

SR. NO.	PARTICULARS	MAKE	RATE	RATE	RATE	RATE
Client	K Raheja					
Project	Kharadi Project					
Description	22KV, 630A, 25KA Indoor Type 6 Panel Switchbord					
Qty	1 Sets					
BILL OF MATERIAL FOR 22KV 630A INDOOR 6 PANEL SWITCHBOARD						
	PARTICULARS		I/C	Trafo O/G	B/C	ADPT
	NO. OF FEEDERS		2	2	1	1
1	POWER SECTION					
	33 KV, 25 KA Horizontal Draw out/Horizontal Isolation VCB with following accessories:-	SCHNEIDER	1	X	1	X
	33 KV 25 KA 1600 Amps HVX BREAKER					
	Spring Charging Motor, 230V AC					
	Tripping Coil- 24 V DC					
	Closing Coil- 24 V DC					
	Aux. Contacts: 6 NO + 6 NC.					
	Limit Switch for Test Position					
	Limit Switch for Service Position					
	With Mechanical ON/OFF Indication					
	Mechanical ON/OFF Emergency Push Button, Inbuilt Antipumping Feature.					
	POWER SECTION					
	33 KV, 25 KA Horizontal Draw out/Horizontal Isolation VCB with following accessories:-	SCHNEIDER	X	1	X	X
	33 KV 25 KA 1250 Amps HVX BREAKER					
	Spring Charging Motor, 230V AC					
	Tripping Coil- 24 V DC					
	Closing Coil- 24 V DC					
	Aux. Contacts: 6 NO + 6 NC.					
	Limit Switch for Test Position					
	Limit Switch for Service Position					
	With Mechanical ON/OFF Indication					
	Mechanical ON/OFF Emergency Push Button, Inbuilt Antipumping Feature.					
2	POTENTIAL TRANSFORMER:-	PRECISE / AE	3	X	X	X
	3 No Single Phase Fixed type Epoxy Cast Resin Type having:-					
	Ratio: 22KV/ $\sqrt{3}$ /110V/ $\sqrt{3}$					
	Core 1: 100 VA, Class 1.0					
3	CURRENT TRANSFORMER 22KV	PRECISE / AE	3	X	X	X
	Single Phase Epoxy Cast Resin Current Transformer :-					
	Rated Voltage: 22KV, BIL=24/50/125 KVp,					
	Freq: 50Hz, Isc: 25KA/1 sec.					
	CTR: 160/5+5 A,					
	Core1: 15 VA, Class 1.0					
	Core2: 15VA, Class 5P10					
	CURRENT TRANSFORMER 22KV	PRECISE / AE	X	3	X	X
	Single Phase Epoxy Cast Resin Current Transformer :-					
	Rated Voltage: 22KV, BIL=24/50/125 KVp,					
	Freq: 50Hz, Isc: 25KA/1 sec.					
	CTR: 60/5+5 A,					
	Core1: 15 VA, Class 1.0					
	Core2: 15VA, Class 5P10					

3	PROTECTION RELAYS					
	MICOM P111A RELAYwith following protection (50,50N,51,51N,95)	SCHNEIDER	1	1	X	X
	MASTER TRIP RELAYModel No : VAJH 13	ALSTOM	1	1	1	X
	3 Element Auxiliary RelayModel No: VAA33	ALSTOM	X	2	X	X
4	METERING					
	Digital Ammeter With Selector Switch, Size: 96×96 Sqmm	CONZERV	1	1	X	X
	Digital Voltmeter With Selector Switch, PTR 22KV/110V, Size: 96×96 Sqmm	CONZERV	1	X	X	X
	Multifunction Meter with RS 485 Port Model No : EM6436H Class: 1.0	CONZERV	1	1	X	X
	12 window Annunciator with Hooter	MINILEC	X	1	X	X
5	CONTROL SECTION					
	Breaker Control Switch, Trip-Neutral-Close, Spring return to Neutral, Pistol Grip Handle.	TEKNIC/EQV	1	1	1	X
	BREAKER LED LAMPS WITH 22.5 sqmm DIA					
	. Breaker ON-24 V DC	TEKNIC	1	1	1	X
	Breaker OFF-24 V DC	TEKNIC	1	1	1	X
	Spring Charged-24 V DC	TEKNIC	1	1	1	X
	Trip Circuit Healthy-24 V DC	TEKNIC	1	1	1	X
	CB in Test Position-24 V DC	TEKNIC	1	1	1	X
	CB in Service Position-24 V DC	TEKNIC	1	1	1	X
	Indicating Lamps:- R,Y,B PHASE EACH WITH 110 V AC	TEKNIC	3	X	X	X
	POWER PACK 230VAC/24 V DC WITH 8-10 MINS BACKUP	ALAN	1	1	1	X
	Panel Space Heater, 100W, 230V AC. WithThermostat Suitable for 230V AC	GIRISH	1	1	1	1
	Heater Control switch	Kaycee/Eqv	1	1	1	1
	Cubicle illumination switch	Anchor/Eqv	1	1	1	1
	6 A 3 pin plug & socket	Anchor/Eqv	1	1	1	1
	Panel illumination 9 W,230 VAC CFL	C&S/Eqv	1	1	1	1
	Main Bus Bar 630 A, Material CU.With suitable heat shrinkable sleeves	Vidyut	1 SET	1 SET	1 SET	1 SET
	Bushing		1 SET	1 SET	1 SET	X
	Safety Shutters		1 SET	1 SET	1 SET	X
	Wiring		1 SET	1 SET	1 SET	1 SET
	22 KV Bus Support Insulators 6 Nos		1 SET	1 SET	1 SET	1 SET
	Misc Items		1 SET	1 SET	1 SET	1 SET
	Bus Bar Sleeve PVC		1 SET	1 SET	1 SET	1 SET
	FAB & POWDER COATING OF CABINET - RAL 7032		1 SET	1 SET	1 SET	1 SET