PNEUMATICS & FITTINGS

THREE-WAY SOLENOID AIR VALVE V11 SERIES

DESCRIPTION

The Johnson Controls V11 Series three-way solenoid air valves have a capacity of 2592 scim and have three connections: a normally open (N.O.) port with 1/8" FNPT connection, and normally closed (N.C.) and common (COM) ports with barbed fittings for 1/4" OD tubing. The posts in the die cast aluminum valve body have No. 60 mesh (217 micron openings) monel screens to prevent foreign material from entering the valve ports.

APPLICATION

The V11 Series is used in applications where the operation of a pneumatic device is dependent upon an electrical circuit. The valves direct supply air to the pneumatic device when the coil is energized or de-energized, depending on the supply and exhaust air connections.

All V11 Series valves are designed for use only as HVAC control system devices. Where system closure, improper flow, or loss of pressure due to valve failure can result in personal injury and/or loss of property, it is recommended that additional devices be added to accommodate proper system operation, such as using a whisker switch to monitor the blade position on smoke dampers.

FEATURES

- Three-port connection C, N.O., N.C.
- Two-position operation
- Positive air seal
- Manual operation for testing and checkout of some models
- Compact and lightweight
- Mounts in any position
- High capacity

SPECIFICATIONS

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See ordering information Operating Temperature	
AC models	32° to 140°F (0° to 60°C)
DC models	32° to 104°F (0° to 40°C)
Pressure Range	0 to 20 psig (0 to 138 kPa)
Wiring	18" leads, 18 AWG, 7/8" knockout for
	1/2" conduit connector
Approvals	UL Listed, CSA
Warranty	1 year
	Operating Tempera AC models DC models Pressure Range Wiring Approvals Warranty



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OPERATION

In a typical application, supply air is connected to the normally closed port, and the control device is connected to the common port. When the solenoid is energized, a magnetic field activates a plunger-type valve stem, and supply air is directed to the control device. When the solenoid is de-energized, the supply air connection is closed, and the normally open port exhausts air from the control device. Reverse action may be obtained by connecting the supply air to the normally open port, using the normally closed port for exhaust (see Application Diagram). For day/night or summer/winter two-pressure switching, see the example Three-pipe Application Diagram. To manually operate, remove the access plug, and insert the **Y99AA-4** key. The manual opener key is ordered separately.

MODEL	DESCRIPTION	
V11PNA-105	24 VDC three-way air valve	
V11HGA-100	24 VAC, 50/60 Hz three-way air valve	
V11HAA-100	110/120 VAC, 50/60 Hz three-way air va lve	
V11HCA-100	208 VAC, 50/60 Hz three-way air valve	
V11HBA-100	220/240 VAC, 50/60 Hz three-way air valve	
V11HFA-100	2/7 VAC, 50/60 HZ three-way air vaive	
VIIHDA-100		
	ACCESSORIES	
Y99AA-4	Manual opener key	