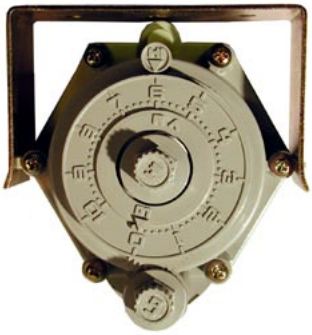
CSC-2000 Series
Reset Volume Controllers

Description

The pneumatic CSC-2000 series are designed for use on VAV terminal units in HVAC systems. These are differential-pressure, sub-master controllers with adjustable minimum and maximum airflow settings. A master controller, typically a room thermostat, resets the CSC-2000 velocity setpoint.

Direct acting models are for normally open VAV terminal units. Reverse acting are for normal closed VAV terminal units.

Each is equipped with separate adjustment knobs for minimum and maximum airflow settings. All models should be calibrated with the use of airflow measuring equipment.



With 0–10 Molded Plastic Dial
(Mount with Face Up Only)

Without Molded Dial

Models

The table below illustrates the appropriate model for each application. If replacing a CSC-2001-22 or CSC-2002-22 (now obsolete), use the CSC-2001, CSC-2002, CSC-2003, or CSC-2004 and mount appropriately.

Direct Acting (Beige Controllers) for Normally Open Dampers

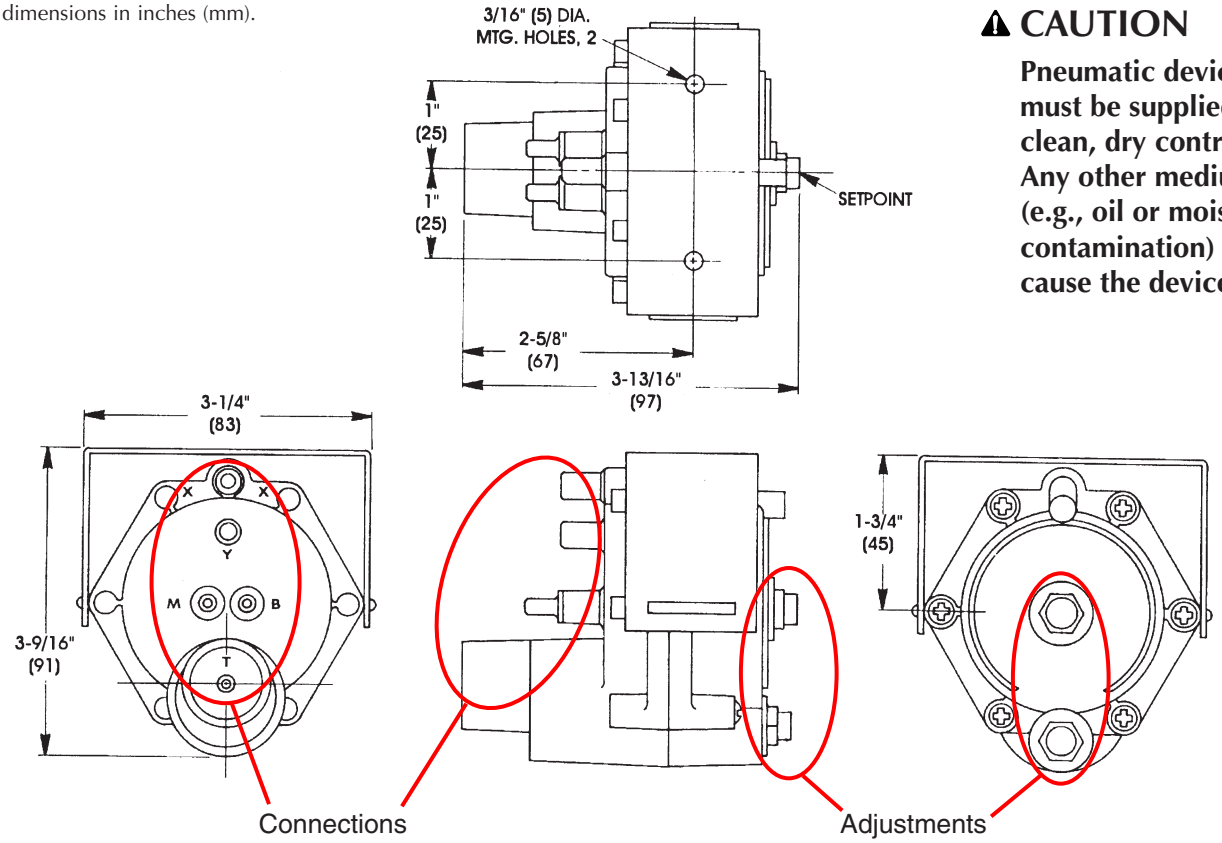
Model	Thermostat Required		Setpoint Range		Reset Pressure Band	Air Consumption	0–10 Molded Plastic Dial
	For Cooling	For Heating	Minimum	Maximum			
CSC-2001	Direct Acting	Reverse Acting	0 to 1.0" wc (249 Pa)	Min. plus 1.0" wc (249 Pa)	8 ±0.5 to 13 psig (55 ±3.5 to 90 kPa)	14.4 scim @ 20 psig (3.93 mL/s @ 138 kPa)	Yes
CSC-2003						14.4 scim @ 20 psig (3.93 mL/s @ 138 kPa)	No molded plastic dial—has paper label instead
CSC-2007						11.5 scim @ 20 psig (3.1 mL/s @ 138 kPa)	
CSC-2009			0 to 2.0" wc (498 Pa)	Min. plus 2.0" wc (498 Pa)		14.4 scim @ 20 psig (3.93 mL/s @ 138 kPa)	
CSC-2017						11.5 scim @ 20 psig (3.1 mL/s @ 138 kPa)	

Reverse Acting (Gray Controllers) for Normally Closed Dampers

Model	Thermostat Required		Setpoint Range		Reset Pressure Band	Air Consumption	0–10 Molded Plastic Dial
	For Cooling	For Heating	Minimum	Maximum			
CSC-2002	Reverse Acting	Direct Acting	0 to Max	0 to 1.0" wc (249 Pa)	3 ±0.5 to 8 psig (21 ±3.5 to 55 kPa)	14.4 scim @ 20 psig (3.93 mL/s @ 138 kPa)	Yes
CSC-2004						14.4 scim @ 20 psig (3.93 mL/s @ 138 kPa)	No molded plastic dial—has paper label instead
CSC-2008						11.5 scim @ 20 psig (3.1 mL/s @ 138 kPa)	
CSC-2010			0 to Max	0 to 2.0" wc (498 Pa)		14.4 scim @ 20 psig (3.93 mL/s @ 138 kPa)	
CSC-2018						11.5 scim @ 20 psig (3.1 mL/s @ 138 kPa)	

Details

All dimensions in inches (mm).



⚠ CAUTION

Pneumatic devices must be supplied with clean, dry control air. Any other medium (e.g., oil or moisture contamination) will cause the device to fail.

Specifications

Output Sensitivity	0 to 1" range unit, 5 psig/0.02" wc (35 kPa/5 Pa)
	0 to 2" range units, 5 psig/0.04" wc (35 kPa/10 Pa)
Main Air Pressure	15 to 30 psig (103 to 207 kPa)
Max. Signal Pressure	6" wc (1493 Pa) applied to either port (X or Y)
Material	ABS (beige or gray)
Output Capability	0 to supply pressure
Weight	7.5 oz. (213 grams)
Temperature Limits	
Operating	40° to 120° F (4° to 49° C)
Shipping	–40° to 140° F (–40° to 60° C)

Mounting Position

The controllers are position sensitive. The min. and max. flow limits must be set (calibrated) in the same position the controller will be mounted. The CSC-2001/2002 (with molded plastic dials) must be mounted horizontally with dials facing up. The CSC-2003 through CSC-2018 may be mounted horizontally (preferred), with the adjustment knobs up or down, or mounted vertically.

Features

- Separate adjustments for minimum and maximum airflow settings.
- CSC-2001/2003/2007/2009/2017 are designed for normally open dampers with direct-acting thermostats for cooling and reverse-acting thermostats for heating.
- CSC-2002/2004/2008/2010/2018 are designed for normally closed dampers with reverse-acting thermostats for cooling and direct-acting thermostats for heating.
- CSC-2001/2002 are equipped with 0 to 10 molded plastic reference dials; others have blind adjustments.

Accessories/Repair Parts

HFO-0006	In-line control-air filter
HMO-4505	Mounting bracket
ICI-1005	Pressure gauge
SSS-1000 Series	Flow sensors

KMC Controls, Inc.

19476 Industrial Drive

New Paris, IN 46553

574.831.5250

www.kmccontrols.com; info@kmccontrols.com