

# LINE CONTROLLER UNIT LC-7 (MEV-7) ver.2.3.1

- The LC-7 line controller unit tests for the existence of the measuring voltage delivered by the MEV-7 in all monitored socket lines.
- Lack of measuring voltage on a line indicates a broken or loosened earth wire on that line.
- Breakage or loosening of the earth wire on a faulty line is indicated by an indicator light on the line controller unit, and by an alarm via the MEV-7 (FIREFAULT light and alarm on relay ALR1).

## CONNECTION INSTRUCTIONS

### AUXILIARY VOLTAGE CONNECTORS:

230V AC from within or outside a floating network.

- N: Neutral.
- L: Line.

### PROTECTIVE EARTH REFERENCE CONNECTORS:

- 14: Protective Earth.

### MEASUREMENT WIRE CONNECTORS:

Protective earths on the socket lines are chained in series, with the last socket chained to the input.

- 1-6: Line 1-6

### MEV-7 CONNECTORS:

Modules are connected in parallel (Max 3 pcs EV-7, 3 pcs M7, and 5 pcs LC-7).

Cabled using shielded Cat-5, Cat 6, and Cat 7, JAMAK or NOMAK cables (or equivalent).

- 20: +12 VDC
- 21: Data A
- 22: Data B
- 23: - GND

## **LC-7 OPERATION AND TESTING INSTRUCTIONS**

### **SELECTING SERIAL TRAFFIC (ver. A / ver. B):**

- MEV-7 / LC-7 From version 2.3 onwards use serial communications ver. B.
- MEV-7 ver. A serial communications ordered separately.
- LC-7 version indicators. Power off and power on. The indicator lights flash as follows:
  1. ver. 1.0 - 2.2: All the green and red indicator lights flash alternately 10 times.
  2. ver. 2.3 communications ver. A: The channel 1 red and green indicator lights flash alternately 10 times.
  3. ver. 2.3 communications ver. B: The channel 2 red and green indicator lights flash alternately 10 times.
- MEV-7 version indicators. Power off and power on. The column display indicators flash as follows:
  1. ver. 1.0 - 2.2: The whole column display flashes.
  2. ver. 2.3: The column display 100 kohm indicator flashes 10 times.
  3. ver. 2.3.1: The column display 0 and 100 kohm indicator lights flash 10 times.
  4. ver. 2.3.2: The column display 0, 100, and 200 kohm indicator lights flash 10 times.
  5. ver. 2.3.3: The column display 300 kohm indicator light flashes 10 times.

When using the old MEV 7 (version 1.0 - 2.2), ver. A serial communications must be selected.

- Ver. A serial communications selection:  
Power off, press button 1 and hold it down, then turn on the power. Release button 1.
- Ver. B serial communications selection:  
Power off, press button 2 and hold it down, then turn on the power. Release button 2.

### **PROGRAMMING THE MODULE ADDRESS:**

- Each LC-7 unit has a programmed address (1-5). Every address can be used only once.
- Press button 5 and hold it down, then press button 6; all the indicator lights are turned off. Release both buttons and press button 1-5 (desired address). The green indicator light for the programmed address lights briefly to indicate programming.
- LC-7 returns to its normal mode.

### **PROGRAMMING CHANNELS IN USE:**

- Press button 2 and hold it down, then press button 6; all the indicator lights are switched off. Release both buttons. Channel search will begin automatically.
- Channel search goes through the channels in sequence, 1-6. Channels in use are shown by green indicator lights and unused channels by red indicator lights.
- LC-7 returns to its normal mode.
- Both indicator lights are off for the unused channels.

### **PROGRAMMING LOOP RESISTANCE REFERENCE FOR CHANNELS IN USE:**

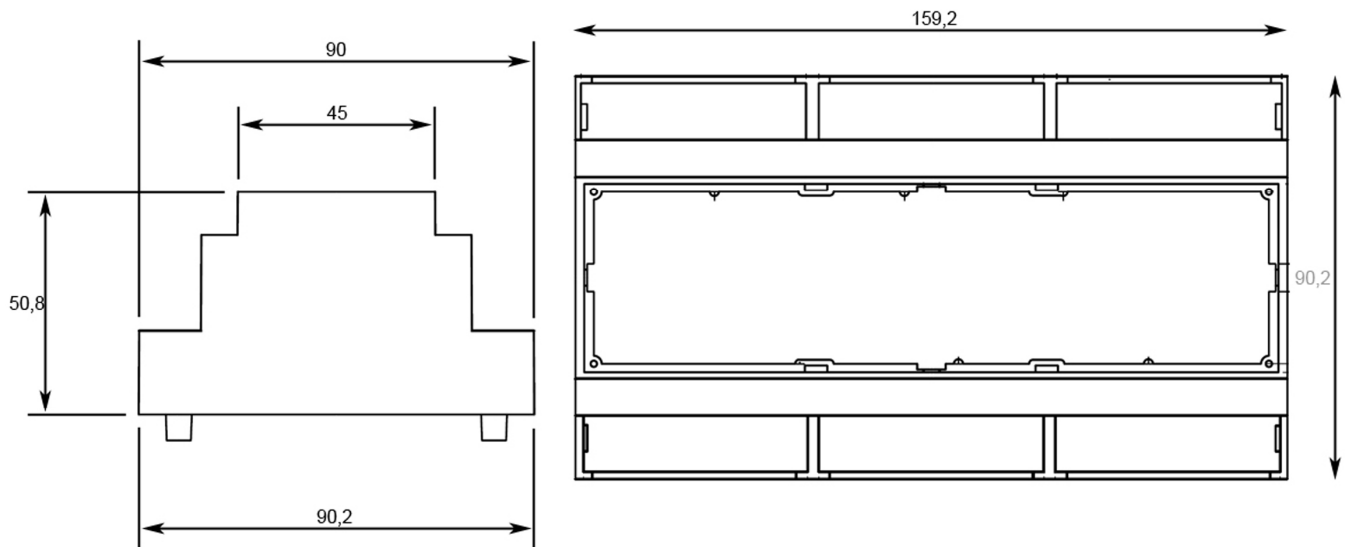
- Press button 1 and hold it down, then press button 6; all the indicator lights are switched off. Release both buttons.
- Resistance metering and saving will start automatically.
- LC-7 returns to its normal mode.

## EARTH WIRE CONTINUITY MEASUREMENT:

- Press button 6; all the indicator lights are switched off. Release the button.
- Resistance metering will start automatically.
- Channels will be metered in order, 1-6. Green indicator lights identify channels where resistance values have remained unchanged (less than 0.2 ohms); a red indicator light indicates a greater change.
- LC-7 returns to its normal mode.

## Alarm test:

- Detach the measurement wire from the channel interface connector (1-6); the indicator light of the detached channel turns red, MEV-7 FIRE FAULT and ALR1 appear after the set alarm delay.
- Re-attach the measurement wire; the indicator light turns green, and the fault is reset.
- Detach the cable from connector 14; all the channel indicator lights turn red, and alarm MEV-7 FIRE FAULT and ALR1 appears after the set delay.
- Re-attach the cable; the indicator lights go back to green, and the fault is reset.



## WARRANTY

This device carries a 12-month warranty. The warranty applies to defects in raw materials and manufacturing. The warranty period begins on the date when the device is purchased. In connection with possible warranty repairs, please submit your purchase receipt or equivalent proof of purchase date. This warranty is void if anyone other than an authorized maintenance company takes corrective action during the warranty period. The warranty does not cover any indirect costs. The device will be sent for maintenance at the customer's expense and returned to the customer at the manufacturer's expense.

# MEV-7 / LC-7

