

	Specification	Matimba Power Station
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Title: **Supply and delivery of Modules, UPS and PLC to Matimba Power Station**

Document Identifier: **N/A**

Alternative Reference Number: **N/A**

Area of Applicability: **Matimba Power Station**

Functional Area: **Maintenance**

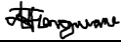
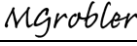

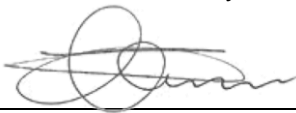
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Compiled by 	Supported by	Supported by  Pr Tech Eng
J Hlongwane Senior Advisor Maintenance Date: 2024/09/11	K Gerber Snr Technician C&I Engineering Date:	M Grobler Technologist C&I Engineering Date: 2024/09/11
Supported by	Approved by 	Authorised by 
V Gebashe System Engineer C&I Engineering Date:	A Matlawa C&I Manager Maintenance Date: 2024/9/12	J Mathobela Middle Manager Engineering Date: 2024/11/14

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1. Introduction

Eskom, Matimba Power Station Management has decided to outsource the supply and delivery of Modules, UPS and PLC Services Scope of Work to an experienced, well-established and qualified Service Provider.

This document describes the detail of the applicable requirements, scope of work, specifications, terms & conditions as well as the criteria to qualify for the tender.

2. Supporting Clauses

2.1 Scope

This document sets out the detailed User Scope of Work requirements necessary for the HVAC Maintenance Services.

2.1.1 Purpose

The purpose of this document is to define a User Scope of Work requirement based on which a supply contract will be established between the Employer and the supplier.

Matimba Power Station is expected to perform at EAF>85, PCLF<8 and UCLF<5, and the supplied material must support this requirement.

It is therefore imperative that the successful and suitably qualified supplier aligns their company fully to these specified user supply requirements scope of work.

2.1.2 Applicability

This document shall apply to the user requirements of supply of gauges to Matimba Power Station.

2.1.3 Effective date

The effective date of this document is as per the date and signature of the authorizer, as indicated on the cover page of this document.

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: Procurement and Supply Chain Management Procedure

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[3] 32- Preferential Procurement Policy Framework Act 5 of 2000

2.2.2 Informative

[1]. 240-62072907: Eskom Delegation of Authority Policy.

[2]. 240-165040111: Supplier Terms Policy

[3]. 32-1033: Procurement and Supply chain Management Policy

[4]. 240-141007195: Electronic Signature usage Policy

[5]. 240-156280553: Procedure for signing documentation electronically using the Eskom electronic signing system.

[6]. 240-168966153: Generation Tender Technical Evaluation Procedure

2.3 Definitions

2.3.1. Ad hoc: A solution designed for a specific problem or task, non-generalizable, and not intended to be able to be adapted to other purposes.

2.3.2. *Contractor*: Partnership agreements and service provider contracted for supplying specific service/goods to Eskom Generation Matimba Power Station.

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

2.3.4. Employer: Eskom or Eskom Generation, Matimba Power Station.

2.3.5. Parties: The Employer and the Contractor.

2.3.6. Supply Manager: The Employer's representative in regard to the supply contract agreement.

2.3.7. Task Order: The Service Manager's instruction to perform a task. SAP PM orders will also be used as task orders.

2.4 Abbreviations

Abbreviation	Description
NECSC	Supply Contract Document
NEC3	New Engineering Contract
URS	User Requirement Specification.
CFT	Cross Functional Team
OEM	Original Equipment Manufacturer.
PCM	Process Control Manual.

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PDF	Portable Document Format.
QCP	Quality Control Plan.
SAP	Systems, Applications Products.
TET	Technical Evaluation Team
SME	Subject Matter Expert

2.5 Roles and Responsibilities

2.5.1 Supply Manager

1. Co-ordinating and Manage contract budget and expenses.
2. Ensures that the service provider operates within the budget.
3. Communicate technical interface between Eskom and the service provider.
4. Review, verify and approve receipt of services or deliverables from the goods supplier.
5. Manage and maintain records and correspondence between the employer and service provider.
6. Ensures that the service provider comply with the terms and conditions of the contract.
7. Keep the records of the contract for history and audit purposes.

2.5.2 Contractor

1. Supply of spares service to the *Employer* in accordance with Matimba Power Station procurement process as per spares URS.
2. Ensure that quality of spares delivered in Process for Monitoring in accordance to the Scope of Work as stipulated within Matimba Power Station spares URS.
3. The supplier shall ensure that all spares are accompanied by their related user specification as per their URS

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2.6 Process of Monitoring

On delivery of spares to Matimba Power station main stores, items will be subjected to quality control (QC) by an End User to ensure that description of delivered items complies with that of the order.

2.7 Related/Supporting Documents

[1]. NEC 3 Supply Contract.

3. Document Content

3.1 General

3.1.1 Adherence to Eskom General Policies & Standards

The Supplier shall ensure that their Employees delivering spares to site comply with Eskom's policies and site regulations and Eskom's Life Saving Rules.

3.1.2 Quality Standard

The Supplier shall ensure that the quality of spares delivered to Matimba is as per the ISO 9001 Standard to support Matimba's objective of improving performance.

3.1.3 Document Control

All contractual communication between the *Employer* and *Supplier* shall be in written format accompanied by an official letterhead and signed by the authorised *Parties*.

All attached documentation shall be in the format of Microsoft Word/ Excel and/ or Power Point.

All contractual communication letterheads and attached documentation shall be electronically mailed as per PDF format.

3.1.4 Contractual Meetings

a) ADHOC Meetings can be scheduled and agreed upon.

3.1.5 Correspondence

All verbal and non – verbal communication between the *Employer* and *Supplier* shall be communicated in an electronic format which can be read or copied.

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3.1.6 Task Order

The *Contractor* shall by no means carry out any maintenance work in terms of the Scope of Work Information, without the approval of the *Employer*.

The *Contractor* shall by no means carry out any maintenance work in terms of the Scope of Work Information, without the approval an official SAP Task Order Number being supplied by the *Employer* to the *Contractor*

3.2 Scope of Work Information

Item	Material	Material Description	UOM	QTY	Unit Price	Stock Value
1	9579	MODULE: TYPE: BINARY OUTPUT; OUTPUT: 24 VDC 0.5 A; SUPPL P/N: 07AB63R1; FOR USE ON TSS	EA	10		
2	0009597	MODULE: TYPE: UNIVERSAL PROCESSOR; SUPPL P/N: PMA323BE; REFERENCE NO: HIEE 300308R001; INCLUDING MOD PSR PSR COUPLER, FOR USE ON TSS	EA	15		
3	0009600	MODULE: TYPE: UNIVERSAL PROCESSOR; SUPPL P/N: PMA324BE; REFERENCE NO: HIEE400923R0001; INCLUDING MOD SCS100 COUPLER, FOR USE ON TSS	EA	10		
4	0009601	MODULE: TYPE: LIGHT EMITTING DISPLAY; SUPPL P/N: ALA334A13; REFERENCE NO: HIEE300043R0013; FOR USE ON TSS	EA	10		
5	0009602	MODULE: TYPE: MONITORING DEVICE; SUPPL P/N: CSA465AE; REFERENCE NO: HIEE400109R0001; FOR USE ON TSS	EA	10		
6	0009603	MODULE: TYPE: UNIVERSAL LOGIC; SUPPL P/N: DDA802AE; REFERENCE NO: HIEE400698R0001; FOR USE ON TSS	EA	10		
7	0009606	MODULE: TYPE: CURRENT TRANSFORMER; SUPPL P/N: UUC080AE03; TSP; OOCUA10/OOCUA30; REFERENCE NO: HIEE401307R0003; FOR USE ON TSS	EA	15		
8	0009607	MODULE: TYPE: CURRENT TRANSFORMER; SUPPL P/N: UUC081AE04; REFERENCE NO: HIEE401308R004; FOR USE ON TSS	EA	15		
9	0009608	MODULE: TYPE: VOLTAGE TRANSFORMER; SUPPL P/N: UUC082AE03; REFERENCE NO: HIEE401309-R0003; FOR USE ON TSS	EA	15		

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10	0009610	MODULE: TYPE: INTERFACE INPUT; INPUT: 220 VDC; OUTPUT: 48 VDC 100 MA; POWER SOURCE: 220 VAC; 24 VDC; SUPPL P/N: ST0E2; REFERENCE NO: HIER464425P001; FOR USE ON TSS	EA	15		
11	0012833	MODULE, POWER SUPPLY: APPLICATION: TSS; SUPPL P/N: UA326AE; REFERENCE NO: HIEE300024R0004; PSR COMBINED 1/0, FOR USE ON TSS	EA	15		
12	0121120	MODULE: TYPE: TURBO/BOILER THYRISTOR REVERSING ANALOG; POWER SOURCE: 380 VAC 3 PH 1.1 KW 50 HZ; SUPPL P/N: A3104360	EA	10		
13	0126008	MODULE: TYPE: SEPARATOR; APPLICATION: RELAY; SPECIFICATION: VDE0160; SUPPL P/N: GHR315-0001R1; REFERENCE NO: VDE 0160	EA	15		
14	0126009	MODULE: TYPE: CURRENT CONDUCTOR; POWER SOURCE: 220 VAC; SUPPL P/N: ZR0101D; PRINTED CURCUIT BOARD	EA	10		
15	0130766	MODULE: TYPE: TEMPERATURE TRANSMITTER; SUPPL P/N: M9047; PCB, ASSY	EA	10		
16	0130961	MODULE: TYPE: TRANSISTOR; SUPPL P/N: 1891203; CTT BOARD ASSEMBLY	EA	10		
17	0131681	MODULE: TYPE: CONTROL; SUPPL P/N: D-LE 460; D6LE460; PRINTED CIRCUIT BOARD	EA	10		
18	0132259	MODULE: TYPE: VOLTAGE MONITOR; SUPPL P/N: 220-3; REFERENCE NO: 4SAJ 0043 L3501-1-1; 4SAJ0043 A3011-1-1; PRINTED CIRCUIT BOARD, FOR 220V BATTERY CHARGER	EA	10		
19	132384	MODULE: TYPE: SPEED LINE AMPLIFIER; REFERENCE NO: ACP	EA	10		
20	0132432	MODULE, POWER SUPPLY: TYPE: PRECIPITATOR; SUPPL P/N: SCAFA118; REFERENCE NO: 3283/102/56; FOR USE ON PRECIPITATOR	EA	10		
21	0132465	MODULE: TYPE: ISOLATED PHOTO SWITCHING; SUPPL P/N: 6700191; MODS	EA	10		
22	0132591	MODULE: TYPE: EARTH FAULT; APPLICATION: PCB; SUPPL P/N: SP305; FOR PRINT CIRCUIT BOARD	EA	20		
23	0132618	MODULE: TYPE: AUTOMATIC BOOST; INPUT: 280 V; POWER SOURCE: 220 VAC; APPLICATION: BATTERY CHARGER; SUPPL P/N: SP201A; FOR PRINT CIRCUIT	EA	10		

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		BOARD, SPARES				
24	0132621	MODULE, POWER SUPPLY: TYPE: BELT FEEDER; INPUT: 220 VAC; OUTPUT: 24 VAC 1 A; 24 VDC 2/20 A; SUPPL P/N: T7AB	EA	10		
25	0132622	MODULE, POWER SUPPLY: TYPE: PRINTED CIRCUIT BOARD; OUTPUT: 24 VDC; REFERENCE NO: PSV5-24 1SS 3; PSU 5-24	EA	10		
26	0132811	MODULE: TYPE: CURVE AREA CONTROLLER; POWER SOURCE: 24 VDC; TECH INFO 30/70-4513 EN	EA	10		
27	0132816	MODULE: TYPE: IMPEDANCE EQUALIZER; SUPPL P/N: RT481B; REFERENCE NO: GNT7081299R0001; PRINTED CIRCUIT BOARD	EA	10		
28	0132817	MODULE, POWER SUPPLY: TYPE: H2 ELECTRO; SUPPL P/N: KC480A; REFERENCE NO: GNT0102700R1; GN7552832	EA	10		
29	0132824	MODULE: TYPE: PRESSURE CONTROL; SUPPL P/N: VDU1; REFERENCE NO: L54E2900JA00; LDP: L54E2900JA00; 860996; PRINTED CIRCUIT BOARD	EA	10		
30	0132836	MODULE, POWER SUPPLY: TYPE: POWER BRIDGE; INPUT: 380/500 VAC; OUTPUT: 26.5/25/11 VDC 0.21/0.9 A; SUPPL P/N: PR25-14; REFERENCE NO: 029059302; 18-14:25V 0.02A, 15-11:11V0.90A, 16-12:11V 0.90A, 17-13:26.5V 0.21A	EA	10		
31	0132913	MODULE: TYPE: CONTROL BASIC; REFERENCE NO: 6AB6150-0AA70; PRINTED CIRCUIT BOARD	EA	10		
32	0132985	MODULE: TYPE: REAL TIME CLOCK; PRINTED CIRCUIT BOARD, BUFFERABLE	EA	10		
33	0132995	MODULE: TYPE: ANALOG DISTRIBUTION; REFERENCE NO: G53300-R16-L1-88; PRINTED CIRCUIT BOARD	EA	10		
34	0133354	MODULE: TYPE: LIGHT DUTY RELAY; REFERENCE NO: 103.111.486.200; WITH INPUT FOR LOGIC SIGNALS, SWITCHING CAPABILITY 60V/1A/30W, PART OF AV 5 CONTROL SYSTEM	EA	10		
35	0133600	MODULE: TYPE: RMR CARD; DIMENSIONS: WD 64 X LG 98 MM; REFERENCE NO: 415864; (M-RET CAR)	EA	10		

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36	0133857	MODULE: TYPE: OPTO ELECTRONIC INTERFACE; REFERENCE NO: UFB008AERS232; HIEE401233R0001; PRINTED CIRCUIT BOARD	EA	10		
37	0133859	MODULE: TYPE: DIODE FAULT DETECTION; REFERENCE NO: L54E3100AW00; DR, PRINTED CIRCUIT BOARD	EA	10		
38	0134023	MODULE: TYPE: CONVERTER I/P; APPLICATION: ASH FLOW CONTROL; REFERENCE NO: 49; FOR PNEUMATIC ACTUATOR AND POSITIONER, USED FOR ASH FLOW CONTROL	EA	10		
39	134068	MODULE: TYPE: BINARY SIGNAL CONDITIONING; POWER SOURCE: 24 VDC; SUPPL P/N: 6DP1210-8BC; FUM210; DRIVE CONTROLLER, TRANSMISSION MONITORING FOR WIRE BREAK, SHORT CIRCUIT TO M, SHORT CIRCUIT TO P INTERCORE, 14 CHANGE OVER CONTACTS OR 28 INDIVIDUAL CONTACTS CONNECTION OF ELECTRONIC TRANSMITTERS IS OPTIONAL	EA	10		
40	134218	MODULE: TYPE: ANALOG SIGNAL; POWER SOURCE: 24 V; SUPPL P/N: 6DS1700-8BA	EA	10		
41	0135121	MODULE: TYPE: SWITCH CONTROL; REFERENCE NO: 0479845; 66011-4-0776097-2; HA01; PRINTED CIRCUIT BOARD	EA	15		
42	0137964	MODULE: TYPE: REVERSE ROTATION DETECTOR DRIVER; REFERENCE NO: 41.04.A4.00.00.00	EA	15		
43	0139325	MODULE: TYPE: CONTROLLER; APPLICATION: BATTERY CHARGER; SUPPL P/N: BR1000; REFERENCE NO: 85/161 AND 89/399	EA	15		
44	0139512	MODULE: TYPE: RELAY CONTROL; REFERENCE NO: 66011-4-0776038-3; PRINTED CIRCUIT BOARD	EA	15		
45	0139524	MODULE: TYPE: OPTO-COUPLER; POWER SOURCE: 24 VDC; SUPPL P/N: ERP-015/24V; FOR USE ON ASH SPREADER AND STACKER	EA	15		
46	0147768	MODULE: TYPE: SCANNER I/O; DRAWING NO: 1775-S4B REV 1; MESSAGE HANDLING, INDICATORS FOR PASS, FAIL CH1/CH2/CH3/CH4, PLUG CONNECTIONS FOR BACKUP AND CH5	EA	10		
47	0148257	MODULE: TYPE: CURRENT SENSOR; POWER SOURCE: +/-15-24 V; SUPPL P/N: MKY30 CE001; RATIO 1:5000, INSULATION 6 KV RMS, INTERNAL RESISTANCE 80 OHMS	EA	50		

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48	0148257	MODULE: TYPE: TRANSMITTER; INPUT: 0-100 DEG C; OUTPUT: 4-20 MA; POWER SOURCE: 12-12.7 VDC; REFERENCE NO: V920-10; 743578; TRANSDUCER, TEMPERATURE, DC AND AC SIGNALS IN M TYPE HOUSING, FOR RAIL OR PANEL MOUNTING WITH PLUG IN ADAPTER BOX VS500 EX, 36 V, INPUT PT100-3 WIRE, EINGANG VS1000	EA	10		
49	0153690	MODULE: TYPE: PROTECTIVE FUSE; INPUT: 24 VDC; OUTPUT: 24 VDC 4 A; POWER SOURCE: 24 VDC; SUPPL P/N: 6FP1707-0B; PRINTED CIRCUIT BOARD, SAFEGUARD FOR PROTECTION OF VOLTAGES, TELEPERM C PROCESS CONTROL SYSTEM, SIEMENS SCHEDULE C02.01.162	EA	10		
50	0157864	MODULE: TYPE: FAN CONTROL; SUPPL P/N: TD040427; PRINTED CIRCUIT BOARD; UNIT	EA	10		
51	0157894	MODULE: TYPE: BUFFER INDICATOR; REFERENCE NO: G53300-R12-L2-1; PRINTED CIRCUIT BOARD	EA	10		
52	0157924	MODULE: TYPE: ALARM CIRCUIT INTERFACE; REFERENCE NO: 7MT00693; G53300-R13-L1-88 LINE 356; PRINTED CIRCUIT BOARD	EA	10		
53	0157925	MODULE: TYPE: DIRECT CURRENT FAIL/BACKUP; REFERENCE NO: G53300-R15-L1-2-88; 7MT00693; PRINTED CIRCUIT BOARD; LINE 357	EA	10		
54	0157926	MODULE: TYPE: DUAL MAKE/BRAKE; DIMENSIONS: WD 14 X LG 25 X THK 5 MM; REFERENCE NO: 2-767-001; JACK, MENTOR, 5 PINS	EA	10		
55	157931	MODULE: TYPE: CUBICLE SUPPLY; POWER SOURCE: 24 V; SUPPL P/N: 6FP1707-0B VA61	EA	10		
56	186386	MODULE: TYPE: TEMPERATURE MONITOR; SUPPL P/N: PC624/604	EA	10		
57	186391	MODULE: TYPE: TEMPERATURE MONITOR; SUPPL P/N: PC601/602	EA	10		
58	186394	MODULE: TYPE: PRESSURE MONITORING; SUPPL P/N: PC627	EA	10		
59	186407	MODULE: TYPE: RELAY; POWER SOURCE: 24 V; SUPPL P/N: 6FP1712-0A-EU27	EA	10		
60	186689	MODULE, POWER SUPPLY: INPUT: 240 VAC; OUTPUT: 24 VDC 10 A; SUPPL P/N: PS-1AC/24VDC/10; DIMENSIONS: WD 60 MM X HT 130 MM X DP 125 MM, ORDER NUMBER: 2866763, PHOENIX CONTACT BRAND ONLY; QUINT	EA	10		

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61	215551	MODULE: TYPE: ELECTRONIC TRIP; POWER SOURCE: 24 VDC; OEM P/N: EAM15A31-99-815; SUPPL P/N: EAM 15A 31-99-815; 9210-004; REFERENCE NO: SZ50013813	EA	5		
62	0218497	MODULE: TYPE: STRAIN GAUGE METER; INPUT: 0.24 VDC; OUTPUT: 4-20 MA; POWER SOURCE: 250 V 50 HZ; SUPPL P/N: PAXCDL 10; PAXS 0000; COMPLETE WITH ANALOG OUTPUT CARD, USED ON ASH CONDITIONER MASS METERS	EA	10		
63	0218847	MODULE: TYPE: THYRISTOR; INPUT: 380 V; OUTPUT: 380 V; SUPPL P/N: V1/V2/V3; 6SY7000-OAA88; 77250N16KOF; 6SE7087-6JK60; LINE SIDE, 2 X 250A, 1600V, USED ON COAL STACKER RECLAIMER VARIABLE SPEED DRIVE AC LONG TRAVEL	EA	10		
64	0218901	MODULE: TYPE: INVERTER; INPUT: 380 VAC 50 HZ; SUPPL P/N: A29; 6SE7087-6JK60; 6SE7033-2EG84-1JF0; PRODUCTS WITH DESIGN VERSION A, GATING IGD5, FOR UNIT 3 PHASE, 380-460VAC, 50/60HZ, 260A AND 3 AC 500-575V, 50/60HZ, 156A, USED ON COAL STACKER RECLAIMER VARIABLE SPEED DRIVE AC LONG TRAVEL	EA	15		
65	218902	MODULE: TYPE: STANDARDIZING; INPUT: 380 VAC 3 PH; SUPPL P/N: A26; 6SE7087-6JK60; 6SE7032-6EG84-1BH0; ABO FOR UNITS 3 PHASE, 380-460VAC AND 510-620VDC, 260A, USED ON COAL STACKER RECLAIMER VARIABLE SPEED DRIVE AC LONG TRAVEL, MASTERDRIVE	EA	20		
66	0218903	MODULE: TYPE: INTERFACE CARD; INPUT: 380 VAC 3 PH; SUPPL P/N: 6SE7087-6JK60; A20; 6SE7038-6GL84-1BG0; PRODUCTS WITH DESIGN VERSION A, INVERTER INTERFACE MODULE IVI, USED ON COAL STACKER RECLAIMER VARIABLE SPEED DRIVE AC LONG TRAVEL	EA	15		
67	0218905	MODULE: TYPE: TRANSISTOR; INPUT: 380 VAC 3 PH; SUPPL P/N: 6SY7000-OAC82; 300A, 1200V, USED ON COAL STACKER RECLAIMER VARIABLE SPEED DRIVE AC LONG TRAVEL; A100/A101/A110/A111/A200/A210/A210/A211/A300/IGBT; BSM300GA 120 DN2S; SIEMENS SIMOVERT MASTERDRIVE 6SE7087-6JK60	EA	20		

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68	0218906	MODULE: TYPE: BATTERY; INPUT: 5.1 VDC 15 MA; OUTPUT: 3.6 VDC 20 MA; SUPPL P/N: 96391474; REFERENCE NO: 1756-BATM A; J SERIES	EA	10		
69	0224277	MODULE: TYPE: CONTROLNET ADAPTOR I/O; INPUT: 0-10 MA; OUTPUT: 0-10 MA; POWER SOURCE: 24 VDC; SUPPL P/N: 1771-ACN15	EA	10		
70	0224278	MODULE, POWER SUPPLY: TYPE: CONTROL; INPUT: 230 VAC; OUTPUT: 24 VDC; SUPPL P/N: 6ES7307-1KA01-OAAO	EA	10		
71	0224887	MODULE, POWER SUPPLY: INPUT: 220 VAC; OUTPUT: 12/24 VDC; REFERENCE NO: 410-500	EA	10		
72	0229850	MODULE: TYPE: PROGRAMMABLE LOGIC CONTROLLER; INPUT: 24 V; OUTPUT: 24 V; POWER SOURCE: 24 V; SUPPL P/N: 6ED1052-1HB08-0BA1; 6ED1052-1HB08-0BA1	EA	15		
73	0233693	MODULE, POWER SUPPLY: TYPE: GAS 1 PLANT; INPUT: 120-230 VAC; OUTPUT: 24 VDC 20 A; SUPPL P/N: 6EP1336-2BA00; USED ON GAS 1 PLANT	EA	15		
74	0238822	MODULE: TYPE: BACKPLANE POWER; INPUT: 5-12 VDC; OUTPUT: 5 VDC; POWER SOURCE: 5 VDC; DIMENSIONS: WD 157 X LG 257 X HT 90 MM; REFERENCE NO: CP3; PACKED IN A BOX WITH ID LABEL, SUITABLE FOR ALL CONDAIR CP3 UNITS, CODE: 2530144	EA	10		
75	0242073	MODULE: TYPE: HIGH RIPPLE ALARM; POWER SOURCE: 24 VDC; APPLICATION: STATIC CHARGER 24 V AT 10 A; SUPPL P/N: SP332	EA	15		
76	0248214	MODULE: TYPE: MOTHERBOARD; POWER SOURCE: 220 V; APPLICATION: STATIC CHARGER; SUPPL P/N: 610A	EA	10		
77	0248215	MODULE: TYPE: MOTHERBOARD/CARD; POWER SOURCE: 24 V; APPLICATION: CHARGER 24 V 45 A; MANUF P/N: 6104 MB	EA	10		
78	0248217	MODULE: TYPE: LOW VOLTAGE; INPUT: 220 VAC; OUTPUT: 24 V; POWER SOURCE: 24 VDC; APPLICATION: ALLIED CHARGER; SUPPL P/N: SP300-32; FOR USE ON 24 V AT V100A	EA	20		
79	0248218	MODULE: TYPE: MOTHER BOARD 3 PH; APPLICATION: CHARGER 24-100 A; REFERENCE NO: 6300C	EA	15		

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80	0248275	MODULE, POWER SUPPLY: TYPE: BOARD 3 PH; APPLICATION: CHARGER 24 V 100 A; REFERENCE NO: 6300C	EA	15		
81	0248276	MODULE: TYPE: CONTROL CARD, 3 PH; OUTPUT: 24 V; POWER SOURCE: 220 VAC; APPLICATION: ALLIED CHARGER 24 V 100 A; SUPPL P/N: BR 500DB-4	EA	15		
82	0248277	MODULE: TYPE: SURGE SUPPRESSION CARD; POWER SOURCE: 24 V 100 A; APPLICATION: CHARGER; REFERENCE NO: BR3	EA	20		
83	0248278	MODULE: TYPE: SURGE SUPPRESSION CARD; OUTPUT: 24 V; POWER SOURCE: 220 VAC; APPLICATION: CHARGER 24 V 45 A/STATIC CHARGER 24 V 50 A; MANUF P/N: BR7	EA	10		
84	0248279	MODULE: TYPE: CONTROL CARD, 1 PH; POWER SOURCE: 24 V 50 A; APPLICATION: STATIC CHARGER; SUPPL P/N: BR5000A-4	EA	10		
85	0248280	MODULE, COMMUNICATION: TYPE: SATT; INPUT: 5 V; OUTPUT: 100-400 MA; APPLICATION: CARD SOOTBLOWER SYSTEM; SOFTWARE: CONTROLNET PROTOCOL, RACH, 200-RACN; REFERENCE NO: PM 864 AK01	EA	15		
86	0250847	MODULE: TYPE: CONTROL; INPUT: 24 V; OUTPUT: 24 V; POWER SOURCE: 24 V; APPLICATION: PLC; SUPPL P/N: 70BK06A-E; REFERENCE NO: HESG 332194 R0001	EA	10		
87	0253203	MODULE, COMMUNICATION: TYPE: ETHERNET, 5 PORT; APPLICATION: DHP/SO3 PLANT COMMS, TWO FIBER OPTIC PORTS, SUPER-FAST FAULT TOLERANT RING REDUNDANCY; SOFTWARE: PRE-CONFIGURED TRUE PLUG AND PLAY SIMPLICITY; SPECIFICATION: MIL-STD-1275; REFERENCE NO: ET-5RS; PRE-CONFIGURED FOR TRUE PLUG & PLAY SIMPLICITY, POWER PROTECTION, COMPACT LOW-PROFILE PACKAGING THAT FITS IN TIGHT SPACES & SHALLOW ENCLOSURES, INDUSTRIAL ETHERNET, ETHERTRAK, SIXNET	EA	15		
88	0253440	MODULE, POWER SUPPLY: TYPE: DISTRIBUTION; INPUT: 24 VDC; APPLICATION: EXCITATION; SUPPL P/N: 3BHE021481R0001; MICO ADVANCED	EA	20		

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89	0255944	MODULE: TYPE: CONVERTER CONTROL; INPUT: UDC:1.133V; 1A; OUTPUT: 24 VDC; POWER SOURCE: 24 VDC 2 A; APPLICATION: EXCITATION SYSTEM; DIMENSIONS: WD 73.5 X HT 142 X DP 373 MM; MANUF P/N: PC D231 B: PEC80-CCI; REFERENCE NO: 3BHE025541R0101; UNITROL 6800	EA	10		
90	0559323	MODULE: TYPE: ADVANCED POWER DISTRIBUTION; INPUT: 24 VDC; OUTPUT: 24 VDC 5 A; POWER SOURCE: 24 VDC; SPECIFICATION: EN 61000-6-2; MANUF P/N: 9000-41034-0100600; REFERENCE NO: 3BHE021481R0001; ELECTRONIC AUXILIARY; FUNCTION: SWITCHING AND MONITORING	EA	20		
91	0559328	MODULE: TYPE: BUS COUPLER; POWER SOURCE: 24 VDC; APPLICATION: CONTROL P14 DCS; REFERENCE NO: 70BK03C-E	EA	15		
92	0565079	MODULE: TYPE: PROGRAMME DISPLAY UNIT; APPLICATION: MOTOR PROTECTION UNIT; MANUF P/N: SPCJ 4D34-AA; REVISION P CARD; FOR SPAM 150C RELAY	EA	15		
93	0577921	MODULE: TYPE: INTERFACE; POWER SOURCE: 24 VDC; MANUF P/N: 3BHE022294R0103; REFERENCE NO: GFD233	EA	50		
94	0580171	MODULE: TYPE: BINARY SIGNAL; APPLICATION: STACKER & RECLAIMER; MANUF P/N: 6SE7090-OXX84-3EA0; SIMOVERT MASTERDRIVES; SERIAL I/O; FOR ANALOG & BINARY SIGNALS SCI1	EA	15		
94	0586589	MODULE: TYPE: MAIN THYRISTOR; APPLICATION: STACKER/RECLAIMER; MANUF P/N: 6SY7000-0AA88; MASTER DRIVES; SKKT; 2 X 273A; 1600V	EA	15		
96	0586590	MODULE: TYPE: ANALOG OUTPUT; POWER SOURCE: 24 VDC; OEM P/N: 6ES7232-4HD32-OXBO; SIMATIC S7-1200; SM 1232; 4 AO; +/- 10 V; 14 BIT RESOLUTION OR 0-20 MA/4-20 MA 13 BIT RESOLUTION	EA	15		
97	0597474	MODULE: TYPE: COMPACT CPU; INPUT: 2.5-10 V 4-20 MA; POWER SOURCE: 24 VDC; OEM P/N: 6ES7214-1AG31-OXBO; SIMATIC S7-1200; CPU 1214C; ON-BOARD I/O; 14DI; 10DO; 2 A1; PROGRAM/DATA MEMORY; 75 KB	EA	20		

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98	0597475	MODULE: TYPE: LOGO MODULAR; POWER SOURCE: 12-24 VDC; APPLICATION: CONVEYOR BELTS; SPECIFICATION: EAN 4034106029371; COMMERCIAL SIZE: WD 4 X LG 3 X HT 3.5 MM; OEM P/N: 6ED1052-1MD08-OBA1; 12/24RCE; DISPLAY: PU/I/O; RELAY: 8DI (4AI)/4 DO; MEM 400 BLOCKS EXPANDABLE; ETHERNET BUILT IN WEB-SERVER: DATALOG MICRO SD CARD FOR LOGO; SOFT COMFORT V8 PREVIOUS PROJECT USABLE	EA	100		
99	0597476	MODULE: TYPE: ANALOG INPUT; INPUT: 24 VDC; OEM P/N: 6ES7231-4HF32-OXBO; SIMATIC S7-1200; SM 1231; 8AI; +/-10V; +/-2.5V; 0-20MA; 12BIT + SIGN OR 13BIT DC	EA	15		
100	0597477	MODULE: TYPE: DIGITAL INPUT/OUTPUT; POWER SOURCE: 24 VDC; OEM P/N: 6ES7223-1BL32-OXBO; SIMATIC S7-1200; SM1223; 16DI; SINK; SOURCE; TRANSISTOR 0.5 A	EA	20		
101	0597478	MODULE: TYPE: REPLACEMENT ELECTRONICS; OEM P/N: IBS STME 24 BK-T-2754367; REFERENCE NO: 2754367; PACKING UNIT: (1PC); IP20; DIN RAIL; INTERBUS-S; 24VDC; IDENT: 08	EA	100		
102	0597835	MODULE: TYPE: EXPANSION; POWER SOURCE: 24 VDC; DIMENSIONS: WD 35.5 X LG 90 X THK 58 MM; OEM P/N: 6ED1055-1MA00-OBA2; PU: DC 12/24 V; 2 AI; 0-10 V OR 0/4-20 MA FOR LOGO 8	EA	15		
103	0599435	MODULE: TYPE: BUS COUPLER; APPLICATION: PRO CONTROL P13 SYSTEM; OEM P/N: 70BK03C-E/R1; LOCAL BUS/SERIAL INTERFACE; RS232; FIRMWARE HESG 492114	EA	15		
104	0599438	MODULE, COMMUNICATION: TYPE: PROCESSOR; OEM P/N: 6GKI1143-OTB01; MODEL NO: CP 1430TF	EA	30		
105	0602641	MODULE: TYPE: ANALOG; INPUT: +/- 20 MA; +/- 10 V; OUTPUT: DIGITAL; POWER SOURCE: 24 V 2 A; APPLICATION: GENERATOR EXCITATION CONTROL; DIMENSIONS: WD 141.4 X LG 370 X 73 DP MM; SPECIFICATION: IEC 60255-21; IEEE 344-1987; COMMERCIAL SIZE: 6; OEM P/N: 3BHE032025R101; REFERENCE NO: PC D232; INPUT/OUTPUT; FOR UNITROL 6800	EA	20		

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106	0602990	MODULE: TYPE: OSCILLATOR/DEMULATOR; OUTPUT: -2 TO -18 VDC; POWER SOURCE: 24 VDC; DIMENSIONS: WD 56 X LG 83 X HT 25 MM; SPECIFICATION: DIN EN 10204; MODEL NO: DS821.OD130; DRIVER FOR STANDARD DISPLACEMENT SENSOR SERIES	EA	15		
107	0609659	MODULE: TYPE: DIODE FIELD FLASH; OEM P/N: 1SVR405651R0000; REFERENCE NO: CR-P/M22	EA	15		
108	0612358	MODULE: TYPE: INFRARD SNSR TRD4; APPLICATION: CONVEYOR BELTS; REFERENCE NO: CTS 9480 KF BL; FOR SENSOR SET	EA	20		
109	0615999	MODULE: TYPE: BOARD, G5 5MPS; APPLICATION: CONVEYOR BELTS; REFERENCE NO: 48V4 MK8 PS1A2	EA	15		
110	0616000	MODULE: TYPE: AC FILTER; INPUT: 85-264 VAC; POWER SOURCE: 230 VAC; APPLICATION: CONTACT POWER SUPPLY; DIMENSIONS: WD 114 X HT 105 X THK 35 MM; SPECIFICATION: EN60950; REFERENCE NO: 2319919; ME-MAX-NEF/QUIT20A; NOMINAL INPUT VOLTAGE 10-230 VAC; INPUT CURRENT 7 A; THE FREQUENCY RANGE IS 45-65 HZ; INSULATION WITH STAND 250 V/6 KV	EA	15		
111	0617144	MODULE: TYPE: SPLIT UNIT; APPLICATION: AIRCON; SPECIFICATION: IPM PCB501/PHH1NO FUJ17MD75 RA120; MODEL NO: HP36HNI	EA	20		
112	0617698	MODULE: TYPE: EXPANSION; INPUT: 5-8.5 VDC; OUTPUT: 5 A 100 MA; SPECIFICATION: IEC 61131; REFERENCE NO: 6ED1055-1MM00-0BA2	EA	30		
113	0620893	MODULE: TYPE: UHF DMR, DASH/PSU; OEM P/N: MDM28QNN9VA2ANEDM4PSU; DM4600E	EA	30		
114	621710	MODULE: TYPE: UHF DMR, DASH; OEM P/N: MDM28QNN9VA2ANE; DM4600E	EA	20		
115	0621716	MODULE: TYPE: VHF DMR; OEM P/N: MDM28JNN9VA2ANEDM4PSU; DASH AND PSU; DM4600E	EA	20		
116	0621719	MODULE: TYPE: TRANSRECEIVER; APPLICATION: PORTABLE RADIO; DIMENSIONS: WD 65 X LG 150 X DP 45 MM; SPECIFICATION: ETSI; OEM P/N: SPU8040T3UHF	EA	20		

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117	0622250	MODULE: TYPE: BINARY O/P EXPANSION; INPUT: (4) DIGITAL; POWER SOURCE: 24 VDC; DIMENSIONS: WD 35.5 X HT 90 X DPT 68 MM; REFERENCE NO: 6ED1055-1MB00-0BA2	EA	20		
118	0623547	MODULE: TYPE: DISPLAY GRAPHICS CARD; NVIDIA NVS; 510 QUAD; INTEL PENTIUM 4 OR XEON PROCESSOR HIGHER AMD OPTERON PROCESSOR OR HIGHER RAM 1GB	EA	20		
119	0625920	MODULE: TYPE: DUAL DISPLAY GRAPHIC CARD; APPLICATION: FIRE PROTECTION; REFERENCE NO: GT7302GBDDR P01-E2.0; NVIDIA GE FORCE; HDMI + DL-DVH	EA	20		
120	0625992	MODULE: TYPE: INTERFACE PROFIBUS DP; APPLICATION: CPU 412-2 CPU INTERFACE MPI/DP 12 MBIT/S; OEM P/N: 6ES7412-2XK07-0AB0\CPU412-2	EA	30		
121	0629290	MODULE: TYPE: DIGITAL OUTPUT; OUTPUT: 24 VDC 0.5 A; APPLICATION: STACKER/SPREADER DHP; OEM P/N: 6ES74221BL000AA0; SIMATIC, OPTICAL, ISOLATED, 32 DO	EA	40		
122	0629291	MODULE, POWER SUPPLY: TYPE: MEDIA CONVERTER; INPUT: 24 VDC; OUTPUT: 24 V 0.1 A; APPLICATION: DHP STACKER/SPREADER; OEM P/N: 6GK51011BC002AA3	EA	15		
123	0629292	MODULE: TYPE: PROFIBUS; APPLICATION: VSD MONITOR MICRO MASTER 4; OEM P/N: 6SE6400-1PB00-0AA0; E-STAND (VERSION) B03/1.03; WEIGHT 0.30 KG, 66 LBS;TEMP RANGE -10 DEG C TO + 50 DEG C; IP20, MM 4 C/L LISTED ACCESSORY	EA	50		
124	0629293	MODULE, COMMUNICATION: TYPE: MODUS SOFTWARE RS422/485; APPLICATION: DHP SIMATIC S7-300; OEM P/N: 6ES7341-1CH01-0AE0; CP 341 PROCESSOR WITH INTERFACE; INCLUDING CONFIGURE PACKAGE ON CD	EA	30		
125	0629294	MODULE: TYPE: ANALOG INPUT; APPLICATION: STACKER/SPREADER DHP, SIMATIC 8 CHANNEL; OEM P/N: 6ES74311KF000AB0	EA	15		
126	0629295	MODULE: TYPE: SIMATIC; APPLICATION: STACKER/SPREADER COAL; OEM P/N: 6ES74001TA010AA0; SIMATIC, UR 1 RACK, CENTRALIZED AND DISTRIBUTED WITH 18 SLOTS 2	EA	20		

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		REDUNDANT PS PLUGGABLE				
127	0629513	MODULE: TYPE: DIGITAL O/P, SM 322; APPLICATION: DHP SIMATIC S7-300; MANUF P/N: 6ES7322-1HH01-0AA0; REFERENCE NO: C-B6TR0249; OPTICALLY ISOLATED 16DO; RELAY CONTACTS, 1 X 20 PIN; AC 120/230V; SIMATIC	EA	20		
128	0632912	MODULE: TYPE: DIGITAL OUTPUT; POWER SOURCE: 24 VDC; OEM P/N: 6ES7322-1BL00-0AA0	EA	20		
129	0632914	MODULE: TYPE: DIGITAL INPUT; INPUT: 24 VDC; OUTPUT: 13-30 V AT 7 MA; POWER SOURCE: 24 VDC; APPLICATION: DEGRITTING SUMP; DIMENSIONS: WD 40 X HT 125 X DP 120 MM; SPECIFICATION: IEC 61131; COMMERCIAL SIZE: SM 321; OEM P/N: 6ES7321-1BL00-0AA0; REFERENCE NO: S7-300; OPTICALLY ISOLATED 32DI; 1 X 40 PIN	EA	10		
130	0632916	MODULE: TYPE: CENTRAL PROCESSING UNIT; INPUT: 750 MA; OUTPUT: 20.4-28.8 VAC; POWER SOURCE: 24 VDC; APPLICATION: DHP SIMATIC S7-300; DIMENSIONS: WD 40 X HT 125 X DP 130 MM; SPECIFICATION: DIN EN 10204; COMMERCIAL SIZE: 315-2 PN/DP; OEM P/N: 6ES7315-2EH14-0AB0; REFERENCE NO: S7-300; 384 KBYTE WORKING MEMORY; INTERFACE MPI/DP 12MBIT/S; WITH 2 PORT SWITCH MICRO MEMORY CARD NECESSARY	EA	10		
131	0632917	MODULE, COMMUNICATION: TYPE: CONNECTION; INPUT: 24 VDC; OUTPUT: 5 VAC DC 1.4 A; APPLICATION: SIMATIC S7-400; HARDWARE: S7-400; SOFTWARE: PROCESSOR; SPECIFICATION: ISO; OEM P/N: 6GK7443-1EX30-0XE0; PROCESSOR CP443-1; TO INDUSTRY ETHERN, VIA ISO, TCP/IP AND UDP; S7-COMM, FETCH/WRITE; SEND/RCV WITH & W/O RFC1006, MULTICAST, PROFINET IO-CONTROLLER, DHCP, SNMP V2, WEB; DIAGNOS, INITIALIZATION VIA LAN	EA	10		

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132	0632918	MODULE, COMMUNICATION: TYPE: OPTICAL LINK; APPLICATION: STACKER/SPREADER DHP; OEM P/N: 6GK15032CB00; PB OLM/G11 V4.0 OPTICAL LINK MODULE W. 1 RS485 AND 1 GLASS-FOC-INTERFACE (2 BFOC-SOCKETS); WITH SIGNAL. CONTACT AND MEASURING OUTPUT	EA	10		
133	0632919	MODULE: TYPE: REPEATER RS485; APPLICATION: DHP SIMATIC DP; OEM P/N: 6ES7972-0AA01-0XA0; SIMATIC DP; RS485 REPEATER FOR THE CONNECTION OF PROFIBUS/MPI BUS SYSTEMS WITH MAX. 31 NODES; MAX. 12 MBIT/S; DEGREE OF PRO-TECTION IP20	EA	20		
134	0632920	MODULE: TYPE: DIGITAL INPUT; INPUT: 24 VDC; OUTPUT: 13-30 VDC 7 MA; POWER SOURCE: 24 VDC; APPLICATION: LP 2 FRONT SHAFT VI; DIMENSIONS: WD 25 X HT 290 X DP 210 MM; SPECIFICATION: ISO; COMMERCIAL SIZE: SM 421; OEM P/N: 6ES7421-BL01-OAAO; REFERENCE NO: S7-400; SM 421 DIGITAL INPUT MODULE; OPTIC. ISOLATED, 32 DI, 24 VDC	EA	25		
135	0632921	MODULE: TYPE: ANALOG I/P; INPUT: 3.2 TO 20 MA; APPLICATION: STACKER/SPREADER DHP; OEM P/N: 6ES73317KF020ABO; SIMATIC S7-300 SERIES PLC I/O MODULE 8 X I/O, 24 V DC, 125 X 40 X 120 MM	EA	20		
136	0632923	MODULE: TYPE: ANALOG INPUT; POWER SOURCE: 24 VDC; OEM P/N: 6ES7331-7KF02-OABO; REFERENCE NO: SM 331	EA	20		
137	0632924	MODULE: TYPE: ANALOG OUTPUT; INPUT: 60-240 MA; OUTPUT: 4-20 MA; POWER SOURCE: 24 VDC; APPLICATION: BACKPLANE BUS; DIMENSIONS: WD 40 X HT 125 X DP 120 MM; SPECIFICATION: ISO; COMMERCIAL SIZE: SM 332; OEM P/N: 6ES7332-5HD01-0AB0; OPTICALLY ISOLATED, 4 AO, U/I; DIAGNOSTICS; RESOLUTION 11/12 BITS, 20 PIN; REMOVE/INSERT W. ACTIVE	EA	15		

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138	0632925	MODULE, COMMUNICATION: TYPE: PROCESSOR; INPUT: 24 VDC; APPLICATION: CONNECTING; OEM P/N: 6GK7343-1CX10-0XE0; SIMATIC NET; CP 343-1 LEAN COMMUNICATION PROCESSOR FOR CONNECTING SIMATIC S7-300 TO IND. ETHERNET VIA TCP/IP AND UDP; MULTICAST; SEND/RECEIVE W. AND W/O RFC1006; FETCH; RITE;S7-COMMUNICATION(SERVER) PROFINET IO-DEVICE; INTEGRATED 2-PORT SWITCH ERTEC 200; BG EXCHANGE W/O PG, SNMP DIAGNOSTICS; INITIALIZ. VIA LAN; 2 X RJ45 CONNECT. FOR LAN WITH 10/100 MBIT/S	EA	15		
139	0632927	MODULE: TYPE: COMMUNICATIONS PROCESSOR; DIMENSIONS: WD 25 X HT 290 X DP 210 MM; COMMERCIAL SIZE: CP 443-1; OEM P/N: 6GK7443-1EX11-0XE0	EA	20		
140	0632928	MODULE: TYPE: MICRO MASTER 4; APPLICATION: VSD MONITOR; SPECIFICATION: EN4019169450805; OEM P/N: 6SE6400-0APOO-0AA1; MICROMASTER 4 ADVANCED OPERATOR PANEL (AOP) DIGITAL FACE, ADVANCED OPERATOR PANEL; E-STAND (VERSION) A05/1.60, WEIGHT 0.30 KG/0.66 LBS, TEMP RANGE -10 DEG C TO + 50 DEG C; PROTECTION IP 20	EA	15		
141	0633359	MODULE: TYPE: ANALOG INPUT; APPLICATION: SIMATIC S7-300; DIMENSIONS: WD 13.2 X LG 14.7 X HT 5.1 MM; SPECIFICATION: EAN 4025515072027; COMMERCIAL SIZE: ST73; OEM P/N: 6ES7331-7PF11-0AB0; ANALOG INPUT SM 331; OPTICALLY ISOLATED; 8 AI THERMOCOUPLE; TYPE B; E; J; K; L; N; R; S; T TXK/TXK (L) ACCORDING GOST 16 BIT; 50 MS; 1 X 40 PIN	EA	10		
142	0636630	MODULE: TYPE: DIGITAL INPUT; INPUT: 24 VDC; POWER SOURCE: 24 VDC; OEM P/N: 6ES7321-1BH02-0AA0	EA	10		
143	0636997	MODULE: TYPE: ANALOG; OEM P/N: 6ES7332-5HF00-0AB0	EA	20		

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144	0636998	MODULE: TYPE: ANALOG OUTPUT; OUTPUT: 4-20 MA; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20 X HT 262 X DPT 176 MM; COMMERCIAL SIZE: DOUBLE HEIGHT EUROCARD; WIDTH 4 PITCH; OEM P/N: 9210-002, OEM: GE STEAM POWER SERVICE; 9222-011, OEM: GE STEAM POWER SERVICE; MANUF P/N: 50-60-983; REFERENCE NO: AA16V00AF; D/A CONVERTER RESOLUTION 12 BIT; ME X012 SN	EA	15		
145	0639248	MODULE: TYPE: ANALOG INPUT; INPUT: 0-20 MA; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20 X HT 262 X DPT 176 MM; SPECIFICATION: DIN EN61000-4-2; COMMERCIAL SIZE: DOUBLE HEIGHT EUROCARD; WIDTH 4 PITCH; OEM P/N: 9210-003, OEM: GE STEAM POWER SERVICE; 9222-013, OEM: GE STEAM POWER SERVICE; MANUF P/N: 50-61-373; REFERENCE NO: AE16V00DF50-61-370; ME X012 SN	EA	15		
146	0639252	MODULE: TYPE: BINARY OUTPUT; OUTPUT: 24 V 50 MA; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; MANUF P/N: 50-60-593; REFERENCE NO: DA64V 01AF 64BA 24V3 Z	EA	15		
147	0639254	MODULE: TYPE: IP/OP BINARY; INPUT: 24 V 3.3 MA; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; OEM P/N: 9210-007, OEM: GE STEAM POWER SERVICE; MANUF P/N: 50- 61-663; REFERENCE NO: SZ50013805; DEAIN 01AF 50-61-660; TYPE: DIGITAL I/O; ME X012 SN	EA	15		
148	0639255	MODULE: TYPE: IMPULSE/FREQUENCY INPUT; INPUT: 1.91 TO 499 000 HZ; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20 X LG 262 X DP 176 MM; COMMERCIAL SIZE: DOUPLE HEIGHT EUROCARD/WIDTH 4 PITCH; OEM P/N: 9222-210, OEM: GE STEAM POWER SERVICE; 9222- 021, OEM: GE STEAM POWER SERVICE; MANUF P/N: IE2FZ21AF/50-60-393; 50-60-390; SUPPL P/N: IE2FZ01AF; MODULE: TYPE: SIGNAL INPUT	EA	30		

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149	0639256	MODULE: TYPE: PROCESSOR; INPUT: 266 MHZ; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; OEM P/N: 9210- 021, OEM: GE STEAM POWER SERVICE; MANUF P/N: UMFPR60HF50-61-384; 50-61-387	EA	15		
150	0639258	MODULE: TYPE: SUBNET BUS COUPLER (16 TN); POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20 X LG 262 X DPT 176 MM; SPECIFICATION: DIN EN 61000-42; COMMERCIAL SIZE: DOUBLE HEIGHT EUROCARD WIDTH 4 PITCH; OEM P/N: 50-60-033, OEM: GE STEAM POWER SERVICE; REFERENCE NO: UVIEW 10EF/50-60- 033; SZ50014080; 16TN/RS232	EA	15		
151	0639259	MODULE: TYPE: CIRCUIT BREAKER; INPUT: 24 VDC; OUTPUT: 15 A; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 106.34 X LG 128.4 X DPT 194 MM; SPECIFICATION: DIN EN50082/DIN EN55011; COMMERCIAL SIZE: 3 HEIGHT 21 PITCH; OEM P/N: EAM15A 2V3 (31-99-815), OEM: GE STEAM POWER SERVICE; REFERENCE NO: SZ50013813	EA	20		
152	0639260	MODULE: TYPE: OVERSPEED MONITOR; INPUT: 8-25 000 HZ; POWER SOURCE: 24 VDC; APPLICATION: TURBINE OVERSPEED PROTECTION SYSTEM; DIMENSIONS: WD 20 X LG 262 X DPT 176 MM; SPECIFICATION: VGB R 103 M; COMMERCIAL SIZE: DOUBLE- EUROPE 6HE 5TE; OEM P/N: SZ50010991, OEM: GE STEAM POWER SERVICE; REFERENCE NO: DW02-ST2; CURRENT CONTROL RANGE: 0.4 AMP (CODING 1:A); NUMBER OF TRIGGER WHEEL TEETH: 200 (CODING 2: F)	EA	30		
153	0639261	MODULE: TYPE: SOLENOID VALVE CONTROL; OUTPUT: 1.5 A 320 HZ; POWER SOURCE: 20-30 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20.32 X HT 133.35; SPECIFICATION: DIN 41612; COMMERCIAL SIZE: EUROPEAN FORMAT 3 HEIGHT; 4 PITCH; OEM P/N: ANS MV02 (31-99- 802), OEM: GE STEAM POWER SERVICE; REFERENCE NO: ANS MV 31-99-801; SZ50013812; PULSE-	EA	20		

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154	0639262	MODULE: TYPE: BINARY INPUT; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20.32 MM; OEM P/N: 9210-016, OEM: GE STEAM POWER SERVICE; MANUF P/N: K16IN01AF 50-60-400; 50-60-403; SUPPL P/N: K16INOIAF/50-60-403; REFERENCE NO: SZ50013804; FOR CHANGE OVER CONTACTS; WECHSLER 24VINT	EA	20		
155	0639263	MODULE: TYPE: CONTROL/VARIABLE SPEED DRIVES; INPUT: 4-20 MA; OUTPUT: 4-20 MA; POWER SOURCE: 24 VDC; APPLICATION: TURBINE CONTROL SYSTEM; DIMENSIONS: WD 20 X HT 262 X DP 176 MM; SPECIFICATION: DIN EN61000-4-4; COMMERCIAL SIZE: DOUBLE HEIGHT EUROCARD WIDTH 4 PITCH; OEM P/N: 9222-014, OEM: GE STEAM POWER SERVICE; 50-60-153, OEM: GE STEAM POWER SERVICE; REFERENCE NO: AEA8 01CF	EA	20		
156	0639292	MODULE: TYPE: FIRMWARE EPROM; INPUT: 5 VDC; OUTPUT: 5 VDC; POWER SOURCE: 5 VDC; APPLICATION: I/O; OEM P/N: EAS S61, OEM: GE STEAM POWER SERVICE; REFERENCE NO: Z50016205	EA	20		
157	0640339	MODULE: TYPE: RAIL MOUNT TEMPERATURE TRANSMITTER; OUTPUT: 4-20 MA; POWER SOURCE: 10.5-42 VDC; APPLICATION: THERMOCOUPLE/RESISTANCE SENSOR; OEM P/N: T32.3S.000-Z; REFERENCE NO: S 813995 V2.21	EA	30		
158	0646753	MODULE: TYPE: VIBRATION MONITORING; INPUT: -30 TO 30 VDC; OUTPUT: 4 TO 20 MA; POWER SOURCE: 24 VDC; DIMENSIONS: WD 230.5 X LG 336 X HT 50 MM; SPECIFICATION: VIB310; OEM P/N: 6DL2310-0XX14-1AX1; SPPA-D3000; FW: V2.11.30	EA	20		

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159	0646754	MODULE: TYPE: VIBRATION PROCESSING; INPUT: +/-22 MA; +/-2 V; POWER SOURCE: 24 VDC; DIMENSIONS: WD 230.5 X LG 336 X HT 50 MM; SPECIFICATION: VIB320; OEM P/N: 6DL4320-0AA00; FW VERSION	EA	20		
160	0646755	MODULE, COMMUNICATION: TYPE: NETWORK; OUTPUT: 24 VDC; SPECIFICATION: EN 60068-2-6; OEM P/N: CX5020-0111; DIMENSION: WD 100MM X HT 106MM X DPT 92MM; PROGRAMMABLE LOGIC CONTROL (PLC); CPU MODULE 1.6GHZ	EA	30		
161	0647198	MODULE, POWER SUPPLY: TYPE: SWITCHMODE; INPUT: 220 VAC; OUTPUT: 24 VDC; APPLICATION: GENERATOR STATOR BAR TEMPERATURES; OEM P/N: T2PR-2222B1; POWER OUTPUT: 48 WATT; SHORT CIRCUIT PROTECTED; THERMAL OVERLOAD PROTECTION; 11 PIN BASE DIN RAIL MOUNT TYPE	EA	20		
162	0655545	MODULE, POWER SUPPLY: TYPE: POWER CONNECTOR UNIT; INPUT: 24 VDC; OUTPUT: 24 VDC; APPLICATION: GENERATOR STATOR BAR TEMPERATURE; OEM P/N: T2PR-3405	EA	20		
163	0655547	MODULE: TYPE: ISOLATED UNIVERSAL CONVERTER; INPUT: 0-150 DEG C; OUTPUT: 4-20 MA; POWER SOURCE: 24 VDC; APPLICATION: GENERATOR STATOR BAR TEMPERATURE; DIMENSIONS: WD 6.1 X LG 115 X HT 113 MM; OEM P/N: T2PR-3114; INPUT: RTD; TC; POTENTIOMETER; 0-10 V; 0/4-20 MA; OUTPUT: 0-10 V; 0/4-20 MA	EA	20		
164	0655558	MODULE, COMMUNICATION: TYPE: DIGITAL OUTPUT SM322; INPUT: 24 VDC; OUTPUT: 24 VDC; APPLICATION: COARSE ASH DEGRADING SUMP PUMP; SOFTWARE: SIMATIC S7-300; OEM P/N: 6ES7322-1BF01-0AA0; ISOLATED; 8DO; 2A; 1 X 20-POLE; SC-K5PV8015	EA	20		
165	0659515	MODULE: TYPE: PM240 POWER; INPUT: 380-400 V; OUTPUT: 400 V; APPLICATION: COAL RECLAIMER; DIMENSIONS: WD 350 X HT 634 X DP 316 MM; COMMERCIAL SIZE: FSF; MANUF P/N: 6SL3224-0BE34-5UA0; POWER FACTOR 0.85A; AMBIENT OPERATION TEMPERATURE 0-50 DEG C; IP 20/UL OPEN TYPE	EA	20		

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		DEGREE OF PROTECTION; CONNECTION M8 BOLT				
166	663356	MODULE: TYPE: DIGITAL OUTPUT; POWER SOURCE: 24 VDC; APPLICATION: HYDRAULIC UNIT CONTROL; DIMENSIONS: WD 45 X HT 80 X DP 62 MM; REFERENCE NO: 6ES7222-1BF22-0XA0	EA	20		
167	0668065	MODULE: TYPE: CPU 224 COMPACT UNIT; INPUT: 24 VDC; APPLICATION: HYDRAULIC UNIT CONTROL; DIMENSIONS: WD 120.5 X HT 80 X DPT 62 MM; REFERENCE NO: 6ES7214-1A023-0XB0; 14 DI; 10 DO	EA	50		
168	0668066	MODULE: TYPE: ANALOG INPUT EM231; INPUT: 0-10 VDC; POWER SOURCE: 24 VDC; APPLICATION: HYDRAULIC UNIT CONTROL; DIMENSIONS: WD 71.2 X HT 80 X DPT 62 MM; REFERENCE NO: 6ES7231-0HC22-0XA0; 4 AI	EA	15		
169	0668067	MODULE: TYPE: SPEED CONTROL; INPUT: 0-10 V; POWER SOURCE: 24 VDC; APPLICATION: COAL FEEDER; DIMENSIONS: WD 100 X LG 160 X HT 35 MM; MODEL NO: VT-VRPA1; REFERENCE NO: RA30052/05.04	EA	15		
170	0671107	MODULE: TYPE: CONTROLLER; APPLICATION: CONVEYOR BELTS; OEM P/N: CTS 9000 RF	EA	15		
171	674187	MODULE, POWER SUPPLY: TYPE: INDOOR PC BOARD FOR CARRIER; INPUT: 24 VAC; OUTPUT: 12 VAC; APPLICATION: AIR CONDITIONING; REFERENCE NO: 3NYV060M2	EA	15		
172	689578	MODULE, POWER SUPPLY: TYPE: VIBRATION MONITORING; INPUT: -30 TO 30 VDC; OUTPUT: 4-20 MA; SPECIFICATION: VIB310; SUPPL P/N: 6DL2310-0XX44-1AX1; SPPA-D3000; COMPATIBLE WITH 6DL2310-0XX22- 1AX1 WITH FW: V2.11.15 & FPGA: P1.2.7	EA	15		
173	0690753	MODULE: TYPE: HYDRAULIC VALVE POSITION CONTROLLER; INPUT: 4- 20 MA; OUTPUT: 4-20 MA; POWER SOURCE: 24 VDC; 19-30 V; APPLICATION: HP BYPASS REGULATING VALVE; DIMENSIONS: WD 163 X HT 51 X DP 111 MM; REFERENCE NO: RS232;	EA	10		

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		103.215.285.210; PVR10-10; 1 PV; 1 BLOCKING ELEMENT; 2 ADDITIONAL SOLENOIDS				
174	0697248	MODULE: TYPE: THIN CLIENT; POWER SOURCE: 220 VAC; APPLICATION: HMI; DIMENSIONS: WD 116 X HT 177 X DP 29; REFERENCE NO: 5030/3040; 0J767W; TO BE USED WITH POWER EDGE R730 SERVERS THROUGH PCOIP & MICROSOFT RDP PROTOCOLS; MUST INCLUDE 2 DISPLAY OUTPUTS; ONE MUST BE DISPLAY PORT; MUST INCLUDE 2 USB INPUTS FOR MOUSE & KEYBOARD; MUST INCLUDE 220 V ADAPTER	EA	30		
175	0698144	MODULE: TYPE: INTERFACE; INPUT: 24 VDC; 4-20 MA; OUTPUT: TCP/IP OPC; POWER SOURCE: 5 VDC; APPLICATION: SICOMP M PEF7; DIMENSIONS: WD 20 X HT 235 X DPT 163 MM; REFERENCE NO: INET-SI-132	EA	20		
176	0701452	MODULE, POWER SUPPLY: TYPE: AUTOMATION PLATFORM; INPUT: 20-30 VDC; OUTPUT: 5.1 VDC; SPECIFICATION: CSA C22.2 NO 142; HARDWARE: COMPUTER; SUPPL P/N: 140CPS21400	EA	30		
177	717226	MODULE PWR SUP:AUTOMATION PLATFORM	EA	10		
					Total	

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