

	Specification	Kusile Power Station
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Title: **Supply and Delivery of
Aux Automation Control Spares**

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1. Introduction

Kusile Power Station Maintenance Management intends to establish a partnership with a suitably qualified, experienced and well-established *Contractor* for the Supply and Delivery of Aux Automation Control spares in operating units, associated BOP. This document describes the details of the requirements, standards, scope of work and the terms and conditions of the maintenance partnership.

2. Supporting Clauses

2.1 Scope

The scope of work (SOW) specifies the required spares to be supplied by the Supplier on an as and when required basis and conditions for acceptance. The scope included here does not substitute procurement procedures that will be followed during the procurement process.

2.1.1 Purpose

The purpose of this document is to provide scope of work and technical information for the purchase of Supply and Delivery of Aux Automation Control spares which Kusile Power Station is procuring, are correct.

2.1.2 Applicability

This document is applicable to Kusile Power Station Generation.

2.1.3 Effective date

This document is effective from the date of authorisation (last signature) until its succeeding document has been authorised.

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

Latest revisions of the following documents applies:

- [1] ISO 9001 Quality Management Systems
- [2] 36-681 Generation Plant Safety Regulations
- [3] 32-727 SHEQ Policy
- [4] 240-83797737 In- Service monitoring of Lubricating oils and Hydraulic fluids
- [5] 240-84513751: Material Specification and Certification Guideline for Power Generation Plant

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- [6] 240-86546783: Procurement Standard for Material Certification Requirements Applicable to Metallic Products Used on Low and Medium Pressure Applications
- [7] 240-54820279: Receive Materials
- [8] BS EN 10204 (2004) - Metallic products -Types of Inspection Documents
- [9] 240-106024999_Kusile Power Station Feedwater and HP Heating Maintenance Spares Strategy
- [10] Table 1 –Variable Speed drive Hydraulic coupling spares
- [11] Table 2 – List of Standards applicable for use

2.2.2 Informative

N/A

2.3 Definitions

Abbreviation	Explanation
Contractor	Service provider contracted to provide a specific spares & documentation to Kusile Power Station. Referred to as the Supplier on this document.
Employer	Kusile Power Station

2.3.1 Document:

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

2.4 Abbreviations

Abbreviation	Description
ISO	International Organisation for Standardisation
KPI	Key Performance Indicator
OEM	Original Equipment Manufacturer
OHS	Occupational Health & Safety
PSR	Plant Safety Regulations
SHEQ	Safety, Health, Environmental & Quality
SOW	Scope Of Work

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2.5 Roles and Responsibilities

All parties concerned in this SOW “shall act as stated in this contract and in a spirit of mutual trust and cooperation”

2.5.1 Employer

- a) The employer shall identify required spares for the plant
- b) The employer shall compile spares specifications and load Data Capture Forms.
- c) Compiles and submit scope of work with technical specifications.
- d) The employer shall performs Quality Control of all spares on delivery at the Employer premises.
- e) Initiate the repairs process all the time an actuator requires repairs.
- f) Ensure repaired actuators are classified clearly

2.5.2 Contractor

- a) The Contractor shall deliver as per specified information from the Employer.
- b) The Contractor shall advise if further information is required
- c) The Contractor shall honour the delivery dates committed on.
- d) Communicate extended lead times where necessary/required.
- e) Always deliver in the Kusile Power Station Stores and obtain a signed delivery note.

2.6 Process for Monitoring

This document will be a once-off document to state the scope of work to Supply and Delivery of Aux Automation Control spares from Original Equipment Manufacturer (OEM) Spares contract.

2.7 Related/Supporting Documents

N/A

3. Document Content

To Supply and Delivery of Aux Automation Control spares from Original Equipment Manufacturer (OEM) Spares Scope of Work.

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3.1 Supply and Delivery of Aux Automation Control spares

All Automation Control spares and accessories delivered must be complete instrument, ready for installation. Instruments must meet the specifications of Kusile Power Station Aux Automation Control spares. All deliveries must only occur after the receipt of an official order. All control spares must be Quality Checked by an approved QC nominee from the End-User list of spares inspectors. No Automation Control Spare or accessory shall be accepted without prior inspection and specification verification. All costs prior to delivery associated with complete spare shall be handled by the supplier concerned.

4. Description of the works

The works is to Supply and Delivery Aux Automation Control Spares from Original Equipment Manufacturer (OEM).The spares are listed in Table 1.

Table 1: Supply and Delivery Aux Automation Control Spares

DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
TRANSDUCER:24765-01-01;EXPANSION SENSOR			0645177
SENSOR:330500-02-00;VELOCITY			0645180
SITOP SELECT 4-CHANNEL DIAGNOSIS MODULE DC 24V			0502227
RELAY MODULE FOR ACTIVATION OF BURNER CONTROL			0621806
PROFIBUS MODULE			0621904
SIPLUS ET200S EM 4DI HF -25...+70 DEG			0502228
SIPLUS ET200S EM 4DO DC24V/2A -25 ... +60 DEG			0502216
SIPLUS ET200S EM 2RO DC24V-AC230V/5A -25 ... +70 DEG			0502232
SIPLUS ET200S EM 2AI STANDARD I -25 ... +60 DEG			0502220
SIPLUS ET200S EM 2AI I-4DMU -25 ... +60 DEG			0502237
PM-E, DC 24V SIMATIC DP, ET 200S SIPLUS POWERMODULE			0502221
SIPLUS ET200S F-DI 24V PROFISAF -25 ... +60 DEG			0502217
SIPLUS ET200S 4 F-DO PROFISAFE -25...+60 DEG			0571238
SIPLUS INTERFACE MODULE IM 151-1 HF SIMATIC DP, ET 200S			0620683
SIPLUS ET200S TM-P15S23-A0 -40 ... +70 DEGREES C			0502218
POWER SUPPLY SITOP POWER 24V/20A			0620682
SIMATIC S7-300 FRONT CONNECTOR 40-POLE WITH SCREWED CONTACTS			0589589
SIMATIC DP,BUS CONNECTOR FOR PROFIBUS UP TO 12 MBIT/S 90 DEG			0620681

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
SIMATIC DP, 5 ELEC MODULES FOR ET 200S, 4 DI HIGH FEATURE 24V DC			0620676
SIMATIC DP, 5 ELEC MODULES FOR ET 200S, 4 DO STANDARD DC 24V/2A,			0620699
SIMATIC DP, 5 ELEC MODULES FOR ET 200S, 2 DO RELAY 24V DC - 230V			0620698
SIMATIC DP, ELEC MODULE FOR ET 200S, 2 AI STAND. I-2DMU 15 MM			0249945
SIMATIC DP, ELEC MODULE FOR ET 200S, 2 AI STAND. I-4DMU 15 MM			0620677
SIMATIC DP, ELECTRONIC MODULE 2 AO I HIGH FEATURE FOR ET200S			0620678
PM-E, DC 24V SIMATIC DP, ET 200S POWERMODULE			0620679
SIMATIC DP, ELECTRON. MODULE F. ET200S, 4 F-DO PROFISAFE			0620673
IM 151-1 HF SIMATIC DP, ET 200S INTERFACEMODULE			0502230
TM-E15S26-A1 SIMATIC DP, ET 200S TERMINALMODULE			0502222
SIMATIC DP, TERMINAL MODULE TM-P15S23-A0 FOR ET 200S			0502234
TM-E30S46-A1 SIMATIC DP, ET 200S TERMINALMODULE			0502219
CPU 315-2 PN/DP SIMATIC S7-300 CENTRAL UNIT			0620674
CPU 315F-2 PN/DP SIMATIC S7-300 CENTRAL UNIT			0502231
SIMATIC S7-300 COMMUNICATION UNIT CP342-4			0634902
GSM MODEM			0620684
ISOLATION AMPLIFIER AI/AO=0/4-20MA US=20-253V AC/DC			0621946
ETAMATIC FUEL-/AIR-CONTROLLER			0621442
NETWORK SWITCH ETHERNET-SWITCH, 8 TP-RJ45-PORTS,			0621514
MODULE:MODULE BUS;9-30 VDC;CONVERTER			0568023
MODULE:6GK7443-31EX20-0XE0;COMMUNICATION			0571237
MODULE:6AG1138-4FB02-2AB0;DIGITAL OUTPUT			0571238
MODULE:6ES7407-0KR020-AA0;POWER SUPPLY			0571241
MODULE:6ES7414-4HM14-0AB0;CENTRAL UNIT			0571242
MODULE:C1002670;TRANGENT DATA INTERFACE			0571262
MODULE:QUINT-PS-100-240AC/24DC/39			0571286
MODULE:CPC1-3840/C10/M512;CPU			0571288
MODULE:E-ME/AC-01F/1;ANALOGUE;24 VDC			0574032

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
MODULE PWR SUP:IC695PSD040;INTERNAL			0574403
MODULE:MMS 635OD;SPEED MONITORING			0574411
MODULE COMM:E52C0407200;ETHERNET;DCS			0574412
MODULE:TC809C1004;ANALOG INPUT			0574876
MODULE:TC809A1059;INTELLIGENT MONITOR			0574877
MODULE:TC811A1006;FAULT ISOLATOR			0574878
MODULE COMM:HS-NCM-SF;HSN COMMUNICATOR			0574879
MODULE:LCM320;LOOP CONTROL			0574880
MODULE:3UF7010-1AU00-0;MOTOR MANAGMENT			0575274
MODULE COMM:3UF7103-1BA00-0;CURRENT			0575275
MODULE COMM:750-627;BUS EXTENSION			0576739
MODULE COMM:750-431;8 CHANNEL			0576741
MODULE COMM:750-554;2 CHANNEL;O/P ANALOG			0576742
MODULE:REMOTE RELAY			0614752
MODULE:6GK5101-1BB00-2AA3;PLC I/O			0615012
MODULE:INTERFACE;I/P 24 VDC;O/P 5 VDC			0615066
VICKERS - EEA-PAM-581-D-32 MODULE			0621825
OVERPRESSURISATION PROTECTION MODULE			0621937
OVERSPEED PROTECTION MODULE			0574411
POWER SUPPLY			0621986
TRANSIENT DATA INTERFACE			0220818
KEYPHASOR			0220829
VIBRATION AXIAL DISPLACEMENT			0220826
PROXIMITOR I/O			0220827
3 RELAYS OUTPUTS			0502790
MODBUS OUTPUT			0220832
SIMATIC S7-300 COMMUNICATION UNIT CP342-4			0220634
DISTRIBUTION MODULE BINARY SIGNALS			0621823
LTO-6 DATA CARTRIDGE; STORAGE CAPACITY: 2.5 TB			0693380
LTO TAPE CLEANING CARTRIDGE			0693383

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
SIMATIC S7-300, DIGITAL INPUT SM 321			0613769
SIMATIC S7-300, DIGITAL OUTPUT SM 322			0613770
SIMATIC S7-400, POWER SUPPLY PS407; 10A,			0571241
SIMATIC S7-400H, CPU 414H CENTRAL UNIT			0571242
COMMUNICATIONS PROCESSOR CP443-5 EXTENDED F			0238779
COMMUNICATIONS PROCESSOR CP443-1			0632918
SCALANCE X101-1, IE MEDIA CONV UNMANAGED 1 X 10/100MBIT/S			0615012
SIMATIC DP, RS485 RESISTOR FOR TERMINATING			0252829
RESISTANCE THERMOMETER TN2530 4-20MA IFM			0622001
5SJ4220-7CC20, SIEMENS, 5SJ SERIES			0621369
SIMATIC S7-300, DIGITAL OUTPUT SM 322			0239643
SITOP MODULAR 20 STABILIZED			0621982
5SJ4101-7CC20, SIEMENS, 5SJ SERIES			0621377
5SJ4106-7CC20, SIEMENS, 5SJ SERIES			0621293
SIMATIC S7-300, ANALOG OUTPUT SM 332,			0207823
SIMATIC DP, ET 200M INTERFACE IM 153-2			0615066
5SJ4102-7CC20, SIEMENS, 5SJ SERIES, TYPE 5SJ41, 1P, 1PH, 2A,			0621294
SIMATIC S7-300 STABILIZED POWER SUPPLY PS307 INPUT: 120/230 V AC			0221354
SIMATIC S7-300 STABILIZED POWER SUPPLY PS307			0256390
SIMATIC NET, CP 343-1 LEAN COMMUNICATION PROCESSOR			0620680
LOCAL PANEL MONITOR SCREEN FOR SIEMENS S7 (PLC)			0620675
SIMATIC S7-300, ANALOG INPUT SM 331, FLOATING, 8AI			0220637
KUS-A-0S-F001_43 CIS066 DELL_P2414H_MONITOR			0620992
MODULE COMM:KVM;I/P 100-240VAC 50/60HZ			0621993
COMPUTER SRVR:INTEL C610 SERIES CHIPSET			0622165
MONITOR: TYPE: LCD; PART NO: DAV2116-G01			0646324
COMPUTER SRVR:INTEL C612 SERIES CHIPSET			0622164
(KUS-A-XD-F002_1 CIS078 SYM-PHONY MELODY			0623954
COMPUTER SRVR:INTEL C612 SERIES CHIPSET			0622163

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
VIBRATION PROBE CABLE: 84661-49;SHIELDED 22 AWG;0.6438 MM			0692849
VIBRATION PROBE CABLE: 84661-66;SHIELDED 22 AWG;0.6438 MM			0692852
VIBRATION PROBE CABLE: 84661-82;SHIELDED 22 AWG;0.6438 MM			0692853
VIBRATION PROBE CABLE: 84661-15;SHIELDED 22 AWG;0.6438 MM			0692856
SENSOR VIBRATION: 330500-01-00 VELOMITOR			0692758
SSC LEVEL CONTROL INSTRUMENTS; - MINI-PS-100-240AC/24DC/C2LPS			0693382
MEMORY CARD (PRELOADED WITH SOFTWARE)			0699977
S7 PLC CPU			0252639
SIEMENS DISLAY UNIT TP700 WITH PRELOADED SOFTWARE			0699978
AMPLIFIER USED IN STEAM SOOTBLOWING			0699976
MODULE: TYPE: SPECIAL I/O HDD11; INPUT: 24-30 V			0706860
MODULE: TYPE: SPECIAL I/O HDD12; INPUT: 24-30 V;			0706861
MODULE: TYPE: SPECIAL I/O HDD43; INPUT: 24-30 V			0706808
MODULE: TYPE: SPECIAL I/O HDD14; INPUT: 24-30 V			0706862
MODULE: TYPE: SPECIAL I/O HDD15; INPUT: 24-30 V			0706863
MODULE: TYPE: SPECIAL I/O HDD16; INPUT: 24-30 V			0706864
MODULE: TYPE: SPECIAL I/O HDD31; INPUT: 24-30 V			0706810
MODULE: TYPE: SPECIAL I/O HDD32; INPUT: 24-30 V			0706811
MODULE: TYPE: SPECIAL I/O HDD33; INPUT: 24-30 V			0706812
MODULE: TYPE: SPECIAL I/O HDD34; INPUT: 24-30 V;			0706813
MODULE: TYPE: SPECIAL I/O HDD35; INPUT: 24-30 V			0706814
MODULE: TYPE: SPECIAL I/O HDD36; INPUT: 24-30 V			0706815
MODULE: TYPE: SPECIAL I/O HDD37; INPUT: 24-30 V			0706816
MODULE: TYPE: SPECIAL I/O HDD21; INPUT: 24-30 V			0706823
MODULE: TYPE: SPECIAL I/O HDD22; INPUT: 24-30 V			0706824
MODULE: TYPE: SPECIAL I/O HDD23; INPUT: 24-30 V			0706825
MODULE: TYPE: SPECIAL I/O HDD24; INPUT: 24-30 V			0706826
MODULE: TYPE: SPECIAL I/O HDD25; INPUT: 24-30 V			0706827

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
MODULE: TYPE: SPECIAL I/O HDD26; INPUT: 24-30 V			0706828
MODULE: TYPE: SPECIAL I/O HDD27; INPUT: 24-30 V;			0706829
MODULE: TYPE: SPECIAL I/O HDD41; INPUT: 24-30 V			0706817
MODULE: TYPE: SPECIAL I/O HDD42; INPUT: 24-30 V			0706818
MODULE: TYPE: SPECIAL I/O HDD13; INPUT: 24-30 V			0706809
MODULE: TYPE: SPECIAL I/O HDD44; INPUT: 24-30 V			0706819
MODULE: TYPE: SPECIAL I/O HDD45; INPUT: 24-30 V			0706820
MODULE: TYPE: SPECIAL I/O HDD46; INPUT: 24-30 V			0706821
MODULE: TYPE: SPECIAL I/O HDD47; INPUT: 24-30 V			0706822
SIMATIC TP 277 6" TOUCH PANEL 5,7"			0502236
ANTENNA GSM MODEM			0638851
MOUNTING BRACKET FOR MULTIWAY COCK			0622162
ACC. KIT FOR MULTIWAY COCK, ST. ST.			0621510
MULTIWAY COCK 12MM, ST. ST.			0622161
REFER TO OEM DATASHEET (PDC06ENGSL-750.PDF) FOR DESIGN CHARACTERISTICS			0623957
FIRE ALARM CONTROL PANEL XLS-139			0574866
FIRE ALARM CONTROL PANEL (CENTRAL PROCESSING UNIT WITH DISPLAY) XLS3000-CPUD			0574867
ADDRESSABLE MANUAL CALL POINT: INDOOR TYPE			0605851
INTRINSICALLY SAFE MANUAL CALL POINT			0636434
INTELLIGENT PLUG-IN PHOTOELECTRIC SMOKE DETECTORS WITH FLASHSCAN			0574872
XNX UNIVERSAL TRANSMITTER WITH CO SENSOR			0627331
CHIME-STROBE			0624500
24VDC SOUNDER / STROBE FOR HAZARDOUS AREA			0624498
BATTERY 12V 40AH			0627388
BATTERY 12V 7AH			0627389
LENS USED TO ALIGN COAL FLAME SCANNERS			0690409
FLAME SCANNER CABLE: 10 METRE : IR FLAME SCANNER, UV FLAME SCANNER			0690391
24V DC 2CO (SPDT) INTERFACE RELAY MODULE			0691796
IGNITOR CABLE FOR BURNERS			0693381

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
PRESSURE TRANSMITTER INTEGRATED LCD DISPLAY			0621509
SWITCH			0621974
SWITCH			0621826
SWITCH			0621828
SWITCH			0621357
SWITCH			0621296
24VDC/24VDC 10A QUINT-PS POWER SUPPLY			0621985
MODULE, POWER SUPPLY: TYPE: SINGLE PHASE; INPUT: 100-240 VDC			0621983
X20 SYSTEM PS3300 24V/24V SUPPLY MODULE			0621912
INDUSTRIAL SECURITY ROUTER EAGLEONE TXTX			0621295
RELAYING 24VDC INTERFACE			0621379
MFC3000 - 24VDC SUPPLY 250 WATTS WITH FRONT RACK CONNECTION			0250253
MFC3000-PMC CARRIER			0621951
SIMATIC S7-300, ET 200M			0690291
RFID TAG READER IPT1-FP			0690705
GPS SMART ANTENNA; POWER SOURCE: 7-32 VDC			0692522
PROFIBUS FRONT CONNECTOR NORMAL; INPUT: 4-20 MA; SOURCE: 24 VDC;			0659731
TOUCH PANEL TP 177MICRO FOR SIMATIC S7-200 5.7"			0694965
SOFTWARE: TRADE NAME: FIELD CARE SFE500			0699974
PROXIMITY PROBE			0645181
PROXIMITY PROBE			0645184
PROXIMITY PROBE			0645182
EXPANSION SENSOR			0231860
PROXIMITY PROBE			0218263
EXPANSION SENSOR			0645177
PROXIMITY PROBE			0645176
VELOCITY SENSOR			0645180
VELOCITY SENSOR			0233369
PROXIMITY PROBE			0232771

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
VELOCITY SENSOR			0233369
VELOCITY SENSOR			0645180
MODULE:3500/22-01-01-00;RACK INTERFACE			0220818
MODULE:3500/25-02-01-00;KEYPHASOR;24 VDC			0220829
MODULE:3500/42-09-00;O/P 4-20 MA;24 VDC			0220826
MODULE:3500/45-01-00;POSITION MONITOR			0220827
POWER SUPPLY:3500/15-02-02-00;24 VDC			0241975
MODULE PWR SUP:3500/15;SINGLE PHASE			0621986
SENSOR:330180-51-00;PROXIMITOR;0-25 MM			0218260
SENSOR VBRTN:PR6423/000-130 + CON011			0257319
SIMATIC TP 277 6" TOUCH PANEL 5,7"			0502236
SIMATIC DP,BUS CONNECTOR FOR PROFIBUS UP TO 12 MBIT/S 90 DEG			0620681
PB FC RS 485 PLUG 180, PB-PLUG WITH FASTCONNECT CONNECTOR AND AXIAL CABLE-			0625022
PROFIBUS OLM/G12 V4.0 OPTICAL LINK MODULE 1 RS485 AND 2 GLASS-LWL			0245586
SIMATIC S7-300 COMMUNICATION UNIT CP342-5			0634902
ANTENNA GSM MODEM			0638851
SIMATIC S7-300, DIGITAL INPUT SM 321, OPTICALLY ISOLATED 32DI, 24 V DC, 1 X 40 PIN			0613769
COMM PROCESSOR CP443-1 FOR CONNECTING SIMATIC S7-400 TO INDUST.			0632918
RESISTANCE THEMOMETER TN2530 4-20MA IFM			0622001
5SJ4220-7CC20, SIEMENS, 5SJ SERIES, TYPE 5SJ42, 2P, 1PH, 20A, 400V AC, 10KA@400V			0621369
SITOP MODULAR 20 STABILIZED POWER SUPPLY INPUT: 120/230 V AC OUTPUT: 24 V DC/20A			0621982
5SJ4101-7CC20, SIEMENS, 5SJ SERIES, TYPE 5SJ41, 1P, 1PH, 1A, 230/400V AC, 10KA@230V			0621377
5SJ4102-7CC20, SIEMENS, 5SJ SERIES, TYPE 5SJ41, 1P, 1PH, 2A, 230/400V AC, 10KA@230V			0621294
12 DIGITAL INPUTS MODULE DI9371 X20 SYSTEM			0559740
SW 24V 6TX/2FX SCMM//RING100MB			0250213
16 INPUTS HIGH LEVEL MODULE 0/20 MA OR 4/20 MA WITH COMMON POINT			0621942
SWITCH 24V 8TX/2FX SC MULTIM. 100MB			0571326

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
SFP GIGABIT OPTICAL TRANSCEIVER SINGLEMODE LC FOR MICE AND RS30			0571345
SWITCH 24V 2TX RJ45 / 2TX RJ45 RING 100MB			0250212
16 INTERFACE RELAYS 24VDC			0621378
1K21F RS63Y RESISTOR			0639155
2 ANALOG INPUTS MODULE AI2632-1 X20 SYSTEM			0621907
2 ANALOG OUTPUTS MODULE AO2632 X20 SYSTEM			0621955
2 POLES 25A BREAKER CURVE C			0623535
230VAC SUPPLY TERMINAL BOARD			0639122
24 VDC 32 POSITIVE/NEGATIVE LOGICAL INPUTS MODULE - FAST			0621954
24VDC 3 FANS ASSEMBLY RACK MOUNTED 19" 1U			0571329
24VDC POWER SUPPLY TERMINAL BOARD 20 TERMINALS M10/10			0639132
TRIP AMPLIFIER CARD TF01 2/209 VARIANT 1.1			0621941
24VDC/24VDC 10A QUINT-PS POWER SUPPLY			0621985
4 ANALOG INPUTS MODULE AI4632-1 X20 SYSTEM			0621905
4 ANALOG OUTPUTS MODULE AO4632 X20 SYSTEM			0250160
DISTRIBUTION POLARITIES MODULE 2/48			0621906
V24 (RS232) / CL CONVERTER - MOUNTED ON DIN RAIL			0621965
4 DIGITAL OUTPUTS MODULE DO4322 X20 SYSTEM			0621961
4 LOGICAL NAMUR INPUTS MODULE DI4760 X20 SYSTEM			0621959
5/24 VDC 0.5 A 32 POSITIVE LOGICAL OUTPUT MODULE			0621948
8 DIGITAL OUTPUTS MODULE DO8332 X20 SYSTEM			0621967
8 OUTPUT MODULE +/- 10VDC OR 0-20 MA OR 4-20 MA			0621949
MODULE, PWR SUPPLY: TYPE: S PHASE; I/P: 100-240 VDC; OUTPUT: 24 VDC 40 A			0621983
ADI 400 TERMINAL 4 ANALOG. I/O			0636433
STI300 CARD TO SPEED SENSORS CONNECTOR CABLE			0655967
X20HB8884 COMPACT LINK SELECTOR			0571323
X20 SYSTEM BB82 BUS MODULE 3 SLOTS			0250159
X20HB2885 HUB EXPANSION MODULE INCLUDING 2 HUBS HOT SWAPABLE			0250155
ANALOG I/O TERMINAL BOARD			0639136

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
ANALOG I/O TERMINAL BOARD			0639147
ANALOG INTERFACE AIT016			0621911
X20BC8084 POWERLINK BC SELECTOR			0621824
X20 SYSTEM PS3300 24V/24V SUPPLY MODULE			0621912
X20 SYSTEM BM11 BUS MODULE			0621909
ANALOG OUTPUTS TERMINAL BOARD			0639133
AUXILIARY BATTERY MODULE IC693ACC302			0621966
AUXILIARY SWITCH BLOCK (POS) 1INV TYPE S 2C - H 6R			0639562
BOM 16 TERMINAL BOARD			0639135
DIODE SKKE 162/08			0621297
DISCONNECTABLE DOUBLE TERMINAL 8 MM-WIRING CAPACITY 0.5-4 MM ² / 22-12 AWG			0639134
DISTRIBUTION POLARITIES MODULE			0621938
THERMOSTAT 0/+60C 250VAC CONTACT NC			0622000
THERMOSTAT 20/+80°C 250VAC TYPE K TS011 1 CONTACT NO			0502852
TWL2/5 WALL MOUNTED TEMP TX 0-50°C/0-10V SUPPLY 24V AC/DC +/-10%			0622177
FUSE 10X38 GG 4A/500V			0243279
DBL TERM SCREWED WITH PROT. CIRCUIT STEP 6 MM WIRING CAP 0.22-2.5 MM ² /22-12 AWG			0639145
FILTER PROTECTION			0621962
FUSE 22X58 AM 63A /500V PERCU			0622002
FUSE 5X20 1AF			0622145
FUSE CARTRIDGE 5X20MM 0.25A/125V INSTANTANEOUS WITHOUT STRIKER			0560212
FUSE ISOLATING SWITCH RMS			0639561
FUSIBLE DISCONNECTING SWITCH RMS 2 POLES 22X58+AUXILIARY CONTACT			0623526
GRD TERMINAL GREEN/YELLOW WITH SCREWED-SCREWED CONNECTIONS M4/6.P			0639148
GROUND TERMINAL YELLOW WITH SCREWED-SCREWED CONNECTIONS M4/6			0639140
HUB 24VDC 8 CHANNELS			0571327
INDUSTRIAL SECURITY ROUTER EAGLEONE TXTX			0621295
END FLASK OF TERMINAL BOARD			0639149

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DETAILED SPARE DESCRIPTION & SPECIFICATION	OEM	OEM Part No.	SAP Material No.
INSULATOR 0/4MA TO 20MA 1WAY / 2 OUTPUTS			0639156
ISOLATION/SUPPLY MODULE MINI MCR-SL-RPS-I-I			0250191
L22 BPVSR 40 6 O 1			0621352
LIMIT SWITCH TYPE XCK T2121P16 1NO/1NC			0623491
LOGICAL OUTPUT DB0216 TERMINAL BOARD			0639142
TERMINAL WITH SCREWED/SCREWED CONNECTION-STEP 8 MM-			0639138
SURGE PROTECTION FILTER SFP 1-20/230AC			0621518
X20 SYSTEME TERMINAL BLOCK			0252849
TERMINAL WITH RELAY 24VDC-2 CHANGEOVER CONTACT			0622153
RELAYING 24VDC INTERFACE			0621379
LOGICALS INPUTS TERMINAL BOARD			0639146
MAINS FILTER 250VAC IN=10A			0621517
MFC3000 - 24VDC POWER SUPPLY 250 WATTS WITH FRONT RACK CONNECTION			0250253
MFC3000 CPCI - ETHERNET QUAD CARD (4 CHANNELS)			0247480
SAFETY RELAY SIL3/CEI 61 508 PSR-SCP-24DC/ESP4/2X1/1X2 2 CLOSING CIRCUITS 1			0623490
SHIELD TERMINALS FOR COLLECTOR BAR : SFB.B1			0639157
MFC3000 FIP CARD CC144			0621947
MFC3000-CFLASH 1GB - BOOTABLE			0571313
MFC3000-CPU PENTIUM			0571288
MFC3000-ETHERNET CARD			0574412
MFC3000-PMC CARRIER			0621951
MFC3000-SPEED MEASUREMENT CARD STI300			0247484
PLC-SP-EIK 1-SVN 24P/P SPRING TERMINAL BLOCK			0639144
PULSE ELECTROMECHANICAL COUNTER			0621963
VICKERS - EEA-PAM-581-D-32 MODULE			0621825
MODULE: TYPE: TRANGENT DATA INTERFACE; PART NO: C1002670;			0571262

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5. Acceptance

This document has been seen and accepted by:

6. Revisions

Date	Rev.	Compiler	Remarks
January 2022	01	S Tembe	First Issue

7. Development Team

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

8. Acknowledgements

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Appendix A – Eskom Document Hierarchy

A.1 Document Hierarchy

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