

 Eskom	Scope of Work	Engineering
--	----------------------	--------------------

Title: **Supply and Delivery of Breakers and Switches Scope of Work**

Document Identifier:

Alternative Reference Number:

Area of Applicability: **Kendal Power Station**



Functional Area: **Engineering**

Revision: **1**

Total Pages: **30**

Next Review Date:

Disclosure Classification: **Controlled Disclosure**

Compiled by	Functional Responsibility	Authorized by
 Nathi Mkhize System Engineer	 Remember Sigawuke Electrical Engineering Manager	 Malibongwe Mabizela Engineering Manager
Date: 30/03/2023	Date: 30/03/2023	Date: 30/03/2023

Content

	Page
1. Revisions	3
2. Introduction	4
3. Supporting Clauses	4
3.1 Scope	4
3.1.1 Purpose	4
3.1.2 Applicability	4
3.2 Normative/Informative References.....	4
3.2.1 Normative.....	4
3.2.2 Informative	4
3.2.3 Disclosure Classification	4
3.3 Abbreviations.....	5
3.4 Roles and Responsibilities	5
4. Breakers and Switches Technical Specification.....	5
4.1 Breakers and Switches Tender Evaluation	5
5. Specification and Description of the <i>Goods</i>	6
5.1.1 Technical Specifications	25
5.1.2 Delivery of Switches and Breakers	27
6. Quality Assurance Requirements.....	27
7. Environmental Requirements	28
8. Refuse Disposal	29
9. Acceptance	30
10. Development Team	30

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

1. Revisions

Date	Rev.	Compiler	Remarks
September 2021	0	N Mkhize	This document was compiled for Suppliers to understand what need to be done.
March 2023	1	Nathi Mkhize	Breakers and Switches were added on the scope

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

2. Introduction

This document specifies the technical requirements for the supply and delivery of switch disconnects or isolators at Kendal Power Station Stores Department. Different types of switch disconnectors are specified in the document and they must be delivered as specified.

3. Supporting Clauses

3.1 Scope

This document defines the technical scope of work to be performed by the contractor or supplier, which includes the supply and delivery of the switch disconnectors that must be delivered at Kendal Power Station Stores Department. The scope also includes datasheet and drawings of the specified components.

3.1.1 Purpose

This document defines the requirements for supply and delivery of switch disconnectors at Kendal Power Station

3.1.2 Applicability

This documents it only applicable to Kendal Power Station.

3.2 Normative/Informative References

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

3.2.1 Normative

- IEC 60947-1: Low Voltage Switchgear and Controlgear – Part 1: General rules
- IEC 60947-3: Low Voltage Switchgear and Controlgear – Part 3
- ISO 9001 Quality Management Systems.

3.2.2 Informative

- None.

3.2.3 Disclosure Classification

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

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

3.3 Abbreviations

Abbreviation	Description
IEC	International Electrotechnical Commission
MCC	Motor Control Centre
UPS	Uninterrupted Power Supply
A	Ampere
kA	Kilo - Ampere
V	Voltage
VAC	Voltage Alternating Current
VDC	Voltage Direct Current
mm	Millimetre
mm ²	Square Millimetre
IP	Internal Protection

3.4 Roles and Responsibilities

This document shall be managed by Electrical Engineering and Stores Department, Kendal Power Station.

- Work Execution – Supplier/Contractor
- Quality Control – Electrical Engineering/ Technical Support

4. Breakers and Switches Technical Specification

4.1 Breakers and Switches Tender Evaluation

Mandatory Technical Evaluation Criteria (gatekeepers) are ‘must meet’ criteria. These criteria shall not be weighted or point scored, but shall be assessed on a Yes/No basis as to whether or not the criteria are met unless set otherwise. An assessment of ‘No’ against any criterion shall technically disqualify the tenderer and shall not be further evaluated against Qualitative Criteria.

Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer after determining that all the Mandatory Evaluation Criteria have been met. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion. The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is **80%**.

Evaluation will be done according to **Tender Engineering Evaluation Procedure 240-48929482**

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

5. Specification and Description of the Goods

All switch disconnectors feature double contact interruption and an isolating distance. As a result, the fuses are de-energized when the switch disconnectors are in the disconnected position. The 3KM switch disconnectors with fuses also feature an isolating plug connector. This facilitates mounting and contact establishment in motor control centres (MCCs) in conjunction with vertical busbars. Generally, all 3KM switch disconnectors can be secured to the shaft with padlock against unauthorized reclosing.

Identical accessories for 3KA switch disconnectors and for 3KL and 3KM switch disconnectors with fuses simplify stock keeping. Please inquire about a special variant with reduced values that is particularly resistant to atmospheres high in sulphur, e.g. in the paper and cellulose processing industries.

3KM switch disconnectors with fuses protect against overload and short-circuits as main control and EMERGENCY-STOP switches of switchboard assemblies, distribution boards, power supply and motor outgoing feeders.

In conjunction with SITOR semiconductor fuses, they are also used in UPS systems, frequency converters and capacitor control systems

All 3K switch disconnectors are climate-proof and meet the requirements of IEC 60947-1 and IEC 60947-3

Switch disconnectors (3KM and 3KL) rated up to 400 A

- Devices for floor mounting with door-coupling rotary operating mechanism and for mounting in control cabinet side panels
- 3KM versions with isolating plug connector for mounting on vertical busbars
- 3 and 4-pole versions
- Suitable for NH and BS 88 fuse systems

Table 1 Switch Disconnectors stock numbers

Material Description	Stock Number	Quantity
BREAKER, CIRCUIT: POTENTIAL: 230/400 VAC; CURRENT: 6 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: AS N133791; NON STANDARD IDENTIFICATION AND SPECIFICATION REQUIREMENTS	0004777	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 30 A; POLE: 1; TYPE: MINIATURE MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA1G3, UNK; PHYSICAL SIZE	0004779	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 20 A; POLE: 1; TYPE: MINIATURE HYDRAULIC MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA1G3, UNK; BREAKER, CIRCUIT; TYPE MINITURE HYDRAULIC MAGNETIC, POTENTIAL 240 V, POLE 1,	0004780	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

CURRENT 20 A, INTERRUPT CAPACITY 2.5 KA, REFERENCE NO: SA1G3~BREAKER,CIRCT;SA1G3,20 A,240 V,1		
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 40 A; POLE: 1; TYPE: MINIATURE MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA1G3, UNK; PHYSICAL SIZE	0004781	50
BREAKER, CIRCUIT: POTENTIAL: 220/380 VAC; CURRENT: 10 A; POLE: 2; WIDTH: 59 MM; LENGTH: 80 MM; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 6 KA; REFERENCE NO: 5SQ22, UNK; 4 CONTACTS, 34.5MM THK	0004795	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 10 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: Q5SP; USED ON BBT SF6, TYPE ELK4 765KV GIS	0004873	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 10 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 3 KA; SUPPL P/N: SAG3	0004874	50
COUPLING: TYPE: DRIVE; SIZE: ID 6 X OD 6 MM; MATERIAL: AL; SUPPL P/N: 8UC6011; FOR SIEMENS DOOR; ROTARY OPERATING MECHANISM	0108698	50
COUPLING: TYPE: DRIVE; SIZE: ID 8 X OD 8 MM; MATERIAL: AL; SUPPL P/N: 8UC6012; FOR SIEMENS DOOR, ROTARY OPERATING MECHANISM	0108699	50
COUPLING: TYPE: DRIVE; MATERIAL: AL; SUPPL P/N: 8UC6013; FOR SIEMENS DOOR ROTARY OPERATING MECHANISM; SIZE 10 MM ID X 10 MM OD	0108700	50
COUPLING: TYPE: DRIVE; SIZE: ID 12 X OD 12 MM; MATERIAL: AL; SUPPL P/N: 8UC6014; FOR SIEMENS DOOR, ROTARY OPERATING MECHANISM	0108701	50
SWITCH, DISCONNECT: TYPE: LOADBREAK; POTENTIAL: 660 VAC; CURRENT: 630 A; ACTION: (3) DPST; OPERATED: GANG; MOUNT: HORIZONTAL; SUPPL P/N: 3KL6130-1AB00; ISOLATOR	0117869	50
SWITCH, DISCONNECT: TYPE: LOADBREAK; POTENTIAL: 600 VAC; CURRENT: 125 A; ACTION: DPST; OPERATED: GANG; MOUNT: HORIZONTAL; SUPPL P/N: 3KM5230-1AB00; ISOLATOR PLUG IN FUSE, 3PH	0117870	50
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; POTENTIAL: 690 V; CURRENT: 250 A; ACTION: 3PST; OPERATED: GANG; MOUNT: HORIZONTAL; REFERENCE NO: 5SNO7125, UNK; SUPPL P/N: 3KM5530-1AB00; PLUG IN FUSE; 3PH LOADBREAK	0117871	50
SWITCH, DISCONNECT: TYPE: LOADBREAK; POTENTIAL: 690 V; CURRENT: 400 A; ACTION: DPST; OPERATED: GANG; MOUNT: HORIZONTAL; SUPPL P/N: 3KM5730-1AB001; PLUG IN FUSE, 3PH	0117872	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 70 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA	0119437	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 60 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: SF3G3C1, UNK	0119438	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; CURRENT: 60 A; ACTION: 3PST; MOUNT: PANEL; REFERENCE NO: A72/465AZ, UNK; CONTACT ARRANGEMENT 3NO	0119439	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 10 A; POLE: 2; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 10 KA; SUPPL P/N: S202M-C10; ABB ONLY	0119440	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 25 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA	0119452	50
BREAKER, CIRCUIT: POTENTIAL: 250 V; CURRENT: 80 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; MODEL NO: SF18280, UNK; REFERENCE NO: 97-82210, UNK; WHITE HANDLE	0119475	50
BREAKER, CIRCUIT: POTENTIAL: 220 VAC; CURRENT: 4 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: 5SN1304/ 4G41188	0119515	50
BREAKER, CIRCUIT: POTENTIAL: 220/380 VAC; CURRENT: 10 A; POLE: 1; TYPE: THERMAL MAGNETIC; REFERENCE NO: 16G101291, UNK; SUPPL P/N: 5SX2110-7/ 16G101291	0119516	50
BREAKER, CIRCUIT: POTENTIAL: 230/400 VAC; CURRENT: 16 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 3 KA; SUPPL P/N: 5SN1316 / 15G163984	0119517	50
BREAKER, CIRCUIT: POTENTIAL: 400 V; CURRENT: 6 A; POLE: 2; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 15 KA; SUPPL P/N: 5SN2306	0119518	50
BREAKER, CIRCUIT: POTENTIAL: 480 VAC; CURRENT: 10 A; POLE: 3; TYPE: THERMAL MAGNETIC; REFERENCE NO: 08G105187, UNK; 5SN3310, UNK	0119519	50
BREAKER, CIRCUIT: POTENTIAL: 230/400 VAC; CURRENT: 1 A; POLE: 1; TYPE: THERMAL MAGNETIC; REFERENCE NO: 5SN1301, UNK; 5SN1701, UNK	0119520	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; CURRENT: 0.4-0.63 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 100 KV; SUPPL P/N: 3VE1010-2E	0119524	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 15 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: C45M11LTi9, UNK	0119545	50
BREAKER, CIRCUIT: POTENTIAL: 220 VAC; CURRENT: 2 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: S16CURVEG; FOR COAL PLANT SPARES	0119557	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 5 A; POLE: 1; TYPE: MINIATURE HYDRAULIC MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; SUPPL P/N: SA1G3	0119562	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 15 A; POLE: 1; TYPE: MINIATURE HYDRAULIC MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA1G3-15A, UNK	0119563	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 25 A; POLE: 1; TYPE: MINIATURE HYDRAULIC MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA1G3-25A, UNK	0119564	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 35 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; SUPPL P/N: SA1G3-35A	0119565	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 45 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; SUPPL P/N: SA1G3-45A	0119566	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 50 A; POLE: 1; TYPE: MINIATURE; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA1G3-50A, UNK	0119567	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 35 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF1G3-35A	0119568	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 45 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF1G3-45A	0119569	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 10 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA	0119570	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 35 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF3G3-35A	0119571	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 45 A; POLE: 3; TYPE: MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: SF3G3-45A, UNK; SUPPL P/N: QF3(19)	0119572	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 50 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA	0119573	50
BREAKER, CIRCUIT: POTENTIAL: 440 VAC; CURRENT: 75 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 20 KA; TYPE LY603	0119574	50
BREAKER, CIRCUIT: POTENTIAL: 440 VAC; CURRENT: 100 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 20 KA; SUPPL P/N: LY603	0119575	50
BREAKER, CIRCUIT: POTENTIAL: 440 VAC; CURRENT: 125 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 20 KA; SUPPL P/N: LY603	0119576	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 25 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; TYPE Q5SP	0119577	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 35 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; TYPE Q5SP	0119578	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 40 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: Q5SP40A, UNK	0119579	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 10 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: 12AD010EE, UNK; OA FM, 07018-2086	0119584	50
BREAKER, CIRCUIT: POTENTIAL: 460 VAC; CURRENT: 25 A; POLE: 3; TYPE: THERMAL MAGNETIC; REFERENCE NO: CF3Y69, UNK; MAIN	0119585	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 10 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; CATALOGUE NO: 21291; TYPE IPC45 MCB	0119586	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 20 A; POLE: 1; TYPE: THERMAL MAGNETIC CURVE U; INTERRUPT CAPACITY: 5 KA; CATALOGUE NO: C45120; SUPPL P/N: C45; MULTI 9	0119587	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 63 A; POLE: 3; TYPE: THERMAL MAGNETIC; CATALOGUE NO: 25006; REFERENCE NO: 3P C63H, UNK; C63H, UNK; MULTI 9	0119588	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 32 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; CATALOGUE NO: 21309; SUPPL P/N: C45 AD; MULTI 9	0119589	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 2.5 A; POLE: 1; REFERENCE NO: G16A, UNK; 16AMP, 50HZ, ON MAIN AIR HEATER I R SCAN DRIVE, 5SQ11AIR HEATER AUXILLARY SYSTEM	0119594	50
BREAKER, CIRCUIT: POTENTIAL: 250 VAC; 65 VDC; CURRENT: 10 A; POLE: 1; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: GWE323907, UNK	0119606	50
BREAKER, CIRCUIT: POTENTIAL: 250 VAC; 65 VDC; CURRENT: 1.5 A; POLE: 1; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: GWE287789, UNK	0119607	50
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; CURRENT: 3 A; POLE: 2; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: 5SX5203-7/5SX9100; WITH AUXILIARY CONTACT	0119608	50
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; CURRENT: 4 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: 5SN71040KB30	0119609	50
BREAKER, CIRCUIT: POTENTIAL: 230/400 V; CURRENT: 2 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 6 KA; SUPPL P/N: 5SX 2102-7/5SX 9100; 1NO AND 1NC	0119615	50
BREAKER, CIRCUIT: POTENTIAL: 240/415 VAC; CURRENT: 10 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 6 KA; REFERENCE NO: SX21107, UNK; SINGLE LEVER, 1 N/O 1 N/C	0119616	50
BREAKER, CIRCUIT: POTENTIAL: 240 VAC; 250 VDC; CURRENT: 50 A; POLE: 2; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 10 KA; SUPPL P/N: TEB1220-50WL	0119617	50
BREAKER, CIRCUIT: POTENTIAL: 120-240 V; CURRENT: 5 A; POLE: 1; TYPE: THERMAL MAGNETIC; SUPPL P/N: 209-1-1-61F-4-7 -5	0119618	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 10 A; POLE: 2; TYPE: THERMAL MAGNETIC; REFERENCE NO: TEB1220-10WL, UNK	0119619	50
BREAKER, CIRCUIT: POTENTIAL: 120/220 VAC; CURRENT: 5 A; POLE: 1; TYPE: THERMAL MAGNETIC; SUPPL P/N: 209-1-1-61F3-7-5	0119620	50
BREAKER, CIRCUIT: POTENTIAL: 125 VDC; CURRENT: 5 A; POLE: 1; TYPE: THERMAL MAGNETIC; SUPPL P/N: 219-1-1-51F-1-7-5	0119621	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 10 A; POLE: 1; TYPE: THERMAL MAGNETIC; SUPPL P/N: 209-1-1-61F4-7; 50/60HZ, FOR FUEL SUPPLY SYSTEM	0119622	50
BREAKER, CIRCUIT: POTENTIAL: 65 V; CURRENT: 5 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 6.25 A; SUPPL P/N: 219-1-1-51F-1-7-5	0119623	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; 440 VDC; CURRENT: 1 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: 5SN92010KB30, UNK; N TYPE, UC, 1N/O 1N/C, G CHARACTER, ITEM 50123	0119642	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; 440 VDC; CURRENT: 6 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: 5SN92060KB30, UNK; N TYPE UC, 1N/O AND 1N/C, G CHARACTER, ITEM 50125	0119643	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; 220 VDC; CURRENT: 1 A; POLE: 1; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: 5SN91010KB30, UNK; N TYPE UC, 1N/O 1N/C, G CHARACTER, ITEM 015 501122	0119647	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; 440 VDC; CURRENT: 2 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; SUPPL P/N: 5SX5 202-7; N TYPE UC MINI, G CHARACTER, CONFIRMED JOHN BOY 17/03/1997	0119648	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; 440 VDC; CURRENT: 16 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; DRAWING NO: N-TYPE VC REV 1; REFERENCE NO: 5SN9216-0KB30, UNK; G CHARACTER, 1 N/O 1N/C, ITEM 50126	0119649	50
BREAKER, CIRCUIT: POTENTIAL: 220-240 VAC; 220 VDC; POLE: 1; REFERENCE NO: 005, UNK; OPJ51021, UNK; 3WX2313, 40-60HZ, MOTOR OPERATING MECHANISM, GENERATOR VOLTAGE REGULATOR	0119650	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 16 A; POLE: 2; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; SUPPL P/N: S212DCK16; 220V DC BOARD	0119656	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 10 A; POLE: 2; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 2.5 KA; SUPPL P/N: S282UC-K10; FOR 220 VOLT STATION DC BOARD	0119657	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 32 A; POLE: 1; TYPE: MINIATURE THERMAL MAGNETIC; FOR UNIT 1 DC BOARD, BBC	0119658	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 10 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 10 KA; SUPPL P/N: 7K10; 9168E	0119659	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 1 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: S162K1; ON UNIT 1 DC BOARD BBC	0119660	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 6 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: S212DCK6, UNK; S212UC, UNK; FOR 220 VOLT STATION DC BOARD	0119664	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 6 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: S212UC00511, UNK	0119665	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 15 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: Q518215Q5	0119667	50
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; CURRENT: 20 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; FUCHS, Q518220	0119668	50
BREAKER, CIRCUIT: POTENTIAL: 440 VAC; CURRENT: 10 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: E538210 EQ5	0119669	50
BREAKER, CIRCUIT: POTENTIAL: 440 VAC; CURRENT: 30 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; FUCHS, E538230 EQ5	0119670	50
BREAKER, CIRCUIT: POTENTIAL: 440 VAC; CURRENT: 40 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; FUCHS, E538240 EQ5	0119671	50
BREAKER, CIRCUIT: POTENTIAL: 525 VAC; CURRENT: 150 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 15 KA; SUPPL P/N: F15D1	0119675	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 16 A; POLE: 2; TYPE: THERMAL MAGNETIC; SUPPL P/N: 5SX4216-7RC	0119680	50
BREAKER, CIRCUIT: POTENTIAL: 380 VAC; CURRENT: 20 A; POLE: 3; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: 5SL3320, UNK; 2 POLE	0119681	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 10 A; POLE: 2; TYPE: MINIATURE THERMAL MAGNETIC; REFERENCE NO: 5SL8210-0KA30, UNK; WITH 1 N/O AUXILLARY CONTACT	0119682	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 32 A; POLE: 3; TYPE: THERMAL MAGNETIC CURVE K; STOTZ, WITH ONE N/C AND ONE N/O AUXILIARY CONTACTS	0119684	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 2 A; POLE: 1; TYPE: THERMAL MAGNETIC; REFERENCE NO: GHS2127271V164, UNK; S210-HS, 5A, 1A, K2A	0119685	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 1.6 A; POLE: 1; TYPE: THERMAL MAGNETIC; REFERENCE NO: GHS2117251VO, UNK; K1.6A, 1S+10	0119686	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 630 A; POLE: 3; TYPE: MOTORIZED; INTERRUPT CAPACITY: 30 KA; SUPPL P/N: NF630-CS; FOR ASH SPREADER MAIN INCOMMER, FITTED WITH 220V UNDER VOLTAGE TRIP COIL AND 1 N/O AND 1 N/C AUX CONTACTS, CONTROL VOLTAGE 110V AC	0119692	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 32 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: C45332, UNK	0119700	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 63 A; POLE: 3; TYPE: THERMAL MAGNETIC; REFERENCE NO: 20576, UNK; MERLIN GERIN	0119701	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 100 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 10 KA; REFERENCE NO: 20578, UNK	0119703	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 10 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: SF1G3, UNK	0119823	50
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; CURRENT: 30 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF1G3	0119825	50
BREAKER, CIRCUIT: POTENTIAL: 380-240 V; CURRENT: 40 A; POLE: 1; TYPE: MINIATURE THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF1G3; ORANGE HANDLE	0119826	50
BREAKER, CIRCUIT: POTENTIAL: 250 V; CURRENT: 5 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: SF1G3, UNK	0119859	50
BREAKER, CIRCUIT: POTENTIAL: 250 V; CURRENT: 50 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF1G3	0119860	50
BREAKER, CIRCUIT: POTENTIAL: 250 V; CURRENT: 60 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; REFERENCE NO: SF1G3, UNK; SUPPL P/N: 97-82209	0119861	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 100 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF3G3; COMPLETE WITH SHROUD CLIP TRAY AND SCREWS	0119862	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 80 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL	0119863	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

P/N: SF3G3; COMPLETE WITH THERMO PLASTIC SHROUD SCREWS AND CLIP TRAY		
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 20 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF1G3	0120110	50
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; CURRENT: 30 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA	0120111	50
BREAKER, CIRCUIT: POTENTIAL: 240 VAC; CURRENT: 15 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA	0120112	50
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; CURRENT: 40 A; POLE: 3; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: SF3G340A; ORANGE HANDLE	0120113	50
BREAKER, CIRCUIT: POTENTIAL: 250 V; CURRENT: 70 A; POLE: 1; TYPE: HYDRAULIC/MAGNETIC; INTERRUPT CAPACITY: 5 KA	0120114	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 15 A; POLE: 1; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 5 KA	0120130	50
BREAKER, CIRCUIT: POTENTIAL: 415 V; CURRENT: 100 A; POLE: 3; TYPE: THERMAL MAGNETIC; CATALOGUE NO: 15092; REFERENCE NO: 3PI, UNK; SWITCH, ISOLATING, MULTI 9	0121086	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 32 A; POLE: 2; TYPE: THERMAL MAGNETIC; REFERENCE NO: 3PI, UNK; CATN015011, UNK; ISOLATING, MULTI 9	0121087	50
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; SUPPL P/N: 3KL5230-1AB0Q; ON CURRENT TRANSFORMER FAN A/B GENERAL CONNECTIONS	0121142	50
SWITCH, DISCONNECT: TYPE: FUSED; POTENTIAL: 600 VAC; CURRENT: 220 A; ACTION: DSPT; MOUNT: PANEL; SUPPL P/N: AFQC200DP; CONTACT ARRANGEMENT 2NO	0121337	50
SWITCH, DISCONNECT: TYPE: FUSED; POTENTIAL: 250/500 VAC; CURRENT: 63 A; REFERENCE NO: 5SG7-130-3A, UNK; AFQC 63 TP / 5SG7-130-3A, UNK; SAFETY, QUAD BREAK; 3 POLE; 3PH	0121339	50
SWITCH, DISCONNECT: TYPE: ISOLATOR; POTENTIAL: 4/5-1 KV; CURRENT: 500 A; ACTION: 3PST; OPERATED: LEVER; MOUNT: PANEL; SUPPL P/N: OETL400D1	0121340	50
BREAKER, CIRCUIT: POTENTIAL: 250 V; CURRENT: 63 A; POLE: 2; TYPE: THERMAL MAGNETIC; REFERENCE NO: 4489AF, UNK	0124039	50
BREAKER, CIRCUIT: POTENTIAL: 220/380 VAC; CURRENT: 6 A; POLE: 3; TYPE: THERMAL MAGNETIC; INTERRUPT CAPACITY: 6 KA; SUPPL P/N: S213K6A; STOTZ, CURVE WITH ONE N/C AND ONE N/O, AUXILIARY CONTACT	0125989	50
BREAKER, CIRCUIT: POTENTIAL: 220/380 VAC; CURRENT: 1.6 A; POLE: 3; TYPE: THERMAL MAGNETIC; REFERENCE NO: GHS2137251VO, UNK; SUPPL P/N: S210HS; S213K; STOTZ CONTACT	0125991	50
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 32 A; POLE: 3; TYPE: THERMAL MAGNETIC CURVE K; INTERRUPT CAPACITY: 25	0125992	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

KA; REFERENCE NO: S203-K32, UNK; S2C-5/H6R, UNK; S2C-H6R, UNK; STOTZ, WITH 1 N/C + 1 N/O AUXILIARY CONTACTS		
BREAKER, CIRCUIT: POTENTIAL: 380 V; CURRENT: 1 KA; POLE: 3; TYPE: ASH TRIPPER CAR MAIN INCOMER; INTERRUPT CAPACITY: 50 KA; SUPPL P/N: CNP1000; CUTLER HAMMER	0126281	5
SWITCH, DISCONNECT: TYPE: FUSED; CURRENT: 63 A; SUPPL P/N: 3KM5030 - 1AB01; ON-LOAD; CSF DIN FUSE	0142142	600
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; CURRENT: 125 A; SUPPL P/N: 3KM5230-1AJ01; SIEMENS ONLY; FUSED ON-LOAD	0142143	200
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; SUPPL P/N: 3KL5230-1AG00	0142144	50
ISOLATOR: TYPE: FUSED; SUPPL P/N: 3KM5530-1AG00; ON-LOAD 250A; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	0142145	50
SWITCH, DISCONNECT: TYPE: FUSED; POTENTIAL: 660 V; CURRENT: 160 A; OPERATED: LEVER; MOUNT: PANEL; SUPPL P/N: 3NP4030-0CA00; ACTION 3 POLE	0142234	50
SWITCH, DISCONNECT: POTENTIAL: 380 V; CURRENT: 10 A; SUPPL P/N: C26A202; FOR LUBE OIL PURIFIER ON BOILER FEED PUMP	0142247	50
SWITCH, DISCONNECT: POTENTIAL: 380 VAC; CURRENT: 25 A; SUPPL P/N: KG41B; 3 PHASE	0142248	50
ISOLATOR: TYPE: FUSED; APPLICATION: ON-LOAD DISCONNECTOR; POTENTIAL: 660 VAC; SUPPL P/N: 3KM30-1AB00; 380V BOARDS; 250 AMP VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	0142250	150
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; CURRENT: 250 A; SUPPL P/N: SMP250; 3 POLE; FOR UNIT 1 DC BOARD	0142338	50
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; CURRENT: 100 A; SUPPL P/N: AFQC100DP; 2 POLE	0142339	50
SWITCH, DISCONNECT: TYPE: TWIN BLADE ISOLATOR; CURRENT: 1.25 KA; SUPPL P/N: 926-527; ASSEMBLY FOR IN-LINE V.C.B	0142560	50
SWITCH, DISCONNECT: TYPE: SIGNAL; SUPPL P/N: 55000-700; FIRE DETECTION	0172688	50
BREAKER, CIRCUIT: POTENTIAL: 240 V; CURRENT: 60 A; POLE: 1; TYPE: MINIATURE; INTERRUPT CAPACITY: 2.5 KA; SUPPL P/N: SC1G3; HEINEMANN	0173637	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 50 A; TYPE: MINI; INTERRUPT CAPACITY: 2.5 KA; MANUF P/N: SAG3; REFERENCE NO: SA1G3	0173650	50
BREAKER, CIRCUIT: POTENTIAL: 220 V; CURRENT: 20 A; POLE: 2; TYPE: MINIATURE; INTERRUPT CAPACITY: 2.5 KA; REFERENCE NO: SA2GOG3, UNK; WITH 1 WHITE AND 1 GREEN	0173652	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

SWITCH, DISCONNECT: TYPE: ISOLATOR; POTENTIAL: 500 VAC; CURRENT: 60 A; REFERENCE NO: AC22, UNK; BOTTOM/TOP ENTRY; SILVER CONTACTS, 3 PHASE	0173698	70
BREAKER, CIRCUIT: POTENTIAL: 6.6 KV; CURRENT: 1.25 KA; POLE: 3; TYPE: VACUUM; INTERRUPT CAPACITY: 25 KA; SUPPL P/N: WL34473	0178603	20
BREAKER, CIRCUIT: POTENTIAL: 12 KV; CURRENT: 2.5 KA; POLE: 3; TYPE: VACUUM; INTERRUPT CAPACITY: 31.5 KA	0178605	20
BREAKER, CIRCUIT: POTENTIAL: 12 KV; CURRENT: 2.5 KA; POLE: 3; TYPE: VACUUM; INTERRUPT CAPACITY: 31.5 KA	0178606	20
BREAKER, CIRCUIT: POTENTIAL: 7.2 KV; CURRENT: 630 A; POLE: 3; TYPE: AIR; INTERRUPT CAPACITY: 25 KA; SUPPL P/N: 3AF1041-4JR886EA2	0179142	4
BREAKER, CIRCUIT: POTENTIAL: 415 VAC; 440 VDC; CURRENT: 10 A; POLE: 3; TYPE: MINIATURE; INTERRUPT CAPACITY: 5 KA; SUPPL P/N: S212-UC; ABB	0187445	30
BREAKER, CIRCUIT: POTENTIAL: 380-440 VAC; CURRENT: 1.25 KA; POLE: 3; TYPE: AIR MAGNETIC; INTERRUPT CAPACITY: 65 KA; SUPPL P/N: SP4236; D/O ACB 3P C/W 520 LSI TRIP, 800 TO 2000 AMP D/O CASSETTE, C/W SHUTTERS, 220/240 VAC 5 SEC CHARGING MOTOR OPERATOR, 208/250V AC/DC SHUNT TRIP COIL 2A/2B AUXILLIARY SWITCH, MAGNUM RACKING HANDLE, MRH001	0219095	30
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; CURRENT: 160 A; SUPPL P/N: 3KM5330-1AJ01; SIEMENS ONLY; ON-LOAD	0224241	300
SWITCH, DISCONNECT: TYPE: FUSED ISOLATOR; POTENTIAL: 690 VAC; CURRENT: 400 A; ACTION: 3 PHASE; SUPPL P/N: 3KF4340-0MF11; ON-LOAD	0224242	800
BREAKER, CIRCUIT: POTENTIAL: 220 VAC; CURRENT: 6 A; POLE: 1; INTERRUPT CAPACITY: 6 KA; SUPPL P/N: MN106	0250374	50
BREAKER, CIRCUIT: POTENTIAL: 690 V; CURRENT: 50 A; POLE: 3; CLASSIFICATION: CL10; FRAME: S2; WIDTH: 55 MM; LENGTH: 144 MM; HEIGHT: 140 MM; TYPE: CURRENT LIMITING; MOUNT: SCREW TERMINAL; INTERRUPT CAPACITY: 50 KA; SUPPL P/N: 3RV1031-4HA10	0252920	50
SWITCH, DISCONNECT: TYPE: FUSED; POTENTIAL: 690 VAC; CURRENT: 630 A; ACTION: 3P; MANUF P/N: 3KL6130-1GB0	0501126	40
BREAKER, CIRCUIT: POTENTIAL: 1000 V; CURRENT: 20 A; POLE: 2; TEMPERATURE RATING: 35 DEG C; COLOR: WHITE; TYPE: PLC POWER SUPPLY; MOUNT: DIN RAIL; INTERRUPT CAPACITY: 20 A	0580323	50
BREAKER, CIRCUIT: POTENTIAL: 400 VAC; CURRENT: 1 A; POLE: 3; CLASSIFICATION: IP20; SPECIFICATION: IEC898/EN60898/DIN43880; FRAME: S1; TEMPERATURE RATING: -25 TO 55 DEG C; WIDTH: 70 MM; LENGTH: 68 MM; HEIGHT: 90 MM; COLOR: WHITE; TYPE: SWITCH; MOUNT: RAIL; INTERRUPT	0589943	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

CAPACITY: 25 KA; MANUF P/N: GHS2830001R0217; MOUNT STANDARD PROFILE RAILS EN20022		
BREAKER, CIRCUIT: POTENTIAL: 400 VAC; CURRENT: 3 A; POLE: 2; CLASSIFICATION: IP20; SPECIFICATION: IEC898/EN60898/DIN43880; FRAME: S1; TEMPERATURE RATING: -25 TO 55 DEG C; WIDTH: 35 MM; LENGTH: 68 MM; HEIGHT: 90 MM; COLOR: WHITE; TYPE: SWITCH; MOUNT: RAIL; INTERRUPT CAPACITY: 25 KA; MANUF P/N: GHS2820001R0317; MOUNT IS STANDARD PROFILE RAILS EN50022; AUXILIARY CONTACT GHS2701916R0001	0589944	30
BREAKER, CIRCUIT: POTENTIAL: 500 VAC; CURRENT: 125-250 A; POLE: 3; SPECIFICATION: IEC EN60947; FRAME: NZM3; TEMPERATURE RATING: -40 TO 80 DEG C; WIDTH: 140 MM; LENGTH: 166 MM; HEIGHT: 297 MM; COLOR: WHITE; TYPE: SWITCH; INTERRUPT CAPACITY: 500-2750 A; MANUF P/N: 3BHB019577R0250	0590709	40
BREAKER, CIRCUIT: POTENTIAL: 400 VAC; CURRENT: 25 A; POLE: 3; CLASSIFICATION: DIN43880; SPECIFICATION: IEC898/EN60898; FRAME: S1; TEMPERATURE RATING: -25 TO 55 DEG C; WIDTH: 70 MM; LENGTH: 68 MM; HEIGHT: 90 MM; COLOR: WHITE; TYPE: SWITCH; MOUNT: RAIL; INTERRUPT CAPACITY: 25 KA; MANUF P/N: GHS2830001R0517; STD PROFILE RAILS EN 50 022; 35X7.5	0590714	40
BREAKER, CIRCUIT: POTENTIAL: 230 V; CURRENT: 10-16 A; POLE: 2; SPECIFICATION: EN61009; TEMPERATURE RATING: -25 TO 40 DEG C; WIDTH: 36 MM; COLOR: WHITE; TYPE: SWITCH; INTERRUPT CAPACITY: 250 A; MANUF P/N: 2CCL462110E0104	0590720	40
BREAKER, CIRCUIT: POTENTIAL: 690 VAC; CURRENT: 50 A; POLE: 3; TEMPERATURE RATING: -20 TO 70 DEG C; WIDTH: 55 MM; LENGTH: 149 MM; HEIGHT: 140 MM; COLOR: WHITE; TYPE: N-RELEASE; MOUNT: SCREW OR RAIL; INTERRUPT CAPACITY: 50 KA/650 A; MANUF P/N: 3RV1331-4HC10	0612793	30
BREAKER, CIRCUIT: SWITCHGEAR DESIGN: METAL-CLAD; POTENTIAL: 22 KV; CURRENT: 1250 A; SHORT TIME CURRENT: 25 KA; POLE: 3; CONTROL VOLTAGE: 220 VDC; CREEPAGE: 300 MM; BASIC INSULATION LEVEL: 170 PEAK KV; INSULATION MATERIAL: GAS INSULATED; OPERATING CONTROL TYPE: MOTORIZED SPRING CHARGE; POLLUTION CLASS: 2; APPLICATION: FEEDER/INCOMER; CLASSIFICATION: ZONE 22; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -25 TO 40 DEG; COLOR: RAL9003 SIGNAL WHITE; TYPE: SF6; MOUNT: PANEL; PHASE SPACING: 300 MM; INTERRUPT CAPACITY: 31.5 KA; SUPPL P/N: GCR-F4C12S2AIN; ECOFIT-TM.FC4-315	0674806	8

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

Table 2 Limit Switches

Material	Long Text Material Description	Quantity
0121017	SWITCH, PROXIMITY: SENSING RANGE: 40 MM; POTENTIAL: 6-30 V; CURRENT: 500 MA; ACTION: SPDT; CONTACT ARRANGEMENT: 1NO 1NC; ON COAL PLANT; PART NO: 3SG3267-1BJ33,	50
0121023	SWITCH, PROXIMITY: POTENTIAL: 10-30 VDC; ACTION: DPST; CONTACT ARRANGEMENT: 1NO 1NC; CAPTIVE CLAMP MOUNT; USED ON THE METROFLEX DAMPERS; OPEN AND CLOSE AND HANDWHEEL LIMITS; PART NO: NBB20-L2-A2-V1	50
0121147	SWITCH, SELECTOR: OPERATED: KNOB; POSITION: 2; POTENTIAL: 380 V; CURRENT: 25 A; CONTACT ARRANGEMENT: 2NO 2NC; 2 POLE; 3 POSITION MOTOR A AND MOTOR B ON MAIN AIR HEATER LEAK CONTROL PANEL; PART NO: C26A221	50
0121197	SWITCH, PRESSURE: RANGE: 30-1000 KPA; POTENTIAL: 220 V; CURRENT: 15 A; ACTION: SPDT; CONNECTION: 1/4 IN-NPT; ENCLOSURE RATING: IP64; DRAWING NO: 01300; REFERENCE NO: A54H82C48; PART NO: 2.04.03	50
0121226	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 0.07-2.8 BAR; POTENTIAL: 120-600 V; ACTION: DPDT; CONNECTION: 1/4 IN-FNPT; ENCLOSURE RATING: IP66; SQUARE D; PART NO: GAWM-22	50
0121230	KIT, CONTACT: TYPE: LIMIT SWITCH; COUNTER CLOCK WISE ROTATION; PART NO: 11LS1-4C/8932	50
0121326	SWITCH, PUSHBUTTON: COLOR: GREEN; MATERIAL PLASTIC; PART NO: Z82BA3	50
0121356	SWITCH, PROXIMITY: TYPE: MAGNETIC; POTENTIAL: 12-24 VDC; CURRENT: 200 MA; SUPPL P/N: XS4P30PA340	50
0121359	SWITCH, PRESSURE: RANGE: 225 BAR; CONNECTION: 3/8 IN-NPT; DRAWING NO: 014420/H; REFERENCE NO: 02557259, UNK; ON 22KV COMPRESSOR PLANT	50
0121363	SWITCH, PRESSURE: RANGE: 0-34.2 BAR; CONNECTION: 1 IN-FNPT; DRAWING NO: 014420/H; REFERENCE NO: 02557279, UNK; SUPPL P/N: TYPE-F2833-63; FOR 22KV BREAKER	50
0121370	SWITCH, PRESSURE: RANGE: 0.5-25 BAR; POTENTIAL: 250 VAC; CURRENT: 10 A; ACTION: SPDT; CONNECTION: 1/2 IN-NPT; BIS; ITM.NO:2.04.03; REFERENCE NO: 2852;	50
0121371	SWITCH, PRESSURE: RANGE: 0.5-16 BAR; ITM.NO:2.04.03; PART NO: 2727	50
0121420	SWITCH, PRESSURE: RANGE: 0.3-0.41 BAR; 0-14.7 KPA; MAX 10 KPA; CONNECTION: 1/4 IN-FNPT; SUPPL P/N: 12NN-KA2-S1-BIB-TTYX3	50
0121422	SWITCH, LIMIT: POTENTIAL: 480/600 VAC; 115/230 VDC; CURRENT: 10-5-4 A; ACTION: DPDT; ACTUATOR: PLUNGER; CONTACT ARRANGEMENT: 1NO 1NC; PILOT DUTY; MAXIMUM 10A-100-240 OR 480VAC 8A-115VDC	50
0121423	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 0.65-6.65 KPA; DIFF 32 MM/H; MAX 1 KPA; CONNECTION: 1/4 IN-FNPT; REFERENCE NO: 52NN-KA117-SI-BIB-TT-YY-X3, UNK; RANGE:1016-0-1016MM WC +6.65-6.65KPA;	50
0121425	SWITCH, PRESSURE: RANGE: 3-10 BAR; POTENTIAL: 250 VAC; CURRENT: 10 A; ACTION: SPDT; CONNECTION: 1/2 IN-NPT;	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0121431	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 0-1.1/0-1.03 MPA; POTENTIAL: 380 VAC; CURRENT: 10 A; ACTION: SPDT; CONNECTION: 1/4 IN-FNPT; MAX CONDITION PRESS. 413KPA;	50
0121693	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 0-1.1/0-1.03 MPA; POTENTIAL: 380 VAC; CURRENT: 10 A; ACTION: SPDT; CONNECTION: 1/4 IN-FNPT; MAX CONDITION PRESS. 413KPA;	50
0123619	SWITCH, SELECTOR: OPERATED: KNOB; POSITION: 3; POTENTIAL: 380-660 VAC; CURRENT: 4 A; CONTACT ARRANGEMENT: 1NO 2NC;	50
0215065	SWITCH, PRESSURE: TYPE: WATER; RANGE: 0-1000 KPA; POTENTIAL: 48 V; CONNECTION: FLANGE; ENCLOSURE RATING: METAL; DANFOSS PRESSURE CONTROL ONLY; ACTION 2 WAY; PART NO: KP535,	50
0220915	SWITCH, PRESSURE: TYPE: WATER; RANGE: 0.28-5.5; PROOF 10 BAR; POTENTIAL: 480 VAC; 250 VDC; CURRENT: 3 A AC; 0.4 A DC; ACTION: SPDT; ENCLOSURE RATING: METAL; BARKSDALE ONLY; FOR USE WITH COOLING TOWER SECTOR LEVELS; LESS THAN LOW LOW; <LO LO; PART NO: DIT-M80SS, SUPPLIER: UNKNOWN; PART NO: 0401-224	50
0237169	SWITCH, PRESSURE: TYPE: WATER; RANGE: 0.28-5.5; PROOF 10 BAR; POTENTIAL: 480 VAC; 250 VDC; CURRENT: 3 A AC; 0.4 A DC; ACTION: SPDT; ENCLOSURE RATING: METAL; BARKSDALE ONLY; FOR USE WITH COOLING TOWER SECTOR LEVELS; LESS THAN LOW LOW; <LO LO; PART NO: DIT-M80SS	50
0614036	SWITCH, FLOW: MATERIAL: SS; POTENTIAL: 220 VAC; CURRENT: 1 A; RANGE: 0-25 M3/HR; ACTION: SPST; CONNECTION: 2 IN; ENCLOSURE: IP66; SPECIFICATION: FLS1; FI1;	50
0120891	SWITCH, SPEED: POTENTIAL: 600 VAC; CURRENT: 5 A; CALIBRATION: 281 RPM; PART NO: 60-23PSA,	50
0120892	SWITCH, PUSHBUTTON: COLOR: RED; FOR MAGNETIC SEPERATOR CONTROL, MATERIAL PLASTIC; REFERENCE NO: ZBE-102;	50
0120894	SWITCH: TYPE: TILT CONTROL; POTENTIAL: 230 VAC; CONTACT ARRANGEMENT: 2NO 2NC; ACTION: 4PDT; MOUNT: WALL; REFERENCE NO: 20-35, UNK; SUPPL P/N: 362; 47/62HZ	50
0121004	SWITCH, SELECTOR: OPERATED: KNOB; POSITION: 2; POTENTIAL: 220 V; CURRENT: 20 A; CONTACT ARRANGEMENT: 3NO 3NC; SUPPL P/N: BF11A222603; 3 POLE	50
0121224	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 0.7-2.8; PROOF 6.9 BAR; POTENTIAL: 120/600 V; CURRENT: 6 A; ACTION: DPDT; CONNECTION: FNPT 1/2 IN; ENCLOSURE RATING: IP66; CLASS 9012; SERIES C; PART NO: GAWM22/EB, SUPPLIER: UNKNOWN; PART NO: CS13-11-3-9,	50
0121311	SWITCH, PROXIMITY: TYPE: MAGNETIC; POTENTIAL: 18-30 V; CURRENT: 100 MA; DRAWING NO: 7305-18310; REFERENCE NO: A56K62A87	50
0121316	SWITCH, LIMIT: POTENTIAL: 380 V; CURRENT: 10 A; 4AMPS RESISTIVE; ON ASH SYSTEM; REFERENCE NO: XCK-P118;	50
0121414	SWITCH, PRESSURE: RANGE: 0.5-10 BAR; REFERENCE NO: 8147002186; PART NO: DCM10,	50
0121458	SWITCH, FLOW: RANGE: 0-400 LPH; ENCLOSURE: STL; REFERENCE NO: 569694;	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0121660	SWITCH, PROXIMITY: SENSING RANGE: 25 MM; POTENTIAL: 10-30 VDC; CURRENT: 200 MA; CONTACT ARRANGEMENT: 1NO; CONNECTION: 4 WIRE LEAD; FLUSH MOUNT; RECTANGULAR; COMPLETE AS A UNIT WITH CABLE, PART NUMBER 35071 TYPE V1-G-2M-PVC 4X0.34 MM2 WIRES; EXTREME ADDITIONAL TEMPERATURE RANGE OF SENSOR COMPONENT 0-250 DEGREES C; 10 METER CABLE BETWEEN SENSOR AND AMPLIFIER WITH TEFLON INSULATION; PART NO: NCN25-F35-A2-250-V1, SUPPLIER: UNKNOWN; PART NO: 121990,	50
0123622	SWITCH, SELECTOR: OPERATED: KNOB; POSITION: S; POTENTIAL: 250 V; CURRENT: 15 A; TYPE: ONE LEVER INDUSTRIAL; 5 POLE; S POSITION; COLOUR: ORANGE ONLY; REFERENCE NO: 6261S-OR	50
0219860	SWITCH, PROXIMITY: POTENTIAL: 240 VAC; CURRENT: 300 MA; ACTION: SPST; CONTACT ARRANGEMENT: 1NC; VERTICAL MOUNT; PART NO: XS2-M30MB250	50
0234301	SWITCH: TYPE: MICRO; POTENTIAL: 240 VAC; CURRENT: 16 A; CONTACT ARRANGEMENT: 1NO 1NC; MOUNT: TWIN SCREW; ACTION SPDT; CONNECTION: SMALL SCREW AND WASHER; BODY SIZE: 49.3MM WD X 17.4MM THK; ACTUATOR HEIGHT (FROM CENTRE OF FIXING HOLES TO TOP OF ACTUATOR: 15.9MM; HOLE SIZE 3.5MM; FIXING HOLES 25.4MM APART; ACTUATOR STYLE: PIN; APPLICATION: HP/LP LEVEL SWITCHES; PART NO: C6R06	50
0120886	SWITCH, LIMIT: ACTION: SPDT; ACTUATOR: ROLLER LEVER; CONTACT ARRANGEMENT: 1NO 1NC; CAM; REFERENCE NO: 3SJ1040-1A; REFERENCE NO: 3SJ1040-1AA	50
0121066	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 8-28; DIFF 0-15 BAR; POTENTIAL: 220/380 V; CURRENT: 16-10 A; CONNECTION: 1/4 IN-NPT; RANGE: 6-30 BAR; REFERENCE NO: 060-1171; REFERENCE NO: FFW 113/060-1171	50
0121240	SWITCH, PRESSURE: RANGE: 170-1900 KPA; POTENTIAL: 220 V; CONNECTION: 1/4 IN-FNPT; CONTACT ARRANGEMENT: 1NO 1NC; APPLICATION: SOOTBLOWER; ENCLOSURE RATING: IP66; PART NO: 6N3-K45	50
0121704	SWITCH, FLOW: POTENTIAL: 250 VDC; CURRENT: 0.5 A; SAMPLE; REFERENCE NO: 020-0255; PART NO: FS-4	50
0122285	SWITCH, SELECTOR: OPERATED: HAND; POSITION: 2; POTENTIAL: 600 V; CONTACT ARRANGEMENT: 1NO 1NC; TYPE: LOCAL/REMOTE; ACTION: DPDT; SPECIFICATION: BS 5419; ACTUATOR TEST, CLOSED ENCLOSURE	50
0120857	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 0.22-4; PROOF 12 BAR; POTENTIAL: 220 V; CURRENT: 16 A; ACTION: SPDT; CONNECTION: 3/8 IN-FNPT; ENCLOSURE RATING: IP55; FOR COUPLING 650SVN/650DTPKL; REFERENCE NO: FF4-4DAH	50
0121433	SWITCH, FLOW: MATERIAL: STL; RANGE: 0-20 LPM; CONNECTION: 1 IN-FNPT; SUPPL P/N: 620CILP3EES320CSS1D28BSP	50
0227454	SWITCH, PROXIMITY: POTENTIAL: 24 VDC; ACTION: DPST; CONTACT ARRANGEMENT: 1NO 1NC; SUPPL P/N: 187479; NCN25-F35-A2-250-V1; NCN25-F35-AZ-250-V1; BRACKET MOUNT, PEPPERL FUCHS ONLY	50
0250864	SWITCH, PRESSURE: RANGE: 0-8 BAR; POTENTIAL: 220 VAC; CURRENT: 10 A; ACTION: SPDT; CONTACT RATING: 250 VAC 10 A; DIMENSIONS: WD 103 X LG 116 X HT 68 MM; APPLICATION: FIRE DETECTION SYSTEM; ENCLOSURE RATING: IP67; PART NO: KPS 35	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0251472	SWITCH, LEVEL: APPLICATION: COAL BUNKER LOW; REFERENCE NO: 40167-180; LB4710-180 MINI SWITCH 4TE	50
0500065	SWITCH, SELECTOR: POSITION: 2; POTENTIAL: 220-240 VAC; CURRENT: 20 A; CONTACT CONFIGURATION: ON/OFF; CONTACT ARRANGEMENT: 8NO 8NC; POWER: 2.5 KW; APPLICATION: HYDRASTEP SYSTEM; DIMENSIONS: WD 48 X LG 105 MM; MANUF P/N: ZA- D681	50
0120877	SWITCH, PUSHBUTTON: COLOR: YELLOW; MATERIAL PLASTIC; REFERENCE NO: 35B1000-0AD20	50
0121369	SWITCH, LIMIT: POTENTIAL: 380 VAC; CURRENT: 6 A; ACTION: SPDT; ACTUATOR: PLUNGER; CONTACT ARRANGEMENT: 1NO 1NC; ENCLOSURE: IP65; SUPPL P/N: ES411TF101S; FOR ISOLATING TORQUE LIMITERS	50
0121449	WITCH, LIMIT: POTENTIAL: 600 V; ACTION: (2) SPST; ACTUATOR: DOUBLE WIRE LEVER; CONTACT ARRANGEMENT: 2NO; ENCLOSURE RATING: AL; CUTLER-HAMMER ONLY; FOR USE ON CONVEYORS; PART NO: CHW53197	50
0227455	SWITCH, PRESSURE: RANGE: 50 BAR; POTENTIAL: 24 VDC; ACTION: (2) SPDT; CONNECTION: 1/4 IN-NPT; ENCLOSURE RATING: IP65; FOR TRUNION LUBE OIL SET ON MILLS; SERIAL NO: 441 785 AZ 31 3 37450; PART NO: HED 30A 36/200,	50
0236582	SWITCH, PRESSURE: TYPE: AIR; RANGE: 17.2-241.3 BAR; 250-3500 PSI; POTENTIAL: 110 VAC; ACTION: SPDT; CONNECTION: 1/2 IN-NPT; ENCLOSURE RATING: IP65; SUPPL P/N: H 100 - 189; TI 905; USED ON UNIT 1 TO 6 SOOTBLOWER SYSTEM, H100	50
0238434	SWITCH, PRESSURE: TYPE: DIFFERENTIAL; RANGE: 105-700 KPA; POTENTIAL: 125-250 VAC; CURRENT: 15 A; ACTION: SPDT; CONNECTION: 1/4 IN-NPT; ENCLOSURE RATING: IP65; PROOF 27580 KP; USE ON MILL TRUNION FILTER DP; PART NO: D424S,	50
0120884	SWITCH, PUSHBUTTON: COLOR: RED; ELECTRICAL RATING: 600 VAC 6 A; ACTION: DPST; CONTACT ARRANGEMENT: 1NO 1NC; MOUNT: PANEL; SUPPL P/N: 3SB3801-2EA30-OCOC	50
0121427	SWITCH, LIMIT: POTENTIAL: 125/250/480 VAC; 125/250 VDC; CURRENT: 0.8 A AC; 0.4 A DC; ACTION: DPDT; ACTUATOR: ROLLER LEVER; CONTACT ARRANGEMENT: 1NO 1NC; ENCLOSURE: IP65; VARIABLE LENGTH ROLLER LEVER, SNAP ACTION; PART NO: XCK-S141H29	50
0225902	SWITCH, PUSHBUTTON: COLOR: RED; ELECTRICAL RATING: 24 VDC; ACTION: 2PST; CONTACT ARRANGEMENT: 1NO 1NC; MOUNT: SURFACE; HOUSING: AL DIE CAST; MUSHROOM TWIST TO RELEASE E-STOP; PART NO: RM/ST12	50
0227457	SWITCH, SELECTOR: POSITION: 3; POTENTIAL: 220 VAC; CONTACT ARRANGEMENT: 2NO 2NC; TYPE: LOCAL/REMOTE; 2 POLE; MOUNT PANEL; FOR GIRTH GEAR TRAIN PANEL; A TO E MILLS; (088939 X 1); (088896 X 1); PART NO: ZB4 BZ 103, SUPPLIER: UNKNOWN; PART NO: ZB4 BD3	50
0243622	SWITCH, PROXIMITY: TYPE: SPEED; SENSING RANGE: 8 MM; POTENTIAL: 10-30 VDC; CURRENT: 2-100 MA; DIMENSIONS: DIA 18 X LG 40 MM; CONNECTION: 2 WIRE; SPECIFICATION: 088Z04; FOR SSC SPEED MEASUREMENT; PART NO: NBN8-18GM40-Z0, MANUFACTURER: PEPPERL AND FUCHS;	50
0241233	SWITCH, LIMIT: POTENTIAL: 24 VDC; ACTION: SPST; CONTACT ARRANGEMENT: 1NO; ENCLOSURE RATING: METAL; PART NO: ZCK-JIH29	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0121231	SWITCH, LIMIT: POTENTIAL: 600 V; CURRENT: 10 A; ACTION: SPDT; ACTUATOR: LEVER ARM; CONTACT ARRANGEMENT: 1NO 1NC; ENCLOSURE: NEMA 9; COMPLETE WITH LEVER; FOR USE ON ISOLATORS; MODEL NO: LSA1A-2D; PART NO: 564000	50
0121669	SWITCH, PROXIMITY: ACTION: SPDT; CONTACT ARRANGEMENT: 1NO 1NC; DOUBLE CONTACT, 52 X 6MM; REFERENCE NO: 22081625080	50
0237170	SWITCH, PRESSURE: TYPE: AIR; RANGE: 4.5 BAR; POTENTIAL: 230/400 V; CURRENT: 15-11 A; ACTION: DPDT; CONNECTION: 1/2 IN-NPT; ENCLOSURE RATING: IP65; USED AT GIRTH GEAR TRAIN 1 AND 2; AIR SUPPLY ON UNT 1 TO 2; PART NO: MCSN4	50
0237737	SWITCH: TYPE: MAGNETIC REED; CURRENT: 1 A AC; 800 MA DC; CONTACT ARRANGEMENT: NO NC; ACTION: DPDT; MOUNT: THD; SUPPL P/N: PSM/T/1; MATERIAL SS304, DIAMETR 10 MM , LENGTH 60 MM, SWITCHING 3 M SEC, READING DISTANCE +-28 MM, PROXY MAGNETIC SENSOR	50
0121068	SWITCH, FLOW: ACTION: SPDT; CONNECTION: 1 IN-NPT; 1-2 OPEN HIGH 1-3 OPEN LOW , CONN 1-11.5; REFERENCE NO: F61SB; REFERENCE NO: F61SB-9100; REFERENCE NO: F64DB9103	50
0227456	SWITCH, LIMIT: POTENTIAL: 24 VDC; CURRENT: 7-8 A; ACTION: (2) SPST; ACTUATOR: ROTARY; CONTACT ARRANGEMENT: 1NO 1NC; ENCLOSURE: IP67; DIMENSIONS: WD 30 X LG 60 MM; BARRING GEAR ENGAGE/DISENGAGE LIMIT COMPLETE IN UNIT 1 TO 6, CUTTLER HAMMER ONLY; MOUNT SURFACE; PART NO: E50RA20 SERIES A1	50
0238438	SWITCH, PRESSURE: TYPE: SOR LOW DIFFERENTIAL; RANGE: 0-1 KPA; POTENTIAL: 250 VAC; CURRENT: 10 A; ACTION: SPDT; CONNECTION: 1/4 IN-NPT; ENCLOSURE RATING: IP65; NON INTRINSIC SAFE; USE ON UNIT 1 TO 6 MILL SEAL AIR DP; PART NO: 107 AL-NIZ-P1-F1A	50
0122256	SWITCH, PRESSURE: RANGE: 0-515 KPA; POTENTIAL: 120-600 VAC; CURRENT: 0.25-0.1 A; ACTION: SPDT; CONNECTION: 1/4 IN-FNPT; RANGE AT FALLING PRESS. 0.069 - 5.2 BAR; MAX. CONDITION PRESSURE 80KPA	50
0210062	SWITCH, PRESSURE: TYPE: HIGH; RANGE: 3 MPA; POTENTIAL: 24 VDC; ENCLOSURE RATING: CI; CUSTOMISED REXROTH HYDRAULIC EQUIPMENT TO BE SUPPLIED BY VITAL SYSTEMS ONLY; COMPLETE WITH R544475 MANIFOLD ADAPTOR; ACTION 2 WAY; PART NO: HED80H1X/100Z14	50
0223814	SWITCH, PROXIMITY: POTENTIAL: 10-60 VDC; CURRENT: 200 MA; ACTION: SPST; CONTACT ARRANGEMENT: 1NO; SCREW ADJUSTMENT MOUNT; PEPPERL AND FUCHS ONLY; FOR USE ON THE TURBINE AND LP BYPASS CVA OIL LEAKAGE DETECTOR; PART NO: CJ10-30GM-E2-V1	50
0220914	SWITCH, PROXIMITY: POTENTIAL: 10-30 VDC; CURRENT: 200 MA; ACTION: SPDT; CONTACT ARRANGEMENT: 1NO 1NC; CONNECTION: 4 WIRE LEAD; SPECIFICATION: EN 50 008-A13; SUPPL P/N: 83766; NBBS-18 GM 60-A2; SCREW MOUNT; PEPPERL AND FUCH BRAND ONLY; FOR USE WITH SICON FLOPPER GATES	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0234300	SWITCH, SENSITIVE: ACTUATOR STYLE: LEVER; CONTACT ARRANGEMENT: 1NO 1NC; POTENTIAL: 380 VAC; CURRENT: 15 A; BODY STYLE: MICRO; MOUNT: TWIN SCREW; APPLICATION: MILL TRUNION OIL FLOW METER; ACTION SPDT; ACTUATOR: TYPE WITH SHORT LENGTH (26MM FROM PIVOT TO CENTRE OF ROLLER WHEEL).ROLLER WHEEL MOUNTED ON TOP AND SPRING LOADED RETURN; CONNECTION BY MEANS OF SCREW AND CUP WASHERS ONLY; BODY SIZE: 49.3MM WD X 17.4MM THK; ACTUATOR HT FROM CENTRE OF FIXING HOLES TO TOP OF ROLLER WHEEL: 32MM; BODY HEIGHT: 29MM; FIXING HOLES 3.5MM AND 25.4MM APART; SWITCHING: MARKED ON BOTTOM AS PER SWITCH CONFIGURATION; PART NO: BZ-2RW822-P2	50
0635069	SWITCH, LEVEL: METHOD OF ACTUATION: RISING/FALLING OIL LEVEL; RANGE: - 10 TO 80 DEG C; POTENTIAL: 230 VAC; CURRENT: 0.5 A; POWER: 40 VA; ACTION: SPST; CONTACT ARRANGEMENT: 1NO 1NC; DIMENSIONS: DIA 12 X LG 320 MM; APPLICATION: TRUNION OIL TANK MILL; ENCLOSURE: ALUMINIUM; ENCLOSURE RATING: IP65; CLASSIFICATION: EXPLOSIONPROOF; FLOAT DIA: 44MM; TERMINAL BOX DIMENSIONS: WD 75 X LG 80 X THK 57MM; CHANGE OVER CONTACT; PART NO: AF-U-L320/12-V44A	50
0121454	SWITCH, PRESSURE: RANGE: 0-1000 KPA; POTENTIAL: 250 VAC; CURRENT: 10 A; ACTION: SPDT; CONNECTION: 1/2 IN-NPT; ENCLOSURE RATING: IP54; BREAKING CAPACITY: 250VAC 10(5)A; MAX.AMBIENT TEMP: 70DEG C; REFERENCE NO: PS5103G2492; PART NO: TYPE DCM 10	50
0210063	SWITCH, PRESSURE: TYPE: LOW PRESSURE; RANGE: 1.5 MPA; POTENTIAL: 24 VDC; ENCLOSURE RATING: CI; CUSTOMISED REXROTH HYDRAULIC EQUIPMENT TO BE SUPPLIED BY VITAL SYSTEMS ONLY; COMPLETE WITH R544475 MANIFOLD ADAPTOR; ACTION 2 WAY; PART NO: HED80H1X/50Z14	50
0237738	SWITCH, PROXIMITY: POTENTIAL: 10-38 VDC; ACTION: PNP; LED; PART NO: XS4 P18PA340	50
0238436	SWITCH, PROXIMITY: POTENTIAL: 12-48 VDC; ACTION: PNP; CONNECTION: 3 WIRE; ACTION DOUBLE THROW; LOCK NUT MOUNT; FOR SICON CONVEYORS SPEED MEASUREMENT; PART NO: XSA V11373	50
0237739	SWITCH, PROXIMITY: TYPE: INDUCTIVE; POTENTIAL: 10-38 VDC; PART NO: XS4 P18 MA 230	50
0121444	SWITCH, LIMIT: POTENTIAL: 125/250 VAC; CURRENT: 10 A; ACTION: SPDT; ACTUATOR: LEVER; CONTACT ARRANGEMENT: 1NO 1NC; ON/OFF; PART NO: 11LS1-4PG	50
0121665	SWITCH, SELECTOR: POTENTIAL: 380 V; CURRENT: 16 A; ACTION: 6PST; 6 POLE; REFERENCE NO: GB4974; PART NO: C10B	50
0225911	SWITCH, PROXIMITY: POTENTIAL: 24 VDC; ACTION: DPST; CONTACT ARRANGEMENT: 1NO 1NC; BRACKET MOUNT; PART NO: XS4 P18 PA 370	50
0225912	SWITCH, PROXIMITY: POTENTIAL: 24 VDC; ACTION: SPST; CONTACT ARRANGEMENT: 1NO; BRACKET MOUNT; PART NO: NCN15-30 GM40-NO	50
0242211	SWITCH, LIMIT: POTENTIAL: 24 VDC; ACTION: DPST; CONTACT ARRANGEMENT: 1NO 1NC; APPLICATION: APRON CONVEYORS UNIT 1-6; REFERENCE NO: ZCKM1H29; PART NO: 073950	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0231094	SWITCH, PROXIMITY: TYPE: INDUCTIVE; POTENTIAL: 24-240 VAC/DC; CURRENT: 5-300 MA AC; 5-200 MA DC; CONTACT ARRANGEMENT: 1NO 1NC; BASE MOUNT; ACTION SINGLE PHASE; 50/60HZ; PART NO: XS7-C40MP230	50
0123287	SWITCH, LEVEL: METHOD OF ACTUATION: FLOAT; RANGE: -0 TO 50 DEG C; POTENTIAL: 250 VAC; CURRENT: 10 A; ACTION: SPDT; CABLE LENGTH: 13 M; ENCLOSURE: PLASTIC; PEAR BALL, MERCURY FILLED FLOAT; PART NO: ENH10	50
0121024	SWITCH, SELECTOR: OPERATED: KEY; POSITION: 3; KEY ACTUATOR ONLY; SWITCHING SEQUENCE 1-0-11; LATCHING 2 X 50 DEG OPERATING ANGLE; REFERENCE NO: 3SB1000-4PB20	50
0121342	SWITCH, SELECTOR: OPERATED: KEY; POSITION: 2; POTENTIAL: 380 V; CONTACT ARRANGEMENT: 1NO 1NC; ACTION: SPST; 250/500VAC; PART NO: EX4225-2	50
0121661	SWITCH, PROXIMITY: TYPE: FLUSH; SENSING RANGE: 4 MM; POTENTIAL: 6-12 VDC; CURRENT: 1.1 MA; ACTION: SPST; CONTACT ARRANGEMENT: NO; DIMENSIONS: DIA 12 X LG 25 MM; CONNECTION: 2 WIRE; APPLICATION: NAMUR PROXY SENSOR; DC; BRS WIRE; NON-FLUSH; 4MM SENS/INP; 500HZ; 2M; CBL; NICKEL; PART NO: P6C2B1204NA/LED	50
0225910	SWITCH, LIMIT: POTENTIAL: 220 VAC; ACTION: (2) DPST; ACTUATOR: ROLLER LEVER; CONTACT ARRANGEMENT: 1NO 1NC; ENCLOSURE: IP66; PART NO: XCK-M1 H29	50
0123192	SWITCH, LIMIT: POTENTIAL: 600 VAC/DC; ACTION: DPST; ACTUATOR: LEVER; CONTACT ARRANGEMENT: 1NO 1NC; ENCLOSURE RATING: AL; PART NO: A2-33-A	50
0241257	SWITCH: TYPE: EMERGENCY STOP; POTENTIAL: 24 VDC; CONTACT ARRANGEMENT: 1NO; STATION; PART NO: CH191176	50
0121173	SWITCH, PHOTOELECTRIC: TYPE: DAYLIGHT; CONTACT RATING: 250 V; CONTACT ARRANGEMENT: 1NO; ACTION: SPST; CONNECTION: PLUG LOCKING; PANEL MOUNT; FOR ULTRAVIOLET RAY PROTECTION; PART NO: ZS20A	50
0227453	SWITCH, SENSITIVE: CONTACT ARRANGEMENT: 1NO 1NC; POTENTIAL: 690 V; CURRENT: 10 A; BODY STYLE: MICRO; ACTION (2) SPDT; CUTTLER HAMMER CONTACT BLOCK FOR SICON CONVEYOR PULL KEYS, UNIT 1 TO 6; PART NO: 10250T1/ 91000T	50
0121772	SWITCH, LEVEL: RANGE: 90 DEG C; POTENTIAL: 24 VDC; CURRENT: 1 A; ACTION: SPST; DIMENSIONS: WD 33 X LG 205 X HT 33 MM; ENCLOSURE: NEMA 009; WITH PROLINE BLOCK CHUTE, STYLE TILT; MODEL NO: 20-39; PART NO: 005778	50
0646781	SWITCH, SELECTOR: OPERATED: LEVER; POSITION: 2; POTENTIAL: 380 V; CURRENT: 20 A; CONTACT CONFIGURATION: ON/OFF; CONTACT ARRANGEMENT: 1NO 1NC; POWER: 5.5 KW; ACTION: 6PST; APPLICATION: LANCE SOOTBLOWERS; CLASSIFICATION: IP65; PART NO: CA10B.GB6704	50
0646786	SWITCH, SELECTOR: OPERATED: LEVER; POSITION: 2; POTENTIAL: 380 V; CURRENT: 20 A; CONTACT CONFIGURATION: ON/OFF; CONTACT ARRANGEMENT: 1NO 1NC; POWER: 5.5 KW; ACTION: 6PST; APPLICATION: LANCE SOOTBLOWERS; CLASSIFICATION: IP65; PART NO: CA10B.GB6704	50

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

0403713	RECEPTACLE, ELECTRICAL: TYPE: SWITCH SOCKET COMBINATION; POLE: 3; POTENTIAL: 250 V; CURRENT: 15 A; DIMENSIONS: SQ 100 MM; REFERENCE NO: 1386-8886; 16 A; DOUBLE PLUG; COLOR IVORY; COMPLETE WITH COVER PLATES	50
0223937	SWITCH, PROXIMITY: POTENTIAL: 10-30 VDC; ACTION: DPST; CONTACT ARRANGEMENT: 1NO 1NC; CAPTIVE CLAMP MOUNT; USED ON THE METROFLEX DAMPERS; OPEN AND CLOSE AND HANDWHEEL LIMITS; PART NO: NBB20-L2-A2-V1, SUPPLIER: UNKNOWN; PART NO: 187548	50

5.1.1 Technical Specifications

Table 3 Switch Disconnectors specification

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107					
Type		3KM50	3KM52	3KM53	3KM55	3KM57	3KL57
Rated uninterrupted current I_u	A	63	125	160	250	400	400
Rated insulation voltage U_i	V	690	1000	1000	1000	1000	1000
Rated operational voltage U_e	V	690	690	690	690	690	690
Rated short-time current (1 s current), rms value	kA	2.5	3.2	3.2	8	11	11
Permissible ambient temperature	°C	-25 up to +55 for operation					
	°C	-50 up to +80 when stored					
Mechanical endurance, operating cycles		15000	15000	15000	12000	12000	12000

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

Degree of protection		IP20 (from the operator side, with fuse and terminal covers)					
Main conductor connections							
Busbar systems max. dimensions (W X T)	mm	25 x 9	45 X10	45 X10	40 X 12	40 X 15	40 X15
Cable lug, max. conductor cross-section (stranded)	mm ²	35	70	120	150	2 X 150 or 1 X 240	2 X 150 or 1 X 240
Terminal screws		M6	M6	M8	M10	M10	M10

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

5.1.2 Delivery of Switches and Breakers

The Supplier shall be responsible for:

1. Providing adequate notice of equipment delivery and co-ordinating site access with responsible personnel onsite.
2. Checking of delivery contents, as well as packing and marking of equipment before dispatch.
3. Delivery loading, transportation to site and unloading of Switch Disconnectors once onsite.

NOTE: In cases where the Supplier employs subcontractor/s, any disagreements between the Supplier and their subcontractor/s shall not affect supply and/or delivery, such as the withholding of supply and/or delivery in the event of a dispute that is independent of Eskom.

6. Quality Assurance Requirements

The Contractor submits a quality control plans prior to commencing work. The quality control plans should cover inspections and test proposals for items or activities to be supplied in the contract.

The quality control plan indicates the following:

- a) The identification of the activity/operation
- b) A list of sequence of operations including inspections and tests
- c) The identification of the specification, drawing or procedure for each operation
- d) The acceptance criteria with reference to the appropriate technical specification set out by the Contractor
- e) The inspections and test the Contractor has nominated for hold and witness points
- f) Provision for inspections and tests nominated by the Employer, and /or his representative
- g) Inspection and test records which are generated by the Contractor

The *Contractor* is also responsible for the following:

- a) The Contractor notifies the Employer of any changes to the quality system and obtains agreement prior to the implementation on the existing orders and contracts or sub orders and contracts.
- b) Identifies any additional documents which are to be submitted to the Employer
- c) Indicates the interface with the Contractor's quality system and applicable documents such as procedures and work instructions
- d) In case a Sub-Contractor is employed, the Contractor indicates how they will be monitored.

The Contractor and/or Sub-Contractors give access to the Employer or his representative where appropriate to their premises and facilities at reasonable times to conduct quality assessments, audits, surveillances, and inspections to establish compliance with the contractual requirements

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

7. Environmental Requirements

Kendal Power Station is ISO 14001 compliant. The Contractor must comply with the requirements of this procedure titled: Environmental Management System Requirement for the Contractors number PG/240/008.

Kendal also has an SHEQ Policy PS/270/0083, to which every Contractor and employees must adhere to. It is therefore the responsibility of the Contractor to ensure that the Contractor obtains copies of Kendal SHEQ Policy. The Contractor must identify all Environmental aspects and impacts related to his/her activities. The Contractor must have copy of the legal register related to the scope.

Kendal procedures applicable to the Contractor's area of responsibility to assist the Contractor and his/her employees to prevent pollution and comply with legislative requirements, and to familiarize themselves on such procedures, within 30 days from the date of commencement of work at Kendal. Copies of the above-mentioned documents shall be obtained from the Eskom Agent and/or Environmental Officer on the first day prior to commencement of work at Kendal.

The Contractor shall submit a proof to the Environmental Officer of Kendal that he and his employees has done all the necessary training on procedures and Policies supplied to them and that they do understand the contents of the procedures, registers and policies and will adhere to them at all times.

The non-adherence to the rules will result in a non-conformance, hence immediate termination of the contract.

Rules are as following:

- a) Provide sufficient storage containers, labelled depicting general or hazardous waste and store in a designated storage area.
- b) Ensure that all hazardous waste is disposed of at a licensed site. A copy of the hazardous waste disposal certificate must be submitted to the Employer Representative.
- c) Ensure that all other general waste is disposed of at the licensed landfill site.

Ensure that your site does comply with the general good housekeeping practices

The contractor/Maintenance must comply with the following requirements.

- a) Environmental Management System (ISO 14001:2015)
- b) National Environmental Management Act (Act 107 of 1998)
- c) Environmental Management Procedure for Contractors (*1018332)
- d) Waste Management Procedure (*1024102)
- e) Non-conformance, Corrective and Preventative Action (*1017357)

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

8. Refuse Disposal

The Contractor is responsible to keep the work area clean of any rubble.

All waste introduced and/or produced on the Employer's premises by the Contractor for this contract, is handled in accordance with the minimum requirements for the Handling and Disposal of Hazardous Waste in terms of Government Legislation as proclaimed by the latest National Environmental acts and regulations. The removal of any waste and hazardous waste is the responsibility of the Contractor.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.

9. Acceptance

This document has been seen and accepted by:

Name	Designation
Ayanda Mahlobo	System Engineer
Tose Msingathi	System Engineer
Remember Sigawuke	Electrical Engineering Manager
Malibongwe Mabizela	Engineering Manager

10. Development Team

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

- Nathi Mkhize

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/06.