

The 2354 Series Diverting Relays are snap-acting devices designed for a variety of switching and interlocking functions in pneumatic control systems where the applications may require one or more of the following functions: feeding and exhausting branch lines, diverting a supply line to either one of two branch lines, diverting either one of two supply lines to one branch line.

Table-1 Ordering Data - Relays.

TAC Model Number	Replaces Model	Switching Action	Factory Settings
2354-501	R504-1	SPDT	4-8 psig
2354-502	R504-2		18-22 psig
2354-503	R504-3	DPDT	4-8 psig
2354-504	R504-4		18-22 psig

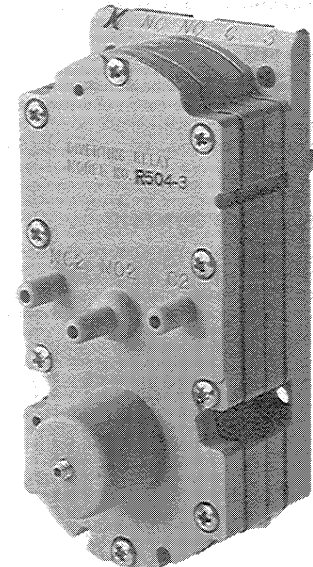
Table-2 Ordering Data - Accessories.

TAC Model Number	Replaces Model	Description
22-150	K502	Optional Mtg. Bracket

Table-3 Active Connections.

PORT	CONNECTED TO
C	Common
C ₂ *	Common No. 2
NO	Normally Open
NO ₂ *	Normally Open No. 2
NC	Normally Closed
NC ₂ *	Normally Closed No. 2
S	Input Signal

*2354-503 & 504 only



SPECIFICATIONS

Action:

2354-501

Below 4 psig: NO and C are connected

Above 8 psig: NC and C are connected

2354-502

Below 16 psig: NO and C are connected

Above 19 psig: NC and C are connected

2354-503

Below 4 psig: NO and C are connected, NO₂ and C₂ are connected

Above 8 psig: NC and C are connected, NC₂ and C₂ are connected

2354-504

Below 16 psig: NO and C are connected, NO₂ and C₂ are connected

Above 19 psig: NC and C are connected, NC₂ and C₂ are connected

Maximum air pressure: 30 psig

Air capacity: 60 SCFH

Maximum ambient temperature: 140 °F

Mounting: Designed for use on 22-120 manifold socket.

This device can also be surface mounted by using the appropriate mounting bracket (see Mounting Instructions).

Connections: Barbed nipples for 1/4" O.D. polyethylene or 5/32" I.D. polyurethane tubing

Adjustments: The differential band (fixed at 4 psi) may be adjusted between 4 - 8 psig and 18 - 22 psig respectively by means of a 1/16" hex wrench

GENERAL INSTRUCTIONS

These devices are to be used on clean, dry, oil free control air only and will operate properly when mounted in any position.

The inherent reliability of these devices is enhanced and prolonged through regular inspection and preventive maintenance by a qualified control expert. Should a device become inoperative, it should be replaced by a new unit.

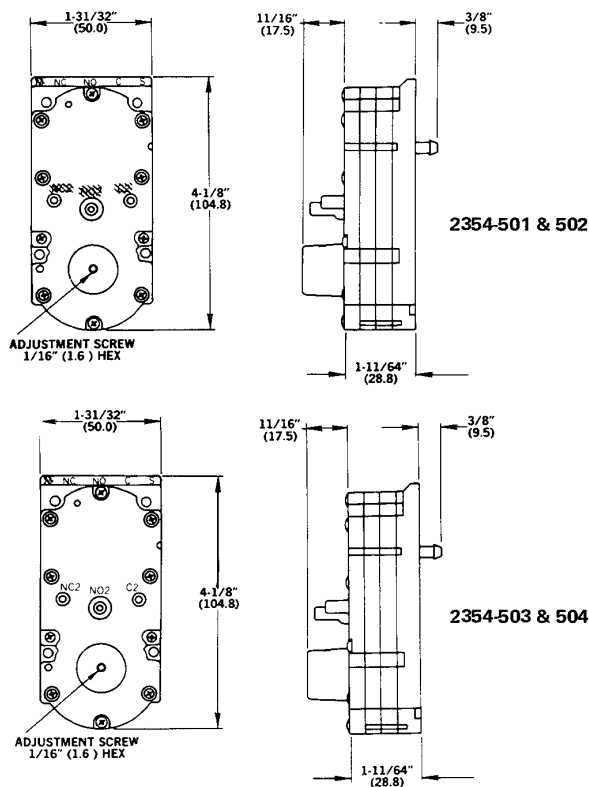
MOUNTING INSTRUCTIONS & DIMENSIONS

Panel Mounting

This device has been designed to be mounted on a 22-120 manifold socket. One socket, one gasket, and two mounting screws are required in addition to the appropriate manifold backplate. Refer to the Parts and Accessories Data Sheet for complete ordering information.

Surface Or Field Mounting

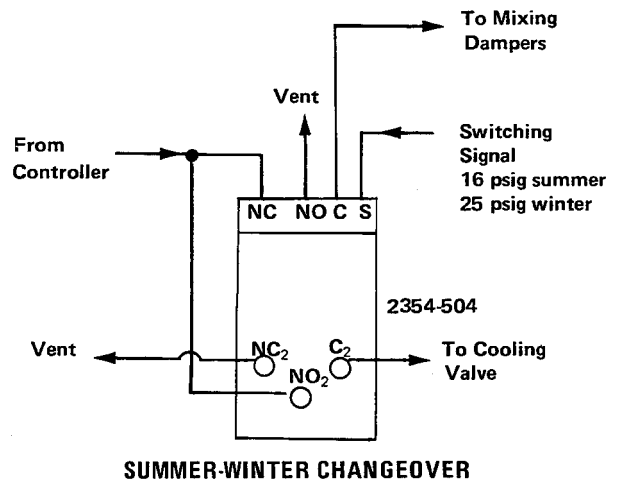
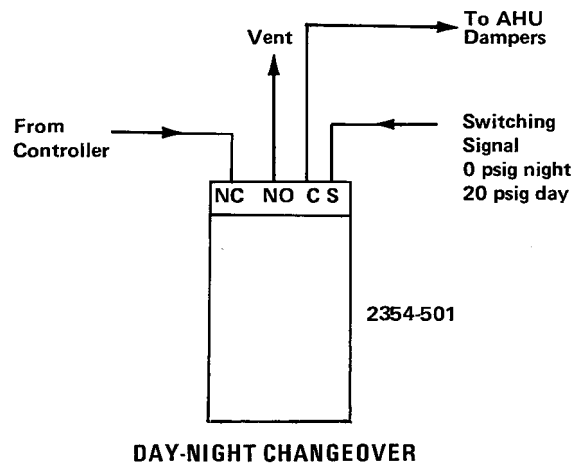
This device may also be mounted without the backplate, socket, and gasket to replace competitive and old Robertshaw devices by using an optional mounting bracket or by using the plastic mounting strap and adhesive base provided with the device.



TYPICAL APPLICATIONS

In the application shown, during day operation, the relay is switched C to NC by the day/night main; and the controller modulates the AHU dampers. During night operation, the relay is switched C to NO. The controller signal is blocked and air to the AHU dampers is vented to allow the dampers to remain closed to outside air when the unit cycles to maintain night temperature.

In the application shown, during winter operation, the relay is switched C to NC and C₂ to NC₂ by the summer/winter main. The controller modulates the unit mixing dampers, and the air supply to the NC cooling valve is vented. During summer operation, the relay is switched C to NO and C₂ to NO₂ by the summer/winter main. The air supply to the mixing dampers is vented, and the controller modulates the cooling valve.



On October 1st, 2009, TAC became the Buildings business of its parent company Schneider Electric. This document reflects the visual identity of Schneider Electric, however there remains references to TAC as a corporate brand in the body copy. As each document is updated, the body copy will be changed to reflect appropriate corporate brand changes.

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