

## TECHNICAL DETAILS

Breaker type VS12 is a 3 phase, outdoor, porcelain clad vacuum circuit breaker. It is designed to have provisions for double trip and series trip coil. The standard breaker is provided with 8NO+8NC auxiliary contacts (additional contacts can be provided as required). The breaker is routine tested for soundness of execution by applying 200 open/trip operations, which is over and above the IS 13118 specifications. The VCB is rated for a maximum current, voltage and breaking capacity of 1600A, 11kV and 26.3kA respectively. Easy maintenance and high reliability adds advantage to this VCB.

The important features of this breaker are:

- A Sturdy Compact, maintenance free Mechanism design suitable for 100000 (one hundred thousand) Operations.
- Reciprocating Bar operates all 3 phase drives instead of the usual Rotating Shaft and independent support under all the 3 Interrupters eliminates Pole discrepancy
- Visible Snatch Gap to determine Contact Erosion
- Sleek and Compact look.
- Large Creepage over the Operating Rod.
- Silent Spring Charging Operation.
- Easy Accessibility for Servicing

## 11 KV OUTDOOR PCVCB TYPE VS12

### CONSTRUCTION DETAILS

The breaker is normally supplied in two parts. The upper part consists of pole and operating mechanism and the lower part is a fabricated structure to give required ground clearance for live parts. The three phase poles of the breaker are mounted on a strong Box steel frame, under which is mounted an operating mechanism. These phase poles contain a vacuum interrupter, housed within porcelain housing and immediately below the contact compression spring, the whole of this assembly is connected to a linear drive flat by an insulated rod. The drive flat is driven by the stored energy of the spring charged mechanism. The operating mechanism, besides the manual and emergency trip operation facilities, also has solenoid coils for remote operations through protective relays. Two mechanically driven flags are provided for showing the operating status of the breaker (i.e. ON/OFF), and the status of the closing springs (i.e. Free/charged).

## TECHNICAL DATA

Type reference	VS12
Applicable standard	IEC 62271-100/IS 13118
Rated voltage	11kV
Rated normal current	1600A
Operating Sequence	O-0.3SEC-CO-3MIN-CO
Rated power Freq. withstand (kV)	28kV
Rated impulse withstand voltage (kVp)	75 peak
Rated short circuit current	26.3kA
Rated closing/tripping voltage	24/30/48/110/220V-DC

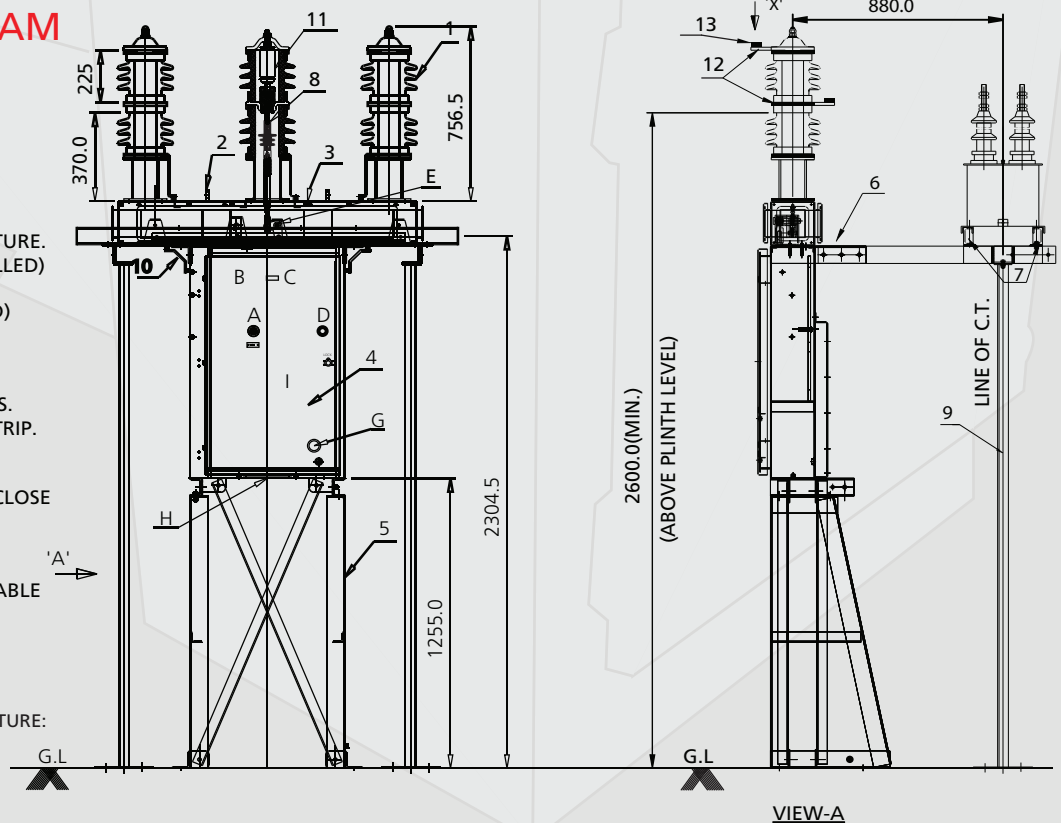
## OUTLINE DIAGRAM

### LEGEND

1. POLE ASSY.
2. LIFTING LUG
3. CHASSIS (2.5MM THK)
4. MECHANISM BOX (2.5MM THK)
5. SUPPORTING STRUCTURE
6. ANCHOR FOR CT SUPPORT STRUCTURE.
7. CT MOUNTING CHANNEL (UN DRILLED)
8. DRIVE TUBE (EPOXY)
9. CT MOUNTING CHANNEL (DRILLED)
10. EARTH LINK
11. VACUUM INTERRUPTER
12. ALUMINI
13. TERMINAL CONNECTOR UM PADS.
- A. MANUAL PUSH BUTTON FOR TRIP.
- B. COUNTER
- C. SPRING CHARGE INDICATOR.
- D. MANUAL PUSH BUTTON FOR CLOSE
- E. ON/OFF INDICATION
- F. LOCAL/REMOTE SWITCH
- G. ON/OFF PUSH BUTTON
- H. GLAND PLATE OF CONTROL CABLE
- I. MANUAL CHARGING (INSIDE)

### NOTE:

1. ALL DIMENSIONS ARE IN mm.
2. WEIGHT OF VCB ASSY WITH STRUCTURE: 450KG(APPROX)



## ON LOAD GEARS

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