

CRC-RPM/C2

Room Pressure Monitor / Controller

Rev 5.2

FEATURES:

- Full color energy efficient ultra-thin LCD touch screen interface (LED Backlight)
- Direct pressure measurement with dead ended silicon diaphragm
- Capable of monitoring and controlling (2) pressure relationships
- Supports positive, negative and neutral environments
- Indicates appropriate precautions to be taken when entering room
- Display resolution to 0.0001" WC
- Supports multiple pressure ranges
- Audible and visual alarms
- Four fully configurable modes
- Full automation of room changeover
- Automated clearing / purging
- Monitors, alarms and allows local set point control of up to eight (8) additional parameters
- Password protected access
- Visual I/O diagnostics of points
- Water spray and dust resistant ultra-thin surface mount enclosure
- Resistive touch control – Use bare finger, gloved finger, or stylus for interaction
- All parameters / settings saved in non-volatile memory
- Field configurable, easy, and intuitive menus
- Ability to "Zero" calibrate the pressure transducer with a touch of a finger
- Supports multiple BMS protocols



OVERVIEW:

CRC's Room Pressure Monitor / Controller model CRC-RPC2 accurately monitors and/or controls two differential pressure relationships where proper pressurization is vital. The CRC-RPC2 can meet the stringent critical environment of; isolation rooms, operating rooms, pharmacies, research facilities and animal rooms. The CRC-RPC2 utilizes direct pressure measurement with industrial quality differential pressure transducer technology capable of displaying pressure to 0.0001"WC.

The primary screen of the RPM/C2 clearly displays current isolation mode along with differential pressure and optional precautionary information. A secondary screen allows the display, alarm, and set point adjustment of 8 additional points. Room changeover automation and automated clearing / purging functions allow facilities to optimize room utilization while insuring the safety of patients, staff and visitors.

The CRC-RPC2 incorporates an easy to navigate microprocessor based controller with full color touch screen interface. All settings / configuring is made by an easy to navigate touch screen interface or via network. The CRC-RPC2 can be configured as a pressure monitor only or complete system controller. The CRC-RPC2's analog inputs/outputs and/or communications allow the CRC-RPC2 seamlessly integrate with the CRC-CLV air valve, Critical Room Control system, or building automation systems.

DISPLAY:

Description:	Full color LED TFT 16 bit (65,535) color depth, sunlight viewable, 320cdm brightness, touch screen interface. Screen is capable of wipe down cleaning and water spray and dust resistant meeting (IP-54)
Listing:	CSA©, RU(us), UL 60950, UL 94 V-0 (Enclosure)
Screens:	Five (5) user defined modes, field configurable verbiage, configurable screen color, patented clearing timing features
Main Screen:	Background color field configurable for green (default), red or blue
Modes:	Total of five (5) user configurable modes including fully automated room changeover
More Info:	Supports up to eight user defined network values allowing local display of points descriptor, value, set point change, visual and audible alarming
I/O Diagnostic:	Graphical display of controller analog inputs/outputs and digital inputs/outputs
Mounting:	Low profile surface

POWER REQUIREMENTS:

Input Power:	22 to 26VAC; 50/60Hz, fully isolated
Power Draw:	18 VA
Primary:	24VAC Input

ENVIRONMENTAL CHARACTERISTICS:

Temperature Limits:

Storage:	-40 to 180
Operating:	+0 to 160
Compensated Range:	+35 to 130

Temperature Coefficients:

Zero:	±0.03%F.S./ F
Span:	±0.03%F.S./ F
Listing:	UL-94-5VA
EMC:	CE compliant to EN61326: 1997+A1: 1998+A2: 2001 annex A (heavy industrial)

PERFORMANCE CHARACTERISTICS:

Accuracy Class (F.S.):	±0.4% & ±0.8% (includes the effects of non-linearity, hysteresis, and non-repeatability)
Stability-Max. Change:	≤0.25% (Full scale/year)
Unidirectional Range:	0/0.1, 0/0.25, 0/0.5, 0/0.75, 0/1.0, 0/2.0, 0/2.5, 0/3.0, 0/5.0, 0/10.0, 0/25.0
Compound Range:	±0.1, ±0.25, ±0.5, ±1.0, ±2.0, ±5.0, ±10.0
Response Time:	250msec
Over Pressure limits:	
Proof Pressure:	15psi
Burst Pressure:	25psi
Max. Static Line Press:	25psi

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PRESSURE ALARMS:

Audible: 2 (pressure alarm & remote alarm)
Visual: 2 (amber (loss of pressure), red (alarm))

CONTROLLER I/O:

Analog Inputs: 4 total analog inputs

- AIN1 & AIN2 are selectable (4-20mA, 0-10V, or 0-5V)
- AIN3 & AIN4 are (0-10V)

Analog Outputs: 4 (2-10V)

Digital Inputs: 4

Relays: 4 (normally closed - 0.5 A at 125 VAC; 2 A at 30 VDC)

Terminals: Removable screw terminals (18ga - 26ga wire)

Enclosure: Fire retardant, extruded acrylic/PVC Alloy UL94V

Communication: RS-485

Onboard power: 10vdc (80mA max.), 5vdc (80mA max.), and onboard loop power circuit 22VDC (80mA max.)

COMMUNICATION:

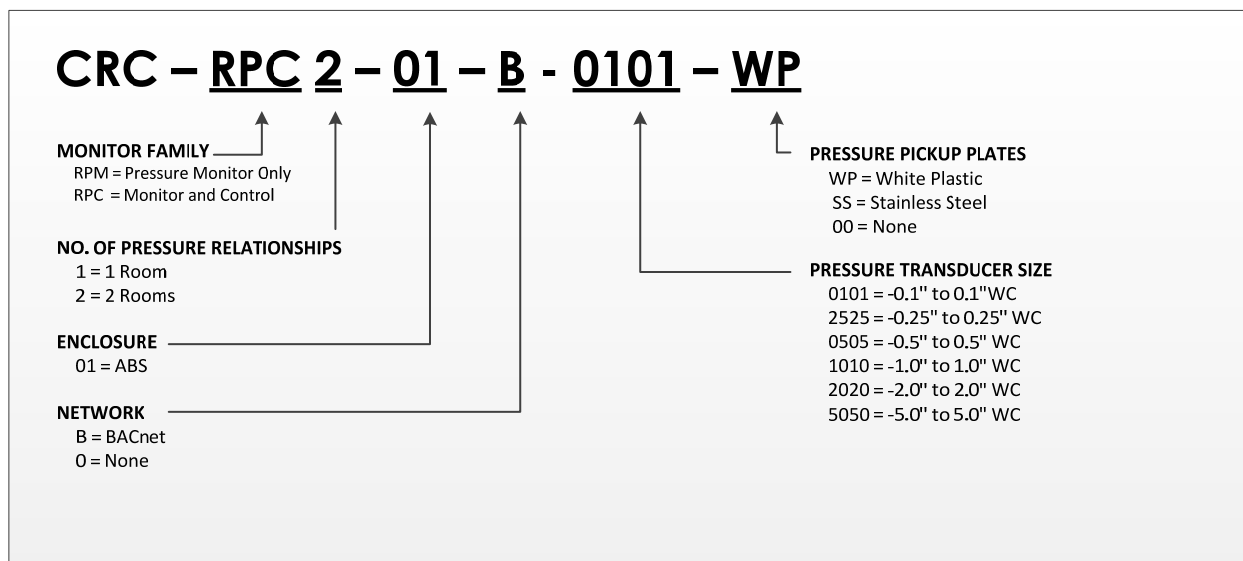
Connection: RS-485

Supported Protocol: BACnet MS/TP; Modbus, Johnson Controls Incorporated N2 & LON with optional card

Network Debug: Network communication diagnostics

Network Setup: Baud rate, MAC address and instance ID configured via touch screen

ORDERING NOMENCLATURE:



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ADDITIONAL SCREENS:

PATIENT ROOM | TEMPERATURE: 72.6° SP 68.7
HUMIDITY: 7.2% SP 4.5%
AIR CHANGE: 5 ACH
HEPA DP: 0.0023"WC

ANTE ROOM | TEMPERATURE: 71.2° SP 69.2
HUMIDITY: 6.2% SP 4.5%
SUPPLY : 4.5 CFM
HEPA DP: 0.0023"WC

EXIT

PATIENT ROOM | TEMPERATURE: 72.6° SP 68.7
HUMIDITY: 7.2% SP 4.5%

PATIENT ROOM
TEMPERATURE Set Point
69.0

APPLY CANCEL

ANTE ROOM | TEMPERATURE: 71.2° SP 69.2
HUMIDITY: 6.2% SP 4.5%
SUPPLY : 4.5 CFM
HEPA DP: 0.0023"WC

EXIT

PATIENT ROOM 0.0000 "WC ANTE ROOM

* LOSS OF PRESSURE - CHECK DOOR *

MODE: POSITIVE PRESSURE
STANDARD PRECAUTIONS

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM 0.0000 "WC ANTE ROOM

* PRESSURE ALARM - CHECK DOOR *

MODE: POSITIVE PRESSURE
STANDARD PRECAUTIONS

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: TO BE CLEANED
STANDARD PRECAUTIONS

CLEANED

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: OCCUPIED - NO ISO
STANDARD PRECAUTIONS

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: CLEARING
STANDARD PRECAUTIONS

TIME UNTILL CLEARED: 21:54

AUTHORIZED PERSONNEL ONLY

PATIENT ROOM ANTE ROOM

MODE: VACANT

AUTHORIZED PERSONNEL ONLY

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ADDITIONAL PRODUCT INFORMATION:

Please contact us at:

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