ROOM PRESSURE MONITOR

RPC SERIES

The RPC series of room pressure monitors are intended to be wall mounted directly to a single gang electrical box or directly to a wall. The monitor will measure differential pressure. It combines precision high sensitivity silicon sensing capabilities and the latest ASIC technology to substantially reduce offset errors due to changes in temperature, stability to warm up, long term instability and position sensitivity.

PRODUCT HIGHLIGHTS

• Measure differential pressure in the range of 0.125 to 1” WC or 30 to 250 Pa

• provide either an analog or BACnet® compatible signal to a building automation system.

• LCD with user menu

* Four selectable pressure ranges
* RS-485 network with either BACnet or Modbus protocol
* Onboard auto zero function
* Alarm output with adjustable high and low alarms
* On board buzzer
* Remote buzzer output
* Silence switch
* Flashing LED alarm
* Adjustable response time

SPECIFICATIONS

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| DESCRIPTION | ENGINEERING SPEC |
| PRESSURE RANGES | ±1”, ±0.5”, ±0.25”, ±0.125” WC  ±250, ±125, ±60, ±30 Pa |
| ACCURACY | ±1% F.S.O. (±2% F.S.O. for 0.125”WC and 30 Pa ranges) |
| STABILITY | ±1% FS max (1 year) |
| THERMAL EFFECTS | <±3.5% FS max, 5 to 50°C (41 to 122°F) |
| RESPONSE TIME | 0 to 60 seconds (menu selectable) |
| MEDIA COMPATIBILITY | Dry air and inert gas |
| PROOF PRESSURE | 100”WC (24.9 kPa) |
| BURST PRESSURE | 200”WC (49.8 kPa) |
| ZERO ADJUSTMENT | Pushbutton auto-zero |
| POWER SUPPLY | 24 Vac/dc, ±10% |
| CONSUMPTION | 70 mA max with alarms on (80 mA with BACnet® option) |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| LCD DISPLAY | Size: 38.1mm W x 16.5mm H (1.5” x 0.65”)  Digit Height: 11.43mm (0.45”)  Symbols: “WC, Pa  Backlight: Enable/disable via menu |
| OUTPUTS | 4-20 mA (3 wire), 0-5 Vdc or 0-10 Vdc (3 wire), field selectable |
| OUTPUT DRIVE | Current: 750Ω max  Voltage: 2000Ω min |
| PRESSURE CONNECTIONS | Ports for 1/16” ID tubing (1/8” ID Adapters included) |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| ALARM FUNCTION | Relay Output: N.O. contact, 2 Amps @ 120 Vac or 30 VdC  Relay Trip Point: Upper and lower trip levels adjustable over the pressure range  Relay Delay: 0 to 10 minutes (menu selectable)  Visual Indication: Setpoint step size is 0.5°C or 1.0°F  Audible Indication: On-board buzzer, 85 db on high range (menu selectable)  Buzzer Output: Output to control remote audible alarm (Part Number AA-1) |
| OPTIONAL BACNET COMMUNICATION | Communications: 2 wires RS-485, BACnet® MS/TP protocol  Baud Rate: Locally set to 9600, 19200, 38400, or 76800  MAC Address Range: Locally set to 0-127 (factory default is 3) |
| OPERATING CONDITIONS | 0 to 60°C (32 to 140°F), 10 to 90 %RH non-condensing |
| STORAGE TEMPERATURE | -40 to 70°C (-40 to 158°F) |
| ENCLOSURE | White ABS, IP30 (NEMA 1)  84mm W x 119mm H x 29mm D (3.3” x 4.7” x 1.15”) |
| WEIGHT | 115g (4 oz) |
| COUNTRY OF ORIGIN | Canada |