Micro Split Core Current Switch Fixed Setpoint

Features

- Micro size
- Switches up to 1A @ 30Vac/dc
- Self powered, no supply required
- 100% Solid state, no moving parts to fail

Specification

Current	0.15 - 60A
Sensor power	Induced from monitored conductor
Frequency range	50 - 60Hz
Switch output:	
Max. current	1A
Max. voltage	30Vac/dc
Switching	Normally open (zero through current)
Ambient:	
Temp.	-15°C to +60°C
RH	10-90% RH non-condensing
Sensing aperture	8 mm
Dimensions	45 x 40 x 30 mm
Insulation class	300Vac RMS
Compliant	CE Marked
Country of origin	U.S.A

Product Codes

PM-H300

Fixed setpoint current switch split core 0.15A to 60A

Suitable for switching 30Vac/dc ONLY.

Technical Overview

The PM-H300 micro current switch can be used to monitor motors, pumps or other electrical loads where a switched output is required. Its small size make it ideal for monitoring small to medium motor loads.
The output can be used for simple run/fail detection, a normally open solid state switch operates when the current level sensed by the internal transformer exceeds the threshold value.

Installation

1. The PM-H300 current switch should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc)

2. Ensure that all power is disconnected before carrying out any work on the PM-H300. Never rely on status indicating devices only to determine if power is present in a conductor.

3. When installing the split-core current switch, you must ensure that there are no dirt particles that will prevent good contact between the core pieces when the device is closed.

4. Mount the sensor in a suitable location using the two mounting holes in the base of the unit or use the self-gripping iris which eliminates the need for drill mounting.

5. Care must be taken not to over tighten the screw terminals. The connections are polarity independent.

Low conductor current:
If the load is less than the required switching point you can loop the conductor through the sensor to multiply the load. Example, load is 0.1A, pass the cable through the aperture 4 times and you will have a total load of 0.4A. This is now a sufficient load to operate the switch. See fig 1.

High conductor current and large diameter cables:
If the load is greater than 60A or the cable diameter is greater than the aperture of the current switch, you must use a suitable current transformer. Pass a cable connected to the secondary winding of the current transformer through the aperture. See fig 2.

Installation (continued)

Fig 1.

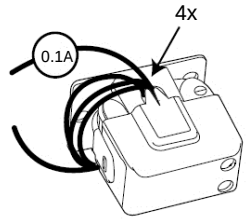
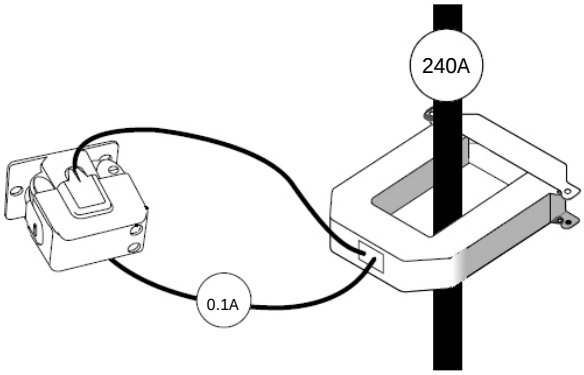
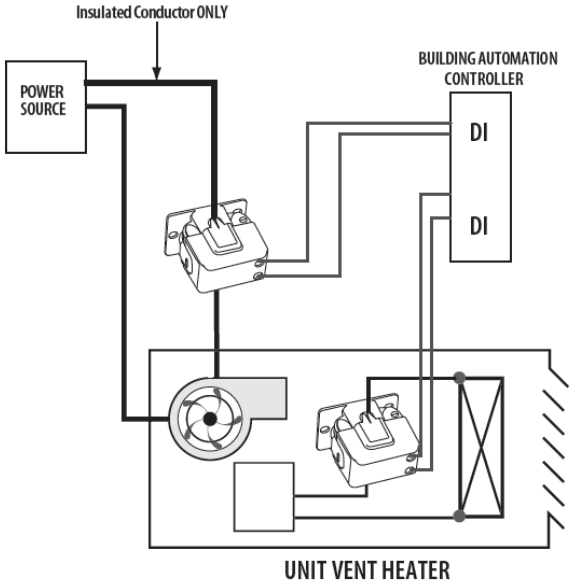


Fig 2.



Wiring Example



Trouble shooting

The unit will not come on at all.

Check to be sure that no more than 30Vac/dc or 1.0A has passed through the contact. Voltages or currents above these levels will damage the unit.

Verify that the conductor you are monitoring is carrying at least .15 Amp. If the sensor is monitoring less than .15 Amp, employ installation note fig 1.

Verify that the conductor you are monitoring is carrying no more than 60 Amps. If the sensor is monitoring more than 60 Amps, employ installation note fig 2.

Assure that the sensor core mating surfaces are clean and that the core is completely closed.

Dimensions