

# VerSaVac™ Distribution Capacitor Switch



**New Models  
Available For 27.5kV  
Ungrounded and  
38kV Grounded  
Applications!**



**Longest Life of any distribution capacitor switch with  
50,000 Maintenance-Free Operations!**

*The Industry Leader in Capacitor Switching*

# Features/Benefits

The Joslyn VerSaVac is a completely sealed, long life vacuum switch that provides an operational life of over 100,000 (50,000 open/close) maintenance-free operations. This results in an operational life five times greater than other switches used for pole top capacitor switching. The VerSaVac was specifically designed as a replacement for maintenance intensive oil switches and can be used as a direct replacement on existing banks or supplied by capacitor manufacturers on new banks. Using the VerSaVac will result in substantial savings from reduced maintenance and maximized bank uptime, and will also improve Power Quality.

## NO OIL OR GAS

Vacuum interruption and solid dielectric "Joslyte" insulation around vacuum bottle. This material is non-hydroscopic and absorbs stresses from thermal expansion & shock, and has been field proven for over 35 years.

## COMPATIBILITY

VerSaVac switches are compatible with existing oil switch or vacuum switch installations.

## RELIABILITY

Proven design with over 100,000 worldwide installations and over 15 years of operational experience.

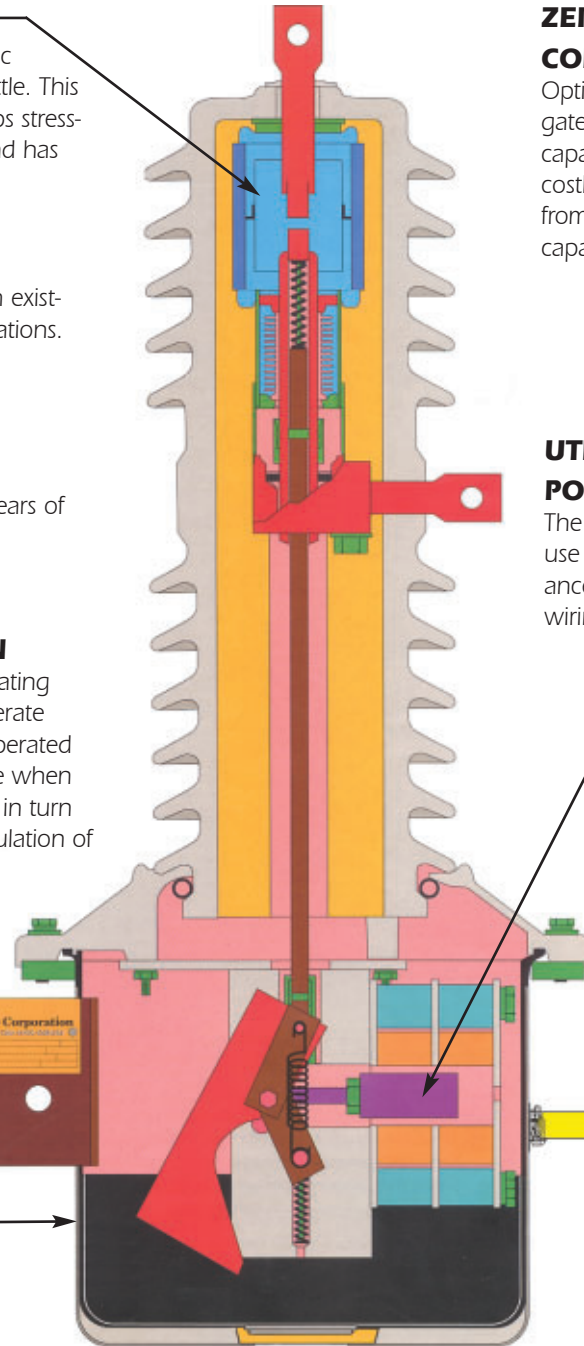
## SYNCHRONIZED OPERATION

The fast and repeatable solenoid operating mechanism ensures all phases will operate within 1/4 cycle, unlike slow motor operated devices, reducing the recovery voltage when the bank is being switched off, which in turn reduces the electrical stress on the insulation of the capacitor bank.

## EXCEEDS ELECTRICAL REQUIREMENTS OF ANSI C37.66

## BLADDER

Completely seals switch system.



## POSITION INDICATOR (Bottom View)

Highly visible reflective lettering indicates switch position.



## ZERO VOLTAGE CLOSING (ZVC) CONTROL

Optional Zero Voltage Closing control, mitigates transients associated with bringing capacitor banks online. Virtually eliminates costly customer equipment damage resulting from voltage spikes created when switching capacitor banks.\*

## UTILIZES EXISTING OIL SWITCH POWER SUPPLY & WIRING

The new low energy mechanism allows the use of standard supply transformer impedances and existing 14AWG oil switch wiring.\*\*

## LONG LIFE SOLENOID MECHANISM

Provides 100,000 operations (50,000 open/close)

## MANUAL TRIP LEVER (OPTIONAL)

Trip lever is NOT mechanically connected to the operating mechanism, eliminating wear during normal operation.

\*See I 750-239 Zero Voltage Closing Instructions Manual

\*\*See I 750-271 Single Phase VerSaVac Installation and Operating Procedure for complete details

# Ratings

Exceeds Electrical Requirements of ANSI C37.66

**Max. System Voltage** 15.5 kV Ungrounded or Grounded  
27.5 kV Ungrounded or Grounded  
38.0 kV Grounded Only

**Continuous Current** 200 Amperes

**AC Withstand** 50kV or 60kV

**BIL Line-to-Ground** 95kV, 125kV, or 150kV

**BIL Open Gap** 95kV or 125kV

**Asymmetrical Momentary/Making Current** 9kA Asymmetrical RMS

**Peak Inrush Current Limit for Parallel**

**or Back-to-Back Switching Applications)** 6kA

**Control Voltage** 120 VAC (240 VAC available)

**Recommended Control Pulse Time** 100ms

**Auxiliary Contact Rating** 15A 120VAC, 0.5A 125VDC

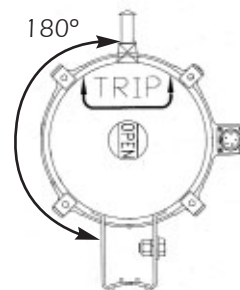
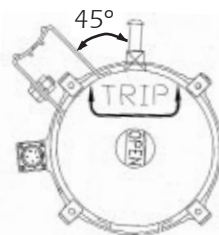
**Creepage Distance** 95kV BIL - 12 5/8"

125kV BIL - 17 3/16"

150kV BIL - 19 1/16"

Note: 150kV Line-to-ground BIL available in all models. See factory if not listed.

## OPTIONAL TRIP LEVER LOCATIONS



# Ordering Information

## GROUNDING SYSTEMS

Max System Voltage (KV)	Line-to-ground/ Open -gap BIL	Auxiliary Contacts	No. of Pins in Connector	Trip Lever Location	Part Number
15.5	95/95	1 (B)	5	N/A	3148X0302G1
15.5	95/95	1 (A)	5	N/A	3148X0302G2
15.5	95/95	2 (1A 1B)	6	N/A	3148X0302G3
15.5	95/95	1 (B)	5	45°	3148X0636G1
15.5	95/95	2 (1A 1B)	6	45°	3148X0636G3
15.5	95/95	1 (B)	5	180°	3148X0637G1
15.5	95/95	2 (1A 1B)	6	180°	3148X0637G3
22.5	125/125	1 (B)	5	45°	3148B1060G1
22.5	125/125	1 (B)	5	180°	3148B1061G1
25	125/95	1 (B)	5	N/A	3148X0302G13
25	125/95	1 (A)	5	N/A	3148X0302G26
25	125/95	2 (1A 1B)	6	N/A	3148X0302G24
25	125/95	1 (B)	5	45°	3148X0636G13
25	125/95	1 (B)	5	180°	3148X0637G13
25	125/95	2 (1A 1B)	6	180°	3148X0637G22
38	125/125	1 (B)	5	N/A	3148B0947G1
38	125/125	1 (B)	5	45°	3148B1060G1
38	125/125	1 (B)	5	180°	3148B1061G1
38	150/125	1 (B)	5	45°	3148B1060G2
38	150/125	1 (B)	5	180°	3148B1061G2
38	150/125	1 (B)	5	N/A	3148B0947G5

## UNGROUNDING SYSTEMS

Max System Voltage (KV)	Line-to-ground/ Open-gap BIL	Auxiliary Contacts	No. of Pins in Connector	Trip Lever Location	Part Number
12.47	95/95	1 (B)	5	45°	3148X0636G1
12.47	95/95	2 (1A 1B)	6	45°	3148X0636G3
12.47	95/95	1 (B)	5	180°	3148X0637G1
12.47	95/95	2 (1A 1B)	6	180°	3148X0637G3
15.5	95/95	1 (B)	5	N/A	3148X0302G1
15.5	95/95	1 (A)	5	N/A	3148X0302G2
15.5	95/95	2 (1A 1B)	6	N/A	3148X0302G3
22.5	125/125	1 (B)	5	45°	3148B1060G1
22.5	125/125	1 (B)	5	180°	3148B1061G1
27.5	125/125	1 (B)	5	N/A	3148B0947G1

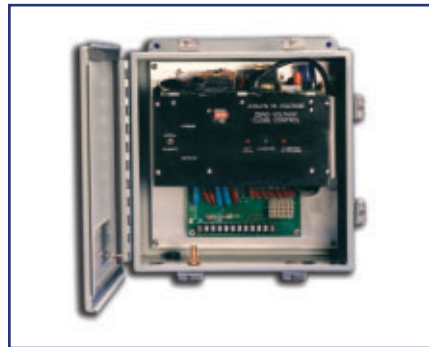
# Accessories

Junction Boxes, Cable Assemblies, Current Sensors, Mating Connectors, Animal Protectors (2 per switch)  
Under Voltage Trip Control

# Capacitor Controls

## **ZERO VOLTAGE CLOSING CONTROL**

Improves power quality and capacitor life by eliminating capacitor closing transients. Closes three poles independently synchronized with zero voltage in each phase to eliminate overvoltages and reduce inrush current.



## **FISHER PIERCE AUTOCAP 4400**

Microprocessor based control featuring Adaptive functions which can allow the unit to program itself. Programmable control modes include Var, current, voltage, time and temperature, as well as override and protective functions. Windows based application software is included.

## **FISHER PIERCE AUTOCAP 4500**

Microprocessor based control including all features of the Series 4400 with data radios for two-way communications. A dedicated communications microprocessor and flash memory allow the use of data radios cellular, and modem communication technologies. The result is a powerful tool for discrete feeder management, data gathering, trouble shooting, system evaluation analysis.



## **FISHER PIERCE TWO & THREE STEP**

Multi-step controllers are intended for use with multiple capacitor racks found in substation applications. The controls can be purchased in Var, voltage, or line current configurations. The control operates the first step which activates the following steps after a fixed time delay. Proper sequencing on capacitors is ensured.



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