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# IE270VB

# 27kV CIRCUIT BREAKERS WITH VISUAL DISCONNECT SWITCHES P/N 1040-0010 & 1040-0011



# **IE270VB**

The IE270VB breakers combine a specially designed Intermountain Electronics Visual Disconnect Switch (VDS), with an industry standard Vacuum Circuit Breaker (VCB) integrated into a single compact unit rated for 27 kV operation at 600A.

The VDS can be opened or closed using an ergonomically designed operating lever on the front panel. When this lever is placed in the fully open position, all three phases (load side) are securely grounded, and a mechanical interlock ensures the VCB remains open. The VDS provides front panel indicators and auxiliary contacts that actuate when the switch is fully open or fully closed.

The VCB provides front panel controls and indicators to control the VCB. Connections are also available for controlling and monitoring the VCB remotely, as well as ten sets of auxiliary contacts (five NC, five NO).

The IE270VB is available with or without a Under-Voltage Relay (UVR).



Front View



**Rear Connections** 



**Control Panel** 



Control Module / Control Circuits (Front Panel Removed)

## **Key Specifications**

**VCB Ratings: VCB/VDS Control Circuits:** 

Continuous Current: VCB Aux Contacts, Rated Load: A008

27 kV (60Hz) 30VDC: 5A Resistive, 3A Inductive Voltaae: Momentary Current (1s): 16kA 125V/250VAC: 5A Resistive, 5A Inductive

Impulse Withstand (BIL): 125kV BIL VDS Aux Contacts, Rated Load:

Interrupt Rating (VCB): 16kA 30VDS: 3A, 1.5A Inductive 250VAC: 3A, 0.8A Inductive

#### Notes:

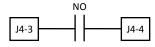
- Interrupt rating is for VCB. The VDS is a non-load break switch, and is interlocked with the VCB to ensure that it does not interrupt current.
- Some electrical ratings must be derated in certain environmental conditions. See manual for further information.

Overall Weight: 420 lbs. / 191 kg

# **Interconnect Diagram**

#### **VDS Connections:**

#### VDS AUX 1: (Detects VDS Fully Closed)

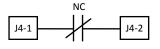


(These signals also available on Expansion Module if installed)

Note: If control power is not present, these contacts will be:

CLOSE D	Model IE270VB-000
OPEN	Model IE270VB-000

#### VDS AUX 2: (Detects VDS Fully Open)

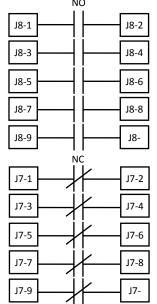


(These signals also available on Expansion Module if installed)

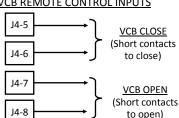
Note: If control power is not present, these contacts will be OPEN.

#### VCB Connec-

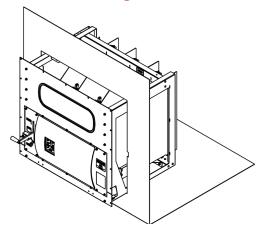
#### VCB AUXILIARY CONTACTS:



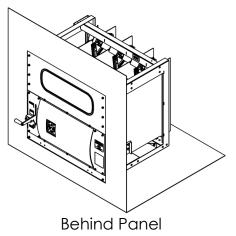
#### VCB REMOTE CONTROL INPUTS



# **Mounting Methods**

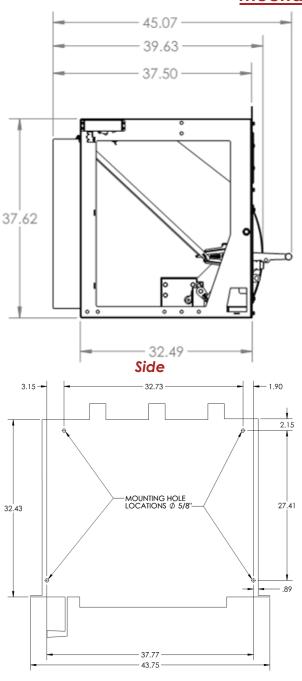


In Front of Panel

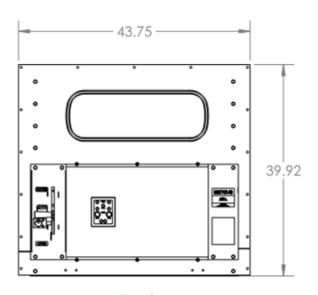


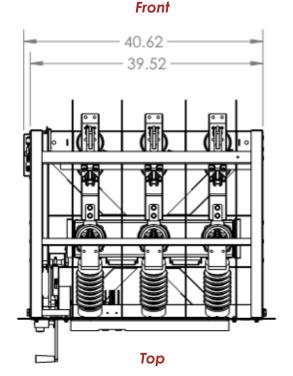


### **Mechanical Characteristics**



**Mounting Holes** 





#### **Important Notice**

This document contains information intended to aid in the proper installation and operation of the product described. Although this information will prove useful to the properly trained and qualified user, it is not practical to cover every possible situation, installation contingency, or other detail.

It is imperative that proper engineering and techniques are adhered to in the installation, operation, and maintenance of this product. It is the responsibility of the user to ensure that any system utilizing this product is safe, and that all personnel involved with the selection, installation, maintenance, and use of this product are properly qualified. This product must not be used in situations where its ratings are exceeded.

While every effort has been made to make sure the information in this document is accurate, IE cannot guarantee that there are no errors. Users of this product should verify any aspects of the product's design or performance that are critical to their application, and in particular, any aspects that may affect the safety of the overall system or installation.

Product design and specifications may change without notice.

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