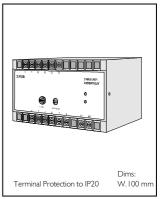
Type: 70 PUCR & 70 POCR

Three Phase, AC Current Relay

The unit is designed to monitor the AC current taken by each load when connected to a three phase supply. The 70PUCR is used for monitoring under current conditions, whereby the relay de-energises (after the adjustable time delay), when the current drops below the adjustable trip point. The relay re-energises when the current rises above the trip point plus the hysteresis. The 70POCR functions by energising the relay (after the adjustable time delay) when the current rises above the adjustable trip point and de-energises when the current drops below the trip point minus the hysteresis. A green LED indicates the supply is present whilst a red LED indicates the relay is energised



TIMING DIAGRAM 70PUCR - Under Current 70POCR - Over Current R (1, 3) % LEVEL Y (4, 6) B (7, 9) Monitored Current % LEVEL % HYST l t

INSTALLATION AND SETTING

BEFORE INSTALLATION, ISOLATE THE SUPPLY. Connect the supply and the monitored current connections in each phase, as shown in diagram below. Note: Where higher currents are to be monitored, an external C.T. with a 5A secondary should be used. Apply power and the green 'aux.' LED should illuminate.

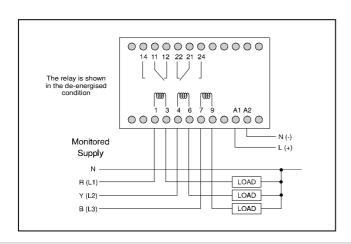
70PUCR: The red 'relay' LED should illuminate and the relay energise if the current is above the set '% level'.

70POCR: The red 'relay' LED should remain extinguished and the relay de-energised if the current 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 on 'Al' and 'A2'. Also, check the current passing through the terminals 'I' and '3', '4' and '6', '7' and '9'.

Set the '% level' and the 'time delay' adjustments as required. **Note:** The sequence of connection is not important on either unit.

CONNECTION DIAGRAM



TECHNICAL SPECIFICATION

Supply Voltage Un: 110, 230, 400V AC 45 - 65Hz

(Galvanic isolation by transformer)

75 - 125% of Un Supply Variation:

Over voltage cat. III (IEC 664) Isolation:

Overload: 1.5 x Un continuous 2 x Un for 3 seconds

Power

Consumption: ≈ 4VA @ Un

Monitored

5A AC (50/60Hz)

Current (In): (per phase)

Trip Level: 0 - 80% of In (70PUCR)

40 - 120% of In (70POCR)

± 0.5% at constant conditions

Time Delay (t): 0.2 to 10S

Hysteresis: ≈ 5% @ 5A setting

Repeat Accuracy: **Ambient**

 $-20 \text{ to } +60^{\circ}\text{C}$ Temperature:

+95% Relative Humidity:

Contact Rating: **DPDT**

> 250V AC 8A (2000VA) AC. I

AC 15 250V AC 3A 25V DC 8A (200W) DC I

Electrical Life: Minimum 150,000 ops at rated load

Housing: Grey flame retardant UL94 VO

Weight: 600g approx.

Mounting Option: Onto 35mm symmetric DIN rail

to BS5584:1978

(EN50 002, DIN 46277-3) Or direct surface mounting via 2 x M3.5 or 4BA screws using the fixing

slots provided on the unit

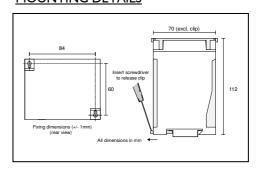
Terminal

Max 2 x 2.5mm² solid or stranded Conductor Size:

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

(Compliant

MOUNTING DETAILS



70PCR-D1999-07-22