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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175 Revision: 1 Page: 2 of 180

## Content

1.	Introd	duction		6
2.	Supp	orting o	lauses	6
	2.1	Scope		6
		2.1.1	Purpose	6
		2.1.2	Applicability	6
	2.2	Norma	tive/informative references	6
		2.2.1	Normative	6
		2.2.2	Informative	7
	2.3	Definit	ions	7
		2.3.1	General	/
	04	2.3.2 Abbrox	vistions	88 0
	2.4	Roles	and responsibilities	o g
	2.5	Proces	and responsibilities	0 9
	2.7	Relate	d/supporting documents	9
2	Tooh		ander Evoluction Procedure	0
з.	3 1	Dockto	no Evaluation	9 Q
	0.1	3.1.1	Level 1: Mandatory (Gatekeeper) Criteria and Returnable	
		3.1.2	Level 2: Functional (Scoring) Criteria and Returnable (only submission that pass Level 1) 11	
		3.1.3	Level 3: Product Sample Criteria	12
	3.2	Factor	y Assessment	13
4.	Autho	orizatio	٦	21
5.	Revis	sions		21
6.	Deve	lopmer	it team	21
7.	Ackn	owledg	ements	22
Ann	ex A -	– Comp	ression Fittings and Clamps Technical Evaluation Criteria	23
Tab	les			
Tab	le 1: L	_evel 1:	Mandatory (Gatekeeper) Criteria and Returnable	10
Tab	le 2: L	_evel 2:	Functional (Scoring) Criteria and Returnable	11
Tab	le 3: L	_evel 3:	Product Sample Criteria	12
Tab	le 4: L	_evel 4:	General Factory Assessment	13
Tab	le A.1	: Comp	ression Dead-End Clamp Assembly for ACSR Hare conductor	23
Tab	le A.2	: Comp	ression Dead-End Clamp Assembly for ACSR Chicadee Conductor	24
Tab	le A.3	: Comp	ression Dead-End Clamp Assembly for ACSR Kingbird Conductor	26
Tab	Table A.4: Compression Dead-End Clamp Assembly for ACSR Tern Conductor         28			28
Tab	le A.5	: Comp	ression Dead-End Clamp Assembly for ACSR Tiger Conductor	30
Tab	le A.6	: Comp	ression Dead-End Clamp Assembly for ACSR Rail Conductor	31
Tab	le A.7	: Comp	ression Dead-End Clamp Assembly for ACSR Bear Conductor	33

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175 Revision: 1

	Page:	3 of 180
Table A.8: Compression Dead-End Clamp Assembly for ACSR W	/olf Conductor	
Table A.9: Compression Dead-End Clamp Assembly for ACSR M	ink Conductor	
Table A.10: Compression Dead-End Clamp Assembly for ACSR 2	Zebra Conductor	
Table A.11: Compression Dead-End Clamp Assembly for ACSR I	BERSFORT Condu	uctor40
Table A.12: Compression Dead-End Clamp Assembly for AAAC A	ASH Conductor	41
Table A.13: Compression Dead-End Clamp Assembly for AAAC C	OAK Conductor	43
Table A.14: Suspension Clamp for Steel wire 7/3.35 Conductor		45
Table A.15: Clamp Suspension for Steel wire 19/2.65 Conductor .		46
Table A.16: DOUBLE OPENING SUSPENSION CLAMP For stee	l wire 7/3.35 and 1	9/2.6547
Table A.17: PISTOL CLAMP for conductor range: 16-5mm Dia		
Table A.18: PISTOL CLAMP for conductor range: 15-6mm Dia		50
Table A.19: PISTOL CLAMP for conductor range: 15-6mm Dia		
Table A.20: PISTOL CLAMP for conductor range: 18-30mm Dia		53
Table A.21: SUSPENSION PIVOTED CLAMP For Conductor range	ge 25.0mm to 40m	m Diameter55
Table A.22: SUSPENSION CRADLE CLAMP for Steel Wires Diar	meter range 5mm t	to 17mm56
Table A.23: CROSBY CLAMP For Conductor range Steel Wire Re	ope 13mm Diamet	er57
Table A.24: CROSBY CLAMP For Conductor range Steel Wire Re	ope 16mm Diamet	er59
Table A.25: THIMBLE CLEVIS		61
Table A.26: Mid-Span Tension Joint for ACSR Mink Conductor		62
Table A.27: Mid-Span Tension Joint for ACSR HARE Conductor .		64
Table A.28: Mid-Span Tension Joint for ACSR WOLF Conductor.		65
Table A.29: Mid-Span Tension Joint for AAAC Ash Conductor		67
Table A.30: Mid-Span Tension Joint for ACSR Tiger Conductor		69
Table A.31: Mid-Span Tension Joint for ACSR Rail Conductor		70
Table A.32: Mid-Span Tension Joint for ACSR CHICADEE Condu	uctor	72
Table A.33: Mid-Span Tension Joint for ACSR BEAR Conductor		73
Table A.34: Mid-Span Tension Joint for ACSR KINGBIRD Conduction	ctor	75
Table A.35: Mid-Span Tension Joint for ACSR TERN Conductor		77
Table A.36: Mid-Span Tension Joint for ACSR ZEBRA Conductor		79
Table A.37: Mid-Span Tension Joint for ACSR BERSFORT Cond	uctor	80
Table A.38: Mid-Span Tension Joint for AAAC Oak		
Table A.39: Mid-Span Tension Joint for Steel wire 3/4		84
Table A.40: Mid-Span Tension Joint for Steel wire 3/4		85
Table A.41: Mid-Span Tension Joint for Steel wire 7/3.35		
Table A.42: Mid-Span Tension Joint for Steel wire 19/2.65		
Table A.43: Sleeve Repair for ACSR Mink Conductor		
Table A.44: Sleeve Repair for ACSR HARE Conductor		
Table A.45: Sleeve Repair for AAAC Ash Conductor		

### **ESKOM COPYRIGHT PROTECTED**

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

1

Revision:

	Page:	4 of 180
Table A.46: Sleeve Repair for AAAC Oak Conductor		
Table A.47: Sleeve Repair for ACSR Tiger Conductor		
Table A.48: Sleeve Repair for ACSR Rail Conductor		
Table A.49: Sleeve Repair for ACSR WOLF Conductor		
Table A.50: Sleeve Repair for ACSR CHICADEE Conductor		
Table A.51: Sleeve Repair for ACSR BEAR Conductor		
Table A.52: Sleeve Repair for ACSR Kingbird Conductor		
Table A.53: Sleeve Repair for ACSR TERN Conductor		
Table A.54: Sleeve Repair for ACSR ZEBRA Conductor		
Table A.55: Sleeve Repair for ACSR BERSFORT Conductor		
Table A.56: Sleeve Repair for Steel wire 3/4 Conductor		
Table A.57: Sleeve Repair for Steel wire 7/3.35 Conductor		
Table A.58: Sleeve Repair for Steel wire 19/2.65 Conductor		
Table A.59: Non-Tension Joint for ACSR Mink Conductor		
Table A.60: Non-Tension Joint for ACSR HARE Conductor		
Table A.61: Armor Grip Suspension (AGS) Unit for ACSR MINK Co	onductor and AA/	AC PINE Conductor 118
Table A.62: Non-Tension Joint for AAAC Oak Conductor		
Table A.63: Non-Tension Joint for ACSR WOLF Conductor		
Table A.64: Non- Tension Joint for ACSR CHICADEE Conductor		
Table A.65: Non-Tension Joint for ACSR BEAR Conductor		
Table A.66: Non-Tension Joint for ACSR Kingbird Conductor		
Table A.67: Non-Tension Joint for ACSR TERN Conductor		
Table A.68: Non-Tension Joint for ACSR Tiger Conductor		
Table A.69: Non-Tension Joint for ACSR RAIL Conductor		
Table A.70: Non-Tension Joint for ACSR ZEBRA Conductor		
Table A.71: Non-Tension Joint for ACSR BERSFORT Conductor		
Table A.72: Non-Tension Joint for Steel wire 3/4 Conductor		
Table A.73: Non-Tension Joint for Steel wire 7/3.35 Conductor		
Table A.74: Non-Tension Joint for Steel wire 19/2.65 Conductor		
Table A.75: Armor Grip Suspension (AGS) Unit for ACSR MINK Co	onductor and AAA	AC PINE Conductor 137
Table A.76: Armor Grip Suspension (AGS) Unit for ACSR HARE C	onductor and AA	AC Oak Conductor 139
Table A.77: Armor Grip Suspension (AGS) Unit for ACSR WOLF C	onductor	140
Table A.78: Armor Grip Suspension (AGS) Unit for ACSR CHICAD	EE Conductor	142
Table A.79: Armor Grip Suspension (AGS) Unit for ACSR BEAR C	onductor	143
Table A.80: Armor Grip Suspension (AGS) Unit for ACSR KINGBIF	RD Conductor	145
Table A.81: Armor Grip Suspension (AGS) Unit for ACSR TERN C	onductor	146
Table A.82: Armor Grip Suspension (AGS) Unit for ACSR ZEBRA	Conductor	
Table A.83: Armor Grip Suspension (AGS) Unit for ACSR BERSFC	ORT Conductor	149

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

AND CLAMPS	Revision:	1
	Page:	5 of 180
Table A.84: Trunnion Clamp for Line Post insulator suitable for a armour rods	conductor range Di	ia. 13-27mm with 151
Table A.85: Trunnion Clamp for Line Post insulator suitable for o armour rods	conductor range Di	ia. 25-38mm with 152
Table A.86: Armor Grip Suspension (AGS) Unit for AAAC ASH	Conductor	154
Table A.87: Armor Grip Suspension (AGS) Unit for ACSR TIGE	R Conductor	155
Table A.88: Trunnion Clamp for Line Post insulator suitable for a armour rods	conductor range Di	ia. 38 - 51mm with 157
Table A.89: Trunnion Clamp for Line Post insulator suitable for a armour rods	conductor range Di	ia. 38 - 51mm with 158
Table A.90: Trunnion Angle Clamp for Line Post insulator suitab with armour rods	le for conductor ra	nge Dia. 13-27mm 160
Table A.91: Trunnion Angle Clamp for Line Post insulator suitab with armour rods	le for conductor ra	nge Dia. 25-38mm 161
Table A.92: Trunnion Angle Clamp for Line Post insulator suitab with armour rods	le for conductor ra	nge Dia. 38 - 51mm 163
Table A.93: Multifrequency Vibration Damper suitable for Oak o	r Hare (Dia. 13.9-1	5mm) conductors164
Table A.94: Multifrequency Vibration Damper suitable for WOLF	(Dia. 18.13mm) c	onductors166
Table A.95: Multifrequency Vibration Damper suitable for CHICA	ADEE (Dia. 18.87m	nm) conductors167
Table A.96: Multifrequency Vibration Damper suitable for BEAR conductors	and KINGBIRD (D	0ia. 23.45 - 23.90mm) 169
Table A.97: Multifrequency Vibration Damper suitable for TERN	(Dia. 27.00mm) co	onductor171
Table A.98: Multifrequency Vibration Damper suitable for ASH (	Dia. 17.40mm) cor	nductors172
Table A.99: Multifrequency Vibration Damper suitable for TIGEF	R (Dia. 16.52mm) c	conductors174
Table A.100: Multifrequency Vibration Damper suitable for RAIL	. (Dia. 29.59mm) c	onductor175
Table A.101: Multifrequency Vibration Damper suitable for ZEB	RA (Dia. 28.56mm)	) conductor177
Table A.102: Multifrequency Vibration Damper suitable for BER	SFORD (Dia. 35.5)	6mm) conductor179

Unique Ident	Unique Identifier: 240-171000175		
Revision:	1		
Page:	6 of 180		

### 1. Introduction

This document describes the standard technical evaluation criteria which will govern the assessment of tender submissions for Overhead Powerlines Compression Fittings and Clamps for Eskom Distribution Division. The criteria for each compression fitting and clamp type are tabulated in the annexures at the end of this document.

This document contains both the evaluation criteria used for desktop evaluation and factory evaluation and was compiled in accordance with Eskom Procurement and Supply Chain Management guidelines (32-1034). This document does not replace the Buyer's Guide specifications and shall be used in conjunction with the documents listed in the normative section of this document.

## 2. Supporting clauses

### 2.1 Scope

This document describes the technical evaluation process and criteria associated with Distribution HV Overhead Powerlines Compression Fittings and Clamps. It covers the design, manufacture, testing and supply of current-carrying compression fittings and clamps for Distribution HV Powerlines. It is applicable to fittings for bare ACSR and AAAC phase conductors and bare galvanised steel wire earth conductors, for use on A.C. system voltages from 44 kV up to and including 132 kV.

### 2.1.1 Purpose

The purpose of this document is to describe the criteria which are to be used when evaluating tender submissions for the supply of Distribution HV Overhead Powerlines Compression Fittings and Clamps, in line with the Eskom Holdings SOC (Ltd) requirement.

### 2.1.2 Applicability

This document shall apply to Eskom Distribution Division.

### 2.2 Normative/informative references

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

### 2.2.1 Normative

- [1] ISO 9001, Quality Management Systems.
- [2] 32-1034 Eskom procurement and supply chain management
- [3] 240-48929482- Tender Engineering Evaluation Procedure
- [4] 240-51757553 Provide Engineering during Project Sourcing
- [5] 240-75883154 Current Carrying Compression Fittings for Overhead Sub-Transmission Systems
- [6] SANS IEC 61284 Overhead lines Requirements and tests for fittings
- [7] SANS 61897 Overhead lines Requirements and tests for Aeolian vibration dampers
- [8] SANS 813 Clamps for wire ropes
- [9] SANS 61089- Round wire concentric lay overhead electrical stranded conductors.
- [10] SANS 121 Hot-dip galvanized coatings on fabricated iron and steel articles specifications and test methods.
- [11] 240-152844641- Phase Conductor Standard for Eskom Overhead Lines

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175		
Revision:	1	
Page:	7 of 180	

### 2.2.2 Informative

- [12] 32-9: Definition of Eskom documents.
- [13] 32-644: Eskom documentation management standard.
- [14] 474-65: Operating manual of the Steering Committee of Technologies (SCOT).

### 2.3 Definitions

### 2.3.1 General

Definition	Description		
Aluminium Conductor Steel Reinforced (ACSR)	steel reinforced (ACSR) A reinforced conductor with one or more layers of aluminium wire stranded around a core of galvanised steel wires.		
All aluminium alloy	A conductor comprising helically wound aluminium alloy wire		
Bare conductor	A conductor without any insulating covering		
Breaking force The tensile load being applied when the test specimen breaks or bec permanently deformed beyond a specified limit.			
Buyer's Guide	A list or catalogue of SAP numbers and associated material descriptions.		
Conductor	An electrical conductor arranged to be electrically connected to a source of electrical energy.		
<b>Compression fitting</b> A conductor fitting designed to ensure electrical and/or mechanical continuit the overhead line conductor, in which the force necessary to grip the conductor is provided by permanent plastic deformation of the fitting and all layers or conductor by an appropriate compression tool.			
<b>Dead-end tension joint</b> A joint inserted at the end of a conductor for attachment to an insulator is set, designed to carry the full current and to provide mechanical terminative conductor.			
Desktop evaluation	esktop evaluation An evaluation of the documentation included in the tender returnable.		
<b>Enquiry returnable</b> Items stipulated in the Tender Enquiry, defined as mandatory, to be sub as part of the tender submission.			
Eskom Assessment Representative(s)	The person(s) appointed by Eskom to perform evaluation of tender submission(s) in line with Eskom requirements.		
Eskom Distribution Systems Hardware and Fittings	Hardware components and assemblies used for the construction of power systems and substations.		
Factory Assessment	An assessment of the production process, ability, and capacity of the manufacturing facility's conformity to standard specifications and regulations.		
Mid-span tension joint	A fitting inserted between two lengths of a conductor to provide electrical and mechanical continuity of the conductor under working load.		
Non-returnable	May not be returned to the tenderer.		
Repair sleeve	A special fitting composed of two interlocking parts, that connect to each other to form a tubular sleeve. The sleeve can be installed over a damaged conductor in order to restore its mechanical and electrical properties.		

Unique Identifier: 240-171000175

Revision:

Page: 8 of 180

1

Definition	Description	
Sliding Scale Points System	Refers to allocating maximum points to the tenderers whose value in question is higher according to the most superior performance amongst others and proportionally deducting points from those tenderers who are lower than that reference value.	
Specified minimum failure load (SMFL)	The minimum load specified by the purchaser or declared by the supplier at which mechanical failure shall not take place.	
Sub-transmission lines	Means powerlines that carry voltages from 44kV up to including 132kV.	
Supplier	Means a current or potential Supplier, vendor, contractor, consultant, or service provider. Suppliers may include Tenderers that are the OEM or redistributors.	

### 2.3.2 Disclosure classification

Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary).

### 2.4 Abbreviations

Abbreviation	Description
AAAC	All aluminium alloy conductors
ACSR	Aluminium Conductor Steel Reinforced
AQL	Acceptable Quality Level
DTI	Department of Trade and Industry
DX	Distribution
GSW	Galvanized steel wire.
HV	High Voltage
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
M-value	Marking Load (in tension test)
NEC	New Engineering Contract
OEM	Original Equipment Manufacturer
OHS ACT	The Occupational Health and Safety Act, 1993 (Act 85 of 1993)
QITP	Quality Inspection Test Plans
SAP	Systems Application Processes
SMFL	Specified Minimum Failure Load
TET	Technical Evaluation Team
UTS	Ultimate Tensile Strength.

### 2.5 Roles and responsibilities

It is the responsibility of the engineers, commercial representatives, end user and manufacturers to completely abide by the criteria set out in this standard together with the requirements mentioned in the referenced documentation.

Unique Identifier: **240-171000175** Revision: **1** Page: **9 of 180** 

### 2.6 Process for monitoring

The Distribution High Voltage Overhead Powerlines Study Committee must ensure that this document is updated, always renewed and current.

### 2.7 Related/supporting documents

Not applicable.

## 3. Technical Tender Evaluation Procedure

The evaluation criteria will be used to measure the supplier's ability to supply Eskom Distribution with compression fittings and clamps for Sub-transmission powerlines in compliance with the specific requirements as stated in Eskom's Standards, Eskom's Buyer's Guide Documents, South African National Standards, International Standards (if there is no South African Standard available) and specific user stipulations, as included in the Commercial strategy.

The technical evaluation procedure is specific to each item type. The items include current carrying compression fittings, mid-span tension joints, repair sleeves, suspension clamps, armour grip suspension units, trunnion clamps, vibrating dampers, Crosby clamp and thimble clamp for DX Sub-transmission powerlines (44kV-132kV).

The complete evaluation of any potential supplier would involve a desktop evaluation as well as a factory assessment. The factory evaluation is necessary to verify if the supplier possesses the capabilities which they have documented in their tender submissions.

### 3.1 Desktop Evaluation

The desktop evaluation forms the first aspect of the assessment. The desktop evaluation will require the submission of evidence demonstrating compliance to the Mandatory Technical Criteria. This evaluation exercise is performed by Eskom evaluating representatives. This part of the evaluation starts when submissions are opened for the first time. It begins by evaluating the tender documentation submitted by potential suppliers against the mandatory criteria (Level 1), then proceeds to the scoring – Level 2, and refers to the relevant Annexures A, B and C Tables for each item required.

The relevant test certificates together with the complete test reports shall be in English and shall be supplied to the purchaser in hardcopy and electronic format. The relevant product specific technical schedules shall be completed in full for each item and no spaces shall be left blank. Technical schedules A/B are provided in this document for each item and will also be made available in excel format with the tender enquiry package.

The Eskom assessment representatives will go through the details of the returnable submissions that are required and will ensure that all Level 1 qualification criteria are met. If submissions obtain a "No" on any of the Mandatory (Gatekeeper) criteria, the supplier will not be able to proceed to Level 2 evaluation and therefore will fail the technical evaluation. Scoring in Level 2 consists of functional criteria and will be assessed out of 100 points. A Level 2 score of  $\leq$ 90% will qualify for the product sample assessment – Level 3.

The Level 3 Threshold is 100%. The sample evaluation determines the compliance of the manufactured product to the manufacturing standards as stated in the Level 2 criteria. For instance, the product sample will be assessed for compliance to aspects such as dimensions, galvanising, markings, accessories etc. These will be known and sourced from the measurable criteria stated in the Level 2 criteria. Full compliance to the technical standards included in the criteria is critical due to the high risk introduced by non-compliance.

The product sample assessment shall be undertaken, only if the Level 2 threshold is met. The non-returnable sample will be requested by the responsible Buyer after Level 2 requirements are met. For those samples that are deemed by the Evaluation Team to be unduly large for delivery to the respective Eskom offices where the evaluation is being conducted, the Technical Evaluation Team may opt to perform the sample evaluation at the manufacturing plant. All other smaller samples shall be delivered to the Designated Eskom Commercial office responsible for that particular product within 14 calendar days from the date of request.

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175 Revision: 1

Page: 10 of 180

Submissions satisfying the Level 3 requirements shall be considered for the Factory Assessment and Verification – Level 4.

### 3.1.1 Level 1: Mandatory (Gatekeeper) Criteria and Returnable

This evaluation will be conducted per SAP number or item. The following evidence is required to meet the Level 1 Mandatory (Gatekeeper) Criteria per SAP number or item:

No.	Criteria	Compliance	Qualification Criteria
1	Is the Technical Schedule A&B completed correctly and submitted for each SAP number stated on the enquiry?	Yes/No	Mandatory requirement
2	Is the test report schedule completed, relevant and submitted for each SAP number stated on the enquiry?	Yes/No	Mandatory requirement
3	Proof submitted that all required Design and Type testing has been performed at an accredited test facility? OR At the factory and witnessed by an accredited body and supporting information supplied?	Yes/No	Mandatory requirement
4	Complete and approved (signed) Manufacturer Drawings submitted for each SAP number stated on the enquiry?	Yes/No	Mandatory requirement
5	Product meets ESKOM requirements as stipulated in Technical Schedule. No deviations found or deviations identified during detailed evaluation are considered minor i.e., negligible impact on technical and economic performance for the full product life cycle and/or considered correctable before contract award	Yes/No	Mandatory requirement

### Table 1: Level 1: Mandatory (Gatekeeper) Criteria and Returnable

Notes:

- Tenderers to submit details of manufacturing premises, location, staff and equipment, testing facilities, manufacturing lead times.
- Schedules will be considered incomplete if any criteria in Schedule B is returned blank or with non-technical responses such as "N/A", "Will be submitted later", etc.
- Specific deviations to the Schedule A requirements are to be clearly stated in the Deviation Schedule with details related to the deviation and motivation for Eskom to consider a concession.
- The drawings must be provided for each unique SAP number. The SAP number may be stated on the drawing, or the document title can describe the product. The drawings must have the Manufacturer's name included. "Approved" means there is an approval signature on the drawing. Evidence for any other SAP number will not be accepted.
- Test Schedules will be considered incomplete if any test report number is left blank. If the test report is not available (e.g., the specific test has not been executed on the specific product) then state "Not Available". Where "Not Available" is stated, this deviation (per test) is to be clearly stated in the Deviation Schedule with details related to the deviation and motivation for Eskom to consider a concession for the testing requirements.
- Submissions meeting 100% of the Level 1 requirements will proceed to the next level of the technical evaluation.
- Submissions failing to meet 100% of the Level 1 requirements will be deemed non-responsive; the submission will be disqualified and not evaluated further.

### ESKOM COPYRIGHT PROTECTED

Unique Identifier: 240-171000175 Revision: 1

11 of 180

Page:

## 3.1.2 Level 2: Functional (Scoring) Criteria and Returnable (only submission that pass Level 1)

This evaluation will be conducted per SAP number or item. The following evidence is required to meet the Level 2 Functional Criteria per SAP number or item:

No	Criteria	Weight [%]	Score
1	Proof of 10 years manufacturing experience (at relevant voltages)	10	10 if > 10 years 5 if > 5 years 2 if < 5 years
2	Completeness and compliance of the evidence stated in the Schedule B column of the Technical A&B Schedules	10	0 – Not compliant 5 – Partially completed 10 – Completed and Fully Compliant
3	Detailed Drawings provided	20	0 – No drawing 10 – Partial itemised drawing 20 – Complete itemised drawing
4	Supplied Type tests certificates	10	0 – Not Acceptable 10 – Acceptable
5	Transport, Handling, Storage and Installation Guidelines	10	0 – No information 5 – Partial Information 10 – Complete Information
6	Ability to provide samples letter	5	0 – No information 5 – Acceptable Information
7	Production capacity letter	5	0 – No information 5 – Acceptable Information
8	Allowance for manufacturing, inspections and witnessing of tests letter	5	0 – No information 5 – Acceptable Information
9	Confirmation that offered product complies fully with IEC/SANS 61284, SANS 61897 and SANS 813 requirements.	25	0 – No information 15 – Partial information 25 - Acceptable Information
	Total	100%	

### Table 2: Level 2: Functional (Scoring) Criteria and Returnable

Notes:

- The Level 2 Threshold is 90.00%. Compliance to the technical standards included in the criteria is critical, due to the high risk introduced by non-compliance. Eskom Distribution systems hardware items are considered high risk items, meaning that when component failure occurs, serious harm, injury or death may be caused to the public, animals or the environment. It also places the network at risk and could adversely affect both the performance as well as continuity of supply.
- Full points will be awarded for fully compliant submissions. "Fully compliant" means that the evidence stated in the Schedule B column of the Technical A&B Schedule complies with specified requirements in Schedule A; there are no deviations, omissions or incomplete/blank/irrelevant responses.
- Submissions meeting 90.00% of the Level 2 requirements will proceed to the next level of the technical evaluation.
- Submissions failing to meet 90.00% of the Level 2 requirements will be deemed non-compliant; the submission will be disqualified and not evaluated further.

Unique Identifier: **240-171000175** Revision: **1** Page: **12 of 180** 

### 3.1.3 Level 3: Product Sample Criteria

This evaluation will be conducted per SAP number or item. A sample will be evaluated as follows:

Table 3:	Level	3:	Product	Sample	Criteria
----------	-------	----	---------	--------	----------

No	Criteria	Weight	Score
1	Compliance of the Manufactured product to the measurable standards included in the Technical A&B Schedules and the Manufacturer's drawings included in the submission.	5	0 – Deficient or non- responsive 5 – Fully Compliant
	Total	100%	

Notes:

- The Level 3 Threshold is 100%. Full compliance to the technical standards included in the criteria is critical due to the high risk introduced by non-compliance.
- Submissions meeting 100% proceed to the next level of the technical evaluation i.e., the Factory Assessment and Verification or the evaluation will be concluded at this stage as per the decision from the Technical Evaluation Team.
- Submissions failing to meet 100% deemed non-compliant; the submission will be disqualified and not evaluated further.

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:	240-171000175
Revision:	1
Page:	13 of 180

## 3.2 Factory Assessment

No	Technical Questions	Score	Criteria	Evidence and Comments
1	Work Systems	10%		
1.1	Works procedures and instructions: a. What ISO standards are used b. Are the ISO accreditations up to date		If both in place and documents are traceable and up to date then = 2 If either 'a' or 'b' are omitted = 1 None = $0$	
1.2	Continuous improvement and international compliance: Do they comply fully to the normative/governing IEC/SANS/IEEE standards and any additional requirements as stipulated in the applicable Eskom Specification for each equipment being assessed?		Full Compliance = 2 Minor deviation = 2 Major deviation/non-compliance = 0.5 Non-compliance to Eskom specs and governing standards = 0	
1.3	Quality control plans and systems (PQPs) (choose one of each)		QCP's and PQP's in place and traceable = 2 QCP's and PQP's in place = 1 Some QCP's and PQP's in place = 0.5 None in place = 0	
1.4	Inspections, audits and reviews (choose one of each)		All inspections, audits and reviews in place, up to date and traceable = 2 All inspections, audits and reviews in place = 1 Some inspections, audits and reviews in place = $0.5$ None in place = $0$	
1.5	Staff training and accreditation systems and controls What training do they offer their staff? Who are they accredited with? (choose minimum 2 random staff members)		Staff trained and accredited, and traceable = 2 Staff trained and traceable = 1 Staff trained = 0.5 Staff not trained = 0	

### Table 4: Level 4: General Factory Assessment

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

Revision:

Page:

1

14 of 180

No	Technical Questions	Score	Criteria	Evidence and Comments
2	Operation – Manufacturing methods	22%		
2.1	What base materials are used, and how is it checked?		All base material quality checked, handled, stored and catalogued correctly, and is traceable = 2 All base material quality checked, stored and catalogued correctly, but not traceable = 1 Some of the above checks not done = 0.5 No tracing of base material, or stored incorrectly = 0	
2.2	For components/materials manufactured in-house, how is quality controlled?		All manufactured materials- quality checked, handled, stored and catalogued correctly, and is traceable = 2 All manufactured materials, stored and catalogued correctly, = 1 Some of the above checks not done = 0.5 No tracing of manufactured materials, or stored incorrectly = 0	
2.3	If corona rings are applicable, how is it checked? Are installation guides supplied for corona rings? Please include short circuit kA/s ratings.		All corona rings quality checked, handled, stored and catalogued correctly and includes kA/s rating, and is traceable = 2 Some of the above checks not done = 1 No tracing of corona rings, or stored incorrectly = 0	
2.4	Which metallic parts are used, and how is it checked?		All metallic parts quality checked, handled, stored and catalogued correctly, and is traceable = 2 All metallic parts quality checked, stored and catalogued correctly = 1 Some of the above checks not done = 0.5 No tracing of metallic parts, or stored incorrectly = 0	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

Revision:

1

Page: 15 of 180

				•
No	Technical Questions	Score	Criteria	Evidence and Comments
2.5	What is the quality and availability of test reports?		Test certificate has all relevant data, easy to read and understand, signed off by authorised personnel and is traceable = 2 Test certificate has all relevant data, easy to read and understand, signed off by authorised personnel = 1 Test certificate has relevant data, not signed off by authorised personnel = 0.5	
2.6	What is the supplier's estimate of current capacity limit of the insulator?		Can meet on time delivery for our unit = 2 Some potential delays for the production of our unit = 1 Major delays anticipated = 0	
2.7	Are there any bottlenecks in the manufacturing process? (e.g., test bay, moulding, baking, etc.)		Can meet on time delivery for our units = 2 Some potential delays for the production of our unit = 1 Major delays anticipated = 0	
2.8	Does the supplier intend to make use of a substitute factory if capacity increase is required? If so, has it been evaluated for this project?		Yes, fully accredited = 2 Yes, not accredited yet = 0	
2.9	How has the supplier expedited orders if required?		Adequate process to fast-track orders, and is traceable = 2 Adequate process to fast-track orders = 1 Process exists, but needs improvement = 0.5 No process = 0	
2.10	Plant Capacity: can the factory provide the commodity according to Eskom's specification		Aligns completely to Eskom specifications = 2 Partially aligns to Eskom specifications = 1 Doesn't align to Eskom specifications = 0	
2.11	What are factory failure rates for the last 5 years and how is daily limit managed if exceeded?		Less than 1%, and traceable = 2 Less than 1% = 1 Between $1-2\% = 0.5$ Greater than 2% = 0	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

Revision:

Page:

1

1

16	of	1	80	)
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No	Technical Questions	Score	Criteria	Evidence and Comments
3	Technical Infrastructure	6%		
3.1	What manufacturing equipment/tools does the supplier have, who manufactures this equipment, what is the capacity of this equipment?		Equipment/tools bought from accredited and known manufacturers, and traceable = 2 Equipment/tools bought from accredited and known manufacturers but not traceable = 1 Some equipment/tools bought from accredited and known manufacturers = 0.5 Equipment/tools bought from unrecognised manufacturers = 0	
3.2	How are supervisors and workers trained on handling equipment?		Certificate or accreditation, and traceable = 2 Certificate or accreditation = 1 Some workers accredited, certified = 0.5 No certificate or accreditation = 0	
3.3	What is the maintenance operating model for the production line?		Complete maintenance records, and traceable = 2 Complete maintenance records = 1 Incomplete maintenance records, procedures = 0.5 Limited/no maintenance records = 0	
4	Design Practices and Application	24%		
4.1	Please describe your design criteria basis and guidelines – Electrical, Mechanical		Clear tools and software for designs = 2 Have tools (software) available, however no clear philosophy on how tools are employed = 1 Have tools only = 0.5 No philosophy = 0	
4.2	What is the design team's composition/structure, numbers, experience levels?		Engineer has >10 years' experience in design, CVs, certifications are current = 2 Engineer has 5-10 experience in design, CVs and/or certifications are not current = 1 No CVs, certifications = 0	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175 1

Page: 17 of 180

				•
No	Technical Questions	Score	Criteria	Evidence and Comments
4.3	Please provide design process flowchart / systems for similar products		Up to date flowchart = 2 Flowchart not current = 1 No flowchart = 0	
4.4	How do you ensure internal design verification/ validation as part of your design process?		Authorised person checks and signs off design = 2 No checks, self-release = 0	
4.5	What is the process to deal with design change requests (concession), internal or external?		Formalised design review process that includes customer, internal personnel and design expert, plan and schedule = 2 No formalised design review process = 0	
4.6	Following final design approval, how is the final design linked to the manufacturing process?		Approved inspection and test plans include hold points to verify execution of design = 2 No monitoring system = 0	
4.7	Are the engineering tools used for the relevant designs calibrated and/or up to date?		Tools are certified and up to date, calibration, software updates – must be of the latest version, user accreditation must be current = 2 Some certifications of tools, software, user has accreditation but not of latest value = 1 No certified tools = 0	
4.8	How do you ensure continuous development of staff with respect to design systems and philosophy? (i.e., software and manually)		Training programme for all involved staff, individual development plans for staff, adequate and up to date learning = 2 Training programme exists process not adequate = 1 No continuous development = 0	
4.9	How does the system flag excursions outside internal design rules? E.g., non-standard design outside the internal design capability		Flags excursions, calibration is current = 2 Flags some but not all = 1 No excursions flagged, not calibrated properly = 0	
4.10	As design technology backup, who are your technology partners?		Aligned with accredited institutions = 2 Not aligned with accredited institutions = 1 None = 0	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

Revision:

Page:

1

18 of 180

No	Technical Questions	Score	Criteria	Evidence and Comments
4.11	How do you support/co-ordinate the use of academic/research institutions for technology support, if any?		Clear functional role and responsibilities, collaboration with universities (i.e., sponsorship of students) = $2$ No = $0$	
4.12	How do you support/co-ordinate external partners for component manufacturers, if any?		Clear functional role and responsibilities, collaboration with manufacturers = 2 No = 0	
5	Testing Facility and Practices	30%		
5.1	Please provide proof of calibration of all test equipment		Calibrated within date, done by accredited person, and traceable = 3 Calibrated within date, done by accredited person = 2	
			Not calibrated = 0	
5.2	Test capabilities		Fully capable of performing sample and routine tests, and is traceable = $3$	
			Fully capable of performing sample and routine tests, and is not traceable = 2	
			Capable of performing routine tests only = 1 Cannot perform any tests = 0	
5.3	Electrical in-house testing (if applicable)		Within required standards, and traceable = 3 If $N/A = 0$ Within required standards but not traceable = 2	
			Not within required standards = 0	
5.4	Mechanical in-house testing		Within required standards and traceable = 3 Within required standards but not traceable = 2 Not within required standards = 0	
5.5	Dimensional verification checking		Within required standards, and traceable = 3 Within required standards but not traceable = 2 Not within required standards = 0	
5.6	Test object laboratory setup		Within required standards, and traceable (or N/A) = 3 Not within required standards = $0$	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

Revision:

1

Page: **19 of 180** 

No	Technical Questions	Score	Criteria	Evidence and Comments
5.7	RIV tests (if applicable)		Within required standards, and traceable (or N/A) = 3 Not within required standards = $0$	
5.8	Reports, timeousness, quality thereof		All test reports produced immediately, checked by accredited person, and is traceable = 3 All test reports produced immediately, not checked by accredited person and is traceable = 2 Test reports produced but not accredited nor traceable = 1 No test report available = 0	
5.9	Is the test bay area closed off?		Yes = 3 Partially closed off = 2 Not closed off = 0	
5.10	Clean conditions in workshop		Clean-room environment (dust-free, static-free) = 3 Workshop is clean overall = 2 Workshop is fairly clean = 1 Workshop not clean = 0	
6	Research and Development capabilities	8%		
6.1	Do you own your R&D? If not, who are R&D partners?		In-house R&D exists= 2 No in-house R&D = 0	
6.2	How is R&D triggered in your organisation?		Clear triggers for $R\&D - optimising$ for performance or cost, continuous improvement (e.g., new materials, component designs), and traceable = 2 Clear triggers for $R\&D - optimising$ for performance or cost, continuous improvement but not traceable = 1 R&D supported, but no clear mandate = 0.5 No support or mandate for $R\&D = 0$	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

Page:

240-171000175

1

20 of 180

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No	Technical Questions	Score	Criteria	Evidence and Comments
6.3	What initiatives are you pursuing to introduce new technology?		Pursuing newest technology actively = 2 No research into the new technology = 0	
6.4	Do you outsource your designs? How much of your designs are outsourced? What controls are in place?		Do not outsource = 2 Outsource, accredited and validation should be current, controls should be in place = 1 Outsource but not accredited and validation, no clear controls = 0	
	Total	100%		

Notes:

• The Level 4 Threshold is 80.00%.

• Submissions meeting 80.00% of the Level 4 requirements will be awarded a result of Fully Compliant or Compliant with Qualifications, as determined by the Technical Evaluation Team.

• Submissions failing to meet 80.00% of the Level 4 requirements will be deemed non-compliant; the submission will be awarded a result of non-compliant.

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 Unique Identifier:
 240-171000175

 Revision:
 1

 Page:
 21 of 180

## 4. Authorization

This document has been seen and accepted by:

Name and surname	Designation
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Mfundi Songo	Senior Manager: Technology and Engineering
Aron Rondganger	Acting Senior Manager: Asset Creation (Cape Coastal Cluster)
Thandiwe Nkambule	Senior Manager: Asset Creation (Gemma Cluster)
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## 5. Revisions

Date	Rev.	Compiler	Remarks
June 2023	1	L.S Sangweni	First Issue

## 6. Development team

The following people were involved in the development of this document:

Lucy Sangweni

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: **240-171000175** Revision: **1** Page: **22 of 180** 

## 7. Acknowledgements

Not applicable.

### ESKOM COPYRIGHT PROTECTED

 Unique Identifier:
 240-171000175

 Revision:
 1

 Page:
 23 of 180

## Annex A – Compression Fittings and Clamps Technical Evaluation Criteria

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
	Eskom Standard and Specifications Referred to:		
1	[1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Hare conductor	
2.2	Drawing number & Revision number	D-DT 7000	
2.3	SAP No	402497	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR HARE Conductor Dia. 14.16mm	
2.9.2	Tap conductor (code name)	ACSR HARE Conductor Dia. 14.16mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier: 240-171000175

Revision:

1

		Page:	24 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>376 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>496 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:	-	

## Table A.2: Compression Dead-End Clamp Assembly for ACSR Chicadee Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Chicadee Conductor	
2.2	Drawing number & Revision number	D-DT 7000	
2.3	SAP No	168745	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxx	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1			
25	of	180	)

		Page:	25 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Chicadee Conductor Dia. 18.87mm	
2.9.2	Tap conductor (code name)	ACSR Chicadee Conductor Dia. 18.87mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
31	Maximum ambient temperature	50 °C	
3.2		-10 °C	
3.3		35 °C	
2.4	Maximum daily average	35 °C	
2.4		1800m	
3.3 1			
4			
4.1			
4.1.1		YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container. etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
432	Maximum temperature under short-circuit condition	200 °C	
4.3.3	Nominal System Voltage (LIn)	132kV	
4.2.4	Maximum System Voltage (LIm)	1/5///	
+.J.4 10E			
4.3.5	current carrying capacity under normal operating conditions	>559 Amps	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	26 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.6	Current carrying capacity under Emergency operating conditions	>761 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	

## Table A.3: Compression Dead-End Clamp Assembly for ACSR Kingbird Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Kingbird Conductor	
2.2	Drawing number & Revision number	D-DT 7000	
2.3	SAP No	168747	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Kingbird Conductor Dia. 23.9mm	
2.9.2	Tap conductor (code name)	ACSR Kingbird Conductor Dia. 23.9mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

### ESKOM COPYRIGHT PROTECTED

Unique Id	lentifier:
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240-171000175

Revision:

1

		Page:	27 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
4	TECHNICAL REQUIREMENTS			
4.1	Mechanical properties			
4.1.1	Extruded or seam free	YES		
4.1.2	Alloy used for outer tube and flag	Aluminium alloy		
4.1.2.1	Outside Diameter	Required		
4.1.2.2	Inside Diameter	Required		
4.1.2.3	Wall thickness and tolerance	Required		
4.1.2.4	Overall length	Required		
4.1.3	Number of crimps per connection	Required		
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.		
4.1.5	Material used for core tube	Required		
4.1.5.1	Outside Diameter	Required		
4.1.5.2	Inside Diameter	Required		
4.1.5.3	Wall thickness and tolerance	Required		
4.1.5.4	Overall length	Required		
4.1.6	Fitting to be compressed by:			
4161	AI CAN Die "index" identification number	As in D-DT 7000		
4 1 7	Charpy V-notch test results	8.1 at -10 °C		
4.1.2	Bolt and nut material	Befer to 240-75883154		
4.1.0		-75Nm		
4.1.9	Maximum Tansian			
4.1.10		IZUKIN		
4.2		Degwined		
4.2.1		Required		
4.2.2	Processes ded supertity per fitting	Required		
4.2.3	Recommended quantity per intung	Required		
4.2.4	Are core tubes pre-tilled and sealed?	Required		
4.2.5	Container used to hold compound for outer tubo	Poquired		
4.2.0		Poquired		
4.2.7	Temperature rating	nequired		
4281		< 80 °C		
4282	Maximum temperature under short-circuit condition	< 200 °C		
429		Bequired		
4.2.10	Performance in wet or saltwater conditions	VES		
4.2.10	Method of marketing i.e., per tube, container, etc.	Bequired		
42	Flectrical ratings			
<b>н.э</b> Л Э 1				
4.3.1	Maximum temperature under short aircuit condition	< 200 °C		
4.3.2	Naminal System Voltage (Up)			
4.3.3	Normum System Voltage (UII)	102KV		
4.0.4 19 F	Current carrying capacity under normal operating conditions	145KV		
4.3.3	Current carrying capacity under mornancy operating conditions	>1045 Amos		
4.3.0	One second Short-Circuit Current Rating Withstand	>1045 Allips 31 5kΔ		
-7.0.7 5	Test reports and certificates (According to SANS 61284)		Report Number	
51	Test authority (approved person/organisation)	SARS/CSIR		
52	Material grade certification	Required		
5.2	Dimensional and material verification	Type test Sample test and Politing tests		
5.0	Visual Examination test	Type test, Sample test and Routine tests		
5.4	Hot din galvanizing	Type test, Sample test and Poultine tests		
5.5	Non-destructive testing	Type test, Sample test and Pouline tests		
5.0	Damage and failure load tests	Type test, Sample test and noutline tests		
5.7	Tansila tast			
5.0	Clamp bolt tightoning test	Tupo toot and Completent		
U.9 E 10				
5.10				
5.11	Short Gircuit test	i ype tests only		

## ESKOM COPYRIGHT PROTECTED

Unique Identifier:	
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Revision:

240-171000175

1

		Page:	28 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### Schedule B: Guarantees Schedule A: Eskom's specific Item Description and technical particulars of requirements no. equipment offered Eskom Standard and Specifications Referred to: [1] 240-75883154- Current Carrying Compression Fittings for 1 Overhead Sub-Transmission Systems **Purchasing Details:** 2 Compression Dead-End Clamp Assembly for 2.1 Clamp type ACSR Tern Conductor D-DT 7000 2.2 Drawing number & Revision number 168748 2.3 SAP No Original Equipment Manufacturer (OEM) 2.4 XXXXXXX South Africa 2.5 Country of origin 2.6 Trade name of the clamp unit XXXXXXX Manufacturer's Product code/model/serial number 2.7 XXXXXXX 2.8 Catalogue reference number XXXXXXX 2.9 Compression fitting unit suitable for conductor: 2.9.1 Main conductor (code name) ACSR Tern Conductor Dia. 27mm 2.9.2 Tap conductor (code name) ACSR Tern Conductor Dia. 27mm Trademark, Date of manufacture and 2.10 Physical identification mark on product mechanical failing load 2.11 Compliance with IEC/SANS 61284 **Test Certificates** 2.12 Compliance to critical dimensions on Buyers Guide D-DT 7000 2.13 Item sample required YES 2.14 Detailed installation instructions of the fitting required? YES 3 **Site Operating Conditions** 3.1 50 °C Maximum ambient temperature 3.2 -10 °C Minimum ambient temperature 3.3 35 °C Maximum daily average 3.4 Maximum daily variation 35 °C 3.5 Altitude above sea level 1800m **TECHNICAL REQUIREMENTS** 4 4.1 **Mechanical properties** 4.1.1 Extruded or seam free YES

### Table A.4: Compression Dead-End Clamp Assembly for ACSR Tern Conductor

4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1 20 of 190

		Page:	29 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
4.1.5.4	Overall length	Required		
4.1.6	Fitting to be compressed by:			
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000		
4.1.7	Charpy V-notch test results	8J at -10 °C		
4.1.8	Bolt and nut material	Refer to 240-75883154		
4.1.9	Bolt/Nut tightening torque	<75Nm		
4.1.10	Maximum Tension	120kN		
4.2	Electrical Jointing Compound			
4.2.1	Type of compound	Required		
4.2.2	Trade name	Required		
4.2.3	Recommended quantity per fitting	Required		
4.2.4	Are core tubes pre-filled and sealed?	Required		
4.2.5	Is compound for outer core packed separately	Required		
4.2.6	Container used to hold compound for outer tube	Required		
4.2.7	Source of compound supply	Required		
4.2.8	Temperature rating			
4.2.8.1	Continuous operating temperature	≤ 80 °C		
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C		
4.2.9	Degree of adhesion	Required		
4.2.10	Performance in wet or saltwater conditions	YES		
4.2.11	Method of marketing i.e., per tube, container, etc	Required		
4.3	Electrical ratings			
4.3.1	Continuous operating temperature	≤ 80 °C		
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C		
4.3.3	Nominal System Voltage (Un)	132kV		
4.3.4	Maximum System Voltage (Um)	145kV		
4.3.5	Current carrying capacity under normal operating conditions	>894 Amps		
4.3.6	Current carrying capacity under Emergency operating conditions	>1231 Amps		
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA		
5	Test reports and certificates (According to SANS 61284)		Report Number	
5.1	Test authority (approved person/organisation)	SABS/CSIR		
5.2	Material grade certification	Required		
5.3	Dimensional and material verification	Type test, Sample test and Routine tests		
5.4	Visual Examination test	Type test, Sample test and Routine tests		
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests		
5.6	Non-destructive testing	Type test, Sample test and Routine tests		
5.7	Damage and failure load tests	Type test and sample test		
5.8	Tensile test	Type tests only		
5.9	Clamp bolt tightening test	Type test and Sample test		
5.10	Heat cycle test	Type tests only		
5.11	Short Circuit test	Type tests only		
5.12	Corrosion test	Type tests only		
5.13	Drift test	Type test, Sample test and Routine tests		
5.14	Magnetic losses test	Type test, Sample test and Routine tests		

5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

Page:

240-171000175

1

30 of 180

## Table A.5: Compression Dead-End Clamp Assembly for ACSR Tiger Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Tiger Conductor	
2.2	Drawing number & Revision number		
2.3	SAP No		
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Tiger Conductor Dia. 16.52mm	
2.9.2	Tap conductor (code name)	ACSR Tiger Conductor Dia. 16.52mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.1 4.1.2	Extruded or seam free Alloy used for outer tube and flag	YES Aluminium alloy	
4.1.1 4.1.2 4.1.2.1	Extruded or seam free Alloy used for outer tube and flag Outside diameter	YES Aluminium alloy Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter	YES Aluminium alloy Required Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.2 4.1.2.3	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance	YES Aluminium alloy Required Required Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.4	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length	YES Aluminium alloy Required Required Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.3 4.1.2.4 4.1.3 4.1.4	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap?	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.4 4.1.3 4.1.4	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap?	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third.	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.3 4.1.2.4 4.1.3 4.1.4 4.1.5	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube	YES Aluminium alloy Required Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.3 4.1.2.4 4.1.3 4.1.4 4.1.5 4.1.5.1	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.3 4.1.2.4 4.1.3 4.1.4 4.1.5 4.1.5.1 4.1.5.1 4.1.5.2	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.3 4.1.2.4 4.1.3 4.1.4 4.1.5 4.1.5.1 4.1.5.2 4.1.5.3 4.1.5.3	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Wall thickness and tolerance	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required	
4.1.1 4.1.2 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.4 4.1.3 4.1.4 4.1.5 4.1.5.1 4.1.5.1 4.1.5.2 4.1.5.3 4.1.5.4 4.1.5.4	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Vall thickness and tolerance Overall length Fitting to be compared by:	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.3         4.1.4         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.5.4	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Dia "index" identification purchase	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required Required Required Required Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.3         4.1.4         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6.1	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.3         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.5.4         4.1.6         4.1.6.1         4.1.7	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Polt and put meteric!	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required Required DA7 and DS8 8J at -10 °C Peter to 240 7502154	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.7         4.1.8         4.1.0	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Ratk/Nut tightoping tercure	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 c75Nm	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6.1         4.1.7         4.1.8         4.1.9         4.1.40	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Vall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN	
4.1.1         4.1.2         4.1.2.1         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical lengting Compound	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2</b>	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.2         4.2.1	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Trade name	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2.1</b> 4.2.1         4.2.2         4.2.3	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Trade name Becommended quantity per fitting	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required Required Required Required Required Required Refer to 240-75883154	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2</b> 4.2.1         4.2.2         4.2.3         4.2.4	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Trade name Recommended quantity per fitting Are core tubes pre-filled and sealed?	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.2.4         4.1.3         4.1.4         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2</b> 4.2.1         4.2.2         4.2.3         4.2.4         4.2.5	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Recommended quantity per fitting Are core tubes pre-filled and sealed? Is compound for outer core packed concretoly	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2.</b> 4.2.1         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Trade name Recommended quantity per fitting Are core tubes pre-filled and sealed? Is compound for outer core packed separately Container used to hold compound for outer tube	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.4         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2.1</b> 4.2.2         4.2.3         4.2.4         4.2.5         4.2.6         4.2.7	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Trade name Recommended quantity per fitting Are core tubes pre-filled and sealed? Isource of compound for outer tube Source of compound supply	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2</b> 4.2.1         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6         4.2.7         4.2.8	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Type of compound Are core tubes pre-filled and sealed? Is compound for outer tube Source of compound supply Temperature ration	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required	
4.1.1         4.1.2         4.1.2.1         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2</b> 4.2.1         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6         4.2.7         4.2.8         4.2.8	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound Trade name Recommended quantity per fitting Are core tubes pre-filled and sealed? Is compound for outer tube Source of compound supply Temperature rating Container used to hold compound to put tupe Container used to hold compound for outer tube Source of compound supply Temperature rating Container used to hold compound to put tupe Container used to hold compound for outer tube Source of compound supply Temperature rating Container used to hold compound for outer tube Source of compound supply	YES Aluminium alloy Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required Requir	
4.1.1         4.1.2         4.1.2.1         4.1.2.1         4.1.2.2         4.1.2.3         4.1.2.4         4.1.2.4         4.1.3         4.1.5         4.1.5         4.1.5.1         4.1.5.2         4.1.5.1         4.1.5.2         4.1.5.3         4.1.5.4         4.1.6         4.1.6         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10 <b>4.2</b> 4.2.1         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6         4.2.7         4.2.8	Extruded or seam free Alloy used for outer tube and flag Outside diameter Inside diameter Wall thickness and tolerance Overall length Number of crimps per connection Do crimps overlap? Material used for core tube Outside diameter Inside diameter Wall thickness and tolerance Overall length Fitting to be compressed by: ALCAN Die "index" identification number Charpy V-notch test results Bolt and nut material Bolt/Nut tightening torque Maximum Tension Electrical Jointing Compound Type of compound for outer tube Source of compound supply Temperature rating Continuous operating temperature Maximum temperature under short-circuit condition	YES Aluminium alloy Required Required Required Required Required Successive crimps shall overlap adjacent crimps by one third. Required Required Required Required DA7 and DS8 8J at -10 °C Refer to 240-75883154 <75Nm 120kN Required Requi	

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Unique Identifier:

240-171000175

Revision:

1

		Page:	31 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>444 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>593 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

## Table A.6: Compression Dead-End Clamp Assembly for ACSR Rail Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Rail Conductor	
2.2	Drawing number & Revision number		
2.3	SAP No		
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	XXXXXXX	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Rail Conductor Dia. 29.59mm	
2.9.2	Tap conductor (code name)	ACSR Rail Conductor Dia. 29.59mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

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Hot dip galvanizing

5.5

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

1

Revision:

		Page:	32 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-11 and DS-10	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>1101 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1408 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	

5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:	· · · · ·	

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Type test, Sample test and Routine tests

Unique Identifier:

Revision:

Page:

240-171000175

1

33 of 180

## Table A.7: Compression Dead-End Clamp Assembly for ACSR Bear Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Bear Conductor	
2.2	Drawing number & Revision number	D-DT 7000	
2.3	SAP No	0010838	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Bear Conductor Dia. 23.45mm	
2.9.2	Tap conductor (code name)	ACSR Bear Conductor Dia. 23.45mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent	
		crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page:	34 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>706 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>962 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5 14	Magnetic losses test	Type test, Sample test and Routine tests	
5.14			
5.15	Corona and RIV test	rype test	

## Table A.8: Compression Dead-End Clamp Assembly for ACSR Wolf Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Wolf Conductor	
2.2	Drawing number & Revision number	D-DT 7000	
2.3	SAP No	0402499	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	35 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.9.1	Main conductor (code name)	ACSR Wolf Conductor Dia. 18.13mm	
2.9.2	Tap conductor (code name)	ACSR Wolf Conductor Dia. 18.13mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4			
 	Mechanical properties		
411	Extruded or seam free	VEQ	
4.1.1 4.1.0	Allow used for outer tube and flag		
4.1.2		Auminium alloy	
4.1.2.1		Required	
4.1.2.2		Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Reauired	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube container etc	Required	
43	Electrical ratings	ricquieu	
<b>۲.3</b>			
4.3.1	Movimum temporature under chart sizurit and this		
4.3.2			
4.3.3	Norminal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	-
4.3.5	Current carrying capacity under normal operating conditions	>498 Amps	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		i uge:	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.6	Current carrying capacity under Emergency operating conditions	>671 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	

### Table A.9: Compression Dead-End Clamp Assembly for ACSR Mink Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Mink Conductor	
2.2	Drawing number & Revision number	D-DT 7000	
2.3	SAP No	0175745	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Mink Conductor Dia. 10.98mm	
2.9.2	Tap conductor (code name)	ACSR Mink Conductor Dia. 10.98mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

### ESKOM COPYRIGHT PROTECTED
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240-171000175

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Revision:

1

		Page:	37 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Bequired	
414	Do crimos overlap?	Successive crimps shall overlap adjacent	
		crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4161	Al CAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8 L at -10 °C	
л. 1. / Л. 1. 0	Bolt and nut material	Defer to 240 75002154	
4.1.0			
4.1.9		510111</td <td></td>	
4.1.10		120KN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (LIm)	145kV	
1.0.4	Current carrying capacity under normal operating conditions	~270 Ampe	
4.3.5	Current carrying capacity under Finorgonou operating conditions	>261 Ampo	
4.0.0	One second Short Circuit Current Daties Withsterd	2001 Antips	
4.3./		ST.3KA	Poport Number
Э г 1	Test reports and certificates (according to SANS 61284)		
5.1	Neterial mode a set (	SABO/USIK	
5.2	iviaterial grade certification	Required	
5.3	Dimensional and material verification	I ype test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	

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#### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES **COMPRESSION FITTINGS AND CLAMPS**

Revision:

240-171000175

1

		Page:	38 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

# Schedule B: Guarantees and technical particulars of Description requirements equipment offered

#### Table A.10: Compression Dead-End Clamp Assembly for ACSR Zebra Conductor

Schedule A: Eskom's specific

1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR Zebra Conductor	
2.2	Drawing number & Revision number	XXXXXXX	
2.3	SAP No	0010836	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Zebra Conductor Dia. 28.62mm	
2.9.2	Tap conductor (code name)	ACSR Zebra Conductor Dia. 28.62mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	

#### **ESKOM COPYRIGHT PROTECTED**

Unique Identifier:

240-171000175

Revision:

1

		Page:	39 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>938 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1285 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	

5.15	Corona and RIV test	l ype test	
6	Comments and Deviations:		

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

Page:

240-171000175

1

40 of 180

#### Table A.11: Compression Dead-End Clamp Assembly for ACSR BERSFORT Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for ACSR BERSFORT Conductor	
2.2	Drawing number & Revision number	xxxxxxx	
2.3	SAP No	0210977	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR BERSFORT Conductor Dia. 35.56mm	
2.9.2	Tap conductor (code name)	ACSR BERSFORT Conductor Dia. 35.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4		crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	-
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	As in D-DT 7000	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

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Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>1304 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1814 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
	Magnetic losses test	Type test, Sample test and Routine tests	
5.14			
5.14 5.15	Corona and RIV test	Type test	

#### Table A.12: Compression Dead-End Clamp Assembly for AAAC ASH Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for AAAC ASH Conductor	
2.2	Drawing number & Revision number		
2.3	SAP No		
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	AAAC Ash Conductor Dia. 17.40mm	
2.9.2	Tap conductor (code name)	AAAC Ash Conductor Dia. 17.40mm	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

		Page:	42 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3 4.1.4	Number of crimps per connection Do crimps overlap?	Required Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA7	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1		Bequired	
422	Trade name	Bequired	
423	Becommended quantity per fitting	Bequired	
424	Are core tubes pre-filled and sealed?	Bequired	
4.2.5	Is compound for outer core packed separately	Bequired	
426	Container used to hold compound for outer tube	Bequired	
427	Source of compound supply	Required	
428	Temperature rating		
4281	Continuous operating temperature	< 80 °C	
4282	Maximum temperature under short-circuit condition	< 200 °C	
429		Required	
4.2.3	Performance in wat or saltwater conditions		
4 2 11	Method of marketing i.e. per tube container etc	Required	
43	Electrical ratings		
431	Continuous operating temperature	< 80 °C	
4.3.2	Maximum temperature under short-circuit condition	< 200 °C	
422	Nominal System Voltage (Un)	1326/	
4.2.7	Maximum System Voltage (Um)	1/5//	
4.0.4	Current earning especity under normal exercising conditions	140K V	
4.3.5	Current carrying capacity under normal operating conditions	>>23 AINPS	
4.3.6	One accord Short Circuit Current Patient With shared		
4.3./ F		51.0KA	Poport Number
5	Lest reports and certificates (According to SANS 61284)		Report Number
5.1	i est authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Vieuel Exemination test	Type test, Sample test and Routine tests	
5.4		Ture test, Sample test and Routine tests	
5.5	Hot olp galvanizing	I ype test, Sample test and Routine tests	
5.6	Non-destructive testing	I ype test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier: 24

Revision:

240-171000175

1

		Page:	43 of 180
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### Table A.13: Compression Dead-End Clamp Assembly for AAAC OAK Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Compression Dead-End Clamp Assembly for AAAC OAK Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	0220716	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	AAAC OAK Conductor Dia. 13.95mm	
2.9.2	Tap conductor (code name)	AAAC OAK Conductor Dia. 13.95mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7000	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Alloy used for outer tube and flag	Aluminium alloy	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Required	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	

#### ESKOM COPYRIGHT PROTECTED

Item no.

4.1.6 4.1.6.1 4.1.7 4.1.8 4.1.9 4.1.10 4.2 4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.8.1

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESS

Unique Identifier:

240-171000175

	Onique identilier.	240-171000175
SION FITTINGS AND CLAMPS	Revision:	1
	Page:	44 of 180
Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
Fitting to be compressed by:		
ALCAN Die "index" identification number	As in D-DT 7000	
Charpy V-notch test results	8J at -10 °C	
Bolt and nut material	Refer to 240-75883154	
Bolt/Nut tightening torque	<75Nm	
Maximum Tension	120kN	
Electrical Jointing Compound		
Type of compound	Required	
Trade name	Required	
Recommended quantity per fitting	Required	
Are core tubes pre-filled and sealed?	Required	
Is compound for outer core packed separately	Required	
Container used to hold compound for outer tube	Required	
Source of compound supply	Required	
Temperature rating		
Continuous operating temperature	≤ 80 °C	
Maximum temperature under short-circuit condition	≤ 200 °C	
Degree of adhesion	Required	
Performance in wet or saltwater conditions	YES	
Method of marketing i.e per tube, container, etc	Required	
Electrical ratings		

4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	Current carrying capacity under normal operating conditions	>391 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>530 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Numbe
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5 14	Magnetic losses test	Type test, Sample test and Routine tests	
0.11			

6	Comments and Deviations:

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

Page:

240-171000175

1

45 of 180

Table A.14: Suspension Clamp for Steel wire 7/3.35 Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Suspension Clamp for Steel wire 7/3.35 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	0165524	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Clamp Suspension fitting unit suitable for conductor:	Steel wire 7/3.35 Dia. 10.05mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7003	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Long Flat Bar	70 x 16 x 115	
4.1.1.2	Bolt to Bolt Centres	/5mm	
4.1.1.3	Inside Diameter	15./mm	
4.1.2		HOT DIPPED GALVANISED	
4.1.3	Supplied with:	2 x M12 x 65mm LONG HEX. BOL IS, 2 x M12 GRADE 4.8 HEXAGON NUTS, 2 x M12 FLAT WASHERS AND 2 x M12 SPRING WASHERS	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and nut material	Refer to 240-75883154	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	Ambient temperature	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	

#### ESKOM COPYRIGHT PROTECTED

240-171000175

Revision:

1

		Page:	46 Of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and Sample test	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		
6	Comments and Deviations:		

#### Table A.15: Clamp Suspension for Steel wire 19/2.65 Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Clamp Suspension for Steel wire 19/2.65 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	0243443	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Clamp Suspension fitting unit suitable for conductor:	Steel wire 19/2.65 Dia. 13.25mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7003	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Long Flat Bar	70 x 20 x 115	
4.1.1.2	Bolt to Bolt Centres	75mm	
4.1.1.3	Inside Diameter	20.7mm	
4.1.2	Material Grade:	MILD STEEL HOT DIPPED GALVANISED	
4.1.3	Supplied with:	2 x M12 x 65mm LONG HEX. BOLTS, 2 x M12 GRADE 4.8 HEXAGON NUTS 2 x M12 FLAT WASHERS AND 2 x M12 SPRING WASHERS	

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Unique Identifier:

Revision:

240-171000175

1

Item no. DescriptionDescriptionSchedule A: Eskon's specific requirementsSchedule B: Guarantees adjupment offered4.1.4Charpy V-notch test resultsBJ at -10 °C4.1.5Bolt and nut materialRefore D240 758831544.1.6BottNut tightening torque<75Nm4.2.1Type of compoundRequired4.2.2Trade nameRequired4.2.3Recommended quantity per fittingRequired4.2.4Are core tubes pre-filled and sealed?Required4.2.5Is compound for outer tubeRequired4.2.6Container used to hold compound for outer tubeRequired4.2.7Source of compound for outer tubeRequired4.2.8Container used to hold compound for outer tubeRequired4.2.8Continuous operating temperatureAmbient temperature4.2.9Degree of adhesionRequired4.2.9Degree of adhesionYES4.2.10Performance in ved or salvater conditionsYES4.2.11Method of marketing i.e., por tube, container, etcRequired4.31One second Short-Circuit ConditionS15KA5Test ruborts and cortificationType test, Sample test and Routine tests4.31One second Short-Circuit Current Rating Withstand31.5kA5Test authority (approved person/organisation)SABS/CSIR5.11Test authority (approved pe			Page:	47 of 180
4.1.4     Charpy V-notch test results     8J at -10 °C       4.1.5     Bolt and rut material     Refer to 240-7583154       4.1.6     Bolt/Nut fightening torque     <75Nm       4.2     Electrical Joining Compound        4.2.1     Type of compound     Required       4.2.2.3     Trade name     Required       4.2.4     Factorial Joining Compound     Required       4.2.5     It compound quantity per fitting     Required       4.2.6     Container used to hold compound for outer tube     Required       4.2.7     Source of compound supply     Required       4.2.8     Container used to hold compound for outer tube     Required       4.2.8.1     Continuous operating temperature     Ambient temperature       4.2.8.2     Temperature rating        4.2.8.1     Continuous operating temperature     Ambient temperature       4.2.8.2     Maximum temparature under short circuit condition     ≤ 200 °C       4.2.9     Degree of adhesion     Required       4.2.11     Method of marketing ie., per tube, container, etc     Required       4.3.1     One second Short-Circuit Current Rating Withstand     31.5kA       5     Test reports and certification     Required       5.1     Test reports and certification     Required	Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.5     Boit and nut material     Refer to 240-75883154       4.1.6     BoitNut tightening torque     -75Nm       4.2.     Electrical Jointing Compound     Required       4.2.1     Type of compound     Required       4.2.2     Trade name     Required       4.2.3     Recommended quantity per fitting     Required       4.2.4     Are core tubes pre-filed and sealed?     Required       4.2.5     Is compound for outer tube     Required       4.2.6     Container used to hold compound for outer tube     Required       4.2.8     Compound supply     Required       4.2.8.1     Container used to hold compound for outer tube     Required       4.2.8.1     Container used to hold compound for outer tube     Required       4.2.8.1     Container used to saltwater condition     \$ 200 °C       4.2.8.1     Continuous operating temperature     Ambient temperature       4.2.8.1     Container used or saltwater conditions     YES       4.2.9     Degree of adhesion     Required       4.2.10     Performance In wet or saltwater conditions     YES       4.3.1     One second Shott-Circuit Current Rating Withstand     31.5kA       5     Test reports and certification     Required       5.1     Test reports and certification     Required	4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.8       Boti/Nut tightening torque       ~75Nm         4.2       Electrical Jointing Compound       Required         4.2.1       Type of compound       Required         4.2.2       Trade name       Required         4.2.3       Recommended quantity per fitting       Required         4.2.4       Are core tubes pre-filled and sealed?       Required         4.2.5       Is compound for outer core packed separately       Required         4.2.6       Container used to hold compound for outer tube       Required         4.2.7       Source of compound supply       Required         4.2.8       Continuous operating temporature       Ambient temperature         4.2.8.1       Continuous operating temporature       Ambient temperature         4.2.8.2       Maximum temperature under short-circuit condition       \$ 200 °C         4.2.8.1       Deferendace in wet or sativater conditions       YES         4.2.10       Performance in wet or sativater conditions       YES         4.2.11       Method of marketing i.e., per tube, container, etc       Required         4.3.1       One second Short-Circuit Current Rating Withstand       31.5kA         5       Test authority (approved person/organisation)       SABS/CSIR         5.2       Material grade certif	4.1.5	Bolt and nut material	Refer to 240-75883154	
4.2Electrical Jointing CompoundRequired4.2.1Type of compoundRequired4.2.2Trade nameRequired4.2.3Recommended quantity per fittingRequired4.2.4Are core tubes per-fitted and sealed?Required4.2.5Is compound for outer core packed separatelyRequired4.2.6Container used to hold compound for outer tubeRequired4.2.7Source of compound supplyRequired4.2.8Temporature ratingImage: Container used to hold compound for outer tube4.2.8.1Continuous operating temperatureAmbient temperature4.2.8.2Maximum temperature under short-circuit condition\$ 200 "C4.2.9Degree of adhesionRequired4.2.10Performance in wet or sativater conditionsYES4.2.11Method of marketing i.e., per tube, container, etcRequired4.3.1Con second Short-Circuit Current Rating Withstand31.5kA5Test reports and certificates (According to SANS 61284)Repuired5.2Material grade certificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hord galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, and Sample test5.7Daraage and failure load testsType test, and Sample test5.8Silp testType test, and Sample test5.9Clamp bolt lightening testType tests and Sample test <t< td=""><td>4.1.6</td><td>Bolt/Nut tightening torque</td><td>&lt;75Nm</td><td></td></t<>	4.1.6	Bolt/Nut tightening torque	<75Nm	
4.2.1       Type of compound       Required         4.2.2       Trade name       Required         4.2.3       Recommended quantity per fitting       Required         4.2.4       Are core tubes pre-filled and sealed?       Required         4.2.5       Is compound for outer core packed separately       Required         4.2.6       Container used to hold compound for outer tube       Required         4.2.7       Source of compound supply       Required         4.2.8       Temperature rating	4.2	Electrical Jointing Compound		
4.2.2Trade nameRequired4.2.3Recommended quantity per fittingRequired4.2.4Are core tubes pre-filled and sealed?Required4.2.5Is compound for outer core packed separatelyRequired4.2.6Container used to hold compound for outer tubeRequired4.2.7Source of compound supplyRequired4.2.8Continuous operating temperatureAmbient temperature4.2.9Temperature ratingAmbient temperature4.2.9Degree of adhesionRequired4.2.10Performance in wet or saltwater conditionsS 200 °C4.2.11Metind of marketing i.e., per tube, container, etcRequired4.2.13IdenticatingsYES4.2.14Identicating i.e., per tube, container, etcRequired4.2.15Test perports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationType test. Sample test and Routine tests5.4Visual Examination testType test. Sample test and Routine tests5.5Hot dig galvanizingType test. Sample test and Routine tests5.6Non-destructive testingType test. Sample test and Sourine tests5.7Damage and failure load testsType test. and Routine tests5.8Silp testType test. and Sample test5.9Clamp bolt tightening testType test and Routine tests5.10Short Circuit testType tests and Sample test <td>4.2.1</td> <td>Type of compound</td> <td>Required</td> <td></td>	4.2.1	Type of compound	Required	
4.2.3       Recommended quantity per fitting       Required         4.2.4       Are core tubes pre-filled and sealed?       Required         4.2.5       Is compound for outer core packed separately       Required         4.2.6       Container used to hold compound for outer tube       Required         4.2.7       Source of compound supply       Required         4.2.8       Temperature rating	4.2.2	Trade name	Required	
4.2.4Are core tubes pre-filled and sealed?Required4.2.5Is compound for outer core packed separatelyRequired4.2.6Container used to hold compound for outer tubeRequired4.2.7Source of compound supplyRequired4.2.8Temperature rating	4.2.3	Recommended quantity per fitting	Required	
4.2.5Is compound for outer core packed separatelyRequired4.2.6Container used to hold compound for outer tubeRequired4.2.7Source of compound supplyRequired4.2.8Temperature ratingRequired4.2.8Temperature ratingAmbient temperature4.2.8.1Continuous operating temperatureAmbient temperature4.2.8.2Maximum temperature under short-circuit condition\$ 200 °C4.2.9Degree of adhesionRequired4.2.10Performance in wet or sattwater conditionsYES4.2.11Method of marketing i.e., per tube, container, etcRequired4.3.1One second Short-Circuit Current Rating Withstand31.5kA5.1Test reports and certificates (According to SANS 61284)Report Number5.2Material grade certificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Routine tests5.8Slip testType test, Sample test and Routine tests5.9Camp bolt tightening testType test, Sample test and Routine tests5.9Camp bolt tightening testType test, Sample test and Routine tests5.10Short Circuit testType test, Sample test and Routine tests5.10Short Circuit testType tests and Sample	4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.6Container used to hold compound for outer tubeRequired4.2.7Source of compound supplyRequired4.2.8Temperature ratingImportance4.2.8.1Continuous operating temperatureAmbient temperature4.2.8.2Maximum temperature under short-circuit condition\$ 200 °C4.2.9Degree of adhesionRequired4.2.10Performance in wet or saltwater conditionsYES4.2.11Method of marketing i.e., per tube, container, etcRequired4.3.1One second Short-Circuit Current Rating Withstand31.5kA5Test reports and certificates (According to SANS 61284)Required5.1Test authority (approved person/organisation)SABS/CSIR5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test5.8Slip testType test, Sample test5.9Clamp bolt tightening testType test, and sample test5.9Clamp bolt tightening testType test, and Sample test5.9Clamp bolt tightening testType test and Sample test5.9Clamp bolt tightening testType test and Sample test5.9Clamp bolt tightening testType tests and Sample test5.10Short Circu	4.2.5	Is compound for outer core packed separately	Required	
4.2.7Source of compound supplyRequiredIndext4.2.8Temperature ratingIndextIndext4.2.8.1Continuous operating temperatureAmbient temperatureIndext4.2.8.2Maximum temperature under short-circuit conditionIndextIndext4.2.9.2Degree of adhesionIndextIndext4.2.10Performance in wet or saltwater conditionsYESIndext4.2.11Method of marketing i.e., per tube, container, etcRequiredIndext4.3.1Descond Short-Circuit Current Rating WithstandIndextIndext5.1Test reports and certificates (According to SANS 61284)Report NumberIndext5.1Test authority (approved person/organisation)SABS/CSIRIndext5.2Material grade certificationType test, Sample test and Routine testsIndext5.3Dimensional and material verificationType test, Sample test and Routine testsIndext5.4Visual Examination testType test, Sample test and Routine testsIndext5.5Hot dip galvanizingType test, Sample test and Routine testsIndext5.6Non-destructive testingType test, Sample test and Routine testsIndext5.7Damage and failure load testsType test, Sample test and Routine testsIndext5.8Silp testType test, and Sample testIndext5.9Short Circuit testType test, and Sample testIndext5.10Short Circuit testShort Circuit testIndex<	4.2.6	Container used to hold compound for outer tube	Required	
4.2.8Temperature ratingAmbient temperature4.2.8.1Continuous operating temperatureAmbient temperature4.2.8.2Maximum temperature under short-circuit condition\$ 200 °C4.2.9Degree of adhesionRequired4.2.10Performance in wet or saltwater conditionsYES4.2.11Method of marketing i.e., per tube, container, etcRequired4.3.1One second Short-Circuit Current Rating Withstand31.5kA5.1Test reports and certificates (According to SANS 61284)Report Number5.1.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationType test, Sample test and Routine tests5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Routine tests5.8Slip testType test and Sample test5.9Slip testType test and Sample test5.9Slip testType test and Sample test5.9Short Circuit testType test and Sample test	4.2.7	Source of compound supply	Required	
4.2.8.1Continuous operating temperatureAmbient temperatureImage: Ambient temperature4.2.8.2Maximum temperature under short-circuit condition\$ 200 °CImage: Ambient temperature4.2.9Degree of adhesionRequiredImage: Ambient temperature4.2.10Performance in wet or saltwater conditionsYESImage: Ambient temperature4.2.11Method of marketing i.e., per tube, container, etcRequiredImage: Ambient temperature4.3Electrical ratingsImage: Ambient temperatureImage: Ambient temperature4.3.1One second Short-Circuit Current Rating Withstand31.5kAReport Number5.1Test authority (approved person/organisation)SABS/CSIRImage: Ambient tests5.2Material grade certificationType test, Sample test and Routine testsImage: Ambient tests5.4Visual Examination testType test, Sample test and Routine testsImage: Ambient tests5.5Hot dip galvanizingType test, Sample test and Routine testsImage: Ambient tests5.6Non-destructive testingType test, Sample test and Routine testsImage: Ambient tests5.7Damage and failure load testsType test, Sample test and Routine testsImage: Ambient tests5.8Slip testType tests and Sample testImage: Ambient test5.9Clamp bolt tightening testType tests and Sample testImage: Ambient test5.9Short Circuit testType tests and Sample testImage: Ambient test5.10Short Circuit testType tests only	4.2.8	Temperature rating		
4.2.8.2Maximum temperature under short-circuit condition≤ 200 °CIntercent4.2.9Degree of adhesionRequiredIntercent4.2.10Performance in wet or saltwater conditionsYESIntercent4.2.11Method of marketing i.e., per tube, container, etcRequiredIntercent4.3Electrical ratingsIntercentIntercent4.3.1One second Short-Circuit Current Rating Withstand31.5kAReport Number5.1Test reports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIRIntercent5.2Material grade certificationType test, Sample test and Routine testsIntercent5.3Dimensional and material verificationType test, Sample test and Routine testsIntercent5.4Visual Examination testType test, Sample test and Routine testsIntercent5.5Hot dip galvanizingType test, Sample test and Routine testsIntercent5.6Non-destructive testingType test, Sample test and Sample testInter5.7Damage and failure load testsType test, Sample testInter5.8Slip testType test and Sample testInter5.9Clamp bolt tightening testType test and Sample testInter5.9Short Circuit testType test and Sample testInter5.9Short Circuit testType test and Sample testInter	4.2.8.1	Continuous operating temperature	Ambient temperature	
4.2.9Degree of adhesionRequired4.2.10Performance in wet or saltwater conditionsYES4.2.11Method of marketing i.e., per tube, container, etcRequired4.3Electrical ratingsImage: Container, etc4.3.1One second Short-Circuit Current Rating Withstand31.5kA5Test reports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationType test, Sample test and Routine tests5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Routine tests5.8Slip testType test and Sample test5.9Clamp bolt tightening testType test and Sample test5.9Clamp bolt tightening testType test and Sample test	4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.10Performance in wet or saltwater conditionsYES4.2.11Method of marketing i.e., per tube, container, etcRequired4.3.1Electrical ratingsImage: Control of Co	4.2.9	Degree of adhesion	Required	
4.2.11Method of marketing i.e., per tube, container, etcRequired4.3Electrical ratingsImage: container, etcRequired4.3.1One second Short-Circuit Current Rating Withstand31.5kAReport Number5Test reports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIRReport Number5.2Material grade certificationType test, Sample test and Routine testsImage: container, etc5.3Dimensional and material verificationType test, Sample test and Routine testsImage: container, etc5.4Visual Examination testType test, Sample test and Routine testsImage: container, etc5.5Hot dip galvanizingType test, Sample test and Routine testsImage: container, etc5.6Non-destructive testingType test, Sample test and Routine testsImage: container, etc5.7Damage and failure load testsType test, Sample test and Sample testImage: container, etc5.8Slip testType test and Sample testImage: container, etc5.9Clamp bolt tightening testType test and Sample testImage: container, etc5.10Short Circuit testType test onlyImage: container, etc	4.2.10	Performance in wet or saltwater conditions	YES	
4.3Electrical ratingsInterfact4.3.1One second Short-Circuit Current Rating Withstand31.5kA5Test reports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationRequired5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Sample test5.8Slip testType test and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType test sonly	4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3.1One second Short-Circuit Current Rating Withstand31.5kA5Test reports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationType test, Sample test and Routine tests5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Sample test5.8Slip testType test and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType tests only	4.3	Electrical ratings		
5Test reports and certificates (According to SANS 61284)Report Number5.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationRequired5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Routine tests5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Sample test5.8Slip testType test and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType test and Sample test	4.3.1	One second Short-Circuit Current Rating Withstand	31.5kA	
5.1Test authority (approved person/organisation)SABS/CSIR5.2Material grade certificationRequired5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Sample test5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Sample test5.8Slip testType tests and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType test and Sample test	5	Test reports and certificates (According to SANS 61284)		Report Number
5.2Material grade certificationRequiredRequired5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test, Sample test and Sample test5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Sample test5.8Slip testType test and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType test and Sample test	5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.3Dimensional and material verificationType test, Sample test and Routine tests5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test and Sample test5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test, Sample test and Sample test5.8Slip testType tests and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType tests only	5.2	Material grade certification	Required	
5.4Visual Examination testType test, Sample test and Routine tests5.5Hot dip galvanizingType test and Sample test5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test and Sample test5.8Slip testType tests and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType tests only	5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.5Hot dip galvanizingType test and Sample test5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test and Sample test5.8Slip testType tests and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType tests only	5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.6Non-destructive testingType test, Sample test and Routine tests5.7Damage and failure load testsType test and Sample test5.8Slip testType tests and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType tests only	5.5	Hot dip galvanizing	Type test and Sample test	
5.7Damage and failure load testsType test and Sample test5.8Slip testType tests and Sample test5.9Clamp bolt tightening testType test and Sample test5.10Short Circuit testType tests only	5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.8     Slip test     Type tests and Sample test       5.9     Clamp bolt tightening test     Type test and Sample test       5.10     Short Circuit test     Type tests only	5.7	Damage and failure load tests	Type test and Sample test	
5.9     Clamp bolt tightening test     Type test and Sample test       5.10     Short Circuit test     Type tests only	5.8	Slip test	Type tests and Sample test	
5.10 Short Circuit test Type tests only	5.9	Clamp bolt tightening test	Type test and Sample test	
	5.10	Short Circuit test	Type tests only	
5.11 Corrosion test Type tests only	5.11	Corrosion test	Type tests only	
5.12 Drift test Type test, Sample test and Routine tests	5.12	Drift test	Type test, Sample test and Routine tests	
5.13 Magnetic losses test Type test	5.13	Magnetic losses test	Type test	
5.14 Corona and RIV test Type test	5.14	Corona and RIV test	Type test	
6 Comments and Deviations:	6	Comments and Deviations:	·	·

#### Table A.16: DOUBLE OPENING SUSPENSION CLAMP For steel wire 7/3.35 and 19/2.65

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	DOUBLE OPENING SUSPENSION CLAMP For steel wire 7/3.35 and 19/2.65	
2.2	Drawing number & Revision number	D-DT 7004	
2.3	SAP No	0243437	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	

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Unique Identifier:

240-171000175

Revision:

1

Item no.DescriptionSchedule A: Eskom's specific required2.9Double Opening Suspension fitting unit suitable for conductor:Steel wire 7/3.35 and 19/2.65 Dia. 10.05 to2.10Physical identification mark on productTrademark, Date of manufacture and mechaload2.11Compliance with IEC/SANS 61284Test Certificates2.12Compliance to critical dimensions on Buyers GuideD-DT 70042.13Item sample requiredYES2.14Detailed installation instructions of the fitting required?YES	ements Schedule B: Guarantees and technical particulars equipment offered 13.25mm unical failing
2.9Double Opening Suspension fitting unit suitable for conductor:Steel wire 7/3.35 and 19/2.65 Dia. 10.05 to2.10Physical identification mark on productTrademark, Date of manufacture and mechaload2.11Compliance with IEC/SANS 61284Test Certificates2.12Compliance to critical dimensions on Buyers GuideD-DT 70042.13Item sample requiredYES2.14Detailed installation instructions of the fitting required?YES	13.25mm Inical failing
2.10       Physical identification mark on product       Trademark, Date of manufacture and mechaload         2.11       Compliance with IEC/SANS 61284       Test Certificates         2.12       Compliance to critical dimensions on Buyers Guide       D-DT 7004         2.13       Item sample required       YES         2.14       Detailed installation instructions of the fitting required?       YES	inical failing
2.11Compliance with IEC/SANS 61284Test Certificates2.12Compliance to critical dimensions on Buyers GuideD-DT 70042.13Item sample requiredYES2.14Detailed installation instructions of the fitting required?YES	
2.12       Compliance to critical dimensions on Buyers Guide       D-DT 7004         2.13       Item sample required       YES         2.14       Detailed installation instructions of the fitting required?       YES	
2.13     Item sample required     YES       2.14     Detailed installation instructions of the fitting required?     YES	
2.14     Detailed installation instructions of the fitting required?     YES	
3 Site Operating Conditions	
3.1 Maximum ambient temperature 50 °C	
3.2 Minimum ambient temperature -10 °C	
3.3   Maximum daily average   35 °C	
3.5     Maximum daily average     35 0	
3.4     Maximum daily variation     35 °C	
3.5 Altitude above sea level 1800m	
4 TECHNICAL REQUIREMENTS	
4.1 Mechanical properties	
4.1.1 Dimensions:	
4.1.1.1 Long Flat Bar M16 X 41 X 65	
4.1.1.2 Inside Diameter 17.5mm	
4.1.2 Material Grade: MILD STEEL DIPPED GALVANISED	НОТ
4.1.3 Supplied with: 1 X M16 X 60MM HEX BOLT, M16 HEXAGON NUT 1 X M16 SPRING WASHER	1 X
4.1.4 Charpy V-potch test results 8.1 at -10 °C	
4.1.5 Bolt and put material Befer to 240-75883154	
4.1.6 Polt/Nut tightoping torque	
4.1.6 Bolt/Nut lightening lorque Sixin</td <td></td>	
4.2 Electrical Jointing Compound	
4.2.1 Type of compound Required	
4.2.2 Trade name Required	
4.2.3 Recommended quantity per fitting Required	
4.2.4 Are core tubes pre-filled and sealed? Required	
4.2.5 Is compound for outer core packed separately Required	
4.2.6 Container used to hold compound for outer tube Required	
4.2.7 Source of compound supply Required	
4.2.8 Temperature rating	
4.2.8.1 Continuous operating temperature Ambient temperature	
4.2.8.2 Maximum temperature under short-circuit condition ≤ 200 °C	
4.2.9 Degree of adhesion Required	
4.2.10 Performance in wet or saltwater conditions YES	
4.2.11 Method of marketing i.e., per tube, container, etc Required	
4.3 Electrical ratings	
4.3.1 One second Short-Circuit Current Rating Withstand 31.5kA	
5 Test reports and certificates (According to SANS 61284)	Report Number
5.1 Test authority (approved person/organisation) SABS/CSIR	· ·
5.2 Material grade certification Required	
5.3 Dimensional and material verification Type test. Sample test and Boutine t	ests
5.4 Visual Examination test Type test and Routine t	ests
5.5 Hot dip galvanizing	
5.6 Non-destructive testing Tupo test Sample test and Bauting t	ests
5.7 Damage and failure lead tests	
5.7     Damage and failure load tests     Type test and Sample test	
5.8 Slip test Type tests and Sample test	
5.9 Clamp bolt tightening test Type test and Sample test	
5.10 Short Circuit test Type tests only	
5.11 Corrosion test Type tests only	
5.12     Drift test     Type test, Sample test and Routine test	ests
5.13     Magnetic losses test     Type test	
5.14 Corona and RIV test Type test	

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Unique Identifier:	
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Revision:

240-171000175

1

		Page: 4	9 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
6	Comments and Deviations:		

#### Table A.17: PISTOL CLAMP for conductor range: 16-5mm Dia.

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	PISTOL CLAMP for conductor range: 16-5mm Dia.	
2.2	Drawing number & Revision number	D-DT 7022	
2.3	SAP No	0401307	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9	Pistol Clamp Suspension unit suitable for conductor:	Steel wires 3X3.35: 3X4.00: 7X3.35 AND 19X2.65	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7022	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	NOMINAL COUPLING LENGTH	100mm	
4.1.2	Material Grade:	MALLEABLE CAST IRON	
4.1.3	Supplied with:	1 X M16 X 75MM CLEVIS BOLT ASSEMBLY, 3 X GALVANISED STEEL 12MM U-BOLTS WITH 6 X SPRING WASHERS, 6 X M12 HEXAGON NUT (D-DT-3173), AND MALLEABLE IRON KEEPER;	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Tension capacity	120kN	
4.1.11	Tension Lip	To be Cast NOT Ground	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		

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#### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES **COMPRESSION FITTINGS AND CLAMPS**

Unique Identifier: 240-171000175

1

Revision:

		Page: 50	of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.2.12	All Moulding Lines to be Removed on Inside of Clamp	YES	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and Sample test	
5.8	Heat cycle test	Type tests	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	PISTOL CLAMP for conductor range: 15-6mm Dia	
2.2	Drawing number & Revision number	D-DT 7022	
2.3	SAP No	0401310	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Pistol Clamp Suspension unit suitable for conductor:	Squirrel, Fox, Mink and Hare ACSR Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7022	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	

#### Table A.18: PISTOL CLAMP for conductor range: 15-6mm Dia.

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Unique Identifier:

240-171000175

Revision:

1

\_\_\_\_\_

		Page: 51 c	of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.2	Material Grade:	HEAT TREATED DIE CAST LM25 ALUMINIUM	
4.1.3	Supplied with:	1 X M16 X 65MM CLEVIS BOLT ASSEMBLY, 3 X GALVANISED STEEL 12MM U-BOLTS WITH 6 X SPRING WASHERS, 6 X M12 HEXAGON NUT AND DIE CAST ALUMINIUM KEEPER;	
4.1.4	Charpy V-notch test results	8.l at -10 °C	
4.1.5	Bolt and nut material	Befer to 240-75883154	
416	Bolt/Nut tightening torque	<75Nm	
417		120kN	
4.1.8	Tension Lip	To be Cast NOT Ground	
4.2	Electrical Jointing Compound		
421		Bequired	
422	Trade name	Bequired	
423	Recommended quantity per fitting	Bequired	
4.2.0	Are core tubes pre-filled and sealed?	Bequired	
425	Is compound for outer core packed separately	Bequired	
426	Container used to hold compound for outer tube	Bequired	
427	Source of compound supply	Bequired	
4.2.8			
4.2.8.1	Continuous operating temperature	< 80 °C	
4.2.0.1		< 200 °C	
4.2.0.2			
4.2.9	Performance in wat or caltwater conditions	VEQ	
4.2.10	Mathed of marketing i.e. per tube, container, etc.	Required	
4.2.17		VES	
43			
431		< 80 °C	
422	Maximum temperature under short circuit condition	< 200 °C	
4.3.2			
4.3.3	Tost reports and partificatos (Apparding to SANS 61284)	51.5MA	Poport Number
51	Test authority (approved percenterganisation)	SABS/CSID	
5.1	Material grade partification	Baguirad	
5.2		Type test. Sample test and Poutine tests	
5.0	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test Sample test and Boutine tests	
5.7	Damage and failure load tests	Type test and Sample test	
5.8	Heat cycle test		
5.0	Clamp bolt tightening test	Tupe test and Sample test	
5.0	Shart Circuit test	Type test and Sample test	
5.10	Corrosion test	Type tests only	
5.10	Drift test	Type test. Sample test and Politing tests	
5.12	Magnetic losses test		
0.13 E 4 4	Corona and RIV/test		
5.14		i ype test	
6	Comments and Deviations:		

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

Page:

240-171000175

1

52 of 180

Table A.19: PISTOL CLAMP for conductor range: 15-6mm Di
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ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	PISTOL CLAMP for conductor range: 15-6mm Dia.	
2.2	Drawing number & Revision number	D-DT 7022	
2.3	SAP No	0401310	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	xxxxxxx	
2.9	Pistol Clamp Suspension unit suitable for conductor:	Squirrel, Fox, Mink and Hare ACSR Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7022	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.2	Material Grade:	HEAT TREATED DIE CAST LM25 ALUMINIUM	
4.1.3	Supplied with:	1 X M16 X 65MM CLEVIS BOLT ASSEMBLY, 3 X GALVANISED STEEL 12MM U-BOLTS WITH 6 X SPRING WASHERS, 6 X M12 HEXAGON NUT AND DIE CAST ALUMINIUM KEEPER;	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and nut material	Refer to 240-75883154	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Tension capacity	120kN	
4.1.8	Tension Lip	To be Cast NOT Ground	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.2.12	ALL MOULDING LINES TO BE REMOVED ON INSIDE OF CLAMP	YES	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	

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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier: 240-171000175

Revision:

1

		Page: 53	of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and Sample test	
5.8	Heat cycle test	Type tests	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### Table A.20: PISTOL CLAMP for conductor range: 18-30mm Dia.

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	PISTOL CLAMP for conductor range: 18-30mm Dia	
2.2	Drawing number & Revision number	D-DT 7022	
2.3	SAP No	0243440	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Pistol Clamp Suspension unit suitable for conductor:	Chicadee and Kingbird ACSR Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7022	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.2	Material Grade:	HEAT TREATED DIE CAST LM25 ALUMINIUM	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page: 54 c	of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.3	Supplied with:	1 X M16 X 65 MM CLEVIS BOLT ASSEMBLY, 3 X GALVANISED STEEL 12 MM U-BOLTS WITH 6 X SPRING WASHERS, 6 X M12 HEXAGON NUT AND DIE CAST ALUMINIUM KEEPER	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and nut material	Refer to 240-75883154	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Tension capacity	120kN	
4.1.8	Tension Lip	To be Cast NOT Ground	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.2.12	ALL MOULDING LINES TO BE REMOVED ON INSIDE OF CLAMP	YES	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and Sample test	
5.8	Heat cycle test	Type tests	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Tensile test	Type test and Sample test	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test	
5.15	Corona and RIV test	Type test	

6	Comments and Deviations:	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	
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Revision:

Page:

240-171000175

1

55 of 180

#### Table A.21: SUSPENSION PIVOTED CLAMP For Conductor range 25.0mm to 40mm Diameter

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	SUSPENSION PIVOTED CLAMP For Conductor range 25.0mm to 40mm Diameter	
2.2	Drawing number & Revision number	D-DT 7009	
2.3	SAP No	0402629	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9	Clamp Suspension Pivoted fitting unit suitable for conductor:	WOLF, CHICADEE, BEAR, KINGBIRD, CENTIPEDE	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7009	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	NOMINAL COUPLING LENGTH	100mm	
4.1.2	Material Grade:	MALLEABLE CAST IRON HOT DIPPED GALVANISED OR HEAT-TREATED DIE CAST ALUMINIUM ALLOY	
4.1.3	Supplied with:	1 x M16 CLEVIS BOLT ASSEMBLY 4 x M12 SPRING WASHERS 4 x M12 HEX. BOLTS 2 x M12 U-BOLTS	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and nut material	Refer to 240-75883154	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Minimum failing load	70kN	
4.1.8	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

Item no.         Item no.           4.2.11         N           4.3         E	Description Method of marketing i.e., per tube, container, etc	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.11 N 4.3 E	Method of marketing i.e., per tube, container, etc		
4.3 E		Required	
	Electrical ratings		
4.3.1 C	Continuous operating temperature	≤ 80 °C	
4.3.2 N	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3 C	One second Short-Circuit Current Rating Withstand	31.5kA	
5 T	Test reports and certificates (According to SANS 61284)		Report Number
5.1 T	Test authority (approved person/organisation)	SABS/CSIR	
5.2 N	Material grade certification	Required	
5.3 C	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4 V	Visual Examination test	Type test, Sample test and Routine tests	
5.5 H	Hot dip galvanizing	Type test and Sample test	
5.6 N	Non-destructive testing	Type test, Sample test and Routine tests	
5.7 E	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8 5	Slip test	Type tests and Sample test	
5.9 C	Clamp bolt tightening test	Type test and Sample test	
5.10 S	Short Circuit test	Type tests only	
5.11 C	Corrosion test	Type tests only	
5.12 E	Drift test	Type test, Sample test and Routine tests	
5.13 N	Magnetic losses test	Type test	
5.14 C	Corona and RIV test	Type test	
6 C	Comments and Deviations:	_ <b>.</b>	

#### Table A.22: SUSPENSION CRADLE CLAMP for Steel Wires Diameter range 5mm to 17mm

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	SUSPENSION CRADLE CLAMP for Steel Wires Diameter range 5mm to 17mm	
2.2	Drawing number & Revision number	XXXXXXX	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	XXXXXXX	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9	Clamp Suspension Pivoted fitting unit suitable for conductor:	Steel wires 3X3.35; 3X4.00; 7X3.35 AND 19X2.65	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	NOMINAL COUPLING LENGTH	100mm	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page: 57	of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.2	Material Grade:	MALLEABLE CAST IRON HOT DIPPED GALVANISED	
4.1.3	Supplied with:	1 x M16 CLEVIS BOLT ASSEMBLY 4 x M12 SPRING WASHERS 4 x M12 HEX. BOLTS 2 x M12 U-BOLTS	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and nut material	Refer to 240-75883154	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Minimum failing load	70kN	
4.1.8	Supplied with Preformed Armor Rods for suitable Steel Wires Cond.	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		
5.1	Test authority (approved person/organisation)	SABS/CSIR	Report Number
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	CROSBY CLAMP For Conductor range Steel Wire Rope 13mm Diameter	
2.2	Drawing number & Revision number	D-DT 7032	
2.3	SAP No.	0400083	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page: 58	of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	ххххххх	
2.9	Crosby Clamp fitting unit suitable for conductor:	Wire Rope with Dia. 13mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with SANS 813	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7032	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5		1800m	
J.J A			
4			
<b>4.1</b> 4.1.1	Material Grade:	DROP FORGED STEEL HOT	
4 4 0	LI Dolt and nut material		
4.1.2	U-Bolt and nut material	Grade 6.8 of SANS 1700-5–11	
4.1.3	Drop forgings forged solid, without welds, in accordance with EN 10243-1 and EN 10243-2, from steel having the following physical requirements:		
4.1.3.1	Maximum Brinell number	123	
4.1.3.2	Maximum Vickers hardness	128	
4.1.3.3	Maximum Rockwell C hardness	70	
4.1.3.4	Minimum tensile strength	430 MPa	
4.1.3.5	Minimum vield strength	230 MPa	
4.1.3.6	Minimum elongation on a gauge length of	$5.65\sqrt{S_0} = 22\%$	
		where S0 is the cross-sectional	
4.1.3.7	Whiteheart malleable iron castings	Complying with the requirements of EN 1562	
4.1.3.8	Blackheart malleable iron castings	Complying with the requirements of EN 1562	
4.1.3.9	Iron castings with spheroidal or nodular graphite	Complying with the requirements for grade SG 38 or SG 42 of SANS 936.	
4.1.4	Nominal bolt Diameter	M12	
4.1.5	Bolt/Nut tightening torque	33Nm	
4.1.6	Joint test force	34.2kN	
4.1.7	Single Saddle Type	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
1001		< 80 %	
4.0.0.0			
4.2.8.2	waximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	

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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page: 5	9 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5	Test reports and certificates (According to SANS 813)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		
1			

#### Table A.24: CROSBY CLAMP For Conductor range Steel Wire Rope 16mm Diameter

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	CROSBY CLAMP For Conductor range Steel Wire Rope 16mm Diameter	
2.2	Drawing number & Revision number	D-DT 7032	
2.3	SAP No	0404246	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Crosby Clamp fitting unit suitable for conductor:	Wire Rope with Dia. 16mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with SANS 813	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7032	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties (in accordance with SANS 813)		
4.1.1	Material Grade:	DROP FORGED STEEL HOT DIPPED GALVANISED	
4.1.2	U-Bolt and nut material	Grade 6.8 of SANS 1700-5–11	

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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.3	Drop forgings forged solid, without welds, in accordance with EN 10243-1 and EN 10243-2, from steel having the following physical requirements:		
4.1.3.1	Maximum Brinell number	123	
4.1.3.2	Maximum Vickers hardness	128	
4.1.3.3	Maximum Rockwell C hardness	70	
4.1.3.4	Minimum tensile strength	430 MPa	
4.1.3.5	Minimum yield strength	230 MPa	
4.1.3.6	Minimum elongation on a gauge length of	$5.65\sqrt{S_0} = 22\%$	
		where S₀ is the cross-sectional area.	
4.1.3.7	Whiteheart malleable iron castings	Complying with the requirements of EN 1562	
4.1.3.8	Blackheart malleable iron castings	Complying with the requirements of EN 1562	
4.1.3.9	Iron castings with spheroidal or nodular graphite	Complying with the requirements for grade SG 38 or SG	
		42 of SANS 936.	
4.1.4	Nominal bolt Diameter	M14	
4.1.5	Bolt/Nut tightening torque	49Nm	
4.1.6	Joint test force	51.43kN	
4.1.7	Single Saddle Type	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 813)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
J. 1 f	Comments and Deviations:	190 (0)(	
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#### ESKOM COPYRIGHT PROTECTED

Unique I	dentifier:
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Page:

240-171000175

Revision:

1 61 of 180

Table A.25: THIMBLE CLEVIS			
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	THIMBLE CLEVIS	
2.2	Drawing number & Revision number	D-DT 7118	
2.3	SAP No	0701176	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.10	Compliance with IEC/SANS 61284	Test Certificates	
2.11	Compliance to critical dimensions on Buyers Guide	D-DT 7118	
2.12	Item sample required	YES	
2.13	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	NOMINAL LENGTH	115mm x 96mm Width	
4.1.1.3	Clevis opening	18mm	
4.1.2	Material Grade:	MALLEABLE IRON HOT DIPPED GALVANISED	
4.1.3	Supplied with:	1x Humpback Split Pin 1 x M16 x 75mm CLEVIS BOLT ASSEMBLY	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and nut material	Refer to 240-75883154	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Tension capacity/ Minimum failing load	120kN	
4.1.8	Tension Lip	To be Cast NOT Ground	
4.1.9	ALL MOULDING LINES TO BE REMOVED ON INSIDE OF CLAMP	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	

4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	

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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

		Page: 6	2 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Tension test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Heat Cycle test	Type test	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:	1	
l			

#### Table A.26: Mid-Span Tension Joint for ACSR Mink Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR Mink Conductor	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0175884	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR MINK Conductor Dia. 10.98mm	
2.9.2	Tap conductor (code name)	ACSR MINK Conductor Dia. 10.98mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	

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Clamp bolt tightening test

5.9

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

		Page:	63 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:	· · · · · · · · · · · · · · · · · · ·	
4.1.6.1	ALCAN Die "index" identification number	DA-6 & DS-6	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 22.0mm (DA-6) AND STEEL 7.6mm (DS-6)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
429		Bequired	
4210	Performance in wet or saltwater conditions	VES	
4211	Method of marketing i e per tube, container, etc.	Bequired	
43	Flectrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Ulm)	145kV	
4.3.2		< 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>270 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>361 Amps	
497	One second Short-Circuit Current Rating Withstand	2001 Amps	
<del></del>	Test reports and certificates (According to SANS 61284)		Benort Number
5 1	Test authority (approved person/organisation)		
5.1	Material grade extification	Bouirad	
53	Dimensional and material verification	Type test. Sample test and Routine tests	
5.5	Visual Examination test	Type test, Sample test and Routine tests	
5.4		Type test, Sample test and Poutine tests	
5.5	Non-destructive testing	Type test, Sample test and Poutine tests	
5.0			
5.7	Damage and failure load tests	I ype test and sample test	
5.8	l ensile test	Type tests only	

Heat cycle test	Type tests only
Short Circuit test	Type tests only
Corrosion test	Type tests only
Drift test	Type test, Sample test and Routine tests
Magnetic losses test	Type test, Sample test and Routine tests
Corona and RIV test	Type test
Comments and Deviations:	
	Heat cycle test         Short Circuit test         Corrosion test         Drift test         Magnetic losses test         Corona and RIV test         Comments and Deviations:

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Type test and Sample test

Unique Identifier:

Revision:

Page:

240-171000175

1

64 of 180

#### Table A.27: Mid-Span Tension Joint for ACSR HARE Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR HARE Conductor	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0165690	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSB HABE Conductor Dia 14 16mm	
2.0.2			
2.9.2	Tap conductor (code name)	ACSR HARE Conductor Dia. 14.16mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4		Required	
4.1.3		Required	
+.1.4		crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7 & DS-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 25.4mm (DA-7) AND STEEL 10.1mm (DS-7)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Reter to 240-75883154	
4.1.9	Bolt/Nut tightening torque	5Nm</td <td></td>	
4.1.10		120KN	
<b>4.2</b>		Bequired	
7.2.1		nequieu	

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240-171000175

Revision:

1

		Page:	65 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>376 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>496 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5 1 1	Short Circuit test	Type tests only	
5.11		Type tests only	
5.12	Corrosion test		
5.12 5.13	Corrosion test Drift test	Type test, Sample test and Routine tests	
5.12 5.13 5.14	Corrosion test Drift test Magnetic losses test	Type test, Sample test and Routine testsType test, Sample test and Routine tests	
5.12 5.13 5.14 5.15	Corrosion test Drift test Magnetic losses test Corona and RIV test	Type test, Sample test and Routine testsType test, Sample test and Routine testsType test	

Table A.28: Mid-Span Tension Joint for ACSR WOLF Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR WOLF Conductor	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No.	0401816	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	

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240-171000175

Revision:

1

		Page:	66 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR WOLF Conductor Dia. 18.13mm	
2.9.2	Tap conductor (code name)	ACSR WOLF Conductor Dia. 18.13mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
411	Extruded or seam free	VES	
412	Material for outer tube	Διμητίμη	
4 1 0 1	Outside Diameter	Required	
4.1.2.1		Required	
4.1.2.2		Required	
4.1.2.3		Required	
4.1.2.4		Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-8 & DS-8	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 28.2mm (DA-8) AND STEEL 12.7mm (DS-8)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	

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Revision:

1

escription aximum temperature under short-circuit condition arrent carrying capacity under normal operating conditions arrent carrying capacity under Emergency operating conditions are second Short-Circuit Current Rating Withstand st reports and certificates (According to SANS 61284) st authority (approved person/organisation)	Schedule A: Eskom's specific requirements ≤ 200 °C >498 Amps >671 Amps 31.5kA	Schedule B: Guarantees and technical particulars of equipment offered
aximum temperature under short-circuit condition Irrent carrying capacity under normal operating conditions Irrent carrying capacity under Emergency operating conditions The second Short-Circuit Current Rating Withstand St reports and certificates (According to SANS 61284) St authority (approved person/organisation)	≤ 200 °C >498 Amps >671 Amps 31.5kA	
rrent carrying capacity under normal operating conditions rrent carrying capacity under Emergency operating conditions le second Short-Circuit Current Rating Withstand st reports and certificates (According to SANS 61284) st authority (approved person/organisation)	>498 Amps >671 Amps 31.5kA	
rrent carrying capacity under Emergency operating conditions ne second Short-Circuit Current Rating Withstand st reports and certificates (According to SANS 61284) st authority (approved person/organisation)	>671 Amps 31.5kA	
e second Short-Circuit Current Rating Withstand st reports and certificates (According to SANS 61284) st authority (approved person/organisation)	31.5kA	
st reports and certificates (According to SANS 61284)		
st authority (approved person/organisation)		Report Number
st authonty (approved person/organisation)	SABS/CSIR	
aterial grade certification	Required	
nensional and material verification	Type test, Sample test and Routine tests	
sual Examination test	Type test, Sample test and Routine tests	
t dip galvanizing	Type test, Sample test and Routine tests	
n-destructive testing	Type test, Sample test and Routine tests	
mage and failure load tests	Type test and sample test	
nsile test	Type tests only	
amp bolt tightening test	Type test and Sample test	
at cycle test	Type tests only	
ort Circuit test	Type tests only	
rrosion test	Type tests only	
ift test	Type test, Sample test and Routine tests	
agnetic losses test	Type test, Sample test and Routine tests	
rona and RIV test	Type test	
mments and Deviations:		
in in an an an an an an an an an an an an an	destructive testing   age and failure load tests   sile test   ap bolt tightening test   cycle test   t Circuit test   osion test   test   netic losses test   ina and RIV test	destructive testingType test, Sample test and Routine testsage and failure load testsType test and sample testsile testType tests onlynp bolt tightening testType test and Sample testcycle testType tests onlyt Circuit testType tests onlypsion testType tests onlytestType tests onlytestType tests onlytestType tests onlytestType tests onlytestType test and Routine testsnetic losses testType test, Sample test and Routine testsna and RIV testType testsments and Deviations:Type test

#### Table A.29: Mid-Span Tension Joint for AAAC Ash Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for AAAC Ash	
2.2	Drawing number & Revision number		
2.3	SAP No		
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	xxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	AAAC Ash Dia 17.40mm	
2.9.2	Tap conductor (code name)	AAAC Ash Dia 17.40mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	ALUMINIUM	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	

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Unique Identifier:

240-171000175

Revision:

1

		Page:	68 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 25.4mm (DA-7)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
42	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
423	Becommended quantity per fitting	Required	
4.2.0	Are core tubes pre-filled and sealed?	Bequired	
125	Is compound for outer core packed constately	Poquired	
4.2.5	Is compound for outer core packed separately	Required	
4.2.0		Required	
4.2.7		Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>523 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>700 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		·



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Unique Identifier:

Revision:

Page:

240-171000175

1

69 of 180

#### Table A.30: Mid-Span Tension Joint for ACSR Tiger Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR Tiger Conductor	
2.2	Drawing number & Revision number		
2.3	SAP No		
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	xxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR TERN Conductor Dia 16.52 mm	
2.9.2	Tap conductor (code name)	ACSR TERN Conductor Dia 16.52 mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diametr	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7 & DS-8	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM (DA-7) AND STEEL (DS-8)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	

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Unique Identifier:

Revision:

240-171000175

1

Item no.     I       4.2.9     I       4.2.10     I       4.2.11     I       4.3     I       4.3.1     I       4.3.2     I       4.3.3     I       4.3.4     I	Degree of adhesion Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un) Maximum System Voltage (Um)	Schedule A: Eskom's specific requirements         Required         YES         Required         120kV	Schedule B: Guarantees and technical particulars of equipment offered
4.2.9     I       4.2.10     I       4.2.11     I       4.3.1     I       4.3.2     I       4.3.3     I       4.3.4     I	Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un) Maximum System Voltage (Um)	Required YES Required	
4.2.10     F       4.2.11     F       4.3     F       4.3.1     F       4.3.2     F       4.3.3     F       4.3.4     F	Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un) Maximum System Voltage (Um)	YES Required	
4.2.11     I       4.3     I       4.3.1     I       4.3.2     I       4.3.3     I       4.3.4     I	Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un) Maximum System Voltage (Um)	Required	
4.3         I           4.3.1         M           4.3.2         M           4.3.3         M           4.3.4         M	Electrical ratings Nominal System Voltage (Un) Maximum System Voltage (Um)	12014/	
4.3.1     1       4.3.2     1       4.3.3     0       4.3.4     1	Nominal System Voltage (Un) Maximum System Voltage (Um)	1001/1	
4.3.2 I 4.3.3 ( 4.3.4 I	Maximum System Voltage (Um)	132RV	
4.3.3 ( 4.3.4 1		145kV	
4.3.4 I	Continuous operating temperature	≤ 80 °C	
105	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>444 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>593 Amps	
4.3.7 (	One second Short-Circuit Current Rating Withstand	31.5kA	
5 1	Test reports and certificates (According to SANS 61284)		Report Number
5.1 -	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3 I	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5 ł	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6 1	Non-destructive testing	Type test, Sample test and Routine tests	
5.7 [	Damage and failure load tests	Type test and sample test	
5.8 -	Tensile test	Type tests only	
5.9 (	Clamp bolt tightening test	Type test and Sample test	
5.10 H	Heat cycle test	Type tests only	
5.11 g	Short Circuit test	Type tests only	
5.12 (	Corrosion test	Type tests only	
5.13 [	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15 (	Corona and RIV test	Type test	
6 (	Comments and Deviations:		

#### Table A.31: Mid-Span Tension Joint for ACSR Rail Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR Rail Conductor	
2.2	Drawing number & Revision number		
2.3	SAP No		
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR Rail Conductor Dia. 29.59 mm	
2.9.2	Tap conductor (code name)	ACSR Rail Conductor Dia. 29.59 mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	

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5

5.1

Test reports and certificates (According to SANS 61284)

Test authority (approved person/organisation)

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

1

Report Number

Revision:

	Page:		71 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diametr	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-11 & DS-10	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM (DA-11) AND STEEL (DS-10)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>1101 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1408 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	

5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	

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SABS/CSIR

4.1.2.4

**Overall length** 

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

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240-171000175

Revision:	1

		Page:	72 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
6	Comments and Deviations:		

#### Schedule B: Guarantees and technical particulars of Item no. Description Schedule A: Eskom's specific requirements equipment offered Eskom Standard and Specifications Referred to: [1] 240-75883154- Current Carrying Compression Fittings for 1 Overhead Sub-Transmission Systems 2 Purchasing Details: Mid-Span Tension Joint for ACSR CHICADEE 2.1 Compression fitting Conductor Drawing number & Revision number D-DT 7001 2.2 2.3 SAP No 0165768 2.4 Original Equipment Manufacturer (OEM) XXXXXXX 2.5 South Africa Country of origin Trade name of the clamp unit 2.6 XXXXXXX 2.7 Manufacturer's Product code/model/serial number XXXXXXX Catalogue reference number 2.8 XXXXXXX Compression fitting unit suitable for conductor: 2.9 ACSR CHICADEE Conductor Dia. 18.87mm 2.9.1 Main conductor (code name) 2.9.2 Tap conductor (code name) ACSR CHICADEE Conductor Dia. 18.87mm Trademark, Date of manufacture and mechanical 2.10 Physical identification mark on product failing load 2.11 Compliance with IEC/SANS 61284 **Test Certificates** 2.12 Compliance to critical dimensions on Buyers Guide D-DT 7001 2.13 YES Item sample required 2.14 Detailed installation instructions of the fitting required? YES 3 Site Operating Conditions 3.1 50 °C Maximum ambient temperature 3.2 -10 °C Minimum ambient temperature 3.3 Maximum daily average 35 °C 3.4 35 °C Maximum daily variation 3.5 Altitude above sea level 1800m 4 **TECHNICAL REQUIREMENTS** 4.1 **Mechanical properties** 4.1.1 YES Extruded or seam free Material for outer tube 4.1.2 Aluminium 4.1.2.1 **Outside Diameter** Required 4.1.2.2 Inside Diameter Required 4.1.2.3 Wall thickness and tolerance Required

#### Table A.32: Mid-Span Tension Joint for ACSR CHICADEE Conductor

4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
	ALCAN Die "index" identification number	As in D-DT 7001	
4.1.7	DIE ACROSS FLATS (A/F):	ALIMINIUM 28.2mm (DA-8) AND STEEL 12.7mm (DS-8)	
4.1.7	Charpy V-notch test results	8J at -10 °C	

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Required
Unique Identifier:

240-171000175

Revision:

1

		Page:	73 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>559 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>761 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		·

#### Table A.33: Mid-Span Tension Joint for ACSR BEAR Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR BEAR Conductor	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0401590	

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Unique Identifier:

240-171000175

Revision:

1

		Page:	74 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR BEAR Conductor Dia. 23.45mm	
2.9.2	Tap conductor (code name)	ACSR BEAR Conductor Dia. 23.45mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.4	Altitude above sea level	1800m	
3.5		180011	
4			
4.1			
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-9 & DS-10	
4.1.7	DIE ACROSS FLATS (A/F):	ALIMINIUM 32.3mm (DA-9) AND STEEL 16.1mm (DS-10)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
424	Are core tubes pre-filled and sealed?	Required	
425	Is compound for outer core packed separately	Required	
7.2.5	Container used to hold compound for outer tube	Required	
4.2.0			
4.2.7		Kequirea	
4.2.8	i emperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	75 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>706 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>962 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		
1			

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR KINGBIRD Conductor	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0165770	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR KINGBIRD Conductor Dia. 23.87mm	
2.9.2	Tap conductor (code name)	ACSR KINGBIRD Conductor Dia. 23.87mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	

### Table A.34: Mid-Span Tension Joint for ACSR KINGBIRD Conductor

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4.3.2

Maximum System Voltage (Um)

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

		Page:	76 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
3.2	Minimum ambient temperature	-10 °C		
3.3	Maximum daily average	35 °C		
3.4	Maximum daily variation	35 °C		
3.5	Altitude above sea level	1800m		
4	TECHNICAL REQUIREMENTS			
4.1	Mechanical properties			
4.1.1	Extruded or seam free	YES		
4.1.2	Material for outer tube	Aluminium		
4.1.2.1	Outside Diameter	Required		
4.1.2.2	Inside Diameter	Required		
4.1.2.3	Wall thickness and tolerance	Required		
4.1.2.4	Overall length	Required		
4.1.3	Number of crimps per connection	Required		
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.		
4.1.5	Material used for core tube	Steel		
4.1.5.1	Outside Diameter	Required		
4.1.5.2	Inside Diameter	Required		
4.1.5.3	Wall thickness and tolerance	Required		
4.1.5.4	Overall length	Required		
4.1.6	Fitting to be compressed by:			
4.1.6.1	ALCAN Die "index" identification number	DA-9 & DS-8		
4.1.7	DIE ACROSS FLATS (A/F):	ALIMINIUM 32.3mm (DA-9) AND STEEL 12.7mm (DS-8)		
4.1.7	Charpy V-notch test results	8J at -10 °C		
4.1.8	Bolt and nut material	Refer to 240-75883154		
4.1.9	Bolt/Nut tightening torque	<75Nm		
4.1.10	Maximum Tension	120kN		
4.2	Electrical Jointing Compound			
4.2.1	Type of compound	Required		
4.2.2	Trade name	Required		
4.2.3	Recommended quantity per fitting	Required		
4.2.4	Are core tubes pre-filled and sealed?	Required		
4.2.5	Is compound for outer core packed separately	Required		
4.2.6	Container used to hold compound for outer tube	Required		
4.2.7	Source of compound supply	Required		
4.2.8	Temperature rating			
4.2.8.1	Continuous operating temperature	≤ 80 °C		
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C		
4.2.9	Degree of adhesion	Required		
4.2.10	Performance in wet or saltwater conditions	YES		
4.2.11	Method of marketing i.e., per tube, container, etc	Required		
4.3	Electrical ratings			
4.3.1	Nominal System Voltage (Un)	132kV		

4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>771 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1045 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	

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145kV

#### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique	Identifier:
Unique	identifier.

240-171000175

Revision:

1

		Page:	77 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR TERN Conductor	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0165771	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR TERN Conductor Dia. 27.00 mm	
2.9.2	Tap conductor (code name)	ACSR TERN Conductor Dia. 27.00 mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	

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240-171000175

Revision:

1

scription  terial used for core tube tside Diameter ide Diameter all thickness and tolerance erall length ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque tximum Tension	Schedule A: Eskom's specific requirements Steel Required Required Required DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) &J at -10 °C	Schedule B: Guarantees and technical particulars of equipment offered
tterial used for core tube tside Diameter ide Diameter all thickness and tolerance erall length ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque tximum Tension	Steel Required Required Required DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
tside Diameter ide Diameter all thickness and tolerance erall length ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque tximum Tension	Required Required Required DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
ide Diameter all thickness and tolerance erall length ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque tximum Tension	Required Required DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
all thickness and tolerance erall length ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque tximum Tension	Required Required DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
erall length ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque tximum Tension	Required DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
ting to be compressed by: CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque uximum Tension	DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
CAN Die "index" identification number E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque	DA-11 & DS-8 ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
E ACROSS FLATS (A/F): arpy V-notch test results It and nut material It/Nut tightening torque	ALUMINIUM 40.2mm (DA-11) AND STEEL 12.7mm (DS-8) 8J at -10 °C	
arpy V-notch test results It and nut material It/Nut tightening torque uximum Tension	8J at -10 °C	
It and nut material It/Nut tightening torque iximum Tension	D ( ) 040 75000454	
It/Nut tightening torque	Refer to 240-75883154	
ximum Tension	<75Nm	
	120kN	
ectrical Jointing Compound		
pe of compound	Required	
ade name	Required	+
commended quantity per fitting	Required	+
e core tubes pre-filled and sealed?	Required	+
compound for outer core packed separately	Required	+
ntainer used to hold compound for outer tube	Required	+
urce of compound supply	Required	+
mperature rating		+
ntinuous operating temperature	< 80 °C	
winum temperature under short-circuit condition	< 200 °C	
	Bequired	
rformance in wet or saltwater conditions	VES	<u> </u>
thed of marketing i.e. per tube, container, etc.	Required	
	nequired	
minal System Voltage (LL)	132kV	
	145kV	
ment carrying capacity under normal operating conditions	>694 Amps	
rrent carrying capacity under Emergency operating conditions	>1231 Amps	
e second Short-Circuit Current Rating Withstand	31.5kA	
st reports and certificates (According to SANS 61284)		Report Number
st authority (approved person/organisation)	SABS/CSIR	
Iterial grade certification	Required	
nensional and material verification	I ype test, Sample test and Routine tests	+
	I ype test, Sample test and Routine tests	+
t dıp galvanizing	Type test, Sample test and Routine tests	
n-destructive testing	Type test, Sample test and Routine tests	
mage and failure load tests	Type test and sample test	
nsile test	I ype tests only	+
and boil lightening test	Type test and Sample test	+
ort Circuit test	Type tests only	+
rrosion test	Type tests only	+
ft test	Type test, Sample test and Routine tests	+
ignetic losses test	Type test, Sample test and Routine tests	
	Type test	
rona and RIV test		·
t dip n-de mag nsile amp l at cy ort C rrosi ft tes	galvanizing structive testing e and failure load tests test bolt tightening test cle test ircuit test on test it ic losses test and RIV test ents and Deviations:	galvanizingType test, Sample test and Routine testsstructive testingType test, Sample test and Routine testse and failure load testsType test and sample testtestType test and sample testtestType tests onlypoll tightening testType test and Sample testcle testType tests onlyircuit testType tests onlyon testType tests onlyttType tests onlyttType tests onlyon testType tests onlyttType tests onlyttType test and Routine testsic losses testType test, Sample test and Routine testsand RIV testType testents and Deviations:Type test

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

Page:

240-171000175

1

79 of 180

### Table A.36: Mid-Span Tension Joint for ACSR ZEBRA Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	Eskom Standard and Specifications Referred to: [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR ZEBRA Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	0657185	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	ACSR ZEBRA Conductor Dia. 28.56mm	
2.9.2	Tap conductor (code name)	ACSR ZEBRA Conductor Dia. 28.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	XXXXX	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-11 & DS-10	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 40.2mm (DA-11) AND STEEL 16.1mm (DS-10)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.11	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	80 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>938 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1285 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		·
1			

#### Table A.37: Mid-Span Tension Joint for ACSR BERSFORT Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for ACSR BERSFORT Conductor	
2.2	Drawing number & Revision number	хххххх	
2.3	SAP No	0656744	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	хххххх	
2.7	Manufacturer's Product code/model/serial number	хххххх	
2.8	Catalogue reference number	хххххх	
2.9	Compression fitting unit suitable for conductor:		

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	81 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.9.1	Main conductor (code name)	ACSR BERSFORT Conductor Dia. 35.56mm	
2.9.2	Tap conductor (code name)	ACSR BERSFORT Conductor Dia. 35.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	XXXXX	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4,1,2,4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
	ALCAN Die "index" identification number	DA-13 & DS-10	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 49.7mm (DA-13) AND STEEL 16.1mm (DS-10)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.27	Source of compound supply	Required	
428	Temperature rating		
4281	Continuous operating temperature	ר ר אט איר	
4.0.0.1	Movimum tomporature under abort circuit condition		
4.2.0.2			
4.2.9			
4.2.10		YES	
4.2.11	Nietriou of marketing i.e per tube, container, etc	Required	
4.3		400114	
4.3.1	Northinal System Voltage (Un)	132KV	
4.3.2	waximum System voltage (Um)	145KV	
4.3.3	Continuous operating temperature	≤ 80 °C	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	82 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>1304 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1814 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		·

### Table A.38: Mid-Span Tension Joint for AAAC Oak

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for AAAC Oak	
2.2	Drawing number & Revision number	XXXXXX	
2.3	SAP No	хххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	AAAC Oak Dia. 13.95mm	
2.9.2	Tap conductor (code name)	AAAC Oak Dia. 13.95mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

#### ESKOM COPYRIGHT PROTECTED

Unique	Identifier:
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240-171000175

Revision:

1

		Page: 83 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	ALUMINIUM	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 25.4mm (DA-7)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>391 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>530 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	84 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

### Table A.39: Mid-Span Tension Joint for Steel wire 3/4

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for Steel wire 3/4	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0247337	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	Steel Wire 3/4 Dia. 8.7mm	
2.9.2	Tap conductor (code name)	Steel Wire 3/4 Dia. 8.7mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	(DS-9)	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 15.2mm (DS-9)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	

#### ESKOM COPYRIGHT PROTECTED

240-171000175

Revision:

1

		Page:	85 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

Table A.40: Mid-Span Tension Joint for Steel wire 3/4

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for Steel wire 3/4	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0247337	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	86 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	Steel Wire 3/4 Dia. 8.7mm	
2.9.2	Tap conductor (code name)	Steel Wire 3/4 Dia. 8.7mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1		50 °C	
2.1		10 °C	
3.2		-10 0	
0.0			
3.4		35 °C	
3.5		1800m	
4			
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	(DS-9)	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 15.2mm (DS-9)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Bequired	
4.2.2	Trade name	Required	
423	Recommended quantity per fitting	Required	
424	Are core tubes pre-filled and sealed?	Required	
425	Is compound for outer core packed separately	Required	
4.2.0	Container used to hold compound for outer tube	Poquired	
4.2.0			
4.2.7		Kequirea	
4.2.8	i emperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)	-	Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
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### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	
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240-171000175

Revision:

1

		Page:	87 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		•
1			

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for Steel wire 7/3.35	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0165845	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression fitting unit suitable for conductor:		
2.9.1	Main conductor (code name)	Steel Wire 7/3.35 Dia. 10.23mm	
2.9.2	Tap conductor (code name)	Steel Wire 7/3.35 Dia. 10.23mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	88 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.6	Fitting to be compressed by:		
	ALCAN Die "index" identification number	(DS-10)	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 16.1mm (DS-10)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
1.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Bequired	
4 2 10	Performance in wet or saltwater conditions	YES	
4211	Method of marketing i e per tube, container, etc.	Bequired	
4.3	Electrical ratings		
431	Nominal System Voltage (LIn)	132kV	
432	Maximum System Voltage (LIm)	145kV	
433		< 80 °C	
134	Maximum temperature under short-circuit condition	< 200 °C	
4.3.4	One second Short-Circuit Current Bating Withstand	31.54	
4.3.3 5	Test reports and certificates (According to SANS 61294)	31.50	Poport Numbor
5 5 1	Test authority (approved person/organisation)	SARS/CSIR	
52	Material grade certification	Required	
5.2 5.3	Dimensional and material verification	Type test Sample test and Politing tests	
5.0	Visual Examination test	Type test, Sample test and Routine tests	
5.4	Hot din galvanizing	Type test, Sample test and Routine tests	
5.5	Non-destructive testing	Type test, Sample test and Routine tests	
5.0	Damage and failure load tests	Type test, sample test and noutline tests	
5.2	Tansila tast		
5.0	Clamp bolt tightening test	Tupo tost and Sample test	
5.9			
5.10		Type tests only	
5.11		Type tests only	
5.12		i ype tests only	
		I ype test, Sample test and Routine tests	
5.13		Type test. Sample test and Routine tests	
5.13 5.14	Magnetic losses test	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
5.13 5.14 5.15	Corona and RIV test	Type test	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

89 of 180

1

Revision: Page:

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Mid-Span Tension Joint for Steel wire 19/2.65	
2.2	Drawing number & Revision number	D-DT 7001	
2.3	SAP No	0165846	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Compression Tension Joint suitable for conductor:	Steel Wire 19/2.65 Dia. 13.55mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7001	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	(DS-12)	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 20.2mm (DS-12)	
4.1.7	Charpy V-notch test results	8J at -10 °C	
4.1.8	Bolt and nut material	Refer to 240-75883154	
4.1.9	Bolt/Nut tightening torque	<75Nm	
4.1.10	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	90 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test, Sample test and Routine tests	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test and sample test	
5.8	Tensile test	Type tests only	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Heat cycle test	Type tests only	
5.11	Short Circuit test	Type tests only	
5.12	Corrosion test	Type tests only	
5.13	Drift test	Type test, Sample test and Routine tests	
5.14	Magnetic losses test	Type test, Sample test and Routine tests	
5.15	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR Mink Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0175916	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR MINK Conductor Dia. 10.98mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	

### Table A.43: Sleeve Repair for ACSR Mink Conductor

#### ESKOM COPYRIGHT PROTECTED

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240-171000175

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Revision:

1

		Page:	91 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Bequired	
4.1.2.2	Inside Diameter	Bequired	
4.1.2.3	Wall thickness and tolerance	Bequired	
4.1.2.4	Overall length	Bequired	
413	Number of crimps per connection	Bequired	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent	
<b>11</b> E	Material used for sore tube		
4.1.5		Aiuminium	
4.1.3.1			
4.1.5.2			
4.1.5.3		Required	
4.1.5.4		Kequired	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-6	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 22.0mm (DA-6)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>270 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>361 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
			1

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Unique Identifier:

240-171000175

Revision:

1

		Page:	92 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

### Table A.44: Sleeve Repair for ACSR HARE Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR HARE Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0168240	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR HARE Conductor Dia. 14.16mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 25.4mm (DA-7)	

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Unique Identifier:

240-171000175

Revision:

1

Item no.         Deside           4.1.8         Ch           4.1.9         Ma           4.1.9         Ma           4.2         Ela           4.2.1         Ty           4.2.2         Tra           4.2.3         Rei           4.2.4         Ara           4.2.5         Is           4.2.6         Cc           4.2.7         Sc           4.2.8         Te           4.2.8.1         Cc           4.2.8.2         Ma           4.2.9         De           4.2.10         Pe           4.2.11         Ma           4.3.1         Nc           4.3.2         Ma	Description         Charpy V-notch test results         Maximum Tension         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         s compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	Schedule A: Eskom's specific requirements         8J at -10 °C         120kN         Required         Required         Required         Required         Required         Required         Required         Schedule A: Eskom's specific required         Required         Required         Required         Schedule A: Eskom's specific required         Required         Schedule A: Eskom's specific required         Schedule A: S0 °C         Schedule A: S0 °C         Schedule A: S0 °C         Required         YES         Required	Schedule B: Guarantees and technical particulars of equipment offered
4.1.8       Ch         4.1.9       Ma         4.1.9       Ma         4.2       Ela         4.2.1       Ty         4.2.2       Tra         4.2.3       Re         4.2.4       Ara         4.2.5       Is         4.2.6       Cc         4.2.7       So         4.2.8       Te         4.2.8.1       Cc         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Charpy V-notch test results Maximum Tension  Electrical Jointing Compound  Type of compound  Trade name Recommended quantity per fitting Are core tubes pre-filled and sealed?  s compound for outer core packed separately Container used to hold compound for outer tube Source of compound supply  Temperature rating Continuous operating temperature Maximum temperature under short-circuit condition Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	8J at -10 °C         120kN         Required         Required         Required         Required         Required         Required         Start - 10 °C         Required         Required         Start - 10 °C         Required         Required         Start - 10 °C         Required         YES         Required	
4.1.9       Ma         4.2       Electrony         4.2.1       Ty         4.2.2       Tra         4.2.3       Ref         4.2.4       Arrow         4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Maximum Tension         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         Is compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	120kN         Required         Required         Required         Required         Required         Required         Sequired         Sequired         YES         Required	
4.2       Electrony         4.2.1       Ty         4.2.2       Tra         4.2.3       Re         4.2.3       Re         4.2.4       Ara         4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         as compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	Required         Required         Required         Required         Required         Required         Sequired         Sequired         YES         Required	
4.2.1       Ty         4.2.2       Tra         4.2.3       Re         4.2.4       Array         4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Type of compound         Frade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         as compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	Required         Required         Required         Required         Required         Required         ≤ 80 °C         ≤ 200 °C         Required         YES         Required	
4.2.2       Tra         4.2.3       Re         4.2.4       Arr         4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         is compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	Required         Required         Required         Required         Required         ≤ 80 °C         ≤ 200 °C         Required         YES         Required	
4.2.3       Re         4.2.4       Arr         4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Recommended quantity per fitting         Are core tubes pre-filled and sealed?         is compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	Required         Required         Required         Required         ≤ 80 °C         ≤ 200 °C         Required         YES         Required	
4.2.4       Arr         4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Are core tubes pre-filled and sealed? s compound for outer core packed separately Container used to hold compound for outer tube Source of compound supply Temperature rating Continuous operating temperature Maximum temperature under short-circuit condition Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	Required         Required         Required         ≤ 80 °C         ≤ 200 °C         Required         YES         Required	
4.2.5       Is         4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	s compound for outer core packed separately Container used to hold compound for outer tube Source of compound supply Temperature rating Continuous operating temperature Maximum temperature under short-circuit condition Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	Required         Required         Required         ≤ 80 °C         ≤ 200 °C         Required         YES         Required	
4.2.6       Co         4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Container used to hold compound for outer tube Source of compound supply Temperature rating Continuous operating temperature Maximum temperature under short-circuit condition Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	Required         Required         ≤ 80 °C         ≤ 200 °C         Required         YES         Required	
4.2.7       So         4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Source of compound supply Temperature rating Continuous operating temperature Maximum temperature under short-circuit condition Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	Required ≤ 80 °C ≤ 200 °C Required YES Required	
4.2.8       Te         4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	emperature rating         Continuous operating temperature         Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	≤ 80 °C ≤ 200 °C Required YES Required	
4.2.8.1       Co         4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3       Ela         4.3.1       No         4.3.2       Ma	Continuous operating temperature  Maximum temperature under short-circuit condition  Degree of adhesion  Performance in wet or saltwater conditions  Method of marketing i.e. per tube, container, etc  Electrical ratings  Nominal System Voltage (Un)	≤ 80 °C ≤ 200 °C Required YES Required	
4.2.8.2       Ma         4.2.9       De         4.2.10       Pe         4.2.11       Ma         4.3.1       No         4.3.2       Ma	Maximum temperature under short-circuit condition         Degree of adhesion         Performance in wet or saltwater conditions         Method of marketing i.e. per tube, container, etc         Electrical ratings         Nominal System Voltage (Un)	≤ 200 °C Required YES Required	
4.2.9         De           4.2.10         Pe           4.2.11         Me           4.3         Ele           4.3.1         No           4.3.2         Ma	Degree of adhesion Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	Required YES Required	
4.2.10         Pe           4.2.11         Me           4.3         Ele           4.3.1         No           4.3.2         Ma	Performance in wet or saltwater conditions Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	YES Required	
4.2.11         Me           4.3         Ele           4.3.1         No           4.3.2         Ma	Method of marketing i.e. per tube, container, etc Electrical ratings Nominal System Voltage (Un)	Required	
4.3         Ele           4.3.1         No           4.3.2         Ma	Electrical ratings Nominal System Voltage (Un)		
4.3.1 No 4.3.2 Ma	Nominal System Voltage (Un)		
4.3.2 Ma		132kV	
	Aaximum System Voltage (Um)	145kV	
4.3.3 Co	Continuous operating temperature	≤ 80 °C	
4.3.4 Ma	Aximum temperature under short-circuit condition	≤ 200 °C	
4.3.5 Cu	Current carrying capacity under normal operating conditions	>376 Amps	
4.3.6 Cu	Current carrying capacity under Emergency operating conditions	>496 Amps	
4.3.7 Or	Dne second Short-Circuit Current Rating Withstand	31.5kA	
5 Te	Fest reports and certificates (According to SANS 61284)		Report Number
5.1 Te	est authority (approved person/organisation)	SABS/CSIR	
5.2 Ma	Naterial grade certification	Required	
5.3 Dii	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4 Vis	/isual Examination test	Type test, Sample test and Routine tests	
5.5 Ho	lot dip galvanizing	Type test	
5.6 Te	ensile test	Type Test and Sample Test	
5.7 Sh	Short Circuit test	Type tests only	
5.8 Co	Corrosion test	Type tests only	
5.9 Dr	Drift test	Type test, Sample test and Routine tests	
5.10 Co	Corona and RIV test	Type test	
6 Co	Comments and Deviations:	·	

Table A.45: Sleeve Repair for AAAC Ash Conductor

Schedule A: Eskom's specific requirements Schedule B: Guarantees and technical particulars of

			equipment onered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for AAAC Ash Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	xxxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	xxxxxxx	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	AAAC Ash Conductor Dia 17.40mm	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	94 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.12	Item sample required	YES	
2 14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
31		50 °C	
3.2		-10 °C	
3.3		35 °C	
3.4		35 °C	
3.5		1800m	
4			
4.1			
4.1.1	Extruded or seam free	YES	
4.1.2	Viaterial for outer tube	Aluminium	
4.1.2.1		Required	-
4.1.2.2			
4.1.2.3	VVall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required Successive crimos shall overlap adjacent	
6. L. <del>T</del>		crimps by one third.	
415	Material used for core tube	Aluminium	
4,1.5.1	Outside diameter	Required	
4152	Inside diameter	Required	
4153	Wall thickness and tolerance	Bequired	
4154		Bequired	
416	Fitting to be compressed by:		
4.1.0	ALCAN Die "index" identification number	 DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM (DA-7)	
410		8 Lat 10 %	
4.1.0	Maximum Tanaian		
4.1.9		120KIN	
4.2		Deguined	
4.2.1		Required	
4.2.2		Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Kequired	-
4.2.8	remperature rating		-
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3			
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≥ 08 ≥	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>523Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>700 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	<u> </u>
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:	1
Page:	95 of 180

		9	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		
l			

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for AAAC Oak Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	xxxxxx	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	AAAC Oak Conductor Dia. 13.95mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 25.4mm (DA-7)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	

### Table A.46: Sleeve Repair for AAAC Oak Conductor

#### ESKOM COPYRIGHT PROTECTED

Uniqu	e Identifier:
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240-171000175

Revision:

1

		Page:	96 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>391 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>530 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		
1			

Table A.47: Sleeve Repair for ACSR Tiger Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR Tiger Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR Tiger Conductor Dia. 17.40mm	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	97 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Xxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	<u> </u>
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection Do crimps overlap?	Required Successive crimps shall overlap adjacent	
·· · · <del>· ·</del>		crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	<u> </u>
4.1.6	Fitting to be compressed by:		<u> </u>
4.1.6.1	ALCAN Die "index" identification number		
4.1./	DIE AUKUSS FLATS (A/F):	ALUMINIUM (DA-7)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to note compound for outer tube		
4.2.1	Tomperature rating		
4.2.0	Continuous operating temperature	< 20 °C	
4.2.0.1	Maximum temperature under short-circuit condition	< 200 °C	
420		Bequired	
4210	Performance in wet or saltwater conditions		
4 2 1 1	Method of marketing i e per tube container etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>444 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>593 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
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### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

	Page:	98 of 180
Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
Drift test	Type test, Sample test and Routine tests	
Corona and RIV test	Type test	
Comments and Deviations:		
	Description         Drift test         Corona and RIV test         Comments and Deviations:	Page:         Description       Schedule A: Eskom's specific requirements         Drift test       Type test, Sample test and Routine tests         Corona and RIV test       Type test, Sample test         Comments and Deviations:       Type test

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR RAILConductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR Rail Conductor Dia 29.59mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do chimps overlap?	crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1		Required	
4.1.5.2	Well thiskness and telerance	Required	
4.1.3.3			
4.1.3.4	Citting to be compressed by:	Required	
4.1.0	AI CAN Die "index" identification number	ΠΔ_11	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 40.2mm (DA-11)	
/ 1 0	Charpy V-notch test results	8 L at _10 °C	
4.1.9	Maximum Tension	120kN	
42	Electrical Jointing Compound		
421		Required	
4.2.7	Trade name	Required	
4.2.2	Recommended quantity per fitting	Required	
424	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	

### Table A.48: Sleeve Repair for ACSR Rail Conductor

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page:	99 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>1101 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1408 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

### Table A.49: Sleeve Repair for ACSR WOLF Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR WOLF Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0402539	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR WOLF Conductor Dia. 18.13mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	100 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
3.4	Maximum daily variation	35 °C		
3.5	Altitude above sea level	1800m		
4	TECHNICAL REQUIREMENTS			
4.1	Mechanical properties			
4.1.1	Extruded or seam free	YES		
4.1.2	Material for outer tube	Aluminium		-
4.1.2.1	Outside Diameter	Required		-
4122		Bequired		-
1122	Wall thickness and tolerance	Bequired		_
4.1.2.3		Beguired		_
4.1.2.4		Required		_
4.1.3				_
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.		-
4.1.5	Material used for core tube	Aluminium		_
4.1.5.1	Outside Diameter	Required		
4.1.5.2	Inside Diameter	Required		_
4.1.5.3	Wall thickness and tolerance	Required		
4.1.5.4	Overall length	Required		
4.1.6	Fitting to be compressed by:			
4.1.6.1	ALCAN Die "index" identification number	DA- 8		
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 28.2mm (DA-8)		
4.1.8	Charpy V-notch test results	8J at -10 °C		
4.1.9	Maximum Tension	120kN		
4.2	Electrical Jointing Compound			-
4.2.1	Type of compound	Required		
4.2.2	Trade name	Required		-
4.2.3	Recommended quantity per fitting	Required		_
424	Are core tubes pre-filled and sealed?	Bequired		-
425	Is compound for outer core packed separately	Bequired		_
126	Container used to hold compound for outer tube	Bequired		-
4.0.7		Boguired		_
4.2.7		nequired		_
4.2.0				_
4.2.8.1	Continuous operating temperature	≤ 80 °C		_
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C		_
4.2.9	Degree of adhesion	Required		
4.2.10	Performance in wet or saltwater conditions	YES		
4.2.11	Method of marketing i.e per tube, container, etc	Required		
4.3	Electrical ratings			
4.3.1	Nominal System Voltage (Un)	132kV		
4.3.2	Maximum System Voltage (Um)	145kV		
4.3.3	Continuous operating temperature	≤ 80 °C		]
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C		1
4.3.5	Current carrying capacity under normal operating conditions	>498 Amps		1
4.3.6	Current carrying capacity under Emergency operating conditions	>671 Amps		1
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA		1
5	Test reports and certificates (According to SANS 61284)		Report Number	1
51	Test authority (approved person/organisation)	SABS/CSIR		-
5.7	Material grade certification	Required		-
5.3	Dimensional and material verification	Type test, Sample test and Routine tests		
5.4	Visual Examination test	Type test, Sample test and Routine tests		1
5.5	Hot dip galvanizing	Type test		1
5.6	Tensile test	Type Test and Sample Test		1
5.7	Short Circuit test	Type tests only		1
5.8	Corrosion test	Type tests only		1
5.9	Drift test	Type test. Sample test and Routine tests		1
5.0	Corona and BIV test			-
5.10		i ype lest		1

### ESKOM COPYRIGHT PROTECTED

240-171000175

COMPRESSION THINKS AND CLAMPS		Revision: 1		
		Page:	101 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
6	Comments and Deviations:			

#### Table A.50: Sleeve Repair for ACSR CHICADEE Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR CHICADEE Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0168749	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR CHICADEE Conductor Dia. 18.87mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-8	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 28.2mm (DA-8)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

	Page:	102 of 180
Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
Electrical Jointing Compound		
Type of compound	Required	
Trade name	Required	
Recommended quantity per fitting	Required	
Are core tubes pre-filled and sealed?	Required	
Is compound for outer core packed separately	Required	
Container used to hold compound for outer tube	Required	
Source of compound supply	Required	
Temperature rating		
Continuous operating temperature	≤ 80 °C	
Maximum temperature under short-circuit condition	≤ 200 °C	
Degree of adhesion	Required	
Performance in wet or saltwater conditions	YES	
Method of marketing i.e per tube, container, etc	Required	
Electrical ratings		
Nominal System Voltage (Un)	132kV	
Maximum System Voltage (Um)	145kV	
Continuous operating temperature	≤ 80 °C	
Maximum temperature under short-circuit condition	≤ 200 °C	
Current carrying capacity under normal operating conditions	>559 Amps	
Current carrying capacity under Emergency operating conditions	>761 Amps	
One second Short-Circuit Current Rating Withstand	31.5kA	
Test reports and certificates (According to SANS 61284)		Report Number
Test authority (approved person/organisation)	SABS/CSIR	
Material grade certification	Required	
Dimensional and material verification	Type test, Sample test and Routine tests	
Visual Examination test	Type test, Sample test and Routine tests	
Hot dip galvanizing	Type test	
Tensile test	Type Test and Sample Test	
Short Circuit test	Type tests only	
Corrosion test	Type tests only	
Drift test	Type test, Sample test and Routine tests	
Corona and RIV test	Type test	
Comments and Deviations:		
Corrosion tes Drift test Corona and F Comments a	t RIV test Ind Deviations:	t Type tests only Type tests only Type tests only Type tests only Type test and Routine tests RIV test Type test and Deviations:

### Table A.51: Sleeve Repair for ACSR BEAR Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR BEAR Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0402541	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	хххххх	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page:	103 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR BEAR Conductor Dia. 23.45mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4122	Inside Diameter	Required	
4100	Wall thickness and tolerance	Boquired	
1101		Boquired	
4.1.2.4		Doguirod	
4.1.3			
4.1.4		crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-9	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 32.3mm (DA-9)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.0.0		De antine d	
4.2.3			
4.2.4	Are core tubes pre-filled and sealed?		
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>706 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>962 Amps	
4,37	One second Short-Circuit Current Rating Withstand	31.5kA	
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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:	
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240-171000175

Revision:

1

		Page:	104 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
5	Test reports and certificates (According to SANS 61284)		Report Number	
5.1	Test authority (approved person/organisation)	SABS/CSIR		
5.2	Material grade certification	Required		
5.3	Dimensional and material verification	Type test, Sample test and Routine tests		
5.4	Visual Examination test	Type test, Sample test and Routine tests		
5.5	Hot dip galvanizing	Type test		
5.6	Tensile test	Type Test and Sample Test		
5.7	Short Circuit test	Type tests only		
5.8	Corrosion test	Type tests only		
5.9	Drift test	Type test, Sample test and Routine tests		
5.10	Corona and RIV test	Type test		
6	Comments and Deviations:			

#### Table A.52: Sleeve Repair for ACSR Kingbird Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR Kingbird Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0168750	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR Kingbird Conductor Dia. 23.90mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	

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Description

Item no.

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

 Revision:
 1

 Page:
 105 of 180

 Schedule A: Eskom's specific requirements
 Schedule B: Guarantees and technical particulars of equipment offered

 Aluminium
 Sequired

			equipment oncieu
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-9	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 32.3mm (DA-9)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>771 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1045 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

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4.1.6

4.1.6.1

4.1.7

Fitting to be compressed by:

DIE ACROSS FLATS (A/F):

ALCAN Die "index" identification number

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Page:

240-171000175

Revision:

106 of 180

1

	Table A.53: Sleeve	Repair for ACSR TERN Conductor	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR TERN Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0168751	
2.4	Original Equipment Manufacturer (OEM)	XXXXXXX	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	XXXXXXX	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR TERN Conductor Dia. 27.00mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	

4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	

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DA-11

ALUMINIUM 40.2mm (DA-11)

#### **Document Classification: Controlled Disclosure**

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

		Page:	107 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>894 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1231 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
	Tensile test	Type Test and Sample Test	
5.6			
5.6 5.7	Short Circuit test	Type tests only	
5.6 5.7 5.8	Short Circuit test Corrosion test	Type tests only Type tests only	
5.6 5.7 5.8 5.9	Short Circuit test Corrosion test Drift test	Type tests only Type tests only Type test, Sample test and Routine tests	
5.6 5.7 5.8 5.9 5.10	Short Circuit test Corrosion test Drift test Corona and RIV test	Type tests only         Type tests only         Type test, Sample test and Routine tests         Type test	

Table A.54: Sleeve Repair for ACSR ZEBRA Conductor	
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Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR ZEBRA Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR ZEBRA Conductor Dia. 28.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

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Revision:

1

		Page:	108 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
3.5	Altitude above sea level	1800m		-
4	TECHNICAL REQUIREMENTS			
4.1	Mechanical properties			
4.1.1	Extruded or seam free	YES		]
4.1.2	Material for outer tube	Aluminium		]
4.1.2.1	Outside Diameter	Required		
4.1.2.2	Inside Diameter	Required		
4.1.2.3	Wall thickness and tolerance	Required		
4.1.2.4	Overall length	Required		
4.1.3	Number of crimps per connection	Required		-
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.		
4.1.5	Material used for core tube	Aluminium		
4.1.5.1	Outside Diameter	Required		]
4.1.5.2	Inside Diameter	Required		
4.1.5.3	Wall thickness and tolerance	Required		1
4.1.5.4	Overall length	Required		1
4.1.6	Fitting to be compressed by:			1
4.1.6.1	ALCAN Die "index" identification number	DA-11		1
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 40.2mm (DA-11)		1
4.1.8	Charpy V-notch test results	8J at -10 °C		-
4.1.9	Maximum Tension	120kN		-
4.2	Electrical Jointing Compound			-
4.2.1	Type of compound	Required		-
4.2.2	Trade name	Required		-
4.2.3	Recommended quantity per fitting	Required		-
4.2.4	Are core tubes pre-filled and sealed?	Required		-
4.2.5	Is compound for outer core packed separately	Required		-
4.2.6	Container used to hold compound for outer tube	Required		-
4.2.7	Source of compound supply	Bequired		-
428	Temperature rating			-
4281		< 80 °C		-
4282	Maximum temperature under short-circuit condition	< 200 °C		-
4.2.0.2		Bequired		-
4.2.3	Performance in wat or caltwater conditions	VEQ		-
4.2.10	Mothed of marketing i.e. per tube, container, etc.	Poquired		-
4.2.11		nequired		-
<b>4.3</b>	Nominal System Voltage (Up)	1201/1		-
4.3.1	Maximum System Voltage (UII)	102KV		-
4.3.2		145KV		4
4.3.3	Continuous operating temperature			-
4.3.4	Invaximum temperature under short-circuit condition	≤ 200 °C		-
4.3.5	Current carrying capacity under normal operating conditions	>938 Amps		-
4.3.6	Current carrying capacity under Emergency operating conditions	>1285 Amps		-
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	Depart New 1	-
5	iest reports and certificates (According to SANS 61284)		Report Number	-
5.1	Test authority (approved person/organisation)	SABS/CSIR		
5.2	Material grade certification	Required		_
5.3	Dimensional and material verification	Type test, Sample test and Routine tests		
5.4	Visual Examination test	Type test, Sample test and Routine tests		
5.5	Hot dip galvanizing	Type test		
5.6	Tensile test	Type Test and Sample Test		-
5.7	Short Circuit test	Type tests only		
5.8	Corrosion test	Type tests only		]
5.9	Drift test	Type test, Sample test and Routine tests		1
5.10	Corona and RIV test	Type test		1
0.10		/ //·····		i i

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4.1.3

Number of crimps per connection

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

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240-171000175

Revision:	1	
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		Page:	109 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
6	Comments and Deviations:			

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for ACSR BERSFORT Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	ACSR BERSFORT Conductor Dia. 35.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	

#### Table A.55: Sleeve Repair for ACSR BERSFORT Conductor

4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-13	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 49.7mm (DA-13)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	

#### ESKOM COPYRIGHT PROTECTED

Required

Unique	Identifier:
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240-171000175

Revision:

1

		Page:	110 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>1304 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1814 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for Steel wire 3/4 Conductor	
2.2	Drawing number & Revision number	хххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	Steel wire 3/4 Conductor Dia. 8.7mm	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	111 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
31	Maximum ambient temperature	50 °C	
3.1		10 °C	
0.2		-10 0	
3.3		35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Bequired	
4153	Wall thickness and tolerance	Bequired	
4.1.5.0		Poquired	
4.1.5.4		nequireu	
4.1.0	ALCAN Die Wederwijkerstürster einer	<b>DO 0</b>	
4.1.0.1			
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 15.2mm (DS-9)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating	- 1	
4281		< 80 °C	
4.0.0.0			
4.2.8.2			
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
51	Test authority (approved person/organisation)	SARS/CSIR	
5.1	Material grade performence	Docuirod	
5.2			
5.3	imensional and material verification	i ype test, Sample test and Routine tests	

#### ESKOM COPYRIGHT PROTECTED

Revision:

240-171000175

1

		Page:	112 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for Steel wire 7/3.35 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	Steel wire 7/3.35 Conductor Dia. 10.23mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	

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Unique Identifier:

Revision:

240-171000175

1

		Page:	113 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DS-10	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 16.1mm (DS-10)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
54	Visual Examination test	Type test, Sample test and Routine tests	
5.4			
5.5	Hot dip galvanizing	Type test	
5.5 5.6	Hot dip galvanizing Tensile test	Type test Type Test and Sample Test	
5.5 5.6 5.7	Hot dip galvanizing Tensile test Short Circuit test	Type test       Type Test and Sample Test       Type tests only	
5.5 5.6 5.7 5.8	Hot dip galvanizing Tensile test Short Circuit test Corrosion test	Type test       Type Test and Sample Test       Type tests only       Type tests only	
5.4 5.5 5.6 5.7 5.8 5.9	Hot dip galvanizing Tensile test Short Circuit test Corrosion test Drift test	Type test         Type Test and Sample Test         Type tests only         Type tests only         Type tests only         Type test and Routine tests	
5.5 5.6 5.7 5.8 5.9 5.10	Hot dip galvanizing         Tensile test         Short Circuit test         Corrosion test         Drift test         Corona and RIV test	Type test       Type Test and Sample Test       Type tests only       Type tests only       Type test, Sample test and Routine tests       Type test	

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Sleeve Repair for Steel wire 19/2.65 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	хххххх	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page:	114 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Sleeve Repair Compression fitting unit suitable for conductor:	Steel wire 19/2.65 Conductor Dia. 13.55mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside Diameter	Required	
4.1.2.2	Inside Diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside Diameter	Required	
4.1.5.2	Inside Diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DS-12	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 20.2mm (DS-12)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.1.9	Maximum Tension	120kN	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
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#### ESKOM COPYRIGHT PROTECTED

240-171000175

Revision:

1

		Page:	115 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Tensile test	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### Table A.59: Non-Tension Joint for ACSR Mink Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR Mink Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Non-Tension Joint suitable for conductor:	ACSR MINK Conductor Dia 10.98mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	

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Unique Identifier:

Revision:

240-171000175

1

Item no.         Descript           4.1.5.4         Overall left           4.1.6         Fitting to           4.1.6.1         ALCAN E           4.1.7         DIE ACR           4.1.8         Charpy W           4.2         Electrica           4.2.1         Type of c           4.2.2         Trade na           4.2.3         Recomm           4.2.4         Are core           4.2.5         Is compo           4.2.6         Containe           4.2.7         Source o           4.2.8         Tempera           4.2.9         Degree o           4.2.10         Performa           4.2.11         Method o           4.2.3         Continuo           4.2.10         Performa           4.2.11         Method o           4.3.1         Nominal 3           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current o           4.3.6         Current o           4.3.7         One seco           5.1         Test auth           5.2         Hot dip g		Page:	116 of 180
4.1.5.4       Overall let         4.1.6       Fitting to         4.1.6.1       ALCAN E         4.1.7       DIE ACR         4.1.8       Charpy W         4.2       Electrica         4.2.1       Type of c         4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.2.3       Continuo         4.2.4       Maximum         4.2.5       Maximum         4.2.6       Continuo         4.2.7       Source o         4.2.8       Tempera         4.2.7       Maximum         4.2.8       Continuo         4.3.1       Method o         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         5.1       Test auth         5.2       Material g </th <th>scription</th> <th>Schedule A: Eskom's specific requirements</th> <th>Schedule B: Guarantees and technical particulars of equipment offered</th>	scription	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.6       Fitting to         4.1.6.1       ALCAN E         4.1.7       DIE ACR         4.1.8       Charpy V         4.2       Electrica         4.2.1       Type of c         4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.2.8       Continuo         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         5.1       Test auth         5.2       Material g         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage	erall length	Required	
4.1.6.1       ALCAN E         4.1.7       DIE ACR         4.1.8       Charpy W         4.2       Electrica         4.2.1       Type of c         4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secco         5       Test auth         5.1       Test auth         5.2       Material g         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage <td>ng to be compressed by:</td> <td></td> <td></td>	ng to be compressed by:		
4.1.7       DIE ACR         4.1.8       Charpy V         4.2       Electrica         4.2.1       Type of c         4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.2.10       Performa         4.2.11       Method o         4.2.11       Method o         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current o         4.3.4       Maximum         4.3.5       Current o         4.3.6       Current o         4.3.7       One seco         5.1       Test auth         5.2       Material o         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro	CAN Die "index" identification number	DA-6	
4.1.8       Charpy V         4.2       Electrica         4.2.1       Type of c         4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secco         5.1       Test auth         5.2       Material g         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cirr         5.8       Corrosion         5.9       Drift test	ACROSS FLATS (A/F):	ALUMINIUM 22.0mm (DA-6)	
4.2         Electrica           4.2.1         Type of c           4.2.2         Trade na           4.2.3         Recomm           4.2.4         Are core           4.2.5         Is compo           4.2.6         Containe           4.2.7         Source o           4.2.8         Tempera           4.2.7         Source o           4.2.8         Tempera           4.2.8.1         Continuo           4.2.8         Maximum           4.2.9         Degree o           4.2.10         Performa           4.2.11         Method o           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current o           4.3.4         Maximum           4.3.5         Current o           4.3.6         Current o           4.3.7         One seco           5.1         Test auth           5.2         Material o           5.3         Dimensio           5.4         Visual Ex           5.5         Hot dip g           5.6         Damage	arpy V-notch test results	8J at -10 °C	
4.2.1       Type of c         4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.2.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secco         5.1       Test repo         5.1       Test auth         5.2       Material g         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test	ctrical Jointing Compound		
4.2.2       Trade na         4.2.3       Recomm         4.2.4       Are core         4.2.5       Is compo         4.2.6       Containe         4.2.7       Source o         4.2.8       Tempera         4.2.8.1       Continuo         4.2.8.2       Maximum         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current o         4.3.6       Current o         4.3.7       One secondo         5.1       Test authom         5.2       Material o         5.3       Dimension         5.4       Visual Exercision         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test	be of compound	Required	
4.2.3         Recomm           4.2.3         Recomm           4.2.4         Are core           4.2.5         Is compo           4.2.6         Containe           4.2.7         Source o           4.2.8         Tempera           4.2.8         Tempera           4.2.8         Maximum           4.2.9         Degree o           4.2.10         Performa           4.2.11         Method o           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current o           4.3.6         Current o           4.3.7         One secondom           5.1         Test authom           5.2         Material o           5.3         Dimension           5.4         Visual Exponsion           5.5         Hot dip g           5.6         Damage           5.7         Short Cirro           5.8         Corrosion           5.9         Drift test	de name	Bequired	
4.2.4         Are core           4.2.5         Is compo           4.2.6         Containe           4.2.7         Source o           4.2.8         Tempera           4.2.8         Tempera           4.2.8         Tempera           4.2.8.1         Continuo           4.2.8.2         Maximum           4.2.9         Degree o           4.2.10         Performa           4.2.11         Method o           4.3         Electrica           4.3.1         Nominal           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current o           4.3.6         Current o           4.3.7         One second           5.1         Test authom           5.2         Material o           5.3         Dimension           5.4         Visual Exercise           5.5         Hot dip g           5.6         Damage           5.7         Short Cirro           5.8         Corrosion           5.9         Drift test	commended quantity per fitting	Bequired	
4.2.5         Is compo           4.2.6         Containe           4.2.7         Source o           4.2.8         Tempera           4.2.8.1         Continuo           4.2.8.1         Continuo           4.2.8.1         Continuo           4.2.8.1         Continuo           4.2.8.1         Continuo           4.2.8.2         Maximum           4.2.9         Degree o           4.2.10         Performa           4.2.11         Method o           4.3.2         Maximum           4.3.1         Nominal a           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current o           4.3.6         Current o           4.3.7         One secondom           5.1         Test auth           5.2         Material o           5.3         Dimension           5.4         Visual Extra o           5.5         Hot dip g           5.6         Damage           5.7         Short Cirro           5.8         Corrosion           5.9         Drift test	core tubes pre-filled and sealed?	Bequired	
4.2.6         Containe           4.2.7         Source o           4.2.8         Tempera           4.2.8         Tempera           4.2.8         Continuo           4.2.8.1         Continuo           4.2.8         Maximum           4.2.9         Degree o           4.2.10         Performa           4.2.11         Method o           4.3         Electrica           4.3.1         Nominal 3           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current c           4.3.6         Current c           4.3.7         One secco           5         Test reports           5.1         Test auth           5.2         Material g           5.3         Dimensio           5.4         Visual Ex           5.5         Hot dip g           5.6         Damage           5.7         Short Cirr           5.8         Corrosion           5.9         Drift test	ompound for outer core packed separately	Bequired	
4.2.7       Source o         4.2.7       Source o         4.2.8       Tempera         4.2.8.1       Continuo         4.2.8.2       Maximum         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current o         4.3.6       Current o         4.3.7       One second         5.1       Test authom         5.2       Material 0         5.3       Dimension         5.4       Visual Expension         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test	aniper used to hold compound for outer tube	Bequired	
4.2.8       Tempera         4.2.8.1       Continuo         4.2.8.2       Maximum         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current o         4.3.6       Current o         4.3.7       One secondom         5.1       Test reports         5.1       Test auth         5.2       Material o         5.3       Dimension         5.4       Visual Extraction         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test		Bequired	
4.2.8.1       Continuo         4.2.8.1       Continuo         4.2.8.2       Maximum         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current o         4.3.6       Current o         4.3.7       One second         5.1       Test reports         5.1       Test auth         5.2       Material g         5.3       Dimension         5.4       Visual Extraction         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test	noe of compound supply		
4.2.8.1       Continuo         4.2.8.2       Maximum         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secc         5       Test repo         5.1       Test auth         5.2       Material g         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test		< 90.°C	
4.2.0.2       Maximum         4.2.9       Degree o         4.2.10       Performa         4.2.11       Method o         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secco         5       Test repo         5.1       Test auth         5.2       Material g         5.3       Dimensio         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cirr         5.8       Corrosion         5.9       Drift test			
4.2.9       Degree of         4.2.10       Performa         4.2.11       Method of         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current of         4.3.6       Current of         4.3.7       One seconds         5       Test reports         5.1       Test auth         5.2       Material of         5.3       Dimension         5.4       Visual Extraction         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test			
4.2.10       Performan         4.2.11       Method of         4.3       Electrica         4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current of         4.3.6       Current of         4.3.7       One second         5.1       Test report         5.1       Test auth         5.2       Material g         5.3       Dimension         5.4       Visual Extra go         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test		Required	
4.2.11         Method of           4.3         Electrica           4.3.1         Nominal 3           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current of           4.3.6         Current of           4.3.7         One second           5.1         Test report           5.1         Test authom           5.2         Material of           5.3         Dimension           5.4         Visual Extra 5.5           5.5         Hot dip g           5.6         Damage           5.7         Short Cirrosion           5.8         Corrosion           5.9         Drift test			
4.3         Electrical           4.3.1         Nominal 3           4.3.2         Maximum           4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current of           4.3.6         Current of           4.3.7         One second           5         Test reports           5.1         Test auth           5.2         Material 9           5.3         Dimension           5.4         Visual Extra 5           5.5         Hot dip 9           5.6         Damage           5.7         Short Cirro           5.8         Corrosion           5.9         Drift test	nod of marketing i.e per tube, container, etc	Required	
4.3.1       Nominal 3         4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secco         5       Test reports         5.1       Test auth         5.2       Material g         5.3       Dimension         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cim         5.8       Corrosion         5.9       Drift test	ctrical ratings		
4.3.2       Maximum         4.3.3       Continuo         4.3.4       Maximum         4.3.5       Current c         4.3.6       Current c         4.3.7       One secc         5       Test reports         5.1       Test auth         5.2       Material g         5.3       Dimension         5.4       Visual Ex         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test	ninal System Voltage (Un)	132kV	
4.3.3         Continuo           4.3.4         Maximum           4.3.5         Current of           4.3.6         Current of           4.3.7         One second           5         Test report           5.1         Test auth           5.2         Material of           5.3         Dimension           5.4         Visual Extra the           5.5         Hot dip g           5.6         Damage           5.7         Short Cirro           5.8         Corrosion           5.9         Drift test	dimum System Voltage (Um)	145kV	
4.3.4       Maximum         4.3.5       Current of         4.3.6       Current of         4.3.7       One second         5       Test reports         5.1       Test auth         5.2       Material g         5.3       Dimension         5.4       Visual Ext         5.5       Hot dip g         5.6       Damage         5.7       Short Cirro         5.8       Corrosion         5.9       Drift test	tinuous operating temperature	≤ 80 °C	
4.3.5Current c4.3.6Current c4.3.7One secco5Test report5.1Test auth5.2Material g5.3Dimension5.4Visual Ext5.5Hot dip g5.6Damage5.7Short Cirro5.8Corrosion5.9Drift test5.10Corona a	kimum temperature under short-circuit condition	≤ 200 °C	
4.3.6Current c4.3.7One second5Test report5.1Test auth5.2Material g5.3Dimension5.4Visual Ext5.5Hot dip g5.6Damage5.7Short Cirr5.8Corrosion5.9Drift test5.10Corona a	rent carrying capacity under normal operating conditions	>270 Amps	
4.3.7One secc5Test report5.1Test auth5.2Material g5.3Dimension5.4Visual Ext5.5Hot dip g5.6Damage5.7Short Cirro5.8Corrosion5.9Drift test5.10Corona a	rent carrying capacity under Emergency operating conditions	>361 Amps	
5Test report5.1Test auth5.2Material g5.3Dimension5.4Visual Ext5.5Hot dip g5.6Damage5.7Short Cirr5.8Corrosion5.9Drift test5.10Corona a	econd Short-Circuit Current Rating Withstand	31.5kA	
5.1Test auth5.2Material g5.3Dimension5.4Visual Ext5.5Hot dip g5.6Damage5.7Short Cirro5.8Corrosion5.9Drift test5.10Corona a	t reports and certificates (According to SANS 61284)		Report Number
5.2Material (5.3Dimension5.4Visual Ex5.5Hot dip g5.6Damage5.7Short Cirro5.8Corrosion5.9Drift test5.10Corona a	t authority (approved person/organisation)	SABS/CSIR	
5.3Dimension5.4Visual Extraction5.5Hot dip g5.6Damage5.7Short Cirro5.8Corrosion5.9Drift test5.10Corona a	erial grade certification	Required	
5.4Visual Ex5.5Hot dip g5.6Damage5.7Short Circ5.8Corrosion5.9Drift test5.10Corona a	iensional and material verification	Type test, Sample test and Routine tests	
5.5Hot dip g5.6Damage5.7Short Cirr5.8Corrosion5.9Drift test5.10Corona a	ual Examination test	Type test, Sample test and Routine tests	
5.6         Damage           5.7         Short Circ           5.8         Corrosion           5.9         Drift test           5.10         Corona a	dip galvanizing	Type test	
5.7Short Cirr5.8Corrosion5.9Drift test5.10Corona a	nage and failure load tests	Type Test and Sample Test	
5.8 Corrosion 5.9 Drift test	ort Circuit test	Type tests only	
5.9 Drift test	rosion test	Type tests only	
5 10 Corona a	t test	Type test, Sample test and Routine tests	
0.10	ona and RIV test	Type test	
6 Commer	nments and Deviations:	•	·

### Table A.60: Non-Tension Joint for ACSR HARE Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR HARE Conductor	
2.2	Drawing number & Revision number	xxxxxx	
2.3	SAP No	xxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	ххххххх	
2.9	Non-Tension Joint suitable for conductor:	ACSR HARE Conductor Dia 14.16mm	

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Unique Identifier:

240-171000175

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Revision:

1

		Page:	117 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load		
2.11	Compliance with IEC/SANS 61284	Test Certificates		
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх		
2.13	Item sample required	YES		
2.14	Detailed installation instructions of the fitting required?	YES		
3	Site Operating Conditions	50.00		
3.1	Maximum ambient temperature	50 °C		
3.2	Minimum ambient temperature	-10 °C		
3.3	Maximum daily average	35 °C		
3.4	Maximum daily variation	1800m		
4				
41				
4 1 1	Extruded or seam free	YES		
4.1.2	Material for outer tube	Aluminium		
4.1.2.1	Outside diameter	Required		
4.1.2.2	Inside diameter	Required		
4.1.2.3	Wall thickness and tolerance	Required		
4.1.2.4	Overall length	Required		
4.1.3	Number of crimps per connection	Required		
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.		
4.1.5	Material used for core tube	Aluminium		
4.1.5.1	Outside diameter	Required		
4.1.5.2	Inside diameter	Required		
4.1.5.3	Wall thickness and tolerance	Required		
4.1.5.4	Overall length	Required		
4.1.6	Fitting to be compressed by:			
4.1.6.1 4.1.7	ALCAN Die "index" identification number DIE ACROSS FLATS (A/F):	DA-7 ALUMINIUM 25.4mm (DA-7)		
4.1.8	Charpy V-notch test results	8J at -10 °C		
4.2	Electrical Jointing Compound			
4.2.1	Type of compound	Required		
4.2.2	Trade name	Required		
4.2.3	Recommended quantity per fitting	Required		
4.2.4	Are core tubes pre-filled and sealed?	Required		
4.2.5	Container used to hold compound for outer tube	Required		
4.2.0	Source of compound supply	Required		
428	Temperature rating			
4.2.8.1	Continuous operating temperature	≤ 80 °C		1
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C		
4.2.9	Degree of adhesion	Required		]
4.2.10	Performance in wet or saltwater conditions	YES		
4.2.11	Method of marketing i.e per tube, container, etc	Required		
4.3	Electrical ratings			
4.3.1	Nominal System Voltage (Un)	132kV		ļ
4.3.2	Maximum System Voltage (Um)	145kV		
4.3.3	Continuous operating temperature	≤ 80 °C		
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C		
4.3.5	Current carrying capacity under normal operating conditions	>376 Amps		
4.3.6	Current carrying capacity under Emergency operating conditions	>496 Amps		
4.3.7	One second Short-Circuit Current Rating Withstand	31.5KA	Doport Number:	
5	Test reports and certificates (According to SANS 61284)		neport inumber	1
5.1	Material grade certification	Dequired		1
5.2	Dimensional and material verification	Type test, Sample test and Routine tests		•
5.4	Visual Examination test	Type test, Sample test and Routine tests		1
5.5	Hot dip galvanizing	Type test		1
5.6	Damage and failure load tests	Type Test and Sample Test		1
5.7	Short Circuit test	Type tests only		1
5.8	Corrosion test	Type tests only		]
5.9	Drift test	Type test, Sample test and Routine tests		

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Unique Identifier:

240-171000175

		Revision:	Revision: 1	
		Page:	118 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
5.10	Corona and RIV test	Type test		
6	Comments and Deviations:			
1				

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for AAAC Ash Conductor	
2.2	Drawing number & Revision number	xxxxxx	
2.3	SAP No	xxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9	Non Tension Joint suitable for conductor:	AAAC Ash Conductor Dia 17.40mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM (DA-7)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	

#### Table A.61: Armor Grip Suspension (AGS) Unit for ACSR MINK Conductor and AAAC PINE Conductor

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page:	119 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>523Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>700 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### Table A.62: Non-Tension Joint for AAAC Oak Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for AAAC Oak Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Non-Tension Joint suitable for conductor:	AAAC Oak Conductor Dia 13.95mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

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4.3.7

5

5.1

5.2

5.3

5.4

5.5 5.6

5.7

One second Short-Circuit Current Rating Withstand

Test authority (approved person/organisation)

Dimensional and material verification

Material grade certification

Damage and failure load tests

Visual Examination test

Hot dip galvanizing

Short Circuit test

Test reports and certificates (According to SANS 61284)

#### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES **COMPRESSION FITTINGS AND CLAMPS**

Unique Identifier:

240-171000175

1

Revision:

		Page:	120 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
4	TECHNICAL REQUIREMENTS			
4.1	Mechanical properties			
4.1.1	Extruded or seam free	YES		
4.1.2	Material for outer tube	Aluminium		
4.1.2.1	Outside diameter	Required		
4.1.2.2	Inside diameter	Required		
4.1.2.3	Wall thickness and tolerance	Required		
4.1.2.4	Overall length	Required		
4.1.3	Number of crimps per connection	Required		
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.		
4.1.5	Material used for core tube	Aluminium		
4.1.5.1	Outside diameter	Required		
4.1.5.2	Inside diameter	Required		
4.1.5.3	Wall thickness and tolerance	Required		
4.1.5.4	Overall length	Required		
4.1.6	Fitting to be compressed by:			
4.1.6.1	ALCAN Die "index" identification number	DA-7		
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 25.4mm (DA-7)		
4.1.8	Charpy V-notch test results	8J at -10 °C		
4.2	Electrical Jointing Compound			
4.2.1	Type of compound	Required		
4.2.2	Trade name	Required		
4.2.3	Recommended quantity per fitting	Required		
4.2.4	Are core tubes pre-filled and sealed?	Required		
4.2.5	Is compound for outer core packed separately	Required		
4.2.6	Container used to hold compound for outer tube	Required		
4.2.7	Source of compound supply	Required		
4.2.8	Temperature rating			
4.2.8.1	Continuous operating temperature	≤ 80 °C		
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C		
4.2.9	Degree of adhesion	Required		
4.2.10	Performance in wet or saltwater conditions	YES		
4.2.11	Method of marketing i.e per tube, container, etc	Required		
4.3	Electrical ratings			
4.3.1	Nominal System Voltage (Un)	132kV		
4.3.2	Maximum System Voltage (Um)	145kV		
4.3.3	Continuous operating temperature	≤ 80 °C		
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C		
4.3.5	Current carrying capacity under normal operating conditions	>391 Amps		
4.3.6	Current carrying capacity under Emergency operating conditions	>530 Amps		

5.8	Corrosion test	Type tests only
5.9	Drift test	Type test, Sample test and Routine tests
5.10	Corona and RIV test	Type test
6	Comments and Deviations:	

31.5kA

SABS/CSIR

Required

Type test, Sample test and Routine tests

Type test, Sample test and Routine tests

Type test

Type Test and Sample Test

Type tests only

Report Number

#### **ESKOM COPYRIGHT PROTECTED**

Unique Identifier:

Revision:

Page:

240-171000175

121 of 180

1

### Table A.63: Non-Tension Joint for ACSR WOLF Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR WOLF Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	XXXXXXX	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	XXXXXXX	
2.9	Non -Tension Joint suitable for conductor:	ACSR WOLF Conductor Dia 18.13mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
<u>4.1.3</u> 4.1.4	Number of crimps per connection Do crimps overlap?	Required Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA- 8	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 28.2mm (DA-8)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page:	122 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>498 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>671 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5 10	Corona and RIV test	Type test	
5.10			

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non- Tension Joint for ACSR CHICADEE Conductor	
2.2	Drawing number & Revision number	D-DT 7020	
2.3	SAP No	0168749	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Non-Tension Joint suitable for conductor:	ACSR CHICADEE Conductor Dia 18.87mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7020	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	

#### Table A.64: Non- Tension Joint for ACSR CHICADEE Conductor

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	123 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1 4.1.7	ALCAN Die "index" identification number DIE ACROSS FLATS (A/F):	DA-8 ALUMINIUM 28.2mm (DA-8)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings	· · · · · ·	
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>559 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>761 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
	Drift test	Type test, Sample test and Routine tests	
5.9			
5.9 5.10	Corona and RIV test	Type test	

#### Table A.65: Non-Tension Joint for ACSR BEAR Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR BEAR Conductor	
2.2	Drawing number & Revision number	хххххх	
2.3	SAP No	xxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page:	124 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	XXXXXX	
2.9	Non-Tension Joint suitable for conductor:	ACSR BEAR Conductor Dia 23.45mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-9	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 32.3mm (DA-9)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4,2.11	Method of marketing i.e per tube, container, etc.	Required	
4.3	Electrical ratings		

4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>706 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>962 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	
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240-171000175

COMPRES	SION FITTINGS AND CLAMPS	Revision:	1
		Page:	125 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		
1			

### Table A.66: Non-Tension Joint for ACSR Kingbird Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR Kingbird Conductor	
2.2	Drawing number & Revision number	xxxxxx	
2.3	SAP No	xxxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9	Non-Tension Joint suitable for conductor:	ACSR Kingbird Conductor Dia 23.90mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1 4.1.7	ALCAN Die "index" identification number DIE ACROSS FLATS (A/F):	DA-9 ALUMINIUM 32.3mm (DA-9)	
/ 1 0	Charpy V-notch test results	8 L at -10 °C	
4.1.0	Flectrical Jointing Compound	00 at -10 0	
421		Required	
4.2.2	Trade name	Required	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page:	126 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>771 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1045 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	Eskom Standard and Specifications Referred to: [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR TERN Conductor	
2.2	Drawing number & Revision number	xxxxxxx	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Non-Tension Joint suitable for conductor:	ACSR TERN Conductor Dia 27.00mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	XXXXXXX	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	

#### Table A.67: Non-Tension Joint for ACSR TERN Conductor

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page:	127 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number		
4.1.7	DIE ACROSS FLATS (A/F):	ALOMINIOM 40.2mm (DA-11)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>894 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1231 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	I est authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
ე.კ		Ture test, Sample test and Routine tests	
5.4		i ype test, Sample test and Houtine tests	
55		I VDE TEST	ĺ

5.5	Hot dip galvanizing	Type test
5.6	Damage and failure load tests	Type Test and Sample Test
5.7	Short Circuit test	Type tests only
5.8	Corrosion test	Type tests only
5.9	Drift test	Type test, Sample test and Routine tests
5.10	Corona and RIV test	Type test
6	Comments and Deviations:	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Page:

240-171000175

Revision:

128 of 180

1

### Table A.68: Non-Tension Joint for ACSR Tiger Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR Tiger Conductor	
2.2	Drawing number & Revision number	xxxxxx	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9 2.10	Non-Tension Joint suitable for conductor: Physical identification mark on product	ACSR Tiger Conductor Dia. 17.40mm Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3 4.1.4	Number of crimps per connection Do crimps overlap?	Required Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-7	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM (DA-7)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

	Page:	129 of 180
Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
Continuous operating temperature	≤ 80 °C	
Maximum temperature under short-circuit condition	≤ 200 °C	
Current carrying capacity under normal operating conditions	>444 Amps	
Current carrying capacity under Emergency operating conditions	>593 Amps	
One second Short-Circuit Current Rating Withstand	31.5kA	
Test reports and certificates (According to SANS 61284)		Report Number
Test authority (approved person/organisation)	SABS/CSIR	
Material grade certification	Required	
Dimensional and material verification	Type test, Sample test and Routine tests	
Visual Examination test	Type test, Sample test and Routine tests	
Hot dip galvanizing	Type test	
Damage and failure load tests	Type Test and Sample Test	
Short Circuit test	Type tests only	
Corrosion test	Type tests only	
Drift test	Type test, Sample test and Routine tests	
Corona and RIV test	Type test	
Comments and Deviations:		·
	Description         Continuous operating temperature         Maximum temperature under short-circuit condition         Current carrying capacity under normal operating conditions         Current carrying capacity under Emergency operating conditions         One second Short-Circuit Current Rating Withstand         Test reports and certificates (According to SANS 61284)         Test authority (approved person/organisation)         Material grade certification         Dimensional and material verification         Visual Examination test         Hot dip galvanizing         Damage and failure load tests         Short Circuit test         Corrosion test         Drift test         Corona and RIV test         Comments and Deviations:	Page:           Description         Schedule A: Eskom's specific requirements           Continuous operating temperature         ≤ 80 °C           Maximum temperature under short-circuit condition         ≤ 200 °C           Current carrying capacity under normal operating conditions         >444 Amps           Current carrying capacity under Emergency operating conditions         >593 Amps           One second Short-Circuit Current Rating Withstand         31.5kA           Test reports and certificates (According to SANS 61284)         Material grade certification           Material grade certification         Required           Dimensional and material verification         Type test, Sample test and Routine tests           Visual Examination test         Type test, Sample test and Routine tests           Hot dip galvanizing         Type Test and Sample Test           Short Circuit test         Type test only           Corrosion test         Type test only           Drift test         Type test, Sample test and Routine tests           Corona and RIV test         Type test, Sample test and Routine tests

### Table A.69: Non-Tension Joint for ACSR RAIL Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR RAIL Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	******	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	*****	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	xxxxxxx	
2.9	Non-Tension Joint suitable for conductor:	ACSR Rail Conductor Dia. 29.59mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	

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Unique Identifier:

Revision:

240-171000175

1

		Page:	130 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-11	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 40.2mm (DA-11)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Beguired	
428	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
429		Bequired	
4 2 10	Performance in wet or saltwater conditions	YES	
4211	Method of marketing i e per tube container etc	Bequired	
43	Flectrical ratings	i i i i i i i i i i i i i i i i i i i	
431	Nominal System Voltage (I In)	132kV	
432	Maximum System Voltage (JIm)	145kV	
433		< 80 °C	
434	Maximum temperature under short-circuit condition	< 200 °C	
435	Current carrying capacity under normal operating conditions		
436	Current carrying capacity under Fiormal operating conditions	>1108 Amps	
437	One second Short-Circuit Current Bating Withstand	31 54 4	
4.J.7	Test reports and certificates (According to SANS 61284)	51.5KA	Bapart Number
5 1	Test authority (approved person/organisation)		
5.0	Material grade certification	Boguired	
5.3	Dimensional and material verification	Type test. Sample test and Routine tests	
51	Visual Examination test	Type test, Sample test and Routine tests	
5.4	Hot dip galvanizing	Type test	
5.5	Damage and failure load tests	Type Test and Sample Test	
5.0	Chantage and failure load lests		
5.7		Type tests only	
5.0		Type tests only	
5.9	Corona and BIV test	Type test, Gample test and noutline tests	
		i ype iesi	

Table A.70: Non-Tension Joint for ACSR ZEBRA Conductor

Schedule A: Eskom's specific requirements

1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR ZEBRA Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	xxxxxxx	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	xxxxxxx	
2.9	Non-Tension Joint suitable for conductor:	ACSR ZEBRA Conductor Dia 28.56mm	

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Unique Identifier:

240-171000175

Revision:

1

		Page:	131 01 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	equipment offered
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5		1800m	
4			
4.1		NEC .	
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube		
4.1.2.1			
4.1.2.2			
4.1.2.3	wall Inickness and Iolerance	Hequired	
4.1.2.4		Hequired	+
4.1.3	Number of crimps per connection	Required	
4.1.4		crimps by one third.	
4.1.5	Material used for core tube	Aluminium	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4161	AI CAN Die "index" identification number	DA-11	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 40.2mm (DA-11)	
110	Charpy V patch test results	81 at 10 °C	
4.1.0			
4.0.1	Type of compound	Poquirod	
4.2.1		Dequired	
4.2.2		Required	
4.2.3		Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>938 Amps	
436	Current carrying capacity under Emergency operating conditions	_1285 Δmns	
437	One second Short-Circuit Current Bating Withstand	31 5kA	
-+.J./ E	Test reports and contributed (According to CANC \$1994)		Report Number
5 5 1	Test reports and certificates (According to SANS 61264)		
1.C			+
5.2	Material grade certification	Required	
5.3		Type test, Sample test and Routine tests	
5.4		ype test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	

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4.1.5

Material used for core tube

### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

		Revision:	1
		Page:	132 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for ACSR BERSFORT Conductor	
2.2	Drawing number & Revision number	xxxxxxx	
2.3	SAP No	xxxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Non-Tension Joint suitable for conductor:	ACSR BERSFORT Conductor Dia 35.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Aluminium	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent	

#### Table A.71: Non-Tension Joint for ACSR BERSFORT Conductor

4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DA-13	
4.1.7	DIE ACROSS FLATS (A/F):	ALUMINIUM 49.7mm (DA-13)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	

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crimps by one third.

Aluminium

Unique Identifier:

240-171000175

Revision:

1

		Page:	133 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	Current carrying capacity under normal operating conditions	>1304 Amps	
4.3.6	Current carrying capacity under Emergency operating conditions	>1814 Amps	
4.3.7	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for Steel wire 3/4 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	XXXXXXX	
2.9	Non-Tension Joint suitable for conductor:	Steel wire 3/4 Conductor Dia. 8.7mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

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Unique Identifier:

240-171000175

Revision: 1

		Faye.	134 01 160
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number		
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 15.2mm (DS-9)	
418	Charpy V-notch test results	81 at -10 °C	+
<u>т. т. о</u>	Flectrical Jointing Compound	05 at -10 0	+
<b>4.2</b>		Poquirod	+
4.2.1	Trade name	Required	+
4.0.0		nequired	+
4.2.3		nequirea	+
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.0	Container used to hold compound for outer tube	Required	
4.2.7			
4.2.8	Centimerature rating		
4.2.8.1	Continuous operating temperature	<u>≤ 80 °C</u>	
4.2.8.2			
4.2.9			
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Page:

240-171000175

Revision:

135 of 180

1

### Table A.73: Non-Tension Joint for Steel wire 7/3.35 Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for Steel wire 7/3.35 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Non-Tension Joint suitable for conductor:	Steel wire 7/3.35 Conductor Dia. 10.23mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and	
		mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
32		-10 °C	
3.3		35 °C	
3.4		35 °C	
2.5	Maximum daily variation	1800m	
3.5		180011	
4			
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DS-10	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 16.1mm (DS-10)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.21	Type of compound	Required	
422	Trade name	Required	
423	Becommended quantity per fitting	Required	
101	Are core tubes pre-filled and sealed?	Required	
4.2.4 105		Required	
4.2.3	Container used to held compound for outer tube	Dequired	
4.2.0			
4.2./		Hequirea	
4.2.8	I emperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	

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Item no.

4.3.3 4.3.4

4.3.5

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

SIGN ITT TINGS AND CLAMFS	Revision:	1
	Page:	136 of 180
Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
Continuous operating temperature	≤ 80 °C	
Maximum temperature under short-circuit condition	≤ 200 °C	
One second Short-Circuit Current Rating Withstand	31.5kA	
Test reports and contificates (Association to CANC C1004)		Deve ant Numerican

5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test	
5.6	Damage and failure load tests	Type Test and Sample Test	
5.7	Short Circuit test	Type tests only	
5.8	Corrosion test	Type tests only	
5.9	Drift test	Type test, Sample test and Routine tests	
5.10	Corona and RIV test	Type test	
6	Comments and Deviations:		

#### Table A.74: Non-Tension Joint for Steel wire 19/2.65 Conductor

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Compression fitting	Non-Tension Joint for Steel wire 19/2.65 Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	xxxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxxx	
2.9	Non-Tension Joint suitable for conductor:	Steel wire 19/2.65 Conductor Dia. 13.55mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Extruded or seam free	YES	
4.1.2	Material for outer tube	Steel	
4.1.2.1	Outside diameter	Required	
4.1.2.2	Inside diameter	Required	
4.1.2.3	Wall thickness and tolerance	Required	
4.1.2.4	Overall length	Required	
4.1.3	Number of crimps per connection	Required	
4.1.4	Do crimps overlap?	Successive crimps shall overlap adjacent crimps by one third.	
4.1.5	Material used for core tube	Steel	
4.1.5.1	Outside diameter	Required	
4.1.5.2	Inside diameter	Required	

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240-171000175

Revision:

1

		Page.	137 Of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.5.3	Wall thickness and tolerance	Required	
4.1.5.4	Overall length	Required	
4.1.6	Fitting to be compressed by:		
4.1.6.1	ALCAN Die "index" identification number	DS-12	
4.1.7	DIE ACROSS FLATS (A/F):	STEEL 20.2mm (DS-12)	
4.1.8	Charpy V-notch test results	8J at -10 °C	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31 5kA	
		01.507	
5	Test reports and certificates (According to SANS 61284)	01.507	Report Number
<b>5</b> 5.1	Test reports and certificates (According to SANS 61284) Test authority (approved person/organisation)	SABS/CSIR	Report Number
5 5.1 5.2	Test reports and certificates (According to SANS 61284) Test authority (approved person/organisation) Material grade certification	SABS/CSIR Required	Report Number
5.1 5.2 5.3	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verification	SABS/CSIR Required Type test, Sample test and Routine tests	Report Number
5.1 5.2 5.3 5.4	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination test	SABS/CSIR Required Type test, Sample test and Routine tests Type test, Sample test and Routine tests	Report Number
<b>5</b> 5.1 5.2 5.3 5.4 5.5	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination testHot dip galvanizing	SABS/CSIR Required Type test, Sample test and Routine tests Type test, Sample test and Routine tests Type test	Report Number
5 5.1 5.2 5.3 5.4 5.5 5.6	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination testHot dip galvanizingDamage and failure load tests	SABS/CSIR Required Type test, Sample test and Routine tests Type test, Sample test and Routine tests Type test Type test Type Test and Sample Test	Report Number
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination testHot dip galvanizingDamage and failure load testsShort Circuit test	SABS/CSIR Required Type test, Sample test and Routine tests Type test, Sample test and Routine tests Type test Type test Type Test and Sample Test Type tests only	Report Number
5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination testHot dip galvanizingDamage and failure load testsShort Circuit testCorrosion test	SABS/CSIR Required Type test, Sample test and Routine tests Type test, Sample test and Routine tests Type test Type test Type Test and Sample Test Type tests only Type tests only	Report Number
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination testHot dip galvanizingDamage and failure load testsShort Circuit testCorrosion testDrift test	SABS/CSIR         Required         Type test, Sample test and Routine tests         Type test, Sample test and Routine tests         Type test         Type Test and Sample Test         Type tests only         Type test, Sample test and Routine tests	Report Number
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.10	Test reports and certificates (According to SANS 61284)Test authority (approved person/organisation)Material grade certificationDimensional and material verificationVisual Examination testHot dip galvanizingDamage and failure load testsShort Circuit testCorrosion testDrift testCorona and RIV test	SABS/CSIR         Required         Type test, Sample test and Routine tests         Type test, Sample test and Routine tests         Type test, Sample test and Routine tests         Type Test and Sample Test         Type tests only         Type test, Sample test and Routine tests	Report Number

### Table A.75: Armor Grip Suspension (AGS) Unit for ACSR MINK Conductor and AAAC PINE Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR MINK Conductor and AAAC PINE Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0168965	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR MINK Conductor Dia. 10.98mm and AAAC PINE Conductor Dia. 10.83mm	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page: 13	88 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2 14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
21		50 %	
2.1		10 °C	
3.2		25 °C	
0.0		35 0	
3.4		33 0	
3.5		1800m	
4			
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	53mm	
4.1.1.3	ROD LENGTH	1040mm	
4.1.1.4	ROD DIA.:	4.06mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	8 RODS PER SET; COLOUR CODE RED; and 1x Hump Backs Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	70kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8 1	Continuous operating temperature	≤ 80 °C	
4282	Maximum temperature under short-circuit condition	< 200 °C	
420		Required	
4.2.3	Performance in wet or coltwater conditions	VEQ	
4.2.10		TEO Described	
4.2.11		nequirea	
4.3			
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
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Unique Identifier:	240-171000175
Revision:	1

		Page:	139 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR HARE Conductor and AAAC Oak Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0402633	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR Hare Conductor Dia. 14.16mm and AAAC Oak Conductor Dia. 13.95mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	67mm	
4.1.1.3	ROD LENGTH	1115mm	
4.1.1.4	ROD DIA.:	4.62mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEELS; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	11 RODS PER SET * COLOUR CODE BROWN; and 1x Hump Backs Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	

#### Table A.76: Armor Grip Suspension (AGS) Unit for ACSR HARE Conductor and AAAC Oak Conductor

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page:	40 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.6	Vertical Ultimate Strength	70kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Table A.77: Armor Grip Suspension (AGS) Unit for ACSR WOLF Conductor

			equipment oncrea
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR WOLF Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0402019	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page: 14	1 of 180	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered	
2.8	Catalogue reference number	ххххххх		
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR WOLF Conductor Dia. 18.13mm		
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load		
2.11	Compliance with IEC/SANS 61284	Test Certificates		
2.12	Compliance to critical dimensions on Buvers Guide	D-DT 7033		
2.13	Item sample required	YES		
2 14	Detailed installation instructions of the fitting required?	VES		
2.14	Site Operating Conditions			
<b>3</b>		50 %0		
0.0		10.00		
3.2		-10 °C		
3.3	Maximum daily average	35 °C		
3.4	Maximum daily variation	35 °C		
3.5	Altitude above sea level	1800m		
4	TECHNICAL REQUIREMENTS			
4.1	Mechanical properties			
4.1.1	Dimensions:			
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L		
4.1.1.2	AGS HOUSING WIDTH	71mm		
4.1.1.3	ROD LENGTH	1395mm		
4.1.1.4	ROD DIA.:	5.18mm		
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;		
4.1.3	Supplied with:	12 RODS PER SET * COLOUR CODE WHITE; and 1x Hump Backs Split pin		
4.1.4	Charpy V-notch test results	8J at -10 °C		
4.1.5	Bolt/Nut tightening torque	<75Nm		
4.1.6	Vertical Ultimate Strength	70kN		
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES		
4.2	Electrical Jointing Compound			
421		Bequired		
422		Bequired		
4.2.2		Bequired		
4.2.3		Required		
4.2.4	Are core tubes pre-lilied and sealed?			
4.2.5	Is compound for outer core packed separately	Required		
4.2.6	Container used to hold compound for outer tube	Required		
4.2.7	Source of compound supply	Required		
4.2.8	Temperature rating:			
4.2.8.1	Continuous operating temperature	≤ 80 °C		
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C		
4.2.9	Degree of adhesion	Required		
4.2.10	Performance in wet or saltwater conditions	YES		
4.2.11	Method of marketing i.e., per tube, container, etc	Required		
4.3	Electrical ratings			
4.3.1	Continuous operating temperature	≤ 80 °C		
430	Maximum temperature under short-circuit condition	< 200 °C		
4.2.2	One cooped Short Circuit Current Dating Withsterd			
4.3.3 5	Test reports and certificates (According to SANS 61284)	ST.3KA	Report Number	
<u>Б 1</u>	Test authority (approved percen/organisation)			
5.1				
5.2		Hequired		
5.3	Dimensional and material verification	i ype test, Sample test and Routine tests		
5.4	Visual Examination test	Type test, Sample test and Routine tests		
5.5	Hot dip galvanizing	Type test and Sample test		

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	240-171000175
Revision:	1

		Page:	142 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

### Table A.78: Armor Grip Suspension (AGS) Unit for ACSR CHICADEE Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR CHICADEE Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0168754	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR CHICADEE Conductor Dia. 18.87mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	71mm	
4.1.1.3	ROD LENGTH	1425mm	
4.1.1.4	ROD DIA.:	5.18mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page: 1	43 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.3	Supplied with:	12 RODS PER SET * COLOUR CODE RED; and 1x Hump Backs Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	70kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		
I			

### Table A.79: Armor Grip Suspension (AGS) Unit for ACSR BEAR Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR BEAR Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0402549	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	

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Unique Identifier:

240-171000175

Revision:

1

		Page: 14	l4 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR BEAR Conductor Dia. 23.45mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
411	Dimensions:		
<u> </u>	Clevis dimension	TO SANS 60471 DESIGNATION 16	
4.1.1.1		Ofference of the ofference ofference ofference of the ofference ofference of the ofference ofference of the ofference offeren	
4.1.1.2		9411111 1690mm	
4.1.1.3		0.05 mm	
4.1.1.4	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING:	
4.1.3	Supplied with:	ALUMIMIUM; AGS RODS: ALUMIMIUM; 12 RODS PER SET * COLOUR CODE ORANGE; and 1x Hump Backs Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	90kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Reauired	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
426	Container used to hold compound for outer tube	Required	
4 2 7	Source of compound supply	Required	
428	Temperature rating:		
4221	Continuous operating temperature	< 20.00	
4.0.0.0			
4.2.0.2			
4.2.9			
4.2.10	Periormance in wet or saltwater conditions	YES	
4.2.11	ivietnod of marketing i.e. per tube, container, etc	Kequired	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	

#### ESKOM COPYRIGHT PROTECTED
Unique Identifier:	240-171000175
Revision:	1

	Page:	145 of 180
Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
Non-destructive testing	Type test, Sample test and Routine tests	
Damage and failure load tests	Type test, Sample test and Routine tests	
Slip test	Type tests and Sample test	
Clamp bolt tightening test	Type test and Sample test	
Short Circuit test	Type tests only	
Corrosion test	Type tests only	
Drift test	Type test, Sample test and Routine tests	
Magnetic losses test	Type test	
Corona and RIV test	Type test	
Comments and Deviations:		
	Description         Non-destructive testing         Damage and failure load tests         Slip test         Clamp bolt tightening test         Short Circuit test         Corrosion test         Drift test         Magnetic losses test         Corona and RIV test         Comments and Deviations:	Page:DescriptionSchedule A: Eskom's specific requirementsNon-destructive testingType test, Sample test and Routine testsDamage and failure load testsType test, Sample test and Routine testsSlip testType tests and Sample testClamp bolt tightening testType tests and Sample testShort Circuit testType tests onlyCorrosion testType tests onlyDrift testType test, Sample test and Routine testsMagnetic losses testType test, Sample testCorona and RIV testType testComments and Deviations:Type test

## Table A.80: Armor Grip Suspension (AGS) Unit for ACSR KINGBIRD Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR KINGBIRD Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0168756	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR KINGBIRD Conductor Dia. 23.90mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	94mm	
4.1.1.3	ROD LENGTH	1702mm	
4.1.1.4	ROD DIA.:	6.35mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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Unique Identifier:

Revision:

240-171000175

1

		Page: 1	46 of 180
4.1.3	Supplied with:	12 RODS PER SET * COLOUR CODE GREEN; and 1x Hump Backs Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	90kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR TERN Conductor	
2.2	Drawing number & Revision number	D-DT 7033	
2.3	SAP No	0168757	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

\_\_\_\_\_

1

		Page: 14	7 of 180
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR TERN Conductor Dia. 27.00mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing	
		load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	106mm	
4113	BOD LENGTH	2035mm	
4114		7 62mm	
412	Material Grade:		
4.1.2		MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	11 RODS PER SET * COLOUR CODE BLUE; and 1x Humpback Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	90kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:	- -	
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YFS	
4,2 11	Method of marketing i.e. per tube, container, etc.	Required	
43	Electrical ratings		
4.3.1	Continuous operating temperature	< 80 °€	
1.3.1	Maximum temperature under short-circuit condition	< 200 °C	
100	One second Short-Circuit Current Pating Withstand	21 5LA	
4.3.3 E	Test reports and cortificates (According to CANE C1004)	JI.JKA	
5 E 1	Test reports and certificates (According to SANS 61284)		
5.1	Neterial grade partification		
5.2			
5.3		I ype test, Sample test and Routine tests	
5.4	VISUAI Examination test	I ype test, Sample test and Routine tests	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

## ESKOM COPYRIGHT PROTECTED

Unique Identifier: 240-171000175

1

Revision:

148 of 180 Page: 5.5 Hot dip galvanizing Type test and Sample test 5.6 Non-destructive testing Type test, Sample test and Routine tests Type test, Sample test and Routine tests Damage and failure load tests 5.7 5.8 Slip test Type tests and Sample test 5.9 Clamp bolt tightening test Type test and Sample test 5.10 Short Circuit test Type tests only Corrosion test 5.11 Type tests only Type test, Sample test and Routine tests 5.12 Drift test 5.13 Magnetic losses test Type test 5.14 Corona and RIV test Type test 6 **Comments and Deviations:** 

Table A.82: Armor G	in Sus	pension	(AGS)	Unit for	ACSR ZEBF	RA Conductor
	ip ous	pension			ACCULCED!	

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR ZEBRA Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR ZEBRA Conductor Dia. 28.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	D-DT 7033	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	106mm	
4.1.1.3	ROD LENGTH	2035mm	
4.1.1.4	ROD DIA.:	7.62mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

#### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page: 14	9 of 180
4.1.3	Supplied with:	12 RODS PER SET * COLOUR CODE YELLOW; and 1x Humpback Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	90kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

ltem no.	Description	Schedule A: Eskom's specific requirements	and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR BERSFORT Conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

		Page: 15	50 of 180
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR BERSFORT Conductor Dia. 35.56mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	129mm	
4.1.1.3	ROD LENGTH	2035mm	
4.1.1.4	ROD DIA.:	9.27mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	13 RODS PER SET * COLOUR CODE WHITE; and 1x Humpback Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	90kN	
4.1.7	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

## ESKOM COPYRIGHT PROTECTED

Unique Identifier: 240-171000175

1

Revision:

		Page: 151 of 180	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:	· · · ·	

Table A.84: Trunnion Clamp for Line Post insulator suitable for conductor range Di	a. 13-27mm with armour rods
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Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Trunnion Clamp for Line Post insulator suitable for conductor range Dia. 13-27mm with armour rods	
2.2	Drawing number & Revision number	D-DT 7010	
2.3	SAP No	0165510	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Trunnion Clamp unit suitable for conductor (INCLUDING PREFORMED ARMOR RODS)	FOX, MINK, OAK AND HARE	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clamp dimensions	TO SANS 60720 & SANS 61952	
4.1.1.2	Clamping Width (minimum)	98.4mm	
4.1.1.3	Clamping Length (minimum)	165.1 mm	
4.1.2	Material Grade:	HEAT TREATED ALUMINIUM ALLOY	
4.1.3	Supplied with:	2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and Nut material	Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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Unique Identifier: 240

240-171000175

JOMPRES	SION FITTINGS AND CLAMPS	Revision: 1	
		Page: 15	52 of 180
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Ultimate Body Strength	12.46kN	
4.1.8	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.1.9	Finishing	Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Table A.85: Trunnion Clamp for Line Post insulator suitable for conductor range Dia. 25-38mm with armour rods

nem no.	Description	Scheulie A. Eskoli 5 specific requirements	equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Trunnion Clamp for Line Post insulator suitable for conductor range Dia. 25-38mm with armour rods	
2.2	Drawing number & Revision number	D-DT 7010	
2.3	SAP No	0165511	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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Unique Identifier:

Revision:

240-171000175

1

		Page: 15	53 of 180
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Trunnion Clamp unit suitable for conductor (INCLUDING PREFORMED ARMOR RODS)	ACSR WOLF, CHICADEE, BEAR AND KINGBIRD Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	xxxxxxx	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clamp dimensions	TO SANS 60720 & SANS 61952	
4.1.1.2	Clamping Width (minimum)	98.4mm	
4.1.1.3	Clamping Length (minimum)	165.1 mm	
4.1.2	Material Grade:	HEAT TREATED ALUMINIUM ALLOY	
4.1.3	Supplied with:	2x Hex Cap Bolts with split lock washers. Nuts to be	
		captive or self-locking nuts	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and Nut material	Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Ultimate Body Strength	12.46kN	
4.1.8	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.1.9	Finishing	Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

## ESKOM COPYRIGHT PROTECTED

Unique Identifier: 240-17

Revision:

240-171000175

1

		Page:	154 of 180
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:	·	

## Table A.86: Armor Grip Suspension (AGS) Unit for AAAC ASH Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for AAAC ASH Conductor	
2.2	Drawing number & Revision number	XXXXXXX	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	XXXXXXX	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	
2.8	Catalogue reference number	xxxxxx	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	AAAC ASH Conductor Dia. 17.40mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	XXXXXXX	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	71mm	
4.1.1.3	ROD LENGTH	1372mm	
4.1.1.4	ROD DIA:	5.18mm	
4.1.2	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	11 RODS PER SET * COLOUR CODE YELLOW; and 1x Hump Backs Split pin	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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Unique Identifier: 240-171000175

Revision: 1 Page: 155 of 180 4.1.4 Charpy V-notch test results 8J at -10 °C 4.1.5 Bolt/Nut tightening torque <75Nm 4.1.6 Vertical Ultimate Strength 70kN 4.1.7 Supplied with Preformed Armor Rods for suitable conductor YES 4.2 **Electrical Jointing Compound** 4.2.1 Type of compound Required 4.2.2 Trade name Required 4.2.3 Recommended quantity per fitting Required 4.2.4 Are core tubes pre-filled and sealed? Required 4.2.5 Is compound for outer core packed separately Required 4.2.6 Container used to hold compound for outer tube Required 4.2.7 Source of compound supply Required 4.2.8 Temperature rating: 4.2.8.1 Continuous operating temperature ≤ 80 °C 4.2.8.2 Maximum temperature under short-circuit condition ≤ 200 °C 4.2.9 Degree of adhesion Required 4.2.10 YES Performance in wet or saltwater conditions 4.2.11 Method of marketing i.e. per tube, container, etc Required 4.3 **Electrical ratings** Continuous operating temperature 4.3.1 ≤ 80 °C 4.3.2 Maximum temperature under short-circuit condition ≤ 200 °C 4.3.3 One second Short-Circuit Current Rating Withstand 31.5kA Test reports and certificates (According to SANS 61284) 5 Report Number SABS/CSIR 5.1 Test authority (approved person/organisation) 5.2 Material grade certification Required Dimensional and material verification Type test, Sample test and Routine tests 5.3 Visual Examination test Type test, Sample test and Routine tests 5.4 Hot dip galvanizing Type test and Sample test 5.5 Non-destructive testing Type test, Sample test and Routine tests 5.6 Type test, Sample test and Routine tests 5.7 Damage and failure load tests 5.8 Slip test Type tests and Sample test 5.9 Clamp bolt tightening test Type test and Sample test 5.10 Short Circuit test Type tests only 5.11 Corrosion test Type tests only 5.12 Drift test Type test, Sample test and Routine tests Magnetic losses test Type test 5.13 5.14 Corona and RIV test Type test **Comments and Deviations:** 6

### Table A.87: Armor Grip Suspension (AGS) Unit for ACSR TIGER Conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR TIGER Conductor	
2.2	Drawing number & Revision number	Ххххххх	
2.3	SAP No	Ххххххх	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR TIGER Conductor Dia. 16.52mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered

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Unique Identifier:

Revision:

240-171000175

1

		Page: 15	6 of 180
2.12	Compliance to critical dimensions on Buyers Guide	Ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
1.1.1	Dimensions:		
1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
1.1.2	AGS HOUSING WIDTH	71mm	
1.1.3	ROD LENGTH	1372mm	
1.1.4	ROD DIA:		
4.1.2		MITE HDG BOLT: GRADE 8.8; MITE HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	11 RODS PER SET * COLOUR CODE RED; and 1x Hump Backs Split pin	
.1.4	Charpy V-notch test results	8J at -10 °C	
.1.5	Bolt/Nut tightening torque	<75Nm	
. I.b ₁ →	Vertical Ultimate Strength	70kN	
.1./	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
.2.1	Type of compound	Required	
.2.2	Trade name	Required	
.2.3	Recommended quantity per fitting	Required	
.2.4	Are core tubes pre-filled and sealed?	Required	
.2.5	Is compound for outer core packed separately	Required	
.2.6	Container used to hold compound for outer tube	Required	
.2.7	Source of compound supply	Required	
.2.8	I emperature rating:		
2.8.1	Continuous operating temperature	≤ 80 °C	
.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
1.2.9	Degree of adhesion	Required	
.2.10	Performance in wet or saltwater conditions	YES	
.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
.3.1	Continuous operating temperature	≤ 80 °C	
.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	I est authority (approved person/organisation)	SABS/CSIR	
5.2 5.2	Material grade certification	Type test Sample test and Beutine tests	
J.J - 4		Type test, Sample test and Routine tests	
5.4 		Tuno toot and Sample test	
5.5 5.6	Non-destructive testing	Type test Sample test and Routing test	
5.0 F 7		Type test, Sample test and Doutine tests	
5./	Damage and failure load tests		
ວ.୪ ົ		i ype tests and Sample test	
5.9 5.10	Clamp bolt tightening test	I ype test and Sample test	
J. IU	Snort Circuit test	I ype tests only	
5.11 5.10	Drift test	I ype tests only	
<b>``</b>		Tupo tost	
5.12			
5.12 5.13	L'orona and RIV test	i ype lest	
5.12 5.13 5.14 6	Corona and RIV test		
5.12 5.13 5.14 6	Corona and RIV test Comments and Deviations:		
5.12 5.13 5.14 6	Corona and RIV test Comments and Deviations:		
5.12 5.13 5.14 6	Corona and RIV test Comments and Deviations:		
5.12 5.13 5.14 6	Corona and RIV test Comments and Deviations:		

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Unique	Identifier:
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Revision:

240-171000175

1

 Page:
 157 of 180

 Table A.88: Trunnion Clamp for Line Post insulator suitable for conductor range Dia. 38 - 51mm with armour rods

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details		
2.1	Clamp type	Armor Grip Suspension (AGS) Unit for ACSR Rail Conductor	
2.2	Drawing number & Revision number	Ххххххх	
2.3	SAP No	Ххххххх	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Armor Grip Suspension Clamp unit suitable for conductor:	ACSR Rail Conductor Dia. 29.59mm	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clevis dimension	TO SANS 60471 DESIGNATION 16L	
4.1.1.2	AGS HOUSING WIDTH	106mm	
4.1.1.3	ROD LENGTH	2035mm	
4.1.1.4	Material Grade:	M16 HDG BOLT: GRADE 8.8; M16 HDG WASHER: MILD STEEL; M16 HDG NUT: GRADE 181; SPLIT PIN: 316 STAINLESS STEEL; AGS STRAP: ALUMINIUM; NEOPRENE INSERT: NEOPRENE; AGS HOUSING: ALUMIMIUM; AGS RODS: ALUMIMIUM;	
4.1.3	Supplied with:	12 RODS PER SET * COLOUR CODE BLUE; and 1x Hump Backs Split pin	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt/Nut tightening torque	<75Nm	
4.1.6	Vertical Ultimate Strength	70kN	
4.1./	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.2	Electrical Jointing Compound		
4.2.1	I ype of compound	Kequired	
4.2.2		Required	
4.2.3	Are commended quantity per titting	Required	
4.2.4	Are core tubes pre-tilled and sealed?		
4.2.5	Container used to hold compound for outer tube	nequirea	
4.2.0		nequirea	
4.2.1	Temperature rating:		
4.2.0	Continuous operating temperature	< 80 °C	
4282	Maximum temperature under short-circuit condition	< 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	24

240-171000175

Revision:

1

		Page:	158 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

## Table A.89: Trunnion Clamp for Line Post insulator suitable for conductor range Dia. 38 - 51mm with armour rods

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Trunnion Clamp for Line Post insulator suitable for conductor range Dia. 38 - 51mm with armour rods	
2.2	Drawing number & Revision number	D-DT 7010	
2.3	SAP No	0165512	
2.4	Original Equipment Manufacturer (OEM)	Хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Trunnion Clamp unit suitable for conductor (INCLUDING PREFORMED ARMOR RODS)	ACSR TERN, ZEBRA, BERSFORT Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clamp dimensions	TO SANS 60720 & SANS 61952	
4.1.1.2	Clamping Width (minimum)	98.4mm	
4.1.1.3	Clamping Length (minimum)	165.1 mm	
4.1.2	Material Grade:	HEAT TREATED ALUMINIUM ALLOY	
4.1.3	Supplied with:	2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts	
4.1.4	Charpy V-notch test results	8J at -10 °C	

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Unique Identifier:

240-171000175

Revision:

1

		Page: 1	59 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	and technical particulars of equipment offered
4.1.5	Bolt and Nut material	Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Ultimate Body Strength	12.46kN	
4.1.8	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.1.9	Finishing	Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
	Operation and DIV(test	Tupo tost	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

 Page:
 160 of 180

 Table A.90: Trunnion Angle Clamp for Line Post insulator suitable for conductor range Dia. 13-27mm with armour rods

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Trunnion Angle Clamp for Line Post insulator suitable for conductor range Dia. 13-27mm with armour rods	
2.2	Drawing number & Revision number	D-DT 7011	
2.3	SAP No	0165522	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number Trunnion Clamp unit suitable for conductor (INCLUDING PREFORMED ARMOR RODS)	Xxxxxx FOX, MINK, OAK AND HARE	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clamp dimensions	TO SANS 60720 & SANS 61952	
4.1.1.2	Clamping Width (minimum)	98.4mm	
4.1.1.3	Material Grade:	HEAT TREATED ALUMINIUM ALLOY	
4.1.3	Supplied with:	2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts	
4.1.4	Charpy V notab toot regulta	8 Lat 10 °C	
4.1.5	Bolt and Nut material	Hot deep Galvanised High Tensile Steel Grade 8.8 or	
		Stainless Steel 316	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Ultimate Body Strength	12.46kN	
4.1.8	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.1.9	Maximum take-off angle vertical	20°	
4.1.10	Maximum take-off angle Horizontal	20°	
4.1.11	Finishing	Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	2° 08 ≥	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9		Kequired	
4.2.10	Method of marketing in a portube container at	YES Descrited	
4.2.11	Electrical ratings	nequirea	
4.3 / 2.1	Nominal System Voltage (Un)	1322//	
4.3.2	Maximum System Voltage (Um)	145kV	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	240-171000175

Revision:

1

		Page:	161 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:	·	

### Table A.91: Trunnion Angle Clamp for Line Post insulator suitable for conductor range Dia. 25-38mm with armour rods

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Trunnion Angle Clamp for Line Post insulator suitable for conductor range Dia. 25-38mm with armour rods	
2.2	Drawing number & Revision number	D-DT 7011	
2.3	SAP No	0165523	
2.4	Original Equipment Manufacturer (OEM)	Хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Хххххх	
2.7	Manufacturer's Product code/model/serial number	Хххххх	
2.8	Catalogue reference number	Хххххх	
2.9	Trunnion Clamp unit suitable for conductor (INCLUDING PREFORMED ARMOR RODS)	ACSR WOLF, CHICADEE, BEAR AND KINGBIRD Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	Clamp dimensions	TO SANS 60720 & SANS 61952	
4.1.1.2	Clamping Width (minimum)	98.4mm	
4.1.1.3	Clamping Length (minimum)	165.1 mm	

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5.11

Corrosion test

# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page: 162 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.2	Material Grade:	HEAT TREATED ALUMINIUM ALLOY	
4.1.3	Supplied with:	2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts	
4.1.4	Charpy V-notch test results	8J at -10 °C	
4.1.5	Bolt and Nut material	Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316	
4.1.6	Bolt/Nut tightening torque	<75Nm	
4.1.7	Ultimate Body Strength	12.46kN	
4.1.8	Supplied with Preformed Armor Rods for suitable conductor	YES	
4.1.9	Maximum take-off angle vertical	20°	
4.1.10	Maximum take-off angle Horizontal	20°	
4.1.11	Finishing	Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	

5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Type tests only

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

 Page:
 163 of 180

 Table A.92: Trunnion Angle Clamp for Line Post insulator suitable for conductor range Dia. 38 - 51mm with armour rods

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp type	Trunnion Angle Clamp for Line Post insulator suitable for conductor range Dia. 38 - 51mm with armour rods	
2.2	Drawing number & Revision number	D-DT 7011	
2.3	SAP No	0183976	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Trunnion Clamp unit suitable for conductor (INCLUDING PREFORMED ARMOR RODS)	ACSR TERN, ZEBRA, BERSFORT Conductors	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5		1800m	
4	I FURNICAL DEGUIDENTENTS		
4 1	Mechanical properties		
<b>4.1</b>	Mechanical properties		
<b>4.1</b> 4.1.1 4.1.1.1	Mechanical properties Dimensions: Clamp dimensions	TO SANS 60720 & SANS 61952	
<b>4.1</b> 4.1.1 4.1.1.1 4.1.1.2	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)	TO SANS 60720 & SANS 61952 98.4mm	
<b>4.1</b> 4.1.1 4.1.1.1 4.1.1.2 4.1.1.3	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm	
4.1       4.1.1       4.1.1.1       4.1.1.2       4.1.1.3       4.1.2	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm HEAT TREATED ALUMINIUM ALLOY	
4.1           4.1.1           4.1.1.1           4.1.1.2           4.1.1.3           4.1.2           4.1.3	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm HEAT TREATED ALUMINIUM ALLOY 2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts	
4.1           4.1.1           4.1.1.1           4.1.1.2           4.1.1.3           4.1.2           4.1.3           4.1.4	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm HEAT TREATED ALUMINIUM ALLOY 2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts 8J at -10 °C	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm HEAT TREATED ALUMINIUM ALLOY 2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts 8J at -10 °C Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316 <75Nm	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316         <75Nm	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm HEAT TREATED ALUMINIUM ALLOY 2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts 8J at -10 °C Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316 <75Nm 12.46kN YES	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°	
4.1           4.1.1           4.1.1.1           4.1.1.2           4.1.1.3           4.1.2           4.1.3           4.1.2           4.1.3           4.1.4           4.1.5           4.1.6           4.1.7           4.1.8           4.1.9           4.1.10	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing	TO SANS 60720 & SANS 61952 98.4mm 165.1 mm HEAT TREATED ALUMINIUM ALLOY 2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts 8J at -10 °C Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316 	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11         4.2         4.2.1         4.2.2         4.2.3	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Becommended quantity per fitting	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required         Required	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11         4.2         4.2.1         4.2.2         4.2.3         4.2.4	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required         Required         Required         Required	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11         4.2.1         4.2.1         4.2.2         4.2.3         4.2.4	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         Is compound for outer core packed separately	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required         Required         Required         Required         Required         Required	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.10         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         Is compound for outer core packed separately         Container used to hold compound for outer tube	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required         Required         Required         Required         Required         Required	
4.1 $4.1.1$ $4.1.1.1$ $4.1.1.1$ $4.1.1.2$ $4.1.1.3$ $4.1.2$ $4.1.3$ $4.1.2$ $4.1.3$ $4.1.4$ $4.1.5$ $4.1.6$ $4.1.7$ $4.1.6$ $4.1.7$ $4.1.8$ $4.1.9$ $4.1.10$ $4.1.10$ $4.1.10$ $4.2.1$ $4.2.1$ $4.2.1$ $4.2.2$ $4.2.3$ $4.2.4$ $4.2.5$ $4.2.6$ $4.2.7$	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         Is compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            12.46kN         YES         20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required         Required	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.10         4.2.1         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6         4.2.7         4.2.8	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         Is compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating:	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316            20°         Have smooth surfaces and all edges rounded to prevent formation of corona or damage to the conductor.         Required	
4.1         4.1.1         4.1.1.1         4.1.1.2         4.1.1.3         4.1.2         4.1.3         4.1.2         4.1.3         4.1.4         4.1.5         4.1.6         4.1.7         4.1.8         4.1.9         4.1.10         4.1.11         4.2.1         4.2.1         4.2.2         4.2.3         4.2.4         4.2.5         4.2.6         4.2.7         4.2.8         4.2.8.1	Mechanical properties         Dimensions:         Clamp dimensions         Clamping Width (minimum)         Clamping Length (minimum)         Material Grade:         Supplied with:         Charpy V-notch test results         Bolt and Nut material         Bolt/Nut tightening torque         Ultimate Body Strength         Supplied with Preformed Armor Rods for suitable conductor         Maximum take-off angle vertical         Maximum take-off angle Horizontal         Finishing         Electrical Jointing Compound         Type of compound         Trade name         Recommended quantity per fitting         Are core tubes pre-filled and sealed?         Is compound for outer core packed separately         Container used to hold compound for outer tube         Source of compound supply         Temperature rating:         Continuous operating temperature	TO SANS 60720 & SANS 61952         98.4mm         165.1 mm         HEAT TREATED ALUMINIUM ALLOY         2x Hex Cap Bolts with split lock washers. Nuts to be captive or self-locking nuts         8J at -10 °C         Hot deep Galvanised High Tensile Steel Grade 8.8 or Stainless Steel 316         <75Nm	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

Revision:

240-171000175

1

		Page:	164 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Nominal System Voltage (Un)	132kV	
4.3.2	Maximum System Voltage (Um)	145kV	
4.3.3	Continuous operating temperature	≤ 80 °C	
4.3.4	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Damage and failure load tests	Type test, Sample test and Routine tests	
5.8	Slip test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Corrosion test	Type tests only	
5.12	Drift test	Type test, Sample test and Routine tests	
5.13	Magnetic losses test	Type test	
5.14	Corona and RIV test	Type test	
6	Comments and Deviations:		

Table A.93: Multifrequency	Vibration Damper s	uitable for Oak or Ha	re (Dia. 13.9-15m	m) conductors
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Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for Oak or Hare (Dia. 13.9-15mm) conductors	
2.2	Drawing number & Revision number	D-DT7005	
2.3	SAP No	0226767	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Multifrequency Vibration Damper suitable for conductor:	Oak or Hare (Dia. 13.9-15mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	

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Unique Identifier:

240-171000175

Revision:

1

		Page: 16	65 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	278mm	
4.1.1.2	ROD SHOP LENGTH	551mm	
4.1.1.3	ROD DIA.	6.35mm	
4.1.2	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4	COLOUR CODES	OAK: BROWN AND HARE: BROWN	
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM: LESS THAN 12Hz MAXIMUM: GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	1.25Kn	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145Kv	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5Ka	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
		1	1

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Unique Identifier: 240-171000175

Revision:

1

		Page: 1	66 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

## Table A.94: Multifrequency Vibration Damper suitable for WOLF (Dia. 18.13mm) conductors

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for WOLF (Dia. 18.13mm) conductors	
2.2	Drawing number & Revision number	D-DT7005	
2.3	SAP No	0168960	
2.4	Original Equipment Manufacturer (OEM)	Ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	Ххххххх	
2.7	Manufacturer's Product code/model/serial number	Ххххххх	
2.8	Catalogue reference number	Ххххххх	
2.9	Multifrequency Vibration Damper suitable for conductor:	WOLF (Dia. 18.13mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	Хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	278mm	
4.1.1.2	ROD SHOP LENGTH	723mm	
4.1.1.3	ROD DIA.	6.35mm	
4.1.2	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4	COLOUR CODE	WOLF: WHITE	
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM: LESS THAN 12Hz MAXIMUM : GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	

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Unique Identifier:

240-171000175

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Revision:

	Page: 167 of 180		67 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.6	Specified minimum Load	1.25kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

## Table A.95: Multifrequency Vibration Damper suitable for CHICADEE (Dia. 18.87mm) conductors

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for CHICADEE (Dia. 18.87mm) conductors	

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4.2.6

Container used to hold compound for outer tube

## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

1

Revision:

168 of 180 Page: Schedule B: Guarantees and technical particulars of Schedule A: Eskom's specific requirements Item no. Description equipment offered 2.2 Drawing number & Revision number XXXXXXX 2.3 SAP No XXXXXXX 2.4 Original Equipment Manufacturer (OEM) XXXXXXX 2.5 Country of origin South Africa 2.6 Trade name of the clamp unit XXXXXXX 2.7 Manufacturer's Product code/model/serial number XXXXXXX 2.8 Catalogue reference number XXXXXXX 2.9 Multifrequency Vibration Damper suitable for conductor: CHICADEE (Dia. 18.87mm) 2.10 Physical identification mark on product Trademark, Date of manufacture and mechanical failing load Compliance with IEC/SANS 61284 2.11 **Test Certificates** 2.12 Compliance to critical dimensions on Buyers Guide XXXXXXX YES 2.13 Item sample required 2.14 Detailed installation instructions of the fitting required? YES 3 Site Operating Conditions 50 °C 3.1 Maximum ambient temperature 3.2 Minimum ambient temperature -10 °C 3.3 35 °C Maximum daily average 3.4 Maximum daily variation 35 °C 3.5 Altitude above sea level 1800m 4 **TECHNICAL REQUIREMENTS** 4.1 **Mechanical properties** 4.1.1 Dimensions: 4.1.1.1 VIBRATION DAMPER LENGTH 278mm 4.1.1.2 ROD SHOP LENGTH 739mm 4.1.1.3 ROD DIA. 6.35mm 4.1.2 HIGH GRADE ALUMINIUM ALLOY FOR RETAINING Material Grade: ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS 4.1.3 Supplied with: ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT 4.1.4 COLOUR CODE CHICADEE : RED MINIMUM : LESS THAN 12Hz 4.1.5 DAMPING FREQUENCY RANGE MAXIMUM : GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70% 4.1.6 1.25kN Specified minimum Load 4.1.7 Maximum slip movement 1mm 4.2 **Electrical Jointing Compound** 4.2.1 Type of compound Required 4.2.2 Required Trade name Recommended quantity per fitting 4.2.3 Required 4.2.4 Are core tubes pre-filled and sealed? Required 4.2.5 Is compound for outer core packed separately Required

4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	

Required

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page:	169 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

### Table A.96: Multifrequency Vibration Damper suitable for BEAR and KINGBIRD (Dia. 23.45 - 23.90mm) conductors

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for BEAR and KINGBIRD (Dia. 23.45 - 23.90mm) conductors	
2.2	Drawing number & Revision number	D-DT7005	
2.3	SAP No	0168893	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	ххххххх	
2.9	Multifrequency Vibration Damper suitable for conductor:	BEAR and KINGBIRD (Dia. 23.45 - 23.90mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	

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Unique Identifier:

240-171000175

Revision:

1

		Page: 17	'0 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	407mm	
4.1.1.2	ROD SHOP LENGTH	891mm	
4.1.1.3	ROD DIA.	6.35mm	
4.1.2	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4	COLOUR CODES	KINGBIRD: ORANGE AND BEAR: ORANGE	
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM: LESS THAN 12Hz MAXIMUM: GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	2.5kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

Revision:

240-171000175

1

		Page: 1	71 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for TERN (Dia. 27.00mm) conductor	
2.2	Drawing number & Revision number	D-DT7005	
2.3	SAP No	0168894	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	xxxxxx	
2.9	Multifrequency Vibration Damper suitable for conductor:	TERN (Dia. 27.00mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	407mm	
4.1.1.2	ROD SHOP LENGTH	1047mm	
4.1.1.3	ROD DIA.	7.62mm	
4.1.2	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4	COLOUR CODES	TERN: BLUE	
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM: LESS THAN 12Hz MAXIMUM: GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	2.5kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	

## Table A.97: Multifrequency Vibration Damper suitable for TERN (Dia. 27.00mm) conductor

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:	240-
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Revision:

240-171000175 1

		Page:	72 of 180
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

Table A.98: Multifrequency Vibration Damper suitable for ASH (Dia. 17.40mm) conductors

Item no.	Description	Schedule A: Eskom's specific requirements	and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for ASH (Dia. 17.40mm) conductors	
2.2	Drawing number & Revision number	XXXXXXX	
2.3	SAP No	xxxxxx	
2.4	Original Equipment Manufacturer (OEM)	XXXXXXX	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxx	
2.7	Manufacturer's Product code/model/serial number	хххххх	

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# TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:	
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240-171000175

\_

Revision:

1

	Page: 17		′3 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.8	Catalogue reference number	XXXXXXX	
2.9	Multifrequency Vibration Damper suitable for conductor: Physical identification mark on product	ASH (Dia. 17.40mm Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4			
4.1	Mechanical properties		
4.1.1			
4.1.1.1		278mm	
4.1.1.2	ROD SHOP LENGTH	669mm	
4.1.1.3	Material Grade:	6.35mm HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4	COLOUR CODE	TIGER: YELLOW	
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM : LESS THAN 12Hz MAXIMUM : GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	1 25kN	
4.1.7	Maximum slip movement	1mm	
4.2			
4.2.1		Bequired	
4.2.2	Trade name	Bequired	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Invaximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Norminal System Voltage (UR)	132KV	
4.3.4	Maximum System Vollage (Um)	140KV 31 52A	
<u>4.3.3</u>	Test reports and certificates (According to SANS 61284 and SANS 61897)	JI.JKA	Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	I ype test, Sample test and Routine tests	
5.4	VISUAL EXAMINATION TEST	i ype test, Sample test and Routine tests	
5.5	Non destructive testing	i ype test and Sample test	
5.6			
5.7		I ype tests and Sample test	
5.8	j Dieakaway Dul lest	i ype lests and Sample test	

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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:	240-171000175
Revision:	1

		Page:	174 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attatchment of weights to messenger cable test	Type test and Sample test	
5.12	Attatchment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

## Table A.99: Multifrequency Vibration Damper suitable for TIGER (Dia. 16.52mm) conductors

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for TIGER (Dia. 16.52mm) conductors	
2.2	Drawing number & Revision number	XXXXXXX	
2.3	SAP No	xxxxxx	
2.4	Original Equipment Manufacturer (OEM)	xxxxxx	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	xxxxxxx	
2.8	Catalogue reference number	xxxxxx	
2.9	Multifrequency Vibration Damper suitable for conductor:	TIGER (Dia. 16.52mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	XXXXXXX	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	278mm	
4.1.1.2	ROD SHOP LENGTH	685mm	
4.1.1.3	ROD DIA	6.35mm	
4.1.2	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4			
4.1.5		MINIMUM : LESS THAN 12Hz MAXIMUM : GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	

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Unique Identifier:	240-171000175
--------------------	---------------

Revision:

1

		Page:	175 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.6	Specified minimum Load	1.25kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e. per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attatchment of weights to messenger cable test	Type test and Sample test	
5.12	Attatchment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for RAIL (Dia. 29.59mm) conductor	
2.2	Drawing number & Revision number	XXXXXXX	
2.3	SAP No	XXXXXXX	
2.4	Original Equipment Manufacturer (OEM)	XXXXXXX	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	XXXXXXX	
2.7	Manufacturer's Product code/model/serial number	XXXXXXX	

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Unique I	dentifier:
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240-171000175

\_

Revision:

1

	Page: 176		′6 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
2.8	Catalogue reference number	XXXXXXX	
2.9	Multifrequency Vibration Damper suitable for conductor: Physical identification mark on product	RAIL (Dia. 29.59mm) Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	хххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4			
4.1	Mechanical properties		
4.1.1			
4.1.1.1		437mm	
4.1.1.2		1166mm	
4.1.1.3	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL	
		BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4 1 4			
4.1.4			
4.1.5	DAMFING FREQUENCE RANGE	MAXIMUM : GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	2.5kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Method of marketing is nor tube conditions		
4.2.11	Neurou or marketing i.e. per tube, container, etc	Kequirea	
4.3 / 2.1	Continuous operating temperature	< 80 °C	
4.3.2	Maximum temperature under short-circuit condition	< 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3		Type test, Sample test and Routine tests	
5.4		Tune test and Sample test	
5.5	Non-destructive testing	Type test Sample test and Routine tests	
5.6	Clin test	Tupo tooto and Comple toot	
5.7	Silp iesi Breakaway holt test	Type tests and Sample test	
0.0	bioanaway boil 1631		1

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### TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES **COMPRESSION FITTINGS AND CLAMPS**

Unique Identifier:	240-171000175
Revision:	1

		Page:	177 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attatchment of weights to messenger cable test	Type test and Sample test	
5.12	Attatchment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
6	Comments and Deviations:		

## Table A.101: Multifrequency Vibration Damper suitable for ZEBRA (Dia. 28.56mm) conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for ZEBRA (Dia. 28.56mm) conductor	
2.2	Drawing number & Revision number	ххххххх	
2.3	SAP No	ххххххх	
2.4	Original Equipment Manufacturer (OEM)	ххххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	ххххххх	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	ххххххх	
2.9	Multifrequency Vibration Damper suitable for conductor:	ZEBRA (Dia. 28.56mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide	ххххххх	
2.13	Item sample required	YES	
2.14	Detailed installation instructions of the fitting required?	YES	
3	Site Operating Conditions		
3.1	Maximum ambient temperature	50 °C	
3.2	Minimum ambient temperature	-10 °C	
3.3	Maximum daily average	35 °C	
3.4	Maximum daily variation	35 °C	
3.5	Altitude above sea level	1800m	
4	TECHNICAL REQUIREMENTS		
4.1	Mechanical properties		
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	437mm	
4.1.1.2	ROD SHOP LENGTH	1117mm	
4.1.1.3	ROD DIA.	7.62mm	
4.1.2	Material Grade:	HIGH GRADE ALUMINIUM ALLOY FOR RETAINING ROD (HELICAL) AND ATTACHMENT CLAMP MATERIAL FOR THE MESSENGER WEIGHTS SHALL BE GALVANICALLY COMPATIABLE WITH THE MESSENGER RODS	
4.1.3	Supplied with:	ATTACHMENT CLAMP (NOT THE BOLTED TYPE) WITH NEOPRENE PAD, HELICAL RETAINING RODS AND MESSENGER WEIGHTS ASSEMBLY SHALL BE SUPPLIED AS ONE COMPLETE UNIT	
4.1.4	COLOUR CODE	YELLOW	

### ESKOM COPYRIGHT PROTECTED

Unique Identifier:

240-171000175

Revision:

1

		Page: 178 of 180	
ltem no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM: LESS THAN 12Hz MAXIMUM: GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	2.5kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
5.16	Corona and RIV test	Type test	
		·	•

6 Comments and Deviations:	
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### **ESKOM COPYRIGHT PROTECTED**

Revision:

P<u>age:</u>

240-171000175

1 179 of 180

Table A.102: Multifrequency Vibration Damper suitable for BERSFORD (Dia. 35.56mm) conductor

Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
1	<b>Eskom Standard and Specifications Referred to:</b> [1] 240-75883154- Current Carrying Compression Fittings for Overhead Sub-Transmission Systems		
2	Purchasing Details:		
2.1	Clamp Type	Multifrequency Vibration Damper suitable for BERSFORD (Dia. 35.56mm) conductor	
2.2	Drawing number & Revision number	хххххх	
2.3	SAP No	хххххх	
2.4	Original Equipment Manufacturer (OEM)	хххххх	
2.5	Country of origin	South Africa	
2.6	Trade name of the clamp unit	xxxxxxx	
2.7	Manufacturer's Product code/model/serial number	ххххххх	
2.8	Catalogue reference number	хххххх	
2.9	Multifrequency Vibration Damper suitable for conductor:	BERSFORD (Dia. 35.56mm)	
2.10	Physical identification mark on product	Trademark, Date of manufacture and mechanical failing	
0.11		load	
2.11	Compliance with IEC/SANS 61284	Test Certificates	
2.12	Compliance to critical dimensions on Buyers Guide		
2.13	Detailed installation instructions of the fitting required?	YES	
2.14	Site Operating Conditions	TES	
<b>3</b>	Site Operating Conditions	50 %	
3.1		10 °C	
3.2		-10 C	
3.0		35 °C	
3.4		1800m	
0.0 A			
4 1			
4.1.1	Dimensions:		
4.1.1.1	VIBRATION DAMPER LENGTH	437mm	
4.1.1.2	ROD SHOP LENGTH	1403mm	
4.1.1.3	ROD DIA.	7.62mm	
4.1.2	Material Grade:	High Grade Aluminium Alloy for Retaining Rod (Helical) And Attachment Clamp Material for The Messenger Weights Shall Be Galvanically Compatible with The Messenger Rods	
4.1.3	Supplied with:	Attachment Clamp (Not the Bolted Type) With Neoprene Pad, Helical Retaining Rods and Messenger Weights Assembly Shall Be Supplied As One Complete Unit	
4.1.4		WHITE	
4.1.5	DAMPING FREQUENCY RANGE	MINIMUM: LESS THAN 12Hz MAXIMUM: GREATER THAN 40Hz WITH AN EFFICIENCY OF AT LEAST 70%	
4.1.6	Specified minimum Load	2.5kN	
4.1.7	Maximum slip movement	1mm	
4.2	Electrical Jointing Compound		
4.2.1	Type of compound	Required	
4.2.2	Trade name	Required	
4.2.3	Recommended quantity per fitting	Required	
4.2.4	Are core tubes pre-filled and sealed?	Required	
4.2.5	Is compound for outer core packed separately	Required	
4.2.6	Container used to hold compound for outer tube	Required	
4.2.7	Source of compound supply	Required	
4.2.8	Temperature rating:		
4.2.8.1	Continuous operating temperature	≤ 80 °C	
4.2.8.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.2.9	Degree of adhesion	Required	

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## TECHNICAL EVALUATION CRITERIA FOR DX HV OVERHEAD POWERLINES COMPRESSION FITTINGS AND CLAMPS

Unique Identifier:

240-171000175

Revision:

1

		Page:	180 of 180
Item no.	Description	Schedule A: Eskom's specific requirements	Schedule B: Guarantees and technical particulars of equipment offered
4.2.10	Performance in wet or saltwater conditions	YES	
4.2.11	Method of marketing i.e., per tube, container, etc	Required	
4.3	Electrical ratings		
4.3.1	Continuous operating temperature	≤ 80 °C	
4.3.2	Maximum temperature under short-circuit condition	≤ 200 °C	
4.3.3	Nominal System Voltage (Un)	132kV	
4.3.4	Maximum System Voltage (Um)	145kV	
4.3.5	One second Short-Circuit Current Rating Withstand	31.5kA	
5	Test reports and certificates (According to SANS 61284 and SANS 61897)		Report Number
5.1	Test authority (approved person/organisation)	SABS/CSIR	
5.2	Material grade certification	Required	
5.3	Dimensional and material verification	Type test, Sample test and Routine tests	
5.4	Visual Examination test	Type test, Sample test and Routine tests	
5.5	Hot dip galvanizing	Type test and Sample test	
5.6	Non-destructive testing	Type test, Sample test and Routine tests	
5.7	Slip test	Type tests and Sample test	
5.8	Breakaway bolt test	Type tests and Sample test	
5.9	Clamp bolt tightening test	Type test and Sample test	
5.10	Short Circuit test	Type tests only	
5.11	Attachment of weights to messenger cable test	Type test and Sample test	
5.12	Attachment of clamp to messenger cable test	Type test and Sample test	
5.13	Corrosion protection test	Type tests only	
5.14	Damper performance test:		
5.14.1	Damper characteristic test	Type test and Sample test	
5.14.2	Damper effectiveness evaluation	Type test and Sample test	
5.15	Damper fatigue test	Type test	
	Corona and RIV test	Type test	
5.16			

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