

Type: 45UCR & 45OCR

AC Current Relay plus Time Delay

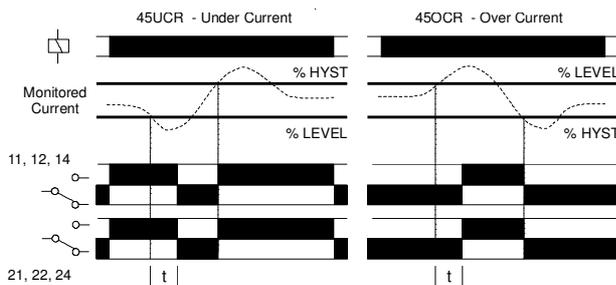
- ❑ Under current (45UCR) or Over current (45OCR) detection
- ❑ Monitors current up to 5A AC when connected directly to terminals 1 and 3
- ❑ Adjustable trip level 0 - 80% (45UCR), 40 - 120% (45OCR)
- ❑ Adjustable time delay 0.2 to 10S*
- ❑ 1 x DPDT relay output
- ❑ LED indication for supply and relay status



Dims:
H. 78mm
W. 45mm
L. 99mm

Terminal Protection to IP20

• FUNCTION DIAGRAM



• INSTALLATION AND SETTING

- **BEFORE INSTALLATION, ISOLATE THE SUPPLY.**
- Connect the unit as shown in the diagram below.
- Where higher currents are to be monitored, an external current transformer (C.T.) with a 5A secondary should be used.
- Apply power (green 'supply on' LED will illuminate).
- **Operation:**
45UCR: The red 'relay' LED should illuminate and the relay energise if the current is above the set '% level'.
45OCR: The red 'relay' LED should remain extinguished and the relay de-energised if the current is below the set '% level'.

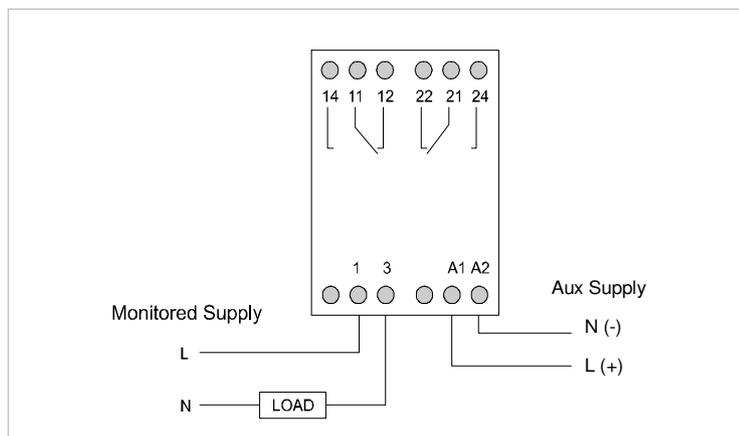
To set the unit:

- Set the 'time delay' and '% level' adjustments as required.

Troubleshooting.

- If the unit fails to operate as described, check the wiring and voltages present on the supply terminals. Check there is current passing through terminals '1' and '3'.

• CONNECTION DIAGRAM



• TECHNICAL SPECIFICATION

Supply voltage U_n : 110, 230, 400V AC 45 - 65Hz
(Integral transformer)
Supply variation: 75 - 125% of U_n
Isolation: Over voltage cat. III (IEC 60664)
Power consumption: ≈ 3 VA (@ U_n)

Monitored current (I_n): 5A AC (50/60Hz)
Overload: 2 x I_n continuous
10 x I_n for 3 seconds

Trip level: 0 - 80% of I_n (45UCR)
40 - 120% of I_n (45OCR)

Adjustable time delay (t): 0.2 - 10S (see Option)
Hysteresis: $\approx 5\%$ @ 5A setting
Repeat accuracy: $\pm 0.5\%$ @ constant conditions

Ambient temp: -20 to +60°C
Relative humidity: +95%

Output: DPDT relay
Output rating: AC 1 250V AC 6A (1500VA)
AC 15 250V AC 3A
DC 1 25V DC 6A (150W)

Electrical life: $\geq 150,000$ ops at rated load

Housing: Orange flame retardant UL94 VO
Weight: ≈ 360 g
Mounting option: On to 35mm symmetric DIN rail to BS5584:1978 (EN50 002, DIN 46277-3)

Terminal conductor size: Max 2 x 1.5mm² stranded (terminated)
Max 2 x 2.5mm² solid

Approvals: Conforms to UL, CUL, CSA & IEC
CE Compliant

* Option

The unit can be supplied with the time delay adjustable up to 30 seconds. Please specify when ordering.

• MOUNTING DETAILS

