

## S-2300 Pneumatic Selector Switch

The S-2300 Pneumatic Selector Switch is designed for manual switching of air flow in pneumatic control systems. Five models of the S-2300 are available; each can be field programmed for two-, three-, or four-position switching. Refer to the air flow diagrams in Table 1 for switching details.

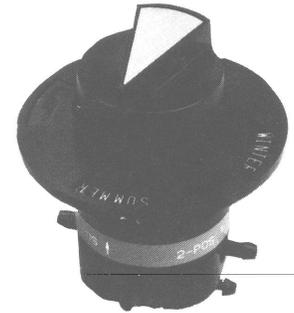
A four-window switchplate assembly and a complete set of self-adhesive service labels used to display the service selected are furnished with each S-2300. Two switchplate window blanks and a self-threading stop screw are also provided to allow the S-2300 to be field programmed for the number of switching positions required.

### Installation

The S-2300 is designed for panel mounting and is furnished with barbed fittings for 1/4 in. O.D. polytubing. Refer to Fig. 4 for space requirements and additional mounting details.

**Note: All models are furnished with a rubber sealing cap to block off the unused air connection when required.**

For S-2300 installations that are not panel mounted, use either an S-232-503 Single Selector Switch Wallbox Kit or an S-232-504 Double Selector Switch Wallbox Kit (both ordered separately) to mount and protect the S-2300. Refer to Figs. 2 and 3 and Tables 3 and 4 for more details.



**Fig. 1: S-2300  
Pneumatic Selector Switch**

To install the S-2300, proceed as follows:

**Note: Each S-2300 is shipped from the factory with its shaft rotated fully counterclockwise to its stop. If the selector switch service is changed at a later date, the shaft must be rotated to its original fully counterclockwise position prior to reinstallation.**

1. Determine whether a two-, three-, or four-position selector switch is required and insert the furnished self-threading stop screw accordingly as shown in Fig 5; a stop screw is not needed in four-position applications.

### Switchplate Assembly

2. Determine the switching service required (Heating-Cooling, Summer-Winter, etc.) and apply the

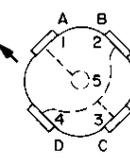
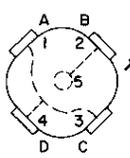
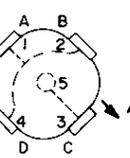
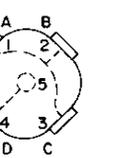
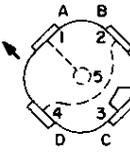
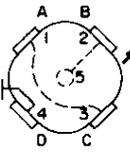
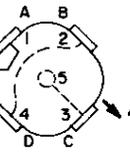
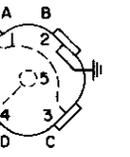
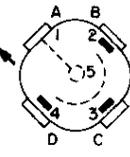
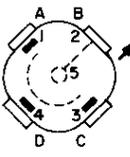
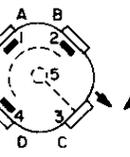
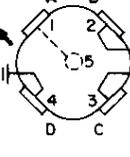
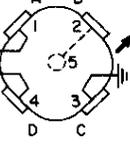
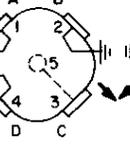
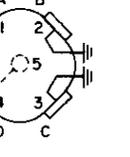
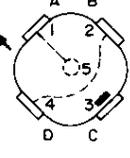
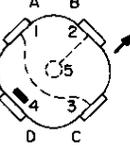
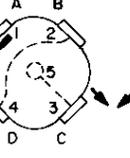
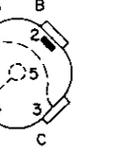
**- Continued on Page 5 -**

### Specifications

<b>Product</b>	S-2300 Pneumatic Selector Switch	
<b>Models (See Table 1)</b>	<b>S-2300-1</b>	Five Ports; All Switching
	<b>S-2300-2</b>	Five Ports; One Exhausting, Two Pairs Switching
	<b>S-2300-3</b>	Five Ports; Three Holding, One Pair Switching
	<b>S-2300-4</b>	Five Ports; Three Exhausting, One Pair Switching
	<b>S-2300-5</b>	Five Ports; One Holding, Two Pairs Switching
<b>Maximum Input Pressure</b>	30 PSIG (210 kPa)	
<b>Flow Capacity</b>	1000 SCIM (273 mL/s) with 20 PSIG (140 kPa) Supply	
<b>Materials</b>	<b>Body</b>	Polysulfone
	<b>Dial Plate</b>	Noryl®
	<b>Knob</b>	Implex Plastic
<b>Mounting</b>	Into 5/8 in. (16 mm) Maximum Thickness Panel with 11/16 in. (18 mm) Diameter Hole, or Into Accessory Wallbox	
<b>Air Connections</b>	Barbed Fittings for 1/4 in. O.D. Polytubing	
<b>Ambient Limits</b>	<b>Temperature</b>	40 to 120°F (4 to 49°C)
	<b>Humidity</b>	10 to 90% RH Non-Condensing, 85°F (29°C) Maximum Dew Point
<b>Accessories (Order Separately)</b>	S-232-503 Single Selector Switch Wallbox Kit	
	S-232-504 Double Selector Switch Wallbox Kit	
<b>Shipping Weight</b>	0.5 lb (.23 kg)	

*The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.*

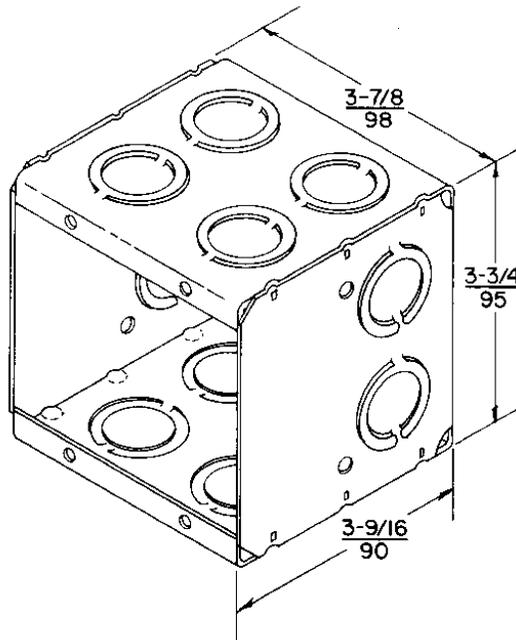
**Table 1: S-2300 Selector Switches**

Code No.	Air Flow Diagrams*			
<p><b>S-2300-1</b> (Viewed from dial end)</p>	<p>1-5 2-3-4</p> 	<p>2-5 1-3-4</p> 	<p>3-5 1-2-4</p> 	<p>4-5 1-2-3</p> 
<p><b>S-2300-2</b> (Viewed from dial end)</p>	(E=EXHAUST TO ATMOSPHERE THROUGH BODY)			
	<p>1-5 2-4 3(E)</p> 	<p>2-5 1-3 4(E)</p> 	<p>3-5 2-4 1(E)</p> 	<p>4-5 1-3 2(E)</p> 
<p><b>S-2300-3</b> (Viewed from dial end)</p>	(H=HOLD)			
	<p>1-5 2-3-4 (H)</p> 	<p>2-5 1-3-4 (H)</p> 	<p>3-5 1-2-4 (H)</p> 	<p>4-5 1-2-3 (H)</p> 
<p><b>S-2300-4</b> (Viewed from dial end)</p>	(E = EXHAUST TO ATMOSPHERE THROUGH BODY)			
	<p>1-5 2-3-4 (E)</p> 	<p>2-5 1-3-4 (E)</p> 	<p>3-5 1-2-4 (E)</p> 	<p>4-5 1-2-3 (E)</p> 
<p><b>S-2300-5</b> (Viewed from dial end)</p>	(H=HOLD)			
	<p>1-5 2-4 3 (H)</p> 	<p>1-3 2-5 4 (H)</p> 	<p>2-4 3-5 1 (H)</p> 	<p>1-3 4-5 2 (H)</p> 

\* Arrow indicates S-2300 knob position. Two-position S-2300 includes positions A & B; three-position S-2300 includes positions A, B, & C; and four-position S-2300 includes positions A, B, C, & D.

**Table 2: Competitive Cross-Reference Guide**

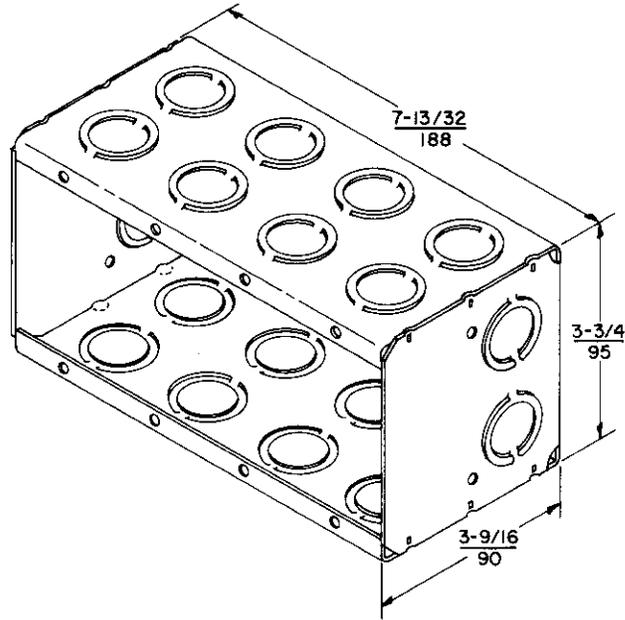
Johnson Controls	Robertshaw	Barber-Colman	Powers	Honeywell
S-2300-1	2392-505	—	786-0500	—
S-2300-2	2392-504	AL-2201	—	SP470A1000
S-2300-3	2393-504 2394-504	AL-2401	—	SP470A1018
S-2300-4	2393-505 2394-505	AL-2401-101	—	—
S-2300-5	—	—	—	—



**Fig. 2: S-232-503**  
**Single Selector Switch Wallbox Kit Dimensions**  $\frac{\text{in.}}{\text{mm}}$   
 (See Table 3)

**Table 3: S-232-503**  
**Single Selector Switch Wallbox Kit**  
**Parts List**

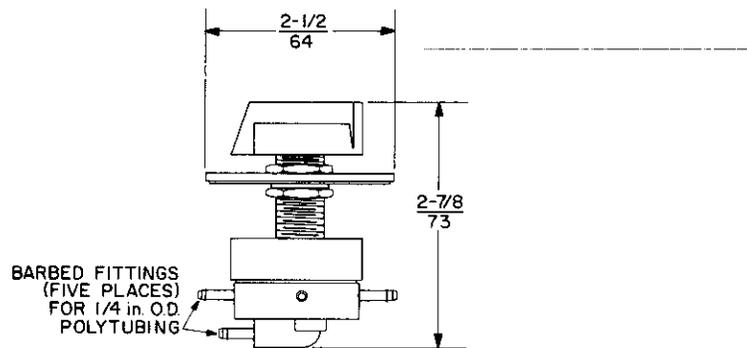
Quantity	Description
1	Single Selector Switch Wallbox (Standard Electrical Flush-Mounting Masonry Box)
1	Silver Finished, Paintable Cover
4	Cover Mounting Screws
2 ft. (61 cm)	Length of 1/4 in. O.D. Poly tubing
4	F-300-32 1/4 x 1/4 in. Barbed Couplers
1	F-1000-347 Bushing for 1/2 in. Knockouts



**Fig. 3: S-232-504**  
**Double Selector Switch Wallbox Kit Dimensions**  $\frac{\text{in.}}{\text{mm}}$   
 (See Table 4)

**Table 4: S-232-504**  
**Double Selector Switch Wallbox Kit**  
**Parts List**

Quantity	Description
1	Double Selector Switch Wallbox (Standard Electrical Flush-Mounting Masonry Box)
1	Silver Finished, Paintable Cover
8	Cover Mounting Screws
4 ft. (122 cm)	Length of 1/4 in. O.D. Poly tubing
8	F-300-32 1/4 × 1/4 in. Barbed Couplers
2	F-1000-347 Bushings for 1/2 in. Knockouts



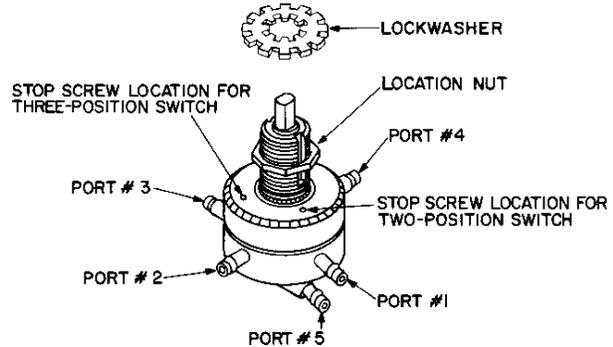
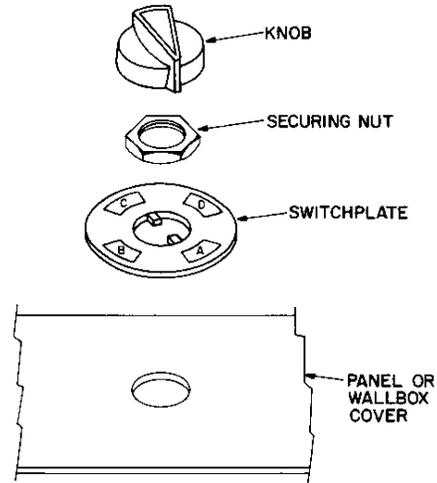
**Fig. 4: S-2300 Dimensions**  $\frac{\text{in.}}{\text{mm}}$

corresponding self-adhesive labels to the dial insert, placing them in the recessed areas (see Fig. 6).

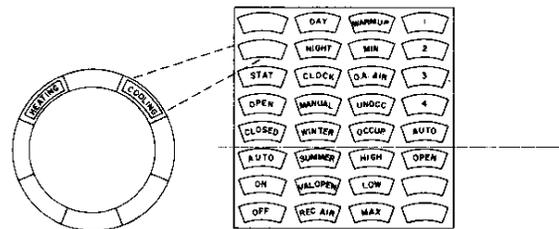
3. Install the switchplate window blank(s) into the switchplate from the back side (see Fig. 7). For a two-position S-2300, insert a window blank into locations "C" and "D"; for a three-position S-2300, insert a window blank into locations "C" and "D"; for a three-position S-2300, insert a window blank into location "D" only. For a four-position S-2300, no window blanks are needed.
4. Install the dial insert into the switchplate, aligning the service labels so that they can be viewed through the open switchplate windows. Secure the assembly by applying two or three of the unused service labels on the back side of the switchplate.

**Switchplate Installation**

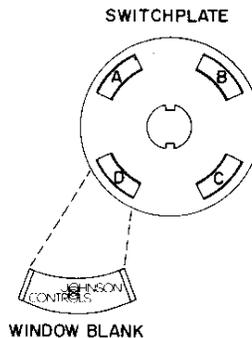
5. Determine whether the S-2300 will be mounted on a panel or on the cover of one the accessory wallboxes.
6. If panel mounting is required, drill an 11/16 in. (18 mm) diameter hole at the desired location. If the S-2300 is to be mounted using an accessory wallbox, a predrilled mounting hole is already provided in the cover.
7. Assemble the S-2300 to the panel or wallbox cover as shown in Fig. 5. Slide the switchplate over the upper body of the S-2300 such that window location "A" is directly above ports 1 and 5 (see Fig. 5). While holding the body of the S-2300 in the desired position, tighten the securing nut to lock the assembly in place.
8. To complete the installation, attach the knob to the selector switch assembly (using a 1/8 in. blade screwdriver) with the



**Fig. 5: S-2300 Exploded View**



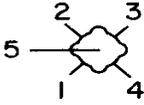
**Fig. 6: S-2300 Service Label Installation**



**Fig. 7: Window Blank Installation**

pointer in the direction of window location "A" (see Fig. 5).

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### Application and Drawing Identification

### Accessories

Single and double selector switch wallbox kits are available; refer to Tables 3 and 4 for a description of the parts included in each. The polytubing (cut in the field to short lengths as required) and 1/4 × 1/4 in. barbed couplers provided must be used between the fittings on the S-2300 and the air system polytubing to make the appropriate air connections and get the selector switch into the limited space of the enclosure.

**Note: Use the bushing furnished in the wallbox kit to protect the polytubing when it is routed through the knockout.**

### Repair information

Field repairs must not be made. For a replacement S-2300, contact the nearest Johnson Controls branch office. Replacement selector knobs are available; order S-232-601.

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## Notes

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# Notes



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