# **OPERATION MANUAL** FUSE FAILURE RELAY **MFR-10**

### **FUSE FAILURE RELAY**

MODEL: MFR-10

### DESCRIPTION

MFR-10 is the micro-controller based multi-channel Fuse Failure Monitoring instrument which is used for various industrial applications.

The instruments are offered in a highly compact, rugged and reliable execution.

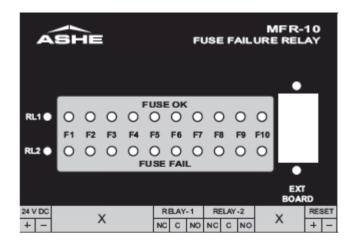
These compact Din rail mount instruments are designed to indicate the failure of a Fuse (Fuse blown condition) in power lines. Most panels have multiple fuses in power lines at various locations. This instrument is used to indicate the fuse blown condition at any location. MFR-10 is the ten-channel Fuse Failure Relay.

The instrument provides LED indications of each fuse status on the front panel. The fuse failure relay also provides two potential free Relay contact for alarm purposes. An external lamp indication or Hooter can be connected to the Relay contact for remote annunciation purposes.

The instrument is available in DIN Rail enclosure and operated on 24V DC power supply.

Further, the instrument is manufactured using selected high-grade components which guarantee it's functionality and long operational life. The instrument carries a performance guarantee against manufacturing defects and workmanship defects.

## FRONT FACIA



# Logic:

When any one of the ten fuses becomes open, Relay #1 will change over and the LED of the corresponding fuse will glow RED.

If a second fuse blows before the first is replaced, the second Relay will chance over and the LED of the second fuse will start flashing RED, thus differentiating from the fuse that failed first.

IF fuse is replaced after blows the LED indication will still show Fail status for corresponding Fuse until reset is done by shorting the reset terminals

## **LED Indications:**

Fuse Healthy – Green
Fuse Fail - Red

### **TECHNICAL SPECIFICATIONS**

Model : MFR-10

Type : Microcontroller based multichannel Fuse

Failure Relay with dual Relay outputs and

Fuse status Indications.

Input Voltage : Upto 1000 VAC/DC

Channels : Ten

Indications : Ten green + Ten red LEDs to indicate status of

Fuses; two LEDs for Relay status.

Output : Two Relay change-over contacts

Contact rating : 10 Ampere @ 230 V AC (Res. Loads).

Memory : Non-Volatile (on EEPROM).

Power Supply : 24 V DC ( $\pm$  20%).

Dimensions : 75 X 100 X 110 mm (H X W X D)

Enclosure : Din Rail Mounting.

Weight : Approximately 0.2 kgs.