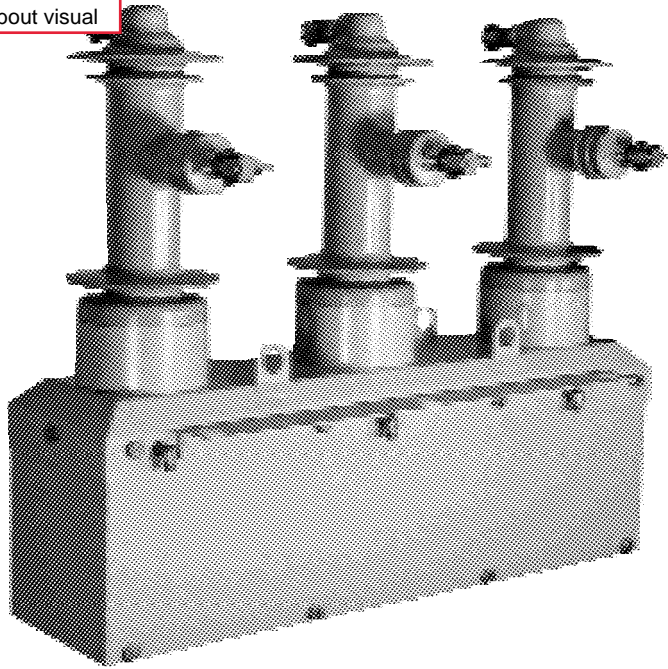


Kyle Type VCS-3 Vacuum Switch

Add note
about visual



- Oil Free
- Maintenance Free
- Environmentally Safe
- Solid Polymer encapsulated Vacuum Interrupters
- Three-Phase, 27 kV, 400A
- * Electrical or Manual (Open)
- Electrical (Close)
- ANSI C37.66-1969 Rated

VCS-3 Description

The Kyle Type VCS-3 Switch is a three-phase vacuum switch with an electrically-controlled low voltage operating mechanism. The mechanism provides for either manual or electrical tripping and electrical closing to ensure close and latch capability.

The VCS-3 vacuum switch is both oil-free and maintenance free.

The solid polymer insulation system does not rely on gaseous or liquid dielectrics. It is highly resistant to ozone, oxygen, moisture, contamination, and ultraviolet light. This results in an environmentally-safe switch for general purpose distribution automation and capacitor switching applications.

The VCS-3 vacuum switch is operable in any mounting orientation (vertical, horizontal, or inverted) and is suitable for operation within a temperature range of -40°C to +40°C.

VCS-3 Operation

The Kyle Type VCS-3 switch is a three-phase, electrically or manually operated vacuum switch for both inductive current and capacitive current switching to meet the requirements of a wide range of applications. This switch is operated by a magnetic actuator that requires an auxil-

iliary low-voltage power source for operation. Electrical operation provides convenient circuit switching by remote control, on command, or automatically through the use of current, voltage, or time-sensitive devices.

Capacitor Bank Switching

Change typeface to match other headings.

The Kyle Type VCS-3 switch is rated for capacitor bank switching application for distribution systems rated up to 24.9 kV. With a capacitive current switching rating of 400 amps and momentary and latching ratings of 16,000 asymmetrical amps, the Kyle Type VCS-3 can switch single-bank capacitors rated up to 18,000 KVAR. The switch also has an inductive continuous and loadbreaking rating of 400 amps with a two hour overload rating of 600 amps. The VCS-3 switch can also be manually operated by a single downward pull of the manual operating handle located under the sleet hood.

Load Transfer Schemes

With the addition of a factory-installed accessory, the VCS-3 switch can be used in load transfer schemes with a load transfer control.

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Distribution Automation switch

For automated distribution system switching or wherever remotely-commanded or manually-initiated current switching is required, the Kyle Type VCS-3 loadbrake switch can provide reliable switching functions at a minimum cost on distribution systems rated through 27 kV. Vacuum interruption and a solid polymer insulation system are employed for long contact life and virtually no maintenance.

The Kyle Type VCS-3 switch is designed to interface with the Cooper Power Systems Fault Targeting Switch Control or other manufacturers' SCADA switch controls. When equipped with the available CT accessory and an electronic control the switch can be operated and interrogated through a SCADA system for fault detection, isolation, and current reconfiguration.

Ratings and Specifications

Table 1.
Voltage ratings (kV).

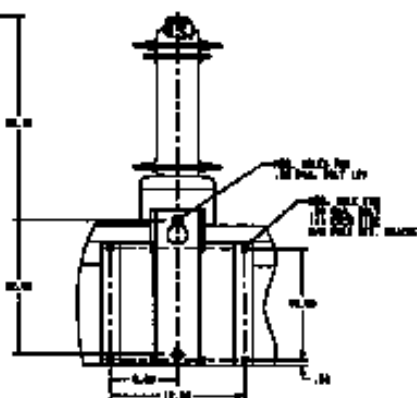
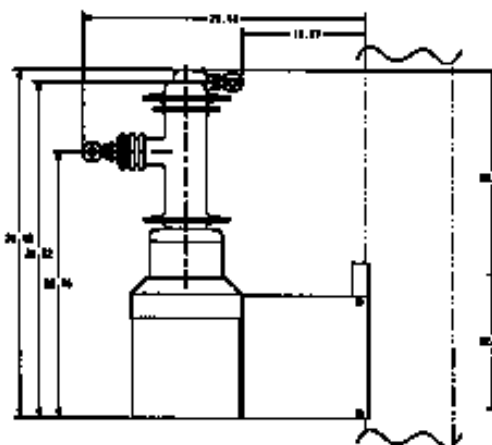
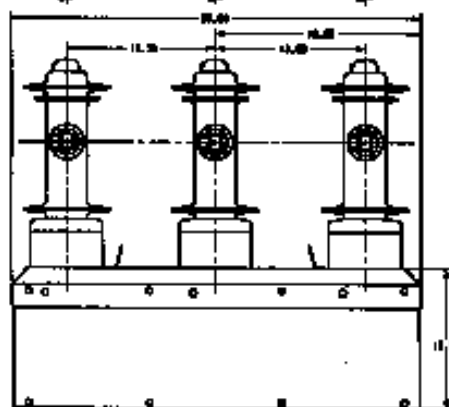
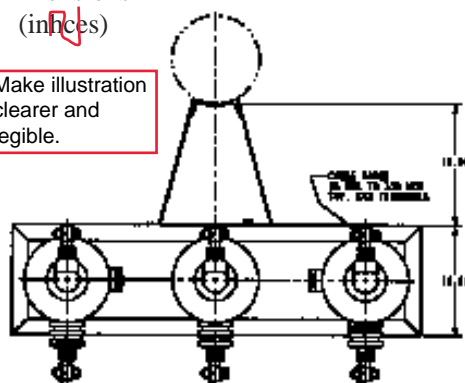
	15.0 kV	27.0 kV
Nominal Voltage	14.4 kV	24.9 kV
Maximum Voltage	15.0 kV	27.0 kV
Rated Basic Impulse Voltage	95.0 kV	125.0 kV
Radio Noise Limit @ 16.4 kV	100.0 μ V	
Radio Noise Limit @ 23.0 kV		100.0 μ V
60 Hz Withstand:		
Dry, 1 minute	35.0 kV	46.0 kV
Wet, 10 seconds	30.0 kV	40.0 kV

Table 2.
Current Ratings (Amperes).

Rated Continuous Current	400A
4 Hour Overload	500A
2 Hour overload	600A
Rated Load Interrupting Current	400A
Rated Capacitive Switching Current	400A
Rated Symmetrical Momentary	10kA
Rated Asymmetrical Momentary	16kA
Rated Symmetrical Making	10kA
Rated Asymmetrical Making	16kA
Rated Symmetrical Interrupting	4kA

Dimensions
(inches)

Make illustration
clearer and
legible.



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