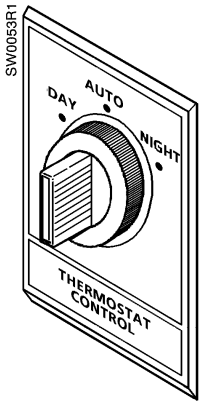
SIEMENS

Technical Instructions
Document No. 155-118P25
SW 786-2
January 31, 2023

POWERS™ Controls

SW 786 Selector Switches



Description

The SW 786 Selector Switches are used to deliver or stop the flow of compressed air to selected controllers, valves, or dampers. The common port may be connected to two or three ports depending on the switch model. These selector switches may be mounted on a wall, duct or control panel up to 1/4-inch (6 mm) thick.

Features

- Compact design and lightweight construction
- Click stop for positive positioning
- Easy panel mounting through 1.22-inch (33 mm) diameter knockout
- 10-32 internal thread connection ports
- Dial label and nomenclature sheet for most applications

Product Numbers

Table 1.

Product Number	Description
786-0600	Two Position Selector Switch
786-0610	Three Position Selector Switch

Application

The SW 786 Selector Switches are used in compressed air systems to connect and direct supply and signal pressures. Typical applications are Open/Close damper position, Day/Night thermostat operation, and On/Off/Auto system operation.

Specifications

Medium	Air
Port Threads	10-32 NPT internal thread
Materials	
Body	Acetal
O-rings	Buna-N
lnlet pressure	
Nominal	30 psi (206 kPa)
Maximum	125 psi (858 kPa)
Operating Temperature	35 to 150°F (2 to 66°C)
Capacity at 1 psi (7 kPa) differential	
3/32 OD Fitting	250 scim (68 ml/s)
1/4 OD fitting	480 scim (130 ml/s)
Shipping weight	0.21 lb (0.1 kg)
Dimensions	See Figures 3, and 4

Operation

Two Position Switch

When the switch is rotated fully counterclockwise, the two-position selector switch connects the center common port to Port 1 and blocks Port 2. In the fully clockwise position, Port 2 is connected to common while Port 1 is blocked. Port 3 is not used. See Table 2.

Three Position Switch

When the switch is rotated fully counterclockwise, the three-position selector switch connects the center common port to Port 1 and blocks Ports 2 and 3. ln the center stop position, Port 2 is connected to common with Ports 1 and 3 blocked. ln the fully clockwise position, Port 3 is connected to common while Ports 1 and 2 are blocked.

Table 2. Switch Connections.

Position	Connection
Two Position Switch	
Counterclockwise	Common to Port 1
Clockwise	Common to Port 2
Three Position Switch	
Counterclockwise	Common to Port 1
Center	Common to Port 2
Clockwise	Common to Port 3

Mounting and Installation

Panel Mounting

NOTE: Insert the provided tubing connectors into ports on the back of the switch body. See Figure 1.

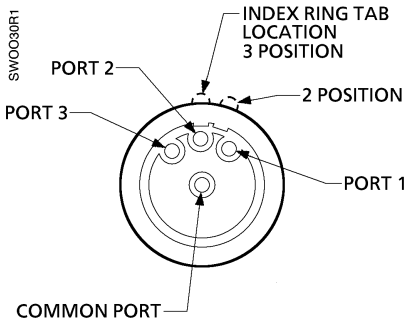


Figure 1. Selector Switch Ports.

1. Select the appropriate dial face label and nomenclature label from the sheet provided.

2. Remove the body locking ring and the index ring.

3. Place dial face label and the nomenclature label face down in the clear plastic bezel. Insert the switch body through the bezel, labels, and the panel cutout.

4. Place the index ring over the switch body with the index pin facing the back of the panel. Align the appropriate index groove on the switch body with the index tab on the index ring. See Figure 2.

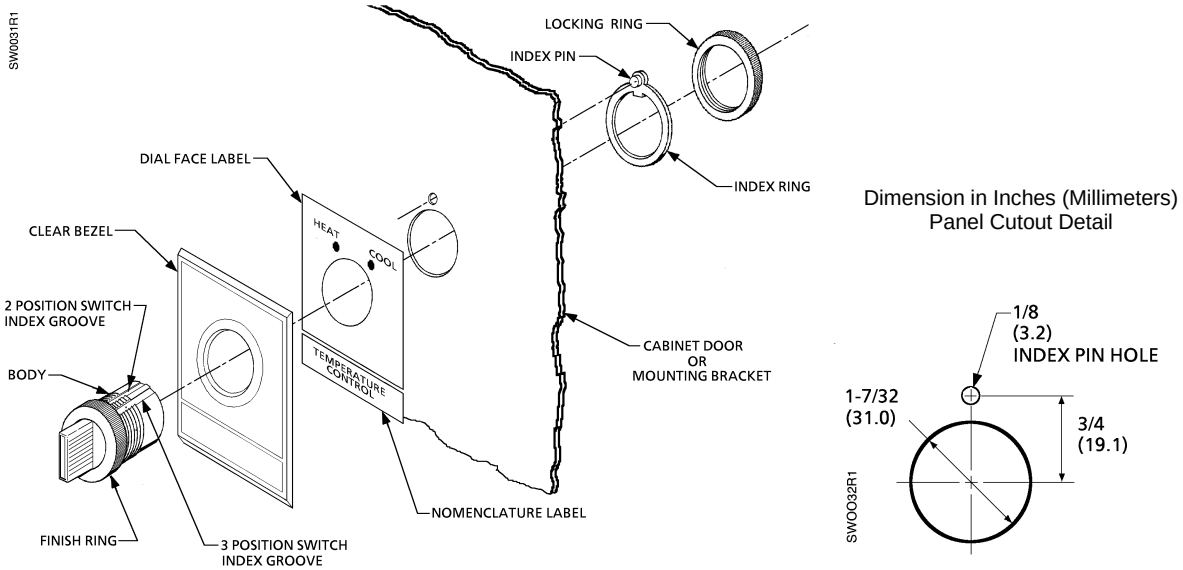


Figure 2. Panel Mounting of the Selector Switch.

Mounting and Installation, Continued

5. Snap the index pin into the small hole. Secure the switch assembly with the locking ring.

6. Pipe the selector switch noting that the center port is the common port (Figure 1).

The installation is now complete.

References

TB 196 Cabinet Cutouts	155-223
CP 567-7 Pneumatic Control Cabinets	155-272
TB 197 How to Layout a Pneumatic Cabinet Door	155-224
Installation Instructions	129-135

Service

No service is available for this product. If the selector switch is inoperative, replace it.

Dimensions

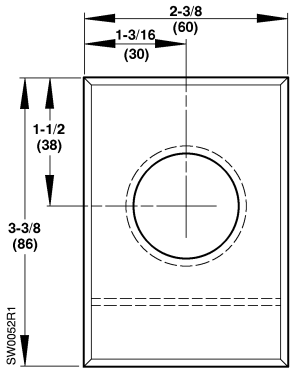


Figure 3. Dimensions of the Bezel.

Figure 4. Dimensions of the SW 786 Selector Switches.