

4-20mA Current Transducers



Features

- 3 Selectable ranges
- Load trending
- Motor control
- 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

Output	4-20mA
Supply:	
Voltage	12 to 30Vdc
Current	30mA max.
Frequency	50/60Hz
Insulation class	600Vac RMS
Accuracy	±2%FS from 10% - 100% of selected range, but not less than ±0.4A
Response time	2 seconds
Ambient:	
Temperature	-15 to 60°C
Humidity	0 to 95% non-condensing
Sensing aperture:	
Solid core	19mm dia.
Split core	28 x 23mm (self gripping iris)
Dimensions:	
Sold core	74H x 76W x 27D mm
Split core	74H x 65W x 26D mm
Protection	IP20
Country of origin	U.S.A

Product Codes

PM-H721LC

Range selectable 0-10 / 0-20 / 0-40A solid core
4-20mA output

PM-H721HC

Range selectable 0-50 / 0-100 / 0-200A solid core
4-20mA output

PM-H921

Range selectable 0-30 / 0-60 / 0-120A split core
4-20mA output

Technical Overview

The PM-Hx21 series of current transducers can be used to monitor motors, pumps or other electrical loads where a linear voltage output signal is required. The output can be used to check operating status, failure, wear/strain and power for consumption analysis. The linear output signal is produced by the unit which is proportional to the current passing through the transducer.

Installation

1. The PM-Hx21 range of current transducers 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-Hx21 range. Never rely on status indicating devices only to determine if power is present in a conductor.
3. When installing the split-core version 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 output cable size is 2.5mm², care must be taken not to over tighten the screw terminals.
6. Insure that the range selection slider is in the correct position for the current being monitored. Excessive current can damage the sensor.

Low conductor current:

If the load is low you can loop the conductor through the sensor to provide adequate current and ensure accuracy.

Example:-

Load is 2.5A, pass the cable through the aperture 3 times and you will have a total load of 7.5A and set the amp range selector switch to 10A. See fig 1.

High conductor current and large diameter cables:

If the load is greater than the maximum specified for the transformer or the cable diameter is greater than the aperture of the current switch, you must use a suitable current transformer. See fig 2.

Installation (continued)

Example:-

When monitoring loads greater than 200A (when using the PM-H721HC), install a suitable CT with a 5A secondary. Pass a cable connected to the secondary winding of the current transformer through the aperture ten times and set the amp range selector switch to 50A.

(Ring type shown). Fig 1.

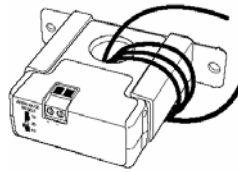
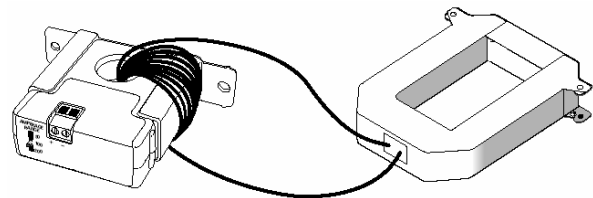
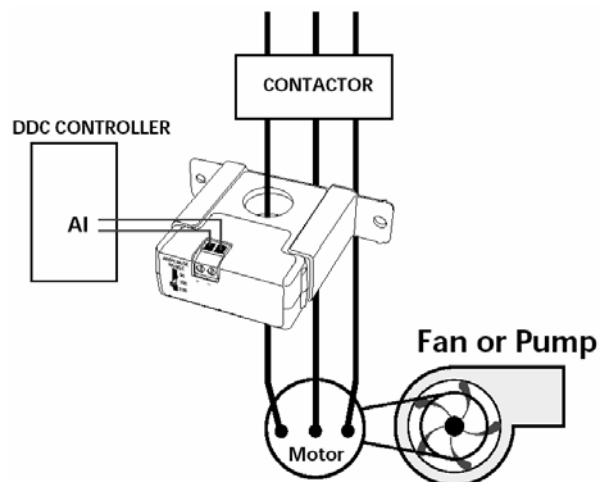


Fig 2.

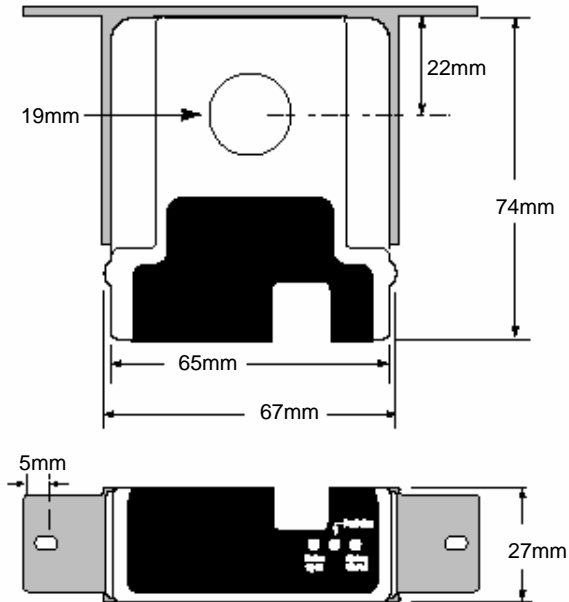


Wiring example



Dimensions

Solid core:



Split core:

