Type: 45050

Voltage Relay

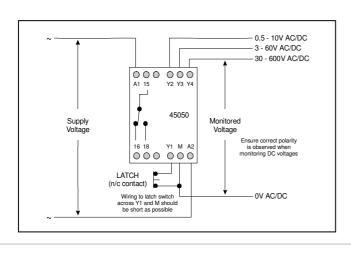
The unit is designed to monitor the voltage of an AC or DC supply. When the level of the voltage being monitored reaches the adjustable trip level set on the front of the unit, the relay changes state after the adjustable delay. If the monitored voltage falls below the set level minus the hysteresis, the relay changes state instantly. If terminals YI and M are linked together, and the voltage exceeds the trip level, the relay will remain latched until the link or the supply is removed.



INSTALLATION AND SETTING

BEFORE INSTALLATION, ISOLATE THE SUPPLY. Connect the supply as shown in the diagram below. Connect the monitored input across 'M' and 'Y2', 'Y3', or 'Y4' depending on the required range. Apply power and the green 'supply on' led will illuminate and provided the voltage is below the set trip level, the relay will be de-energised (red 'relay' led extinguished) if the switch is in the 'N' (normal) position or energised (red 'relay' led illuminated) in the 'I' position. If this does not occur, check the wiring to the unit. Set the required '% level', '% hysteresis', and 'fault delay' duration. If the latching facility is required, connect a link or normally closed push button across terminals 'Y1' and 'M'

CONNECTION DIAGRAM



TECHNICAL SPECIFICATION

Supply Voltage Un: 24V, 110V, 230V AC 48 - 63Hz

(Galvanic isolation by transformer)

Supply Variation: 85 - 115% of Un

Isolation: Overvoltage cat. III (IEC 664)

Power

Consumption: 3VA maximum

Monitored Voltage: Y2: 0.5 – 10V AC/DC (± 10%)

30V continuous O/L, 100V for 1 sec Y3: 3 – 60V AC/DC (± 10%) 130V continuous O/L, 450V for 1 sec Y4: 30 – 600V AC/DC (± 10%) 660V continuous O/L, 1000V for 1 sec

Hysteresis: 5 to 50%

Time Delay (t): 0. I to 3 seconds (± 20%)

(from fault)

Reset Time ≈ 60mS

Frequency of

measured signal: 0 to 500Hz

Temperature

Range: -20 to +60°C
Relative Humidity: +95%
Contact Rating: SPDT

AC I 250V AC 10A (2500VA)

AC 15 250V AC 6A

DC I 25V DC 10A (250W)

Electrical Life: Minimum 150,000 ops at rated load Housing: Orange flame retardant UL94 VO

Weight: 200g approx.

Mounting Option: Onto 35mm symmetric DIN rail

to BS5584:1978

(ENSO 002, DIN 46277-3)

Terminal

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

 $Max 2 \times 2.5 mm^2$ solid

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

(Compliant

MOUNTING DETAILS

