CE

MRI

Features

- **135Ohm and 1kOhm versions**

- **0-10 Vdc Output**

- **24ac/dc powered**

- **DIN Rail (TS35) Mounting**

- **High Quality Rising Clamp Terminals**

- **LED Indication**

Technical Data

Inputs:	135 Ohm and 1kOhm
Output Signal:	0-10Vdc
LED Indication:	ON when Input is ON
Power Supply:	24 Vac/dc
Terminals:	Rising Clamp for 0.5-2.5mm^2 Cable
Ambient Temperature:	0-50°C
Dimensions:	47(w) x 92.5(h) x 47mm (approx.)

General

The MRI 135 and MRI 1000 Modules enable an existing resistance signal to be monitored by a BMS Controller.

The modules convert either a 0-135Ohm or a 0-1000Ohm signal to a 0-10Vdc output..

Both units are powered from 24Vac or 24Vdc, feature LED indication and are designed for mounting on TS35 section DIN Rail.

A Reverse Action Link is also fitted.

Ordering Code

MRI 135   135 Ohm Resistance Input Module

MRI 1000 1000 Ohm Resistance Input Module

Configuration

The MRI 135 and MRI 1000 are supplied pre-calibrated for either a 135Ohm or a 1000Ohm resistance input signal, but onsite adjustment is possible using the multi-turn trimpot on the pcb..

The 0-10Vdc Output Signal will be in direct proportion to the Resistance Input such that for a MRI 1000 there will be 10V output for a resistance input of 1000Ohm and a 5Vdc output for a 500Ohm input resistance.

Connection

The diagram below shows the terminal designations for the MRI.

Installation and Connection Details

All connections to BEMS controllers, data recorders etc. should be made using screened cable.

Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise.

Low voltage signal and supply cables should be routed separately from high voltage or mains cabling.

Separate conduit or cable trays should be used. Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth.

This will provide better immunity to high frequency noise.

Most modern buildings have a separate earth for this purpose.

24V ac/dc supply | 24V
Common 0V | 0V
Resistance Input
Resistance Input
Common 0V | 0V
0-10V dc Output | 0-10Vdc