



RWTUV



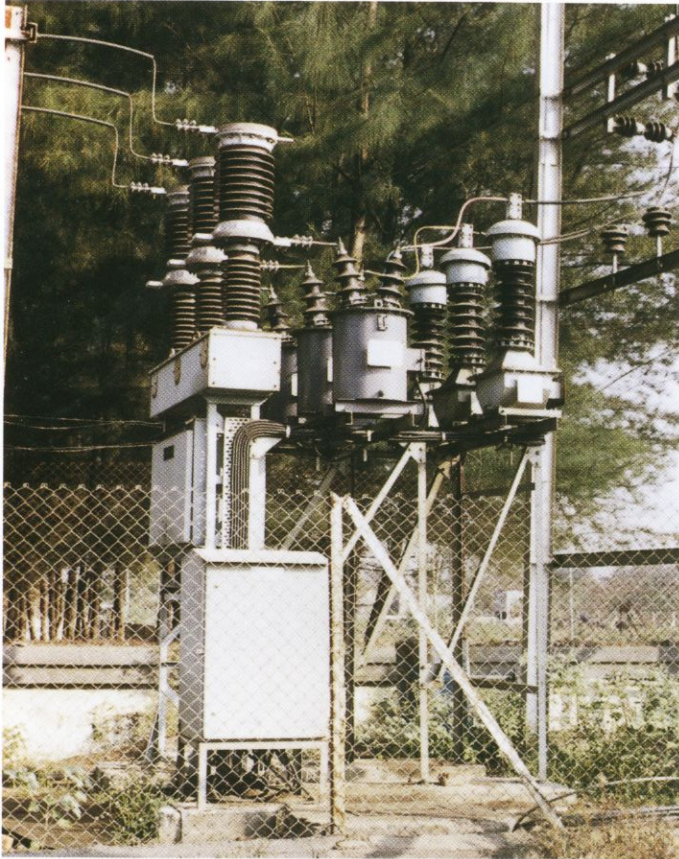
'Jyoti'
12/36 kV Outdoor
Porcelain Clad
Vacuum Circuit Breaker
(Type VK & VY)

12 kV - 800 A - 13.1kA
12 kV - 1250 A - 25kA
12 kV - 2000 A - 25kA
36 kV - 1250 A - 25 kA
36 kV - 2000 A - 25 kA



SALIENT FEATURES

- Type tested as per IEC/IS
- Conforms IP65/IP55 degree of protection
- No fire - hazards
- Suitable for Auto Reclosing duty



36 kV Outdoor Vacuum Circuit Breaker with CT & PT Structure

INTRODUCTION

'Jyoti' Outdoor Vacuum Circuit Breakers type 'VK' & 'VY' are Outdoor structures mounted with easy - to - install Vacuum Circuit Breaker type 'VK' for use in 12 kV system & type 'VY' for use in 36 kV system.

CONSTRUCTIONAL FEATURES

The Porcelain-clad Outdoor type Vacuum Circuit Breaker has a separate vertical pole column for each phase. Adequate phase clearances and height have been provided as per the standards to ensure safe operation.

The pole column consists of upper and lower

porcelain housings. The fixed contact of Vacuum Interrupter is connected with top terminal, while the moving contact is connected with lower terminal through flexible connector.

Special care has been taken in the mechanism cabinet to achieve easy access for the wiring and electrical inserts by providing swiwell type chassis to house all the electrical inserts.

Three pole bushing assemblies are mounted on a polebox structure, which, in turn, is supported on rigid angle structure.

Lower housing contains insulating rod suitable mechanically and electrically for 36 kV system. This rod connects the Vacuum Interrupter to Spring Operating Mechanism.

OPERATING MECHANISM

The Breaker is operated by Spring Operating Mechanism, type VK for 12 kV and VY for 36 kV, which is located below the polebox structure.

The spring can be charged electrically, by DC or AC, through rectifier by D.C. shunt PMDC motor and manually by charging handle.

The breaker gets charged immediately after the closing operation. This distinct feature enables the breaker to offer rapid auto reclosing duty. i.e. 0-0.3 Sec-CO-3 Min-CO. The charging time of the breaker is only 5 to 7 sec. so that the breaker can perform the special duty CO-15 Sec-CO.

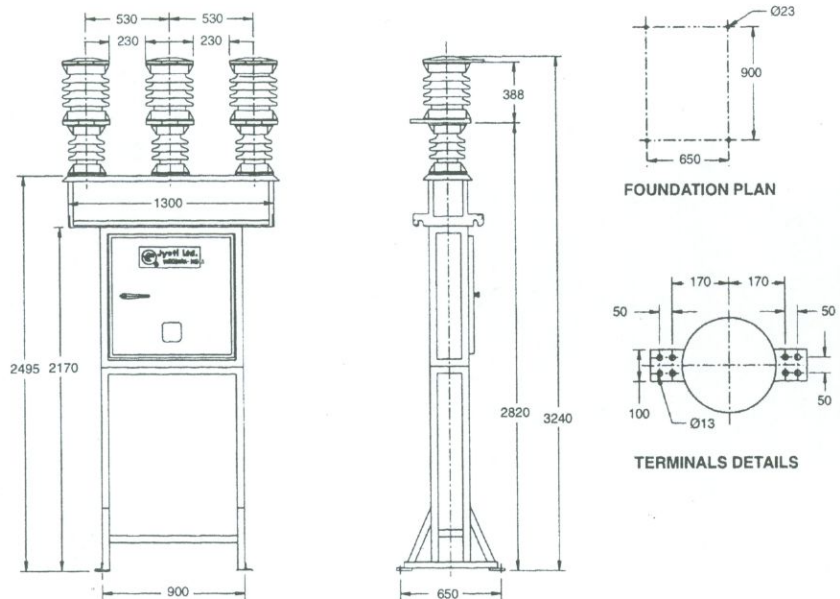
ACCESSORIES

Following accessories can be provided

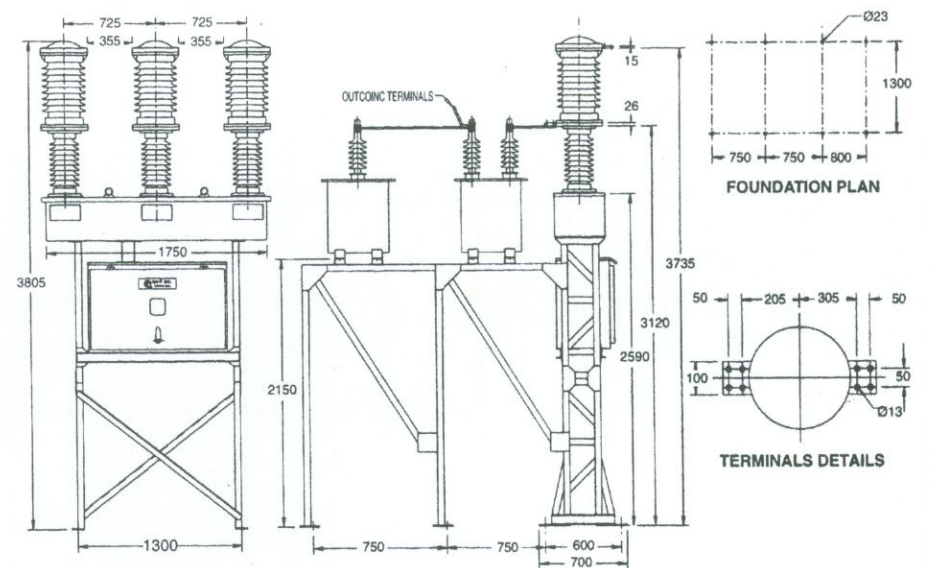
- Auxiliary Switch (7 NO + 7 NC)
- Closing Coil - 24,30,48,110,220V DC
- Tripping Coil - 24,30,48,110,220V DC

CURRENT TRANSFORMERS & POTENTIAL TRANSFORMERS

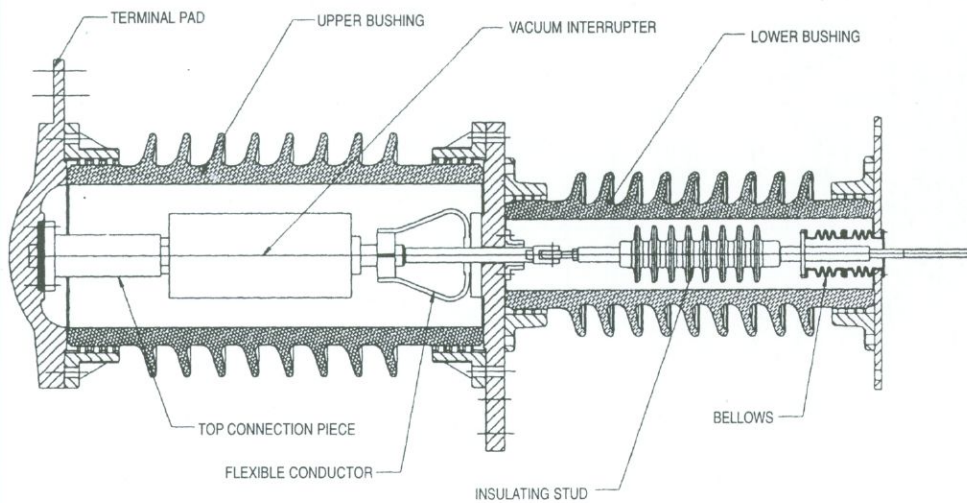
As required by the clients, the breaker can be supplied with extended structure for mounting Current and Potential Transformers.



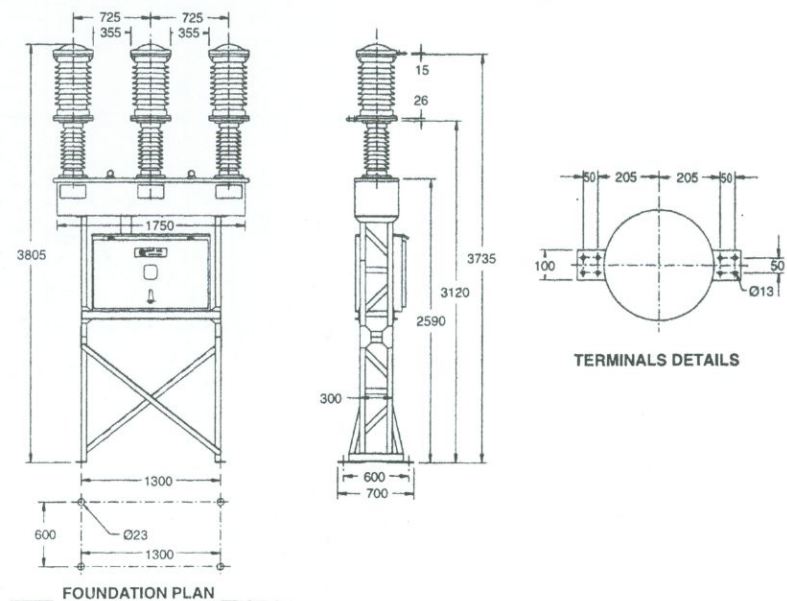
GENERAL ARRANGEMENT FOR 'JYOTI' 12kV OUTDOOR VCB
(TYPE : VK-10M25D)



GENERAL ARRANGEMENT FOR 'JYOTI' 36kV OUTDOOR VCB WITH CT & PT
(TYPE : VY-30M25D & VY-30P25D)



SECTION VIEW OF POLE ASSEMBLY OF 'JYOTI' 36 kV OUTDOOR VCB



GENERAL ARRANGEMENT FOR 'JYOTI' 36kV OUTDOOR VACUUM CIRCUIT BREAKER
(TYPE : VY-30M25D & VY-30P25D)

'JYOTI' OUTDOOR VACUUM CIRCUIT BREAKER - SPECIFICATIONS

Type	VY		VK		
	30M25D	30P25D	10M13D	10M25D	10P25D
Operating Method	Manual / Motor Spring Charge Type		Manual / Motor Spring Charge Type		
Rated Voltage (kV)	36	36	12	12	12
Interrupting Current (kA)	25	25	13.1	25	25
Rated Normal Current (A)	1250	2000	800	1250	2000
Rated Frequency (Hz)	50	50	50	50	50
Making Current (kAp)	63	63	33	63	63
Short Time Current (kA) Rating For 3 Sec.	25	25	13.1	25	25
Max. Interrupting time (Cycles)	3.5	3.5	3.5	3.5	3.5
Max. Opening Time (Cycles)	2.5	2.5	2.5	2.5	2.5
Max. Closing Time (Cycles)	2.5	2.5	2.5	2.5	2.5
Insulation Level					
Impulse kVp	170	170	75	75	75
Power Frequency Withstand Voltage (kVrms/1 Min)	70	70	28	28	28
Normal Operating Duty	O-3'-CO-3'CO		O-3'-CO-3'CO		
Rapid Reclosing duty	O-0.3Sec.-CO-3'-CO		O-0.3Sec.-CO-3'-CO		
Closing Coil Voltage (VDC)	24/30/48/110/220		24/30/48/110/220		
Wattage (W) (Approx.)	450	450	450	450	450
Trip Coil Voltage (VDC)	24/30/48/110/220	24/30/48/110/220	24/30/48/110/220	24/30/48/110/220	24/30/48/110/220
Wattage (W) (Approx.)	450	450	450	450	450
Charging Motor					
Voltage (VDC)	48/110/220	48/110/220	48/110/220	48/110/220	48/110/220
Wattage (W) (Approx.)	350	350	350	350	350
Weight (kg) (Approx.)	800	800	450	450	450



FOR FURTHER ENQUIRIES
PLEASE CONTACT

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