

Type: LMCCR-2A

Multifunction, Combined Current Relay



- *NEW* 17.5mm DIN rail housing
- 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
 - Red LED indication for relay status

FUNCTION DIAGRAMS Under Current Monitoring (with and without Latch enabled 中 中 4 1 4 **Over Current Monitoring** П П 中[] 中 П 4 П П 1 * 1 *

INSTALLATION AND SETTING

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

Settina the unit.

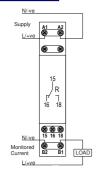
- Set the "Hyst. / Mode" selector to the required position depending whether under or over monitoring is required. Select either a suitable hysteresis setting of 2% or 10% or choose Latch if required.
- Set the "Range" to the required position (depending on monitored input current to be monitored). Set 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.

Applying power.

- 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 3 flashes for the set "Delay" then remains lit. Red LED extinguishes / relay de-energises.
 If Over current mode is selected:
- 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.

TECHNICAL SPECIFICATION Auxiliary supply voltage U (A1, A2): 24 - 230V AC/DC 1(12 - 60V AC/ DC also available) Frequency range: 48 - 63Hz (AC supplies) +15%/ - 10% Supply variation: III (IEC 60664) Overvoltage category: Rated impulse withstand voltage 4kV (1.2/50uS) IEC 60664 Power consumption (max.): 48V Ω 8.4 V.Δ 0.82 VA 1.4 VA 0.53 W 0.6 W 0.47 W 0.46 W Monitoring mode: Under or Over current (selectable) Hysteresis: 2 or 10% (selectable) Enabled using Mode selector switch Latch: 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 Reset time: 100mS Accuracy: ± 1% of maximum full scale Adjustment accuracy: < 5% of maximum full scale Repeat accuracy: ±0.5% at constant conditions Drift with temperature ±0.05% / °C Drift with voltage: ±0.2%/V Monitoring input (B1, B2): 0.01 to 2.4A AC/DC DC, 48 – 70Hz Frequency: Maximum input rating: 1.4 x 5A 5A for 1s Overload: Overvoltage category: III (IEC 60664) Rated impulse withstand voltage 4kV (1.2/50μS) IEC 60664 Power on indication Green LED Alarm status indication: Yellow LED Relay status indication: Red LED Ambient temp: -20 to +60°C Relative humidity: +95% Output (15, 16, 18): SPDT rela 250V 10A (2500VA) Output rating: AC1 AC15 250V 5A (no), 3A (nc) DC1 25V 10A (250W) Electrical life: ≥ 150,000 ops at rated load Dielectric voltage Rated impulse withstand voltage 4kV (1.2/50μS) IEC 60664 Orange flame retardant UL94 VO Housing ≈ 63g Mounting option: On to 35mm symmetric DIN rail to BS EN 60715 or direct surface mounting via 2 x M3.5 or 4BA screws using the black clips provided on the rear of the unit Terminal conductor size ≤ 2 x 2.5mm² solid or stranded CE and RoHS Compliant

CONNECTION DIAGRAM



• <u>SETTING DETAILS</u> 1. Power supply status (Green) LED

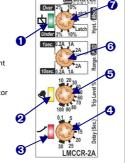
Installation work must be carried

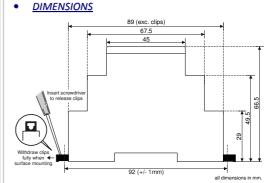
out by qualified personnel.

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





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

Emissions: EN 61000-6-4

