Pneumatic Temperature Controllers

RP920 Pneumatic Controller





Airflow Usage: 0.07 scfm (33.0 mL/s) with 1 psi (7kPa) pressure drop

at 18 psi (124 kPa) main air supply

Connections: Air: Combination 5/32 in. by 1/4 in. barb.

Input Signal: 3 to 15 psi (21 to 103 kPa)

Maximum Operating Temperature: 130 F (54 C)

Temperature Range: 40 F to 130 F (5 C to 55 C)

Humidity Ratings: 5 to 95% RH

Maximum Safe Operating Pressure: 30 psi (207 kPa)
Mainline Pressure Range: 17 to 21 psi (115 to 145 kPa)
Output Pressure Range: 3 to 13 psi, output signal maximum is
Mainline Pressure minus 1/2 psi (21 to 90 kPa, output signal maximum is Mainline Pressure minus 7 kPa)

Maximum Safe Mainline Pressure: 30 psi (205 kPa)

Remote Bulb Sensor: no

Remote Control Point Adjustment: Yes

Comments: All RP920s can be converted to reverse acting in the field. For additional technical information see literature Form no. 85-0224 and 95-7392FF

Comments on Pressure: The controller is capable of operating with the MLP (Mainline pressure) as low as 15 psi (100 kPa) or as high as 23 psi (160 kPa), however recalibration may be required.

Accessories:

305616-1-1/2 in. diameter, 1/8 NPT center stem back mount Receiver gauge (0 to 2 in. w.c. scale) with ±2% accuracy

305965-1-1/2 in. diameter, 1/8 NPT center stem back mount Pressure Indicating gauge (0 to 30 psi scale) with ±4% accuracy

305929-1-1/2 in. diameter, 1/8 NPT center back stem mount Receiver gauge (-40 to +160 F scale) with ±2% accuracy

305930-1-1/2 in. diameter, 1/8 NPT center back stem mount Receiver gauge (0 to 200 F scale) with ±2% accuracy

Proportional, high capacity, single or dual input pneumatic controller used in conjunction with remote sensors to provide proportional (P) or proportional plus integral (P+I) control of temperature, humidity, pressure, or dew point for heating and air conditioning systems. Replacement devices are available for Johnson, Powers, Robertshaw, Barber-Colman, and older Honeywell controllers.

- · Proportional plus integral control option minimizes offset.
- Miniature diaphragm technology provides high degree of accuracy and reliability.
- Direct Acting models can be converted to Reverse Acting (RA) function in field.
- · Field adjustable compensation start point.
- Local or remote setpoint field option. Integral action cut-off provides trouble-free automatic startup.
- Transparent cover (optional) provides protection while allowing easy reading of settings and gages.
- Corrosion resistant construction.

305931-1-1/2 in. diameter, 1/8 NPT center back stem mount Receiver gauge (40 to 240 F scale) with ±2% accuracy

305972-Receiver gauge, 1-1/2 in. 1/8 NPT center back, temperature 50 to 100F

305986-Receiver Gauge. -20 to 80 F scale 1-1/2 in. diameter,1/2 NPT connection

14000786-001-Receiver Gauge, 25 F-125 F scale, 1 1/2 in. diameter, 1/8 in. NPT connection

14000786-002-Receiver Gauge, -5 to 55 C scale, 1 1/2 in. diameter, 1/8 in. NPT connection

14000786-003-Receiver Gauge, 15 to 75% RH scale, 1 1/2 in. diameter, 1/8 in. NPT connection

14000786-004-Receiver Gauge, 65 to 95% RH scale, 1 1/2 in. diameter, 1/8 in. NPT connection

14000786-005-Receiver Gauge, 15 to 85% RH scale, 1 1/2 in. diameter, 1/8 in. NPT connection

14004267-001-Temperature and Humidity scaleplate insert for setpoint knob for all RP920

14505694-004-17 3/4 inch (450 mm) long mounting rail for RP920 43188057-010-Clear plastic cover for all RP920A pneumatic controllers 43188123-010-Clear plastic cover for all RP920B, RP920C, RP920D pneumatic controllers

Replacement Parts:

14004277-003-Setpoint module with gasket with CPA for RP920 14004278-002-Compensation module with gasket for RP920B and RP920D

14003757-001-Seal screw for port 8 and O-ring repair parts for RP920

43915905-110-O-ring for filter in RP920

43188059-001-Setpoint knob for all RP920 pneumatic controllers

14002172-001-Gage Tap repair plug

14001865-001-Filter Cartridge Assembly

Product Number	Action	Capacity	Number of Sensors	Includes
RP920A1025/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.021 scfm (10 mL/s)	single	With remote control point adjustment capability.
RP920A1033/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.021 scfm (10 mL/s)	single	Without remote control point adjustment capability.
RP920B1023/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.046 scfm (21.7 mL/s)	dual	With remote control point adjustment capability.
RP920B1031/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.046 scfm (21.7 mL/s)	dual	Without remote control point adjustment capability.
RP920C1021/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.021 scfm (10 mL/s)	single	With remote control point adjustment capability.
RP920C1039/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.021 scfm (10 mL/s)	single	Without remote control point adjustment capability.
RP920D1029/U	Direct Acting	at 18 psi (124 kPa) MLP and 8.5 psi (59 kPa) BLP (does not include sensor usage): 0.046 scfm (21.7 mL/s)	dual	With remote control point adjustment capability.