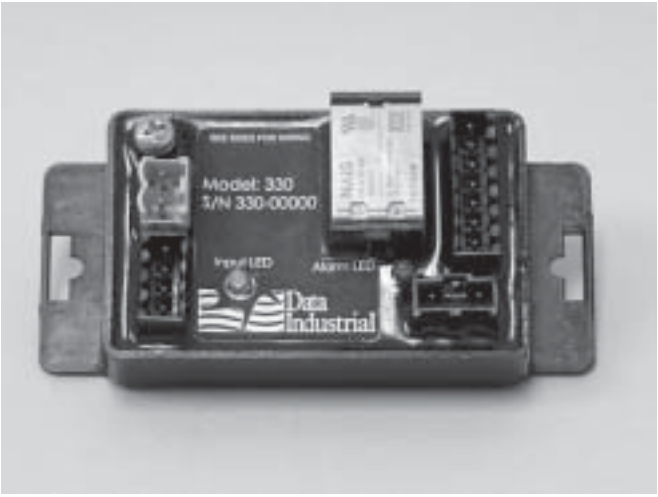
Model 330 Relay Control

The **Model 330** is a compact, programmable relay control capable of converting the signal from a Data Industrial flow sensor into a flow switch.

With an onboard microcontroller and digital circuitry, the Model 330 is programmed from a Windows® based computer program. This eliminates the need to set dip switches or potentiometers and produces precise, accurate and drift free control of the relay outputs. In addition to accepting the Data Industrial square wave signal, the Model 330 can accept other pulse and sine wave inputs.

The compact cast epoxy body measures 1.75” (44mm) x 2.75” (70mm) x 1.5” (38mm) and can easily be mounted to panels, DIN rails or enclosures. With multiple inputs, ease of use and a variety of enclosures, the Model 330 is a powerful, competitive priced relay control.

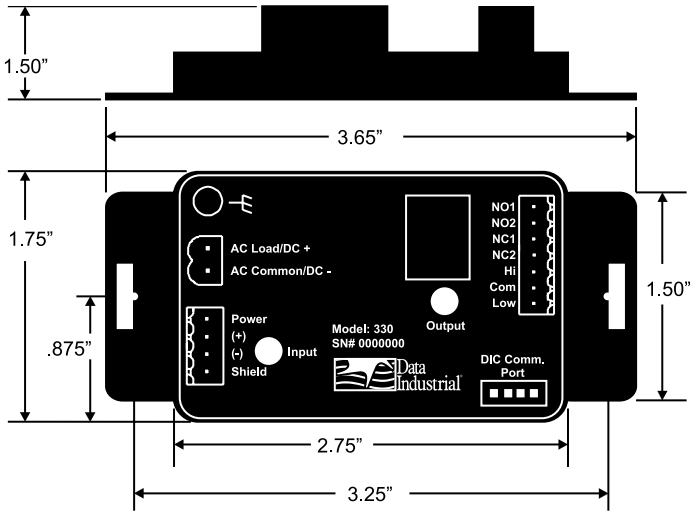


Applications:

Combined with a flow sensor the Model 330 may be used in a variety of "Flow Switch" applications.

- Flow / no flow indicator
- High Flow / Low Flow alarm monitor
- Booster pump control
- Multiple pump staging
- Leak control

Model 330 Dimensions



Features:

1. **Relay Output** - The Model 330 output is a pair of single pole relays, one normally open and one normally closed. Both relays act in unison to the programmed parameters.

2. **Selectable Alarm Type** - The Model 330 may be programmed as a high flow alarm where the relays are energized when the flow rate exceeds the set point, or as a low flow alarm where the reverse is true and the relays energize when the flow rate falls below the set point.

3. **Programmable Set & Release Points** - The set point, the flow rate where the relays are energized, is programmed independently from the release point, the flow rate where they are de-energized. This adjustable deadband prevents relay chatter and control cycling.

4. **Programmable Time Delays** - This feature provides a time delay between crossing the set or release point and energizing or de-energizing the relay. This feature allows surges in the flow to dampen out before the control circuit reacts.

5. **Latch Feature** - The latch maintains the relays in the energized state even when the alarm condition has been satisfied, until manually reset.

6. **Remote Reset** - This allows all the control parameters of the Model 330 to be reset by an external signal.

Data Industrial Corporation, 11 Industrial Drive, P.O. Box 740, Mattapoisett, MA 02739, Telephone: (508) 758-6390 Fax: (508) 758-4057
web site: www.dataindustrial.com email: sales@dataindustrial.com

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Specifications

Power
Power supply options:
12-24 VDC
12-24 VAC
Current Draw:
60 mA @ 12 VDC

Flow Sensor Input
All sensors:
Excitation voltage 3 wire sensors:
9.1 VDC 500Ω source impedance
Pulse type sensors:
Signal amplitude:
2.5 VDC threshold
Signal limits:
Vin < 35V (DC or AC peak)
Frequency:
0-10kHz
Pull-up:
2 kΩ
Sine Wave Sensors:
Signal amplitude:
10 mV p-p threshold
Signal limits:
Vin < 35V (DC or AC peak)
Frequency:
0-10kHz

Relay:
1 Form A 1 Form B
Contact Ratings:
5A@30VDC
5A@125VAC
5A@250VAC

Time Delay:
1-9999 second delay between flow point and relay actuation

Transient Suppression:
Designed to withstand a 5000 volt 1/2 microsecond, 100KHz ring wave

SENSOR CALIBRATION

Data Industrial:
Use “K” and “offset” provided in sensor owner’s manual

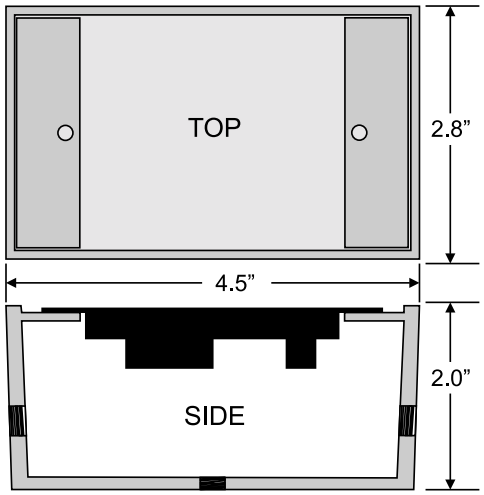
Other Sensors:
Check with factory

UNITS OF MEASURE

Flow measurement
Rate:
gpm, gph, l/sec, l/min, l/hr, ft3/sec, ft3/min, ft3/hr, m3/sec, m3/min, m3/hr

PROGRAMMING
Requires PC or laptop running Windows® 9x, ME, NT, 2000, XP

Optional Enclosure (330-02 and 330-03)



Operating Temperature:
-25° C to +70° C
-20° F to +158° F

Storage Temperature:
-40° C to +85° C
-40° F to +185° F

Weight:
4.8 oz. with headers installed

Accessories:
A-330 programming kit containing software and 3' A301 cable.

A-330-20 programming kit containing software and 20' A301-20 cable. (longer cable may be required for field programming).

Model 330 Ordering Matrix

	EXAMPLE:	330	-	xx
Series				
Programmable Local Relay Control		330		
Options				
Transmitter Only				00
W / NEMA 4X Enclosure				01
W / Metal Enclosure				02
W / Plastic Enclosure				03
W / DIN Rail Mounting Clips				04

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