



Precise Sensors

"Defining Higher Expectations"

1/32 DIN Process Controller

Model **4221**

Description

The Model 4221 is ideal for closed-loop process control and actuation based on inputs from pressure sensor or gas cylinder scale output signals. The Model 4221 is a fully programmable, 4-digit microprocessor-based process device. The 0.4" red LED display offers excellent visibility on a unit that is 1/32 DIN in size. This controller operates with either a 20-32V AC/DC or 90-264V AC power supply. This is a single universal input unit that will accept a variety of linear mA and VDC signals. Options for the outputs include: relays, SSR drives, 4-20mA signal retransmission, or RS-485. Output #1 can be used in control situation. Output #2 can be used as an alarm or as a 20 VDC power supply for most of Precise Sensors' pressure transducers, transmitters and gas cylinder scales.



Features

- Built-in sensor power supply
- 3 front panel keys
- Auxiliary output for digital RS-485 signal or 4-20mA signal retransmission
- Small size (1/32 DIN)
- NEMA 4X approved faceplate
- Security lockout
- Long life warranty

Benefits

- Eliminates requirement for an additional sensor power supply; more economical, less wiring
- Easy navigation, user friendly operation
- Allows interface to data acquisition systems/PC's or sending an analog signal that can serve as an input signal to a second controller or device.
- Mounts conveniently where space is limited
- Controller panel is water-, chemical-, splash-, and washdown-proof
- Prevents unauthorized tampering
- Warranty period is 2 years

Model 4221 Specifications

Input

Type 4-20mA, 0-20mA, 0-1V,
0-5V,1-5V, 0-10V: linear, all
scalable
Indicating Range User configurable:
-1999 to 9999 process units
Accuracy ±0.05%
Normal Mode Rejection . . 60dB
Common Mode Rejection . . 120dB
Sample Rate 200 msec

Sensor DC Power Supply (20 VDC @ 25 mA max)

Load Resistance 500 Ω max. (Based on
4-20mA 2-wire loop using
Precise Sensors transmitter)

Control

ON-OFF With adjustable hysteresis
0.1-199 process units
Control Action Direct

Indication

Process Display 0.4" red LED, 4 digits
Status Indicator Control output and alarm

Power

Rating 90-264VAC, 50/60Hz or
20-32VAC/DC
Consumption Less than 5VA

Environmental & Physical

Safety CE, TUV, UL & CSA Approved
Protection NEMA 4X, IP65 (faceplate)
Operating Temperature . . -10 to 50°C
Humidity 0 to 90%RH (non-condensing)
Insulation 20 MΩ min. (500VDC)
Breakdown AC2000V. 50/60Hz. 1 minute
Vibration 10-55Hz. amplitude 1mm
Shock 200 m/s² (20g)
Weight 3.85 oz. (110 grams)
Dimensions 1/32 DIN size front panel
0.94"(H) x 1.88"(W) x 3.89"
depth behind panel
(24mm x 48mm x 99mm)
Panel cutout 0.87" (H) X 1.77" (W)
(22mm X 45mm)
Warranty Two years

Output 1 Options (Control)

- Setpoint range: -1400 to 9400 process units
- Relay (3A/240VAC) resistive
- SSR Drive (24VDC/20mA Max.)

Alarm/Output 2 Options

- Relay rated 3A/240VAC resistive
- SSR Drive (24VDC/20mA Max.)
- Sensor DC power supply (20VDC @ 25mA max.)

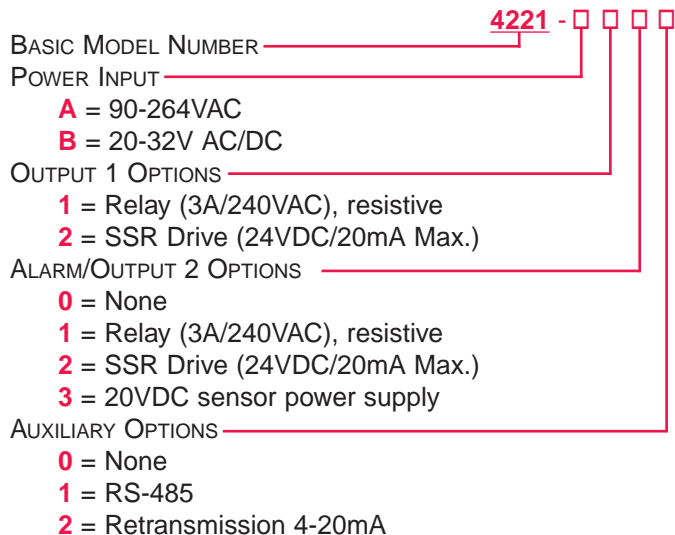
Auxiliary Options

- RS-485
- Retransmission 4-20mA

Specifications are subject to change without notice.

How to order

Example: 4221 - A 1 1 2



The example represents a controller requiring 90-264 VAC power featuring a relay for output #1, an alarm relay for output #2, and a 4-20 mA retransmission auxiliary output.



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