

Pole mount SF₆ gas insulated load break switch for power distribution system thru 15kV, 27kV, 38kV



General features

Pole mounted SF₆ load break switches are designed to meet growing requirements for reliability.

Switches filled with SF₆ gas as the insulating and arc quenching medium with puffing principle in make and break ensure the positive breaking of small inductive, mainly active load current, cable charging current, magnetizing current etc and manufactured under a quality system conforming to ISO 9001.

Manual and motor operation

The basic mechanism is operator independent quick close and quick open spring toggle mechanism.

The motor operating mechanism is developed to meet the feeder automation in addition to the manual switch. The motor driven shaft is connected to the manual operating lever through cam with spool so that the manual operating handle is free to operate regardless of the position of the motor driven mechanism.

Stainless steel enclosure and safety devices

The switch enclosure is made of stainless steel plate(STS304L) and filled with SF₆ gas pressure 2kg/cm².G for maintenance free. The low pressure locking device operating at the level of the pressure 0.3-0.7kg/cm².G and pressure relief device operating at the level of the bursting pressure 4.0-6.0kg/cm².G are guaranteed for safety operation.

Porcelain and polymeric bushing.

The porcelain and the polymeric bushing have long creepage distance.

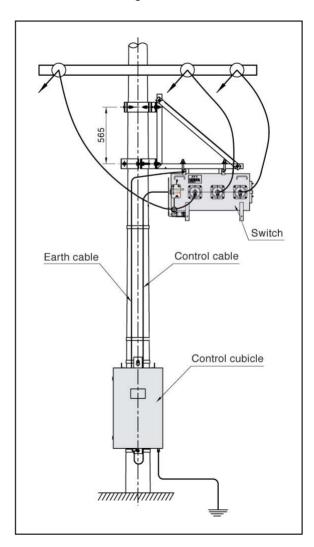
The high voltage terminal is provided with the NEMA terminal or the molded cone type lead which has high dielectric strength even under heavily polluted conditions.

Microprocessor based controller

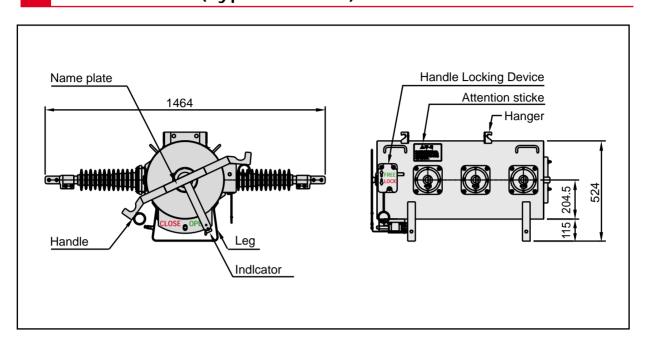
Microprocessor based control cubicle for feeder automation is designed for outdoor pole mounting on an separate external panel and is normally mounted low on the pole for ease of access.

The basic control cubicle is provided with detection of phase and earth faults sensing from current sensing elements and checks the live and dead line status from the voltage sensing element.

The details of the fault and event log can be stored and transmitted over the SCADA or remote control through modem.



Construction (Type : ETGA6)



Electrical ratings

(Rated maximum) Voltage	kV	15	27	38
Rated Load current	А	400/630	400/630	400/630
Closed loop breaking current	А	400/630	400/630	400/630
Cable charging breaking current	А	25	25	20
Rated Load breaking capacity	No.	200/400	200/400	200/400
Rated Short time withstand current . 3sec	kA rms	16/20	16/20	16/20
Rated Short-circuit making current	kA peak	40/50	40/50	40/50
Impulse withstand voltage(1.2 \times 50 μ s)				
- To earth and between phases	kV	95	125/150	150/170
- Across disconnector	kV	110	145/165	165/195
Power frequency withstand voltage, dry				
- To earth and between phases	kV	38	50	70
- Across disconnector	kV	45	60	60

^{*} Other ratings is available upon request.

