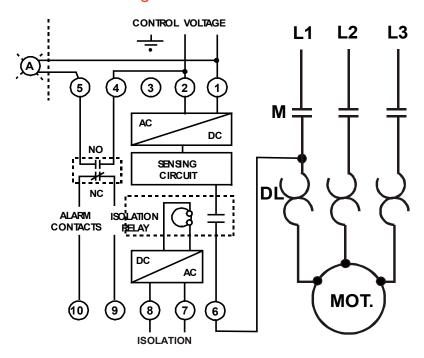


#### **iM803S**

iM803S insulation monitors are primarily intended for use in special applications such as variable speed or soft start drives or solid-state contactors to monitor AC motors with line voltages to 600V. They may also be used with DC motors to 600V.

The insulation resistance range of 5 Megohms to 1 Megohm was chosen to meet industrial environmental requirements. They provide visual alarm indication, with contacts for external alarm and other functions.

## Connection Diagram:



Fast and easy installation

Variable speed drives

Small footprint DIN Rail mounting

Integral self-test capability

Completely automatic in operation

Early warning of insulation issues

LED local alarm

Optional automatic reset mode

Solid state circuitry

Contacts provided for local alarm and PLC connection

# **Technical Specifications:**

Maximum Line Voltage	600 AC/DC
Supply Voltage*	115, 230V AC, +20% to -40%, 50/60HZ
Power Requirements	3VA
Factory Set Point**	5, 3 & 1 MΩ
Isolation Voltage	24 - 600V AC/DC
Isolation Time	0.5ms
Contact Rating	5 Amp., 250V AC resistive
Dimensions (mm)	45 x 68 x 112
W x H x L (in)	1.77 x 2.67 x 4.4
Weight (kg)/(oz)	0.27/9.5

<sup>\*</sup> DC and 400Hz supply voltage units available - contact factory

- Maximum short circuit current 5 microamps.
- Temperature: Operating -20°C to +50°C; Storage -40°C to +100°C
- Environment: Maximum 95% relative humidity, non-condensing

## Application:

iM803S insulation monitors provide safe monitoring of electrical motor insulation integrity in all environments. Their primary application is on motors which are in intermittent operation, as these motors are the most susceptible to insulation deterioration in adverse environments. Designed for use with variable speed drive AC motors and motors with soft start or solid-state contactors up to 600V, they may also be used with DC motors to 600V.

iM803S insulation monitors give early warning of insulation degradation long before the motors are in danger of failing on start up. This allows preventative maintenance to be scheduled when convenient, thus eliminating motor insulation failure as a cause of production downtime, product loss or emergency situations.

When used with variable speed drives, soft start or solid state contactor, an isolation contactor is required for complete isolation of the motor from the power line when it is off-line. The isolation voltage (range 24 - 600V AC/DC) must be obtained from a source, such as the running light, which is energized simultaneously with the drive or incoming power to the drive. iM803S offers easy monitoring of the motor winding and has three alarm levels (5, 3 and 1  $M\Omega$ ), selectable with a faceplate switch, to provide a simple way of insulation deterioration rate determination by noting the time intervals between alarms at successively lower levels.



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<sup>\*\*</sup> For other set points, consult factory