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# I.S. SUPPLY SWITCH

P/N's - RWREL27V4A\_110, RWREL27V4A\_24
[Ex ia] | IIC | IIC - | IECEx TSA 12.0002X

## RELAY SWITCH FOR REDUNDANT I.S. POWER SUPPLIES

# **DESCRIPTION:**

The Ringway Relay Switch for Backup I.S. Power Supplies (RWREL27V4A) enables safe live-line changeover between one of two possible I.S. power supplies to field equipment in the hazardous area. The relay switch achieves this by ensuring that the necessary isolation between the two power supplies is maintained at all times even under fault conditions as required by the Intrinsic Safety concept. The Relay Switch meets category 'ia' requirements and is certified for Groups I, IIC and IIIC applications. The Relay Switch is conveniently housed in a foot-mounted enclosure with nominal dimensions 135(L) x 77(W) x 70(D) mm. The unit must be housed in an IP54 min. rated metal enclosure that meets requirements of IEC 60079.0. Connection to the Relay switch is via pluggable Phoenix terminals which makes for easy swap-out or testing of connections.

#### **FEATURES:**

- Safe live-line changeover of power supplies to hazardous area
- 110VAC and 24VDC supply options available
- Certified for Groups I, IIC and IIIC applications
- Can switch supplies up to 27.5V (Uo), 4A (Io)
- Convenient foot mounted enclosure suitable for G-rail or hat-rail
- Power and fuse health LED indication

#### **APPLICATIONS:**

The RWREL27V4A is suitable for any application where critical equipment in the Hazardous Area requires a redundant standby power supply to be switched-in quickly when primary power supply fails or for any other reason. The 'Backup Supply' input switches the 'Field I.S. Output' source from 'Primary' to 'Backup'. The input is designed for either 110VAC (RWREL27V4A\_110) or 24VDC (RWREL27V4A\_24) and will typically be wired in parallel with the input of the backup I.S. power supply (see Figure below for a typical 110V version installation).

## **BRIEF TECHNICAL SPECIFICATIONS:**

Power Supply Switching input: 110VAC or 24VDC

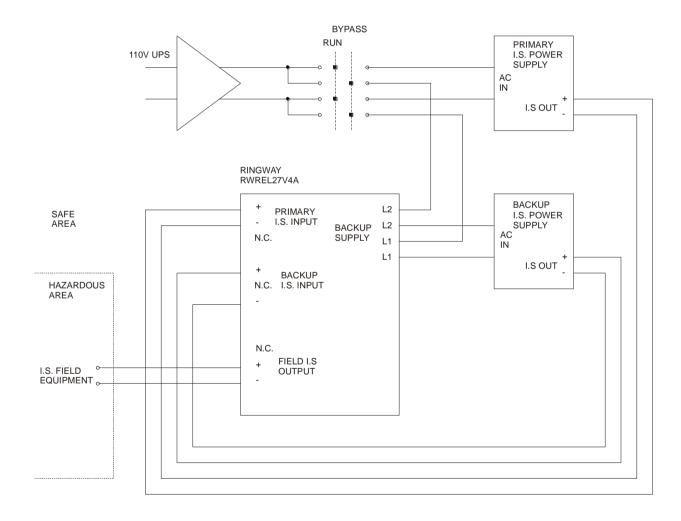
Output: 'Primary' or 'Backup' I.S. input

**Inputs:** 27.5V (Ui), 4A (Ii)

Operating/Release Time<sup>1</sup>: 20ms max.

**Dimensions<sup>2</sup>:**  $135(L) \times 77(W) \times 70(D) \text{ mm}$ 

Certification: IECEx TSA 12.0002X



**Typical Terminations** 

<sup>&</sup>lt;sup>1</sup> Contact bounce time not included.

<sup>&</sup>lt;sup>2</sup> The length axis (L) will run parallel to the rail mounting i.e. horizontal.