

# Overview

The SV9641 SmartValve® System Controls, combine gas flow control and electronic intermittent pilot sequencing functions into a single unit and provide all gas ignition safety functions by controlling gas flow, ignition source and air blower.

## Features

- These controls communicate directly with an electronic fan timer (ST9160 Electronic Fan Timer for single stage applications; ST9162 Electronic Fan Timer for two-stage applications) in typical forced warm air furnace applications.
- They also interface with the 208907 Terminal Board, providing compatibility with power stealing thermostats. Or, they directly interface with the appropriate power supplies and a system thermostat for additional appliance applications.
- When controlled directly by a thermostat, these controls do not provide a postpurge function, because power to the control is removed when the thermostat call for heat ends.
- The SV9641 Systems are suitable for a wide range of fan-assisted combustion gas-fired appliances including furnaces, rooftop furnaces, boilers, unit heaters, infrared heaters, water heaters and commercial cooking appliances.

## Product Specifications

### Dimensions (in.)

3.2 in. wide x 4.9 in. high x 4.1 in. long

### Dimensions (mm)

81 mm wide x 124 mm high x 104 mm long

### Includes

Two 3/4 in. x 1/2 in. reducer bushings and an LP conversion kit.

### Mounting

0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

### Electrical Ratings

24 Vac

### Frequency

50 Hz; 60 Hz

### Tradeline Value

Super Tradeline

### Voltage

Call for heat--24 Vac

### Flame Failure Response Time (sec)

1.6 sec @ 3  $\mu$ A

### PrePurge

15 seconds

### PostPurge

30 seconds

### Ambient Temperature Range (F)

-40 F to +175 F

### Ambient Temperature Range (C)

-40 C to +79 C

Ignition System Type

Intermittent Hot Surface Pilot Ignition

Ignition Sequence

Intermittent Pilot

Type of Gas

Natural

Flame Sense

Two Rod

Ignition Source

Pilot

Ignition Trials To Lockout

continuous retry

Ignition Trial Time (sec)

90 sec

Body Pattern

Straight-through

Opening Characteristics

Standard Opening

Pressure Regulator Setting (psi)

3.5 in. wc

Pressure Regulator Setting (kPa)

0.87 kPa

Pressure Ratings (psi)

1/2 psi

Pressure Ratings (kPa)

3.5 kPa

Inlet/Outlet Size (in.)

3/4 in. NPT x 3/4 in. NPT.

Pilot Gas Outlet

Yes

Capacity (ft<sup>3</sup>/hr)

Maximum at 1 in. P.D.--300 ft<sup>3</sup>/hr; Maximum--415 ft<sup>3</sup>/hr; Minimum--30 ft<sup>3</sup>/hr

Capacity (m<sup>3</sup>/hr)

Maximum at 1 in. P.D.--8.5 m<sup>3</sup>/hr; Maximum--11.8 m<sup>3</sup>/hr; Minimum--0.8 m<sup>3</sup>/hr

Pressure Tapping

1/8 in. - NPT