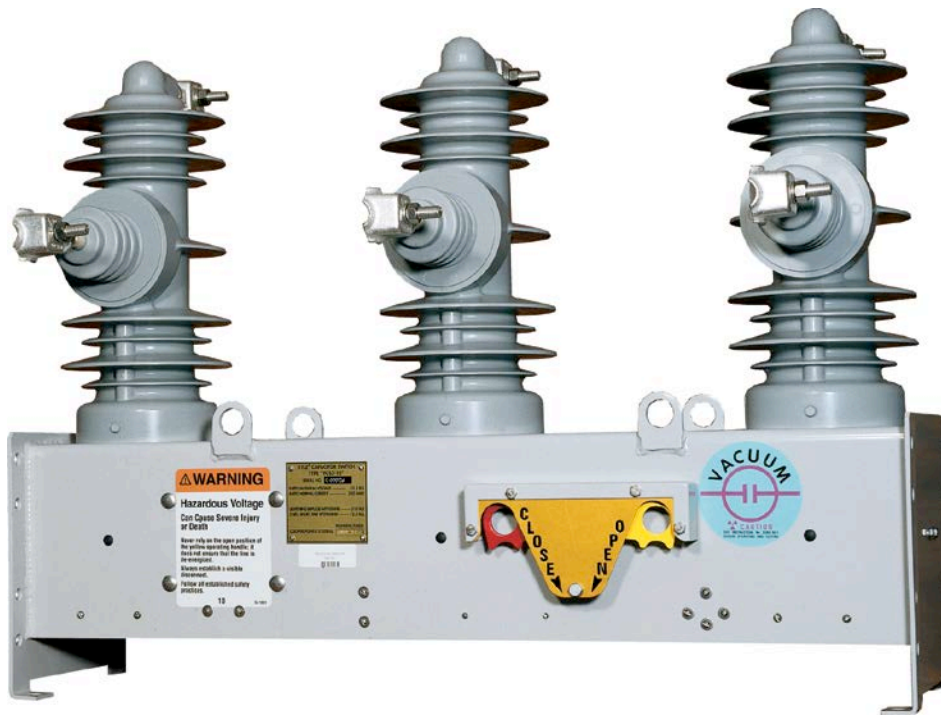


VCS-3 vacuum capacitor switch



Design features and benefits

- SF₆-free
- Oil-free
- Maintenance-free
- Environmentally safer
- Cycloaliphatic encapsulated vacuum interrupters
- Three-phase operation
- 15.5 kV and 29.2 kV, 400 A capacitive switching
- ANSI C37.66 rated and certified

Description

The Cooper Power™ series VCS-3 vacuum capacitor switch is another in the complete line of capacitor switches from Eaton. The VCS-3 is a three-phase switch combining the proven NOVA™ solid insulation system with technologically advanced vacuum interrupters and an efficient magnetic actuator operating mechanism.

Operation

Reliable operation of the mechanism is assured by use of a magnetic actuator. Magnetic force provides faster, more efficient latching action than mechanical force. Magnetic latching utilizes fewer moving parts, resulting in less wear on mechanical components and yields latching force in excess of 300 pounds (136 kilograms), eliminating the need for closing/opening springs and mechanical latches.

The lightweight VCS-3 switch is SF₆ gas-free, oil-free and maintenance-free, utilizing Eaton's environmentally friendly NOVA solid insulation system.

The switch is equipped with operating handles for manual close and open abilities, ensuring operational capabilities should control power be lost. And, to further simplify your VCS-3 application, the power required to operate the magnetic actuator is substantially less than solenoid-operated switches—just 25 W (150 W peak).

Capacitor bank switching

The versatile VCS-3 switch is designed for a wide range of inductive current and capacitive current switching applications. A variety of options and accessories makes applying the VCS-3 in capacitor switching applications easy.

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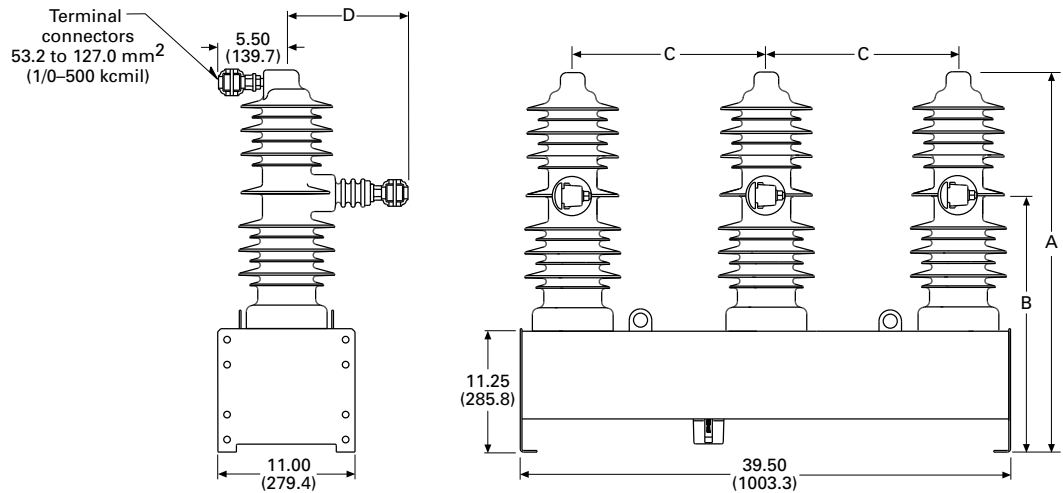
Powering Business Worldwide

Ratings

Description	15 kV	27 kV
Maximum voltage	15.5 kV	29.2 kV
Nominal voltage	14.4 kV	24.9 kV
Rated Basic Impulse Level (BIL)	110 kV	125 kV
Radio noise limit	100 µV at 9.4 kV	100 µV at 17.7 kV
60 Hz withstand		
Dry, 1 minute	50.0 kV	60.0 kV
Wet, 10 seconds	45.0 kV	50.0 kV
Rated continuous current	400 A	400 A
Rated capacitive switching capability	400 A	400 A
Rated load-break capability, 10% to 100% power factor	400 A	400 A
Rated asymmetrical making current, peak	31 kA	31 kA
Rated symmetrical making current, rms	20 kA	20 kA
Short-time currents		
0.5 second	13.5 kA	13.5 kA
2 seconds	13.0 kA	13.0 kA
3 seconds	12.5 kA	12.5 kA
Rated high frequency peak transient making current	20 kA 20 kA	
Rated transient inrush frequency	4000 Hz	4000 Hz
Creepage distance		
Terminal to terminal	28.25 in (717.6 mm)	28.25 in (717.6 mm)
Terminal to ground/earth	24.75 in (628.7 mm)	31.5 in (800.1 mm)
Mass/weight	155 lb (70 kg)	160 lb (73 kg)
Minimum mechanical open/close operations	10,000	10,000
Duty cycle	Per ANSI C37.66	Per ANSI C37.66

Dimensions in inches (mm)

	VCS-3-15	VCS-3-27
A	28.75 (730.3)	31.00 (787.4)
B	20.00 (508.0)	22.50 (571.5)
C	15.50 (393.7)	15.50 (393.7)
D	10.50 (266.7)	10.50 (266.7)



Note: All dimensions are inches (mm). Dimensions shown are approximate.

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