Multifunction, Combined Current Relay

Terminal Protection to IP20

43880

W. 17.5mm



NEW 17.5mm DIN rail housing

 \Box Microprocessor based

True R.M.S. monitoring

Monitoring input (0.02 - 2A) split in to 3 selectable ranges

Selectable Under or Over current monitoring

Selectable hysteresis or latch option

Adjustable trip level and time delay

Isolated Auxiliary supply (24 - 230V AC/DC) 1

1 x SPDT relay output 8A

Green LED indication for supply status

Yellow LED indication for alarm status \Box

Red LED indication for relay status



FUNCTION DIAGRAMS Under Current Monitoring (with and without Latch enabled) 中 中 1 * 1 √. Over Current Monitoring (with П 如 中 Supply П 4 **V**: П **Q**: 1 * П * **/**[] П **√**∏ П

INSTALLATION AND SETTING

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the Auxiliary and Monitored Inputs as required.

- Set the "Hyst. / Mode" selector 70 to the required position depending whether under or over monitoring is required. Select either a suitable hysteresis setting of 2% or 10% or choose Latch if required.
- Set the "Range" **3** to the required position (depending on monitored input current to be monitored). Set the "Power Up Delay" according to whether start up currents are likely in the application.
- Set the "Trip Level %" and "Delay" to suit the selected monitoring range and delay to tripping period.

Apply power and the green LED 1 will illuminate

If Under current mode is selected:

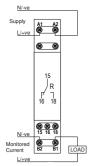
Relay energises / red LED 3 illuminate if the current is above the set "Trip Level". If the current falls below the "Trip Level", yellow LED 2 flashes for the set "Delay" then remains lit. Red LED extinguishes / relay de-energises.

Relay energises / red LED 3 illuminate if the current is below the set "Trip Level". If the current rises above the "Trip Level", yellow LED 2 flashes for the set "Delay" then remains lit. Red LED extinguishes / relay de-energises.

Auxiliary supply voltage U (A1, A2): 24 - 230V AC/DC 1 (12 - 60V AC/DC also available) 48 - 63Hz (AC supplies) Frequency range: +15%/ - 10% III (IFC 60664) Overvoltage category: Rated impulse withstand voltage 4kV (1.2/50μS) IEC 60664 Power consumption (max.): 24V 48V 0.84 VA 0.82 VA 1.1 VA 1.4 VA Monitoring mode: Under or Over current (selectable) Hysteresis: 2 or 10% (selectable) Enabled using Mode selector switch Monitoring ranges 0.02 - 0.2A, 0.1 - 1A, 0.2 - 2A Trip level: 10 - 100% of selected monitoring range Time delay (t): 0.1 - 30S (from fault occurring to relay de-energising) Power up delay (Td) 1 or 10 seconds $\pm\,1\%$ of maximum full scale < 5% of maximum full scale Accuracy Adjustment accuracy: Repeat accuracy: ± 0.5% at constant conditions Drift with temperature: +0.05% / °C Drift with voltage: $\pm 0.2\% / V$ Monitoring input (B1, B2) 0.01 to 2.4A AC/DC Frequency: DC, 48 - 70Hz Maximum input rating: 1.4 x 2A Overload: 5A for 1s Overvoltage category: Rated impulse withstand voltage III (IEC 60664) 4kV (1.2/50μS) IEC 60664 Power on indication: Green LED Alarm status indication: Yellow LED Relay status indication: Red LED -20 to +60°C Ambient temp: Relative humidity Output (15, 16, 18) SPDT relay 250V 10A (2500VA) Output rating: 250V 5A (no), 3A (nc) 25V 10A (250W) AC15 DC1 Electrical life: ≥ 150,000 ops at rated load Dielectric voltage 2kV AC (rms) IEC 60947-1 Rated impulse withstand voltage: 4kV (1.2/50uS) IEC 60664 Housing Orange flame retardant UL94 V0 Weight: ≈ 63g

TECHNICAL SPECIFICATION

CONNECTION DIAGRAM



SETTING DETAILS 1. Power supply status

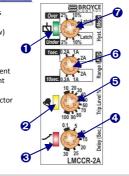
Installation work must be carried

out by qualified personnel.

(Green) LED 2. Alarm status (Yellow) LED 3. Relay output status (Red) LED

4. Time delay adjustment 5. Trip level adjustment

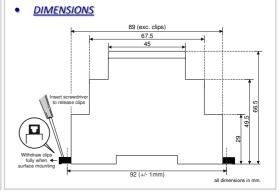
6. Power up delay / Monitoring range selector 7. Hysteresis / Mode selector



Mounting option:

Approvals:

Terminal conductor size



On to 35mm symmetric DIN rail to BS EN 60715

 \leq 2 x 2.5mm² solid or stranded

CUL US LISTED IND. CONT. EQ.

CE and RoHS Compliant.

80MHz - 2.7GHz)

or direct surface mounting via 2 x M3.5 or 4BA screws

using the black clips provided on the rear of the unit

EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 10V/m

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