

Bill of Quantities

Supply and delivery of substation materials for Hercules Traction substation

Schedule of quantities and Rates / Price (s)					
Item No.	Description	Unit	Qty	Rate/unit. (Excl VAT)	Total Price (Excl VAT)
Material for 3kV DC Traction substation					
1.	Holding coil contactor, DC, 25KA, 3 pole 25A, 110V DC.	Each	5	R.....	R.....
2.	Delay on Timer -DP1 (Rectifier fan fail) 220V AC coil 0 to 60 seconds.	Each	5	R.....	R.....
3.	Delay on Timer - DP2 (Rectifier Diode and Over temp trips) 220V AC coil	Each	5	R.....	R.....
4.	Delay on Timer DP1 (Rectifier fan Running Time) 220VAC coil 0 to 30 second	Each	5	R.....	R.....
5.	110V DC Battery under Voltage (Type = RHOMBERSP200) Relay	Each	5	R.....	R.....
6.	24 Way Diode Monitor Card	Each	5	R.....	R.....
7.	Fan Controller Card – 18/24 (50/80 degree Celsius)	Each	5	R.....	R.....
8.	Power Supply PSU 120/24 VDC 18/24 Diode React	Each	5	R.....	R.....
9.	3kV DC Undervoltage Receiver Cards	Each	5	R.....	R.....
10.	Interval Timer 0 – 30 sec 110VDC Coil IPI	Each	5	R.....	R.....
11.	3kV DC Undervoltage Transmitter.	Each	5	R.....	R.....
12.	3kV DC Undervoltage Electronic Card	Each	5	R.....	R.....
13.	Manual Motor Starter 17 – 23A Rectifier fans	Each	5	R.....	R.....
14.	Contactor 4KW, 3 Poles, 110V DC coil for track breaker	Each	5	R.....	R.....
15.	ECR Card for Track breakers	Each	5	R.....	R.....
16.	Diode Board 10 Way for indication	Each	5	R.....	R.....
17.	110V DC Battery Undervoltage (type – AC /DC Dynamic VCP1).	Each	5	R.....	R.....
Material for 11kV Distribution Substation					
18.	11kV Fuse 10A	Each	5	R.....	R.....

Supply and delivery of substation material for Hercules Traction substation

www.prasa.com

Be moved



prasa

PASSENGER RAIL AGENCY
OF SOUTH AFRICA

19.	Siemens Relay 75 R – 1102 IN 1/5A (Argus relay)	Each	1	R.....	R.....
20.	12V, 400ah, maintenance-free batteries	Each	2	R.....	R.....
21.	12V, 150ah at 20-hour rate, maintenance free battery	Each	6	R.....	R.....
22.	MOV battery card	Each	5	R.....	R.....
23.	Surge protection device: SPW02, U _c : -275, I _{max} : 40kA, U _p : 1.5kV	Each	12	R.....	R.....
24.	Surge protection device: Clamper. U _c : -175, I _{max} : 20kA, U _p : < 0.8kV, I _r : 10kA	Each	12	R.....	R.....
	Total Excluding VAT			R.....	
	VAT @ 15%			R.....	
	GRAND TOTAL			R.....	