

Medium Voltage Indicator

Product Data Sheet

Catalog Number
R-1VH003 / R-1VL003

(part number contains 3 units)

Voltage Indicator



Rated 2KV to 43KV*
Flash Rate Optimized for Voltage Range:

R-1VL003 2KV to 15KV (Low)*
(contains 3 units)

R-1VH003 15KV to 43KV (High)*
(contains 3 units)

*2KV=2,000 volts; 15KV=15,000 volts; 43KV=43,000 volts

Features:

- ▶ Qty. (3) Long Life LED's per Unit
- ▶ 2KV to 43KV Operating Range
- ▶ 1/2" bolt mounting
- ▶ Viewing Angle Adjustability

Application:

- ▶ Medium Voltage Starters
- ▶ Switchgear
- ▶ Power Distribution Systems

Specifications

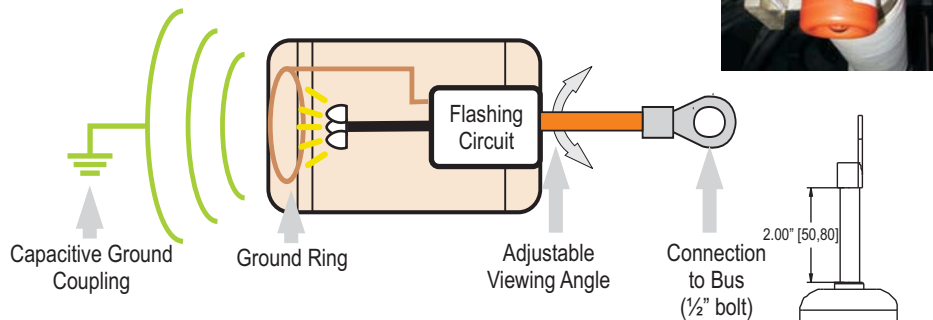
Apply Voltage AC (rms)	2~43KV
Max Voltage AC (rms)	43KV
LED Color	Red
Power consumption	<0.01 W
Approx. Weight	0.6 lbs
Operating temperature	-20~80 C°

Disclaimer: It is recommended that an installed R-1VH or R-1VL flashes more than 20 times per minute. If the flash rate is less than 20 times per minute, do not use this product in this application. Voltage indicators are a supplement, not a substitute, for establishing electrically safe work conditions when working on potentially live electrical conductors as per NFPA 70E 120.1(1) to (6). Employers must also provide written LOTO procedures and the corresponding training that properly incorporates voltage indicators into their safety programs [NFPA 70E 120.2(C)(2) and 110.6(D)(4)(e)].

Warning: Verify an electrical conductor has been de-energized using an adequately rated voltage detector before working on it. Follow appropriate Energy Control (Lockout/Tagout) procedures as per OSHA Subpart S; the current edition of NFPA 70E; and the current edition of CSA Z462.

Electrical safety demands the answer to one question: *Is there voltage?* The R-1VH / R-1VL Medium Voltage Indicator mounts to a medium voltage bus and flashes when voltage is present on the bus. This product is designed to provide sufficient illumination to be easily seen through IR or viewing windows on a medium voltage starter, transformers, switchgear and other power distribution equipment.

The R-1VH / R-1VL is built for long life and reliability with solid-state LED's and flame-rated material. Because the R-1VH / R-1VL capacitively couples to ground, it provides high surge immunity and has electrical-installation integrity.



Capacitive coupling between the R-1VH / R-1VL and earth ground provides a means of completing the flashing circuit without a hardwired ground connection. This allows for enough energy to flash the LEDs.

The amount of energy transferred to a medium voltage indicator through capacitive coupling varies, and therefore determines its flash rate and intensity. The key factors include the line voltage, the distance between the adjoining phases, and the size, and distance of the ground plane (enclosure or other). For this reason, flash rates are not stated in this datasheet.

Alerting workers to voltage requires the voltage indicator to flash at least once every 3 seconds (20 per minute). A slower flash rate is not an effective warning for workers. Because of this, the R-1VH flash rate is optimized for applications on voltages between 15KV and 43KV. Likewise, the R-1VL works better between 2KV and 15KV.

