

Current Switch, Fixed Setpoint



Features

- Fixed setpoint
- Switches up to 1A @ 30Vac/dc
- Self powered, no supply required
- For use inside a separate fire or electrical enclosure
- For use in a Measurement category III environment, or less, as per IEC 61010-1:2001

Specification

Current:	
PM-H800	0.25 - 200A
PM-H900	1.5 - 200A
Sensor power	Induced from monitored conductor
Max. current continuous	200A
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	0-95% RH non-condensing
Sensing aperture:	
Solid core	18mm dia.
Split core	28 x 23 mm
Dimensions:	
Solid core	45.7 x 70.35 x 25.9 mm
Split core	81 x 74 x 26 mm
Insulation class	600Vac RMS
Compliant:	
CE Marked	
UL508 E150462	
Country of origin	U.S.A

Product Codes

PM-H800

Fixed setpoint 0.25A current switch solid core 0.25 to 200A

PM-H900

Fixed setpoint 1.5A current switch split core 1.5 to 200A



Suitable for switching 30Vac/dc ONLY.

Technical Overview

The PM-Hx00 range of current switches can be used to monitor motors, pumps or other electrical loads where a switched output is required.

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-Hx00 range of current switches 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-Hx00 range. Never rely on status indicating devices only to determine if power is present in a conductor.
3. When installing the split-core version 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 (split core only).
5. Maximum switched output cable size is 2.5mm², care must be taken not to over tighten the screw terminals. The connections are polarity independent.

Note:

The contacts are solid state open collector type. When the switch is closed 1Ω is present. When the switch is open more than 1MΩ is present.

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 0.4A, pass the cable through the aperture 4 times and you will have a total load of 1.6A. 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 200A 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)

(Ring type shown). Fig 1.

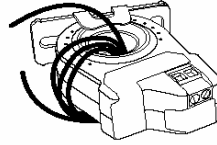
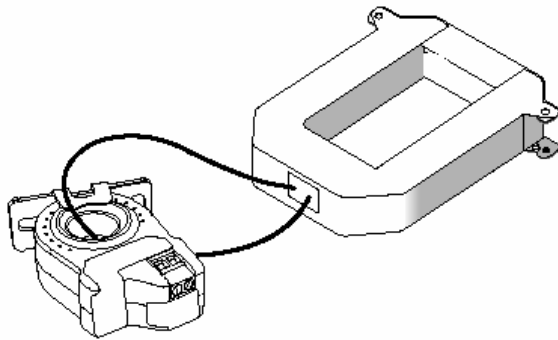
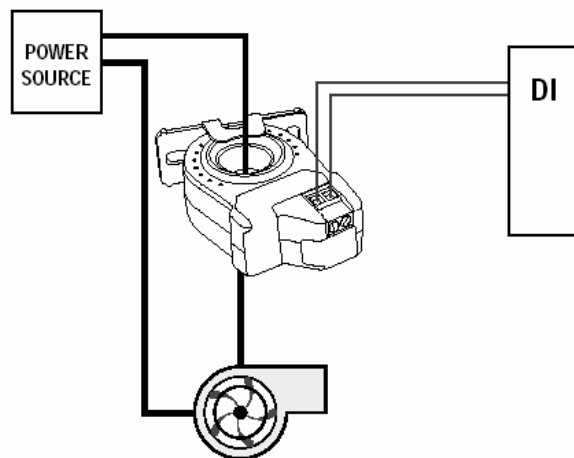


Fig 2.



Wiring Example



Trouble Shooting

1/ The unit will not come on at all.

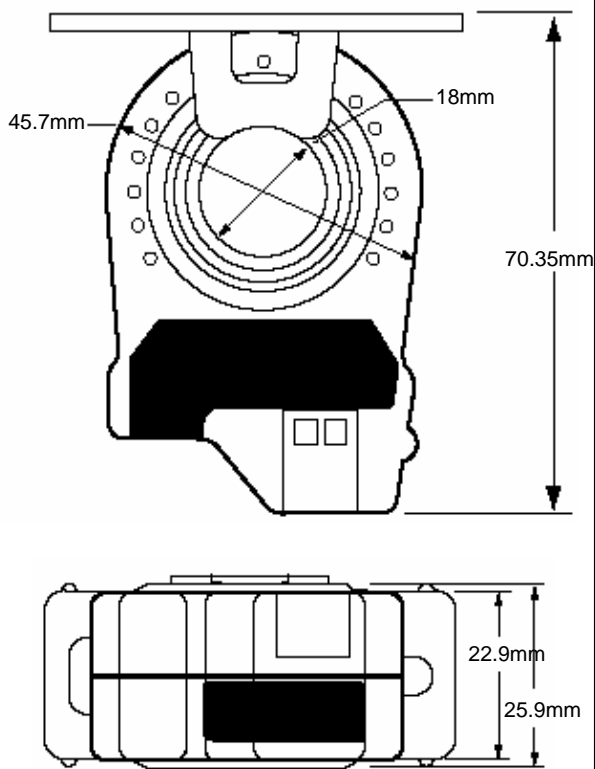
Check to be sure that no more than 30VAC/DC or 1.0A has passed through the contact. Voltages or currents above these levels will damage the unit.

Verify that the conductor you are monitoring is carrying at least 0.5 Amp. If the sensor is monitoring less than 0.5 Amp, employ installation note fig 1.

Verify that the conductor you are monitoring is carrying no more than 200 Amps. If the sensor is monitoring more than 200 Amps, employ installation note fig 2.

Dimensions

PM-H800:



Dimensions (continued)

PM-H900

