Alarm Module and Isolator



Models PHA-51 and PHA-52

Dual Alarm Modules

- Adds Alarm Relay Capability to Common Analog Outputs
- Ideal for Use with Two Wire Transmitters
- Independent Setpoint and Dead Band Controls for Each Relay
- Relays Energize on Increasing or Decreasing Input Value-Switch Selectable
- NEMA 4X Gasketed Enclosure Provides Watertight Protection

The Model PHA-51 and PHA-52 dual alarm modules provide an ideal way to add alarm capability to a control system loop. The module's two relays each have setpoint and deadband controls and an LED to indicate on/off relay status. Relay phasing switches individually select each relay to operate in response to increasing or decreasing input signal value. For compatibility with many systems, input levels are user selectable. The PHA-51 accepts 0 to 20 mA, 4 to 20 mA, or 0 to 5Vdc inputs and the PHA-52 takes 0 to 50 mV, 0 to 100 mV, 0 to 5 Vdc.

Specifications

Inputs: PHA-51: 0 to 20 mA, 4 to 20 mA, 0 to 5 Vdc; PHA-52: 0 to 50 mV, 0 to 100 mV, 0 to 5 Vdc

Outputs: 0 to 5 Vdc, 100 K ohms min. load; 0 to 1 mA, 100 ohms max.

Power: 100 - 130 Vac

Relays: Setpoints: 0 to 100% of Input Signal Range; Deadbands: 0 to 50% of Signal Input Range; Contact Rating: SPDT, 3A max. resistive, 250 Vac max. 3A max. resistive, 30 Vdc max.

Dimensions: 120.6mm H x 120.6mm W x 63.5mm D x (4.75" x 4.75" x 2.5") Weight: 567g (1.25 lb)



Model PHA-50 Loop Powered Isolator

- Prevents Ground Loops
- Transformer Isolated

Loop Powered

Virtually Zero Temperature Drift

The PHA-50 loop-powered isolator provides an isolated 4 to 20 mA output equal to the 4 to 20 mA non isolated input. This one to one current isolator is used in 4 to 20 mA two wire circuits to prevent ground loops. To eliminate moisture and humidity problems, the electronics are encapsulated in epoxy and the output is compensated for virtually zero temperature drift. The PHA-50 can be surface mounted in any position, and a trimpot control to adjust the output span is accessed by removing a protective cap. Model PHA-50 \$175 USA

Specifications

Input: 4 to 20 mA non isolated Output: 4 to 20 mA Isolated Insertion loss at 20 mA: 4.5 Vdc (this represents a max. resistance of 225 ohms into the 4 to 20 mA loop)

Allowable Isolated Load:

20 to 500 ohms **Isolation:** 1000 Vac or dc, transformer isolated

Sensitivity: 0.01 mA

Stability: 0.01 mA

Non-linearity: $\pm 0.03\%$ of span

Accuracy: ±0.1%

Temperature Range: -20 to 50°C **Dimensions:** 62.2mm H x 53.3mm W x 48mm D (2.45" x 2.10" x 1.89")

To Order (Specify Model No.)		
Model No.	Price	Description
PHA-50	\$175	Loop power isolator
PHA-51	215	Dual alarm module (4-20 mA, 0-5 Vdc)
PHA-52	255	Dual alarm module (millivolt, 0 to 5 Vdc)