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TAC Pneumodular Electric-Pneumatic Relays
Data Sheet

The 2368 Series Electric Pneumatic Relays are 3-way, 2-position, electrically activated air valve for use in pneumatic control systems where the application requires a variety of switching, diverting, or interlocking functions, actuated by an electrical circuit. The 2368-500, 501, 502, and 503 have one SPDT pneumatic circuit that they switch, while the 2368-520, 521, 522 and 523 are designed with DPDT pneumatic switching (two independent SPDT pneumatic circuits).

On models 2368-500, 501, 502 and 503, when the coil is de-energized, ports “C” to “NO” are connected with port “NC” blocked. With the coil energized, ports “C” to “NC” are connected with port “NO” blocked. On models 2368-520, 521, 522 and 523, when the coil is de-energized, ports “C” to “NO” and “C2” to “NO2” are connected with ports “NC” and “NC2” blocked. With the coil energized, ports “C” to “NC” and “C2” to NC2” are connected with ports “NO” and “NO2” blocked.

Table-1 Ordering Data.

TAC Wholesale Number	Factory Model	Coil Voltage	Switch Action
2368-500	R527-24DC	24 Vdc	SPDT
2368-501	R527-24	24 Vac	
2368-502	R527-110	110 Vac	
2368-503	R527-230	208-240 Vac	
2368-520	R528-24 DC	24 Vdc	DPDT
2368-521	R528-24	24 Vac	
2368-522	R528-110	110 Vac	
2368-523	R528-230	208-240 Vac	

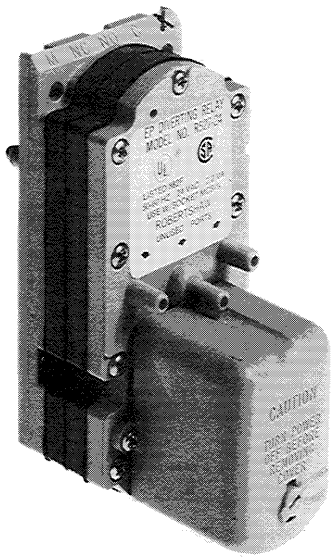
Table-2 Replacement Coils.

TAC Wholesale Number	Replaces Model	Description
22-200	K527-24	24 Vac Replacement Coil
22-201	K527-110	110 Vac Replacement Coil
22-202	K527-230	208-240 Vac Replcmt. Coil
22-203	K527-24 DC	24 Vdc Replacement Coil

Table-3 Active Connections.

Port	Connected To
M	Main Air
C	Common
C_2 [a]	Common No. 2
NO	Normally Open
$NO._2$ [a]	Normally Open No. 2
NC	Normally Closed
NC_2 [a]	Normally Closed No. 2

[a] DPDT models only.



Note: A loss of main air pressure will have the same effect as de-energizing the coil.

SPECIFICATIONS

Action:
SPDT Models, Coil de-energized, C and NO are connected. Coil energized, C and NC are connected.
DPDT Models, Coil de-energized, C and NO are connected, C2 and NO2 are connected. Coil energized, C and NC are connected, C2 and NC2 are connected.
Main Air Pressure:
Typical, 20 to 25 psig.
Maximum, 30 psig.
Air Capacity: 60 scfh.
Air Consumption: 29 scim.
Power Consumption: 2.2 VA.
Maximum Ambient Temperature: 140°F.
Connections: barbed nipples for 1/4" O.D. polyethylene or 5/32" I.D. polyurethane tubing.
Mounting: Designed for use on 22-120 TAC Pneumodular manifold socket only.

Caution: This device should be installed by a qualified person with due regard for safety, as improper installation could result in a hazardous condition.

GENERAL INSTRUCTIONS

This device is to be used on clean, dry, oil-free control air only and will operate properly when mounted in any position.

The inherent reliability of this device is enhanced and prolonged through regular inspection and preventive maintenance by a qualified control expert. If failure is due to a problem other than the coil, the device should be replaced by a new unit.

MANUAL OPERATION

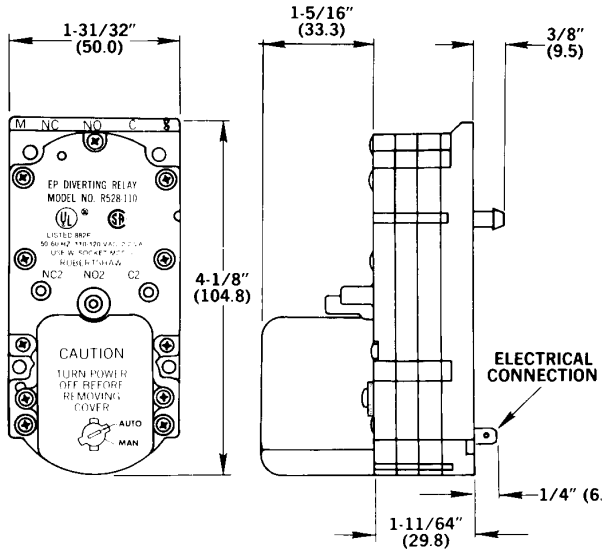
In the event of a power loss, the 2368 relays may be manually "energized" by the use of the AUTO/MANUAL switch located on the coil assembly.

Note: When electrical power is restored, the switch must be moved to the AUTO position to ensure proper operation.

MOUNTING INSTRUCTIONS & DIMENSIONS

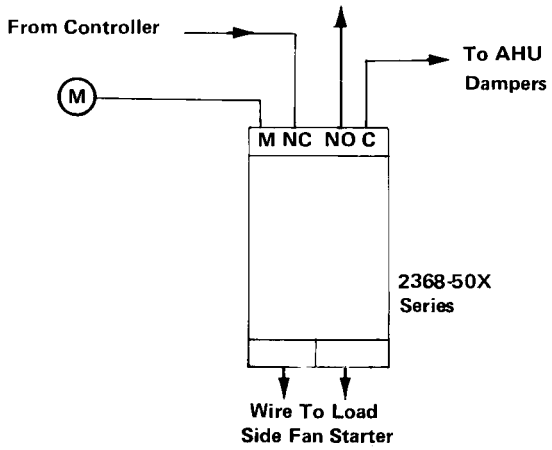
Panel Mounting

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



TYPICAL APPLICATIONS

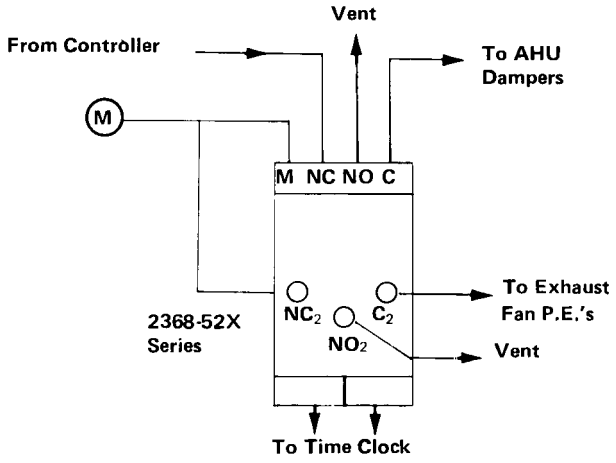
Single Pole, Double Throw Switching



In the application shown, when the fan is started, the relay switches "C" to "NC" and the controller modulates the air handling unit dampers. When the fan is stopped, the relay switches "C" to "NO" and the air line to the dampers is vented.

SWITCHING TWO CIRCUITS

Double Pole, Double Throw Switching



In the application shown, if the fan starts when the time clock contact is closed (day), the controller modulates the air handling unit dampers and the building exhaust fans are started. When the fan is stopped and/or the time clock contact is open (night), the air line to the unit dampers is vented along with the air line to the exhaust fan PE, allowing the unit dampers to close and stopping the exhaust fans.

F-24559-2

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