

MAR3 Interface for Digital Linear Heat Detector cable

The module **MAR3** has been designed to detect the alarm point along a Protectowire Digital Linear Heat Detection Cable (non-resettable) and to identify the location of alarm point.

The module is able to manage a detection line with a maximum length of 2,000 meters (1999).

It is possible to show the point in alarm distance, by a 3½ backlit display. The **MAR3** is equipped with an analogue current (0-20mA) with a double function: to report the operating status of the unit and to identify the location of the point in alarm along the linear heat detector cable.

The module **MAR3** allows the possibility of using a non-sensitive interconnection cable (interposing cable) placed between the module and the linear heat detector cable.

The interface **MAR3** is able to monitor both the alarm condition and the fault condition (line opening or short-circuit of the interposing cable).

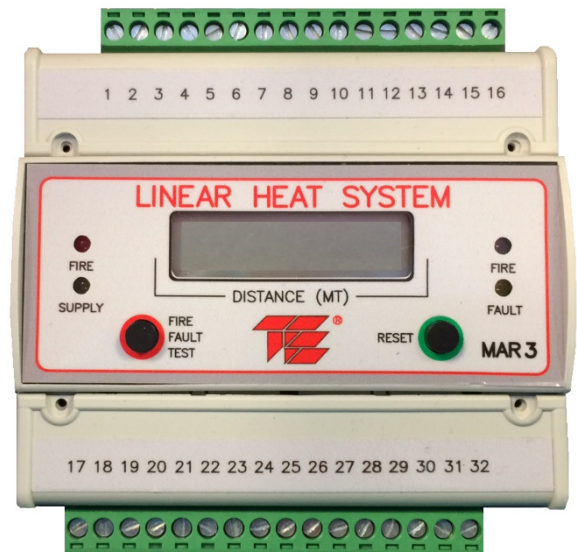
Besides, the module **MAR3** is equipped with four on-board relays for interfacing with a Fire Alarm Control Panel, PLC, SCADA or activating local alarm signals such as sirens, flashing lights etc.

Main features

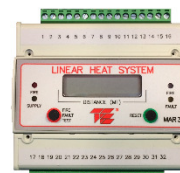
- Capable of monitoring up to 2.000mt of Protectowire Digital Linear Heat Detector cables (single zone interface)
- LCD display to visualize the Alarm Point Location meter
- LEDs on board for alarm, fault and power
- Two push buttons (Reset and Line test)
- 0-20 mA outputs for Status and Alarm Point Location
- Input for remote reset
- Local test by push button
- Easy installation (35mm DIN rail)
- External Modbus RS485 or TCP/IP interface (option)

Specifications

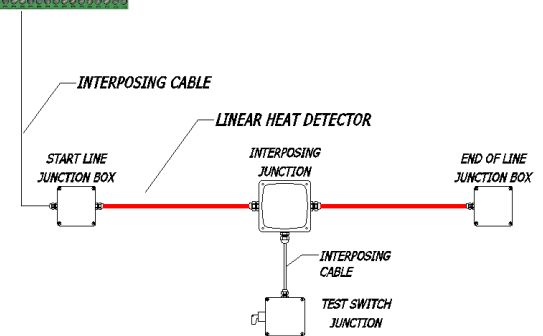
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| ▪ Code | MAR3 |
| ▪ Dimensions | 110 (L) x 110 (A) x 40mm (P) |
| ▪ Display | 3½ digit backlite (range 0-1999) |
| ▪ Display resolution | 1 digit (1 mt) |
| ▪ Input power | 24Vdc (option: external power supply 230Vac) |
| ▪ Consumption | max 150mA@24Vdc |
| ▪ Ambient temperature range | 0 ÷ +50°C |
| ▪ Accuracy | 1% (modulo MAR3) |
| ▪ Response time | < 2 s at max. distance |
| ▪ Alarm Relays | nr. 2 SPDT max. 1A@24Vdc |
| ▪ Fault Relays | nr. 2 SPDT max. 1A@24Vdc (energized) |
| ▪ Calibration | by trimmer on board |
| ▪ Output 0-20mA | 0mA general fault
3,5mA normal operation (settable)
4-20mA proporzionale alarm location |
| ▪ Approvals | CE, EMC |



Typical layout



Outputs:
2 Alarm Relays
2 Fault Relays
Analogue output 0-20mA



Main applications

- Roadway and railway tunnels
- Conveyor belts
- Subway tunnels
- Hostile environments
- Escalators
- Cable trays