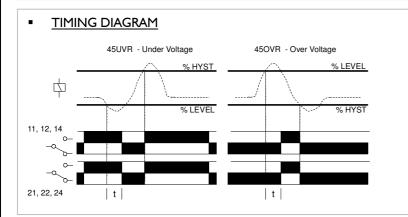
Type: 45 UVR & 45 OVR

Voltage Relay

The unit is designed to monitor the voltage of its own supply (single phase) for an under voltage condition (45UVR) or an over voltage condition (45OVR). Generally used in monitoring mains power supplies for supply failure, over voltage or under voltage. The relay changes state (de-energises on 45UVR/energises on 45OVR) when supply voltage deviates outside the user set limits and returns to its original state (re-energises on 45UVR/de-energises on 45OVR) when it is within the set limits. A green LED indicates the supply is present whilst a red LED indicates the relay is energised.





INSTALLATION AND SETTING

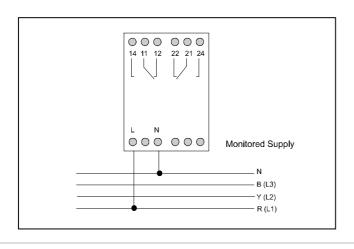
BEFORE INSTALLATION, ISOLATE THE SUPPLY. Connect the supply as shown in diagram below. Apply power and the green 'supply on' LED should illuminate.

45UVR: The red **'relay'** LED should illuminate and the relay energise if the voltage is above the set **'% level'**

45OVR: The red **'relay'** LED should remain extinguished and the relay de-energised if the voltage is below the set **'% level'**

If on either unit the green LED illuminates but the red LED and relay indicate a fault, then check all connections and the voltage present Set the '% level' and the '% hyst' adjustments as required.

CONNECTION DIAGRAM



TECHNICAL SPECIFICATION

Supply/Monitored

Voltage Un: 110, 230V AC 45 - 65Hz

(Galvanic isolation by transformer)

Supply Variation: 75 - 125% of Un

Isolation: Over voltage cat. III (IEC 664)
Overload: I.5 x Un continuous

1.5 x Un continuous 2 x Un for 3 seconds

Power

Consumption: 3VA @ Un

Trip Level: 75 - 100% Under Voltage (45UVR)

100 - 125% Over Voltage (45OVR)

Hysteresis: I to 15% (user adjustable)
Repeat Accuracy: ± 0.5% at constant conditions
Reaction Time (t): ≈ 200mS (see Options I & 2)

Ambient

Temperature: -20 to +60°C Relative Humidity: +95%

Contact Rating: DPDT

AC I 250V AC 8A (2000VA) AC 15 250V AC 3A DC I 25V DC 8A (200W) Minimum 150,000 ops at rated load Orange flame retardant UL94 VO

Housing: Orange flame Weight: 300g approx.

Mounting Option: Onto 35mm symmetric DIN rail

to BS5584:1978

(EN50 002, DIN 46277-3)

Terminal

Electrical Life:

Conductor Size: Max 2 x 1.5mm² stranded (terminated)

Max 2 x 2.5mm² solid

Approvals: Conforms to: UL, CUL, CSA, IEC.

€ Compliant

OPTIONS

- I. The above units can be supplied with an internally set time delay which prevents the relay from changing state immediately the supply voltage passes the trip point. The delay (ranging from I to I0 seconds) should be specified, prior to ordering.
- 2. Where it is necessary for the user to set the time delay, the unit can be supplied with the hysteresis adjustment replaced with a time delay adjustment. On these units, the delay is adjustable from 0.2 to 10 seconds. The hysteresis is then factory set to 1%.