

MONITORS LOAD CURRENTS

DESCRIPTION

The Model LR-50A monitors load currents of devices such as fans, pumps and other critical items in HVAC systems. The solid state relay output provides a run status indication for these devices to compatible DDC/PLC control systems. The relay output of this model is completely isolated from the input current.

NOTE: LR-50A was previously LR.50A.



SPECIFICATIONS

INPUT

Current Range 1-20A
Frequency Nominal..... 60Hz

OUTPUT

Solid State Relay Form A, Normally Open, 30Vdc, 150mA maximum
Response Time 25ms
Threshold Setting Fixed at 1A, ±0.25A
Relay Action Load current under threshold = Open
Load current over threshold = Closed

INSTRUMENT POWER

All models Self Powered

TEMPERATURE

Operating Range..... 10°-135°F

PHYSICAL

Enclosure Noryl SE1X, UL 94V-1
Net Weight 0.25lb

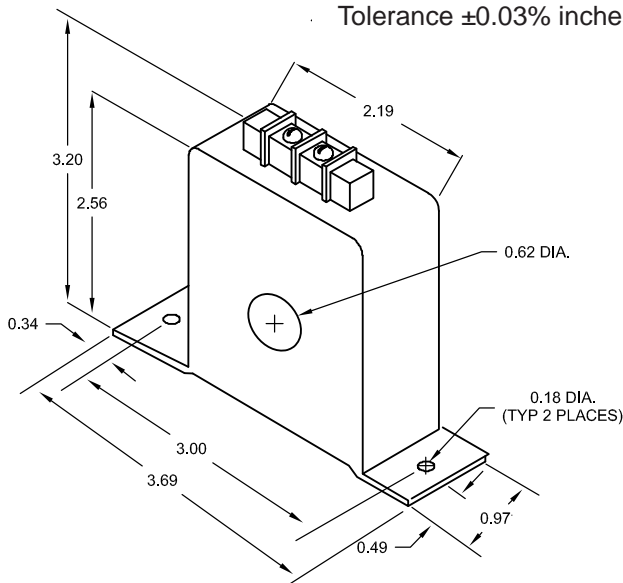
CONNECTIONS

Input Current-carrying cable is inserted through circular window opening.
Maximum cable size #3/0 (dia. <0.62")

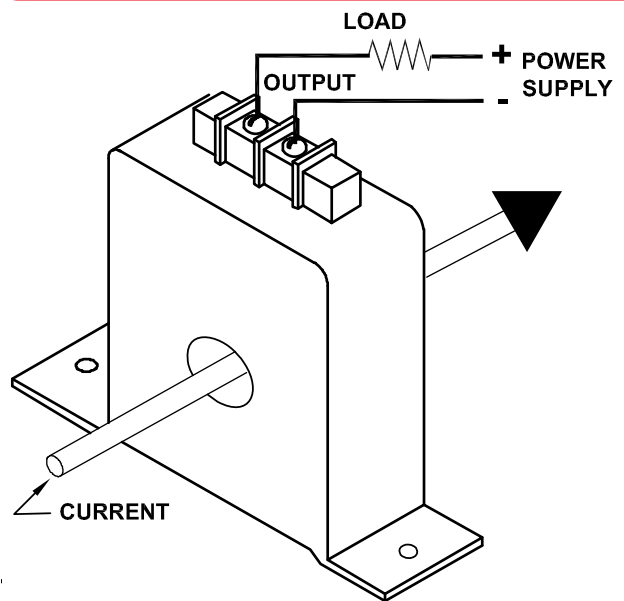
Output Wire-retaining screw terminals No. 6/32
Maximum wire size #14 AWG

CASE DIMENSIONS

All dimensions in inches.
Tolerance ±0.03% inches.



CONNECTIONS



Dwg# 0902-01084-B Rev--

INSTALLATION

1. The LR-50A may be mounted in any type of protected enclosure, motor starter, motor control center, control system field panel, or disconnect switch.
2. The current-carrying cable must pass through the circular window opening.
3. Permanently affix the LR-50A to the cable with a conventional cable tie or similar nonconductive material. The unit may be oriented in any position.
4. Alternatively the LR-50A may be mounted to any flat surface such as the back panel of the enclosure - see Case Dimensions for mounting dimensions.
5. Should mounting space be limited, the mounting feet of the LR-50A may be snapped off.

SETUP

1. After the LR-50A has been installed, energize the load and observe the solid-state relay output status.
2. When load current is under 1A the relay will be open.
3. When load current is over 1A the relay will be closed.
4. No other setup is required.

Note 1: The LR-50A current switch uses a solid-state relay output. Contact closure can not be properly verified by a continuity meter.

Note 2: The LR-50A solid-state relay output may be used to switch dc loads of up to 30V and 0.150A.

Note 3: For measured load currents of less than 1A, two or more turns of the main current-carrying cable may be taken through the window to provide at least 1.0 Ampere-turns.