

RCC-1000/1100 Series

Pneumatic Relays

Description

RCC-1001/1012/1101/1112 Reversing Relays (pilot capacity) are designed for reversing a proportional signal from a controlling device. Factory adjusted to decrease branch line pressure as the input pressure increases. Comes with a bias adjustment and two factory calibration points (8 and 9 psi).

RCC-1006/1106 Low Pressure Selector Relays are designed to control a final device based on the lower of two pneumatic input signals.

RCC-1008/1108 High Pressure Selector Relays are designed to select the greater of two pneumatic signals as the control signal for a final device. These signals must be supplied by "relieving" type devices such as thermostats and receiver-controllers.

RCC-1009/1109 Adjustable Diverting/Switching Relays are SPDT devices. They divert one signal to either of two branch circuits **or** select one of two inputs and transmit it to another control device. They can also be used to feed or exhaust a circuit.

RCC-1102 Averaging Relay is designed for applications that do not require large amounts of output air volume. Suitable for room or zone applications such as VAV terminals. Use where the output signal to the controlled device must be the average of two source signals.

Accessories

HMO-4511

Replacement mounting bracket

A CAUTION

Pneumatic devices must be supplied with clean, dry control air. Any other medium (e.g., oil or moisture contamination) will cause the device to fail.





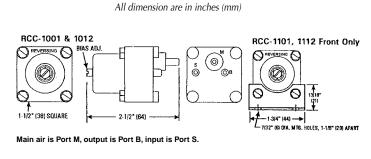


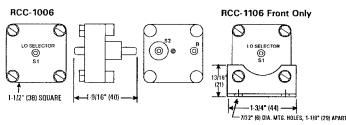
Models

Without Mounting Bracket

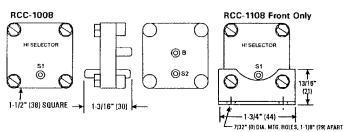
| RCC-1001 | Reversing, 9 psi calibration | |
|---------------------------|------------------------------------|--|
| RCC-1006 | Low pressure selector | |
| RCC-1008 | High pressure selector | |
| RCC-1009 | Diverting/switching, SPDT | |
| RCC-1012 | Reversing, 8 psi calibration | |
| Includes Mounting Bracket | | |
| DCC 1101 | D · O · 1'1 · · | |
| RCC-1101 | Reversing, 9 psi calibration | |
| RCC-1101 RCC-1102 | Averaging | |
| | U I | |
| RCC-1102 | Averaging | |
| RCC-1102 RCC-1106 | Averaging Low pressure selector | |

Details

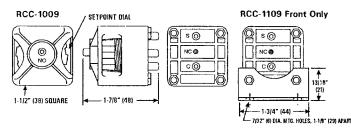




The output, Port B, is the lower of the two input pressures applied to Ports S1 and S2. Take CARE when applying "one-pipe" restricted signals to S2 since the relay's output is derived from the air applied to S2.

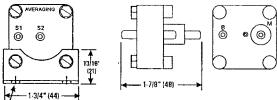


No adjustments need to be made. The design allows for positive switching between signals, and the non-transmitted signal is internally blocked. The signals applied to Ports S1 and S2 must come from "relieving" type devices. DO NOT supply from NO or NC ports of diverting relays or solenoid air valves.



The setpoint dial can be rotated within the body to adjust the switching point. One turn yields approximately 6 psi change in the switching point. Each unit is factory-set to switch between 18 and 23 psi, which allows it to match most two-pressure main air systems. This device is not "snap-acting" (it must receive a positive pressure change at its signal port to switch).

RCC-1102



- 7/32" (5) DIA. MTG. HOLES, 1-1/8" (29) APART

Main air is Port M and output is Port B. Inputs to be averaged are applied to S1 and S2.

Specifications

| • | |
|---------------------|--|
| Supply Pressure | 0–20 psi (138 kPa) operating 30 psi (207 kPa) maximum |
| Air Capacity | |
| RCC-1001/1012/1101 | /1112 17.3 scim (4.7 mL/s) @ 20 |
| | psi (138 kPa) |
| RCC-1006/1106 | 21.6 scim (5.9 mL/s) @ 20 psi |
| | (138 kPa) |
| RCC-1009/1109 | 432 scim (117.9 mL/s) @ 20 psi |
| | (138 kPa) |
| RCC-1008/1108 | 260 scim (70.6 mL/s) @ 5 psi |
| | (34.5 kPa) pressure drop |
| Air Consumption | |
| RCC-1001/1012/ 1101 | l/1112 17.3 scim (4.7 mL/s) |
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| RCC-1001/1012/1101/1112 17.3 scim (4.7 mL/s) | |
|--|-----------------------------------|
| RCC-1006/1106 | 0–21.6 scim (5.9 mL/s) on Port S2 |
| RCC-1008/1108/1009 | 9/1109 None |
| RCC-1102 | 17.3 scim (4.7 mL/s) on Main, |
| | 0 on Signal |

Bias Adjustment

RCC-1001/1012/1101/1112 +/-15 psi (103 kPa)

Switching and Setpoint (RCC-1009/1109 Only)

| 0 1 | | |
|---------------------------------------|--|--|
| Factory Setpoint | 18–23 psi (124–159 kPa) | |
| Setpoint Range | 3–23 psi (21–159 kPa) | |
| Switching Differential 5 psi (34 kPa) | | |
| Action | C and NO connected below setpoint, C and NC connected above setpoint | |
| Supply Connection | 3/16" (5 mm) for 1/4" (6 mm) O.D. polyethylene tubing | |
| Weight | 2.5 oz. (71 grams) maximum | |
| Material | RCC-1009/1109 are glass-filled nylon, all other models are beige flame-retardant plastic | |
| Approvals | RoHS compliant | |
| Temperature Limits | | |
| Operating | 40 to 120° F (4 to 49° C) | |
| | | |

Shipping $-40 \text{ to } 140^{\circ} \text{ F} (-40 \text{ to } 60^{\circ} \text{ C})$

KMC Controls, Inc. 19476 Industrial Drive, New Paris, IN 46553 574.831.5250 www.kmccontrols.com info@kmccontrols.com