

TECHNICAL SPECIFICATION

11KV 800 AMPS OUTDOOR TYPE STAND ALONE PANEL VCB KIOSK

S.No	Description	Ratings	Qty/Panel
1	Vacuum Circuit Breaker		
1.1	Horizontal Draw Out VCB fitted with Manual / Motor Operated spring charging mechanism with 230V AC Motor & Motor Control Switch, Mechanical ON / OFF indicator Operation Counter, Automatic safety shutters & push button as IEC and IS.	11kV, 800A, 25kA	1 No. (630A) for INCOMING.
1.2	Shunt trip and series Coil	110V DC	
1.3	Closing Coil	110V DC	
1.4	Spare auxiliary contact 6 NO + 6 NC(silver plated contacts)	6 NO +6 NC	
1.5	Antipumping Feature	110V DC	
1.6	Degree of protection	IP 55	
2	Potential Transformer		
2.1	Three Phase, Resin cast, Dry type, Fixed type potential transformer with one set of HTFS / LTFS and one no. Neutral Link	(11kV/ $\sqrt{3}$) / (110V/ $\sqrt{3}$)	1 No.
	Core 1: for meter	TO BE SUITABLE SPECIFICATION AS PER DESIGN	
3	Current Transformer		
3.1	single phase, Resin Cast, Dry Type Current Transformer		3Nos
	Core 1: for meter	TO BE SUITABLE SPECIFICATION AS PER DESIGN	CT range – 300- 500 A
	Core 1: for protection (Separate cores shall be used for metering and protection).		
4	Metering		
4.1	96 sq.mm Digital Ammeter with Inbuilt Selector Switch		1No
4.2	96 sq.mm Digital Voltmeter with Inbuilt Selector Switch		1No
4.3	3 Φ , 4 wire, 3 Element Digital Multifunction Meter		1No
	Trivector Meter 3phase 3wire system		1No
5	Protections		
5.1	Numerical Non-directional IDMT combined 3 O/C+1 E/F relay with high set	TO BE SUITABLE SPECIFICATION AS PER DESIGN	1No
5.2	High speed/Master trip relay		1No
5.3	Door interlock with breaker		
6	Indication Lamps		
6.1	VCB OFF/ON/Auto trip/Trip circuit healthy/Spring charge indication lamps	LED	1 Set.
6.2	R,Y,B Phase Indication Lamps	LED	1 Set

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7	Control Switches / Push Buttons		
7.1	Breaker Control Switch (Close-Neutral-Trip)	(T-N-C)	1 No.
7.2	Local Remote selector switch	L/R	1 No.
7.3	Flush Head type Trip Circuit Healthy Push Button		1No
8	Control wiring with appropriate colors		1 Lot
9	Busbar Ratings		
9.1	11kV, 8000Amps Busbar with PVC Sleeve (63.5 X 12.7mm)	Aluminium	1Set
9.1	Earth bus 40 *6 mm	Aluminium	1Set
10	Common For Switchgear		
10.1	Heater ON / OFF switch with filament type 80Watts space heater & thermostat , single phase switch with socket, 40W cubicle Lamp for panel illumination with snap type door limit switch, Fuses / MCBs for AC / DC control.		1Set
10.2	MS Sheet steel enclosure & installation with paint shade of RAL 7032.	Outdoor	1 Set.
10.3	Incoming (Excluding Cable termination kits, lugs & glands) – Bottom side suitable for 2RX3CX185SQMM Alu Armoured cable		
10.4	Outgoing (Excluding Cable termination kits, lugs & glands) - Bottom / Side suitable for 2RX3CX185SQMM Alu Armoured cable		
	NOTE: 1 VCB, PT, CT, METERS, CONTROL SWITCHES, HEATER & THERMOSTAT, MCB etc...all are reputed make only. 2 Surge Arrestor shall be provided as per IE standards. 3 110V DC for operation of the circuit breaker and protection relays shall be taken from power pack (110V DC) with suitable capacity battery and charging circuit arrangement. This is to ensure the operation of breaker in case of power supply failure. (2 open and 2 close operations). Only 230 volts AC supply shall be provided by BHEL.		

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