

Description

The electronic analog KMC CSP-5001/5002 VAV Flow Controller-Actuators are pressure-independent combination controller-actuators, designed primarily for use on variable-air-volume terminal units.

Airflow is sensed by using a single or multi-point differential (velocity) pressure measuring station or pitot tube (such as an SSS-1000 series airflow sensor). Designed with an onboard flow-through sensor using twin platinum resistance temperature detectors, these models are capable of controlling a velocity setpoint from 0 to 3,300 fpm with an accuracy of 3%.

The CSP-5001/5002 offers full-range flow control of VAV terminal units when used with the CTE-5100 series room thermostats. Air velocity flow control limits may be set at the thermostat or internal to the CSP-5001/5002. The actuator section provides adjustable stops, magnetic clutch, and a gear disengagement button. Internal status LEDs indicate green for opening and red for closing.

Available control options include proportional or two position wet or electric reheat, changeover, dual minimums, fan induction, dual duct, and automation interface.

Features

- ◆ Onboard flow-through sensors with twin platinum resistance temperature detectors
- ◆ Setpoint accuracy of 3% from 0 to 3,300 fpm
- ◆ Adjustable stops
- ◆ Magnetic clutch
- ◆ Gear disengagement button
- ◆ Internal LED rotation status indicators
- ◆ Mount for auxiliary switch or potentiometer

Models

Two models are available: CSP-5001 (CCW to close) and CSP-5002 (CW to close).

(Factory-set rotation direction can be reversed by changing the position of a jumper.)



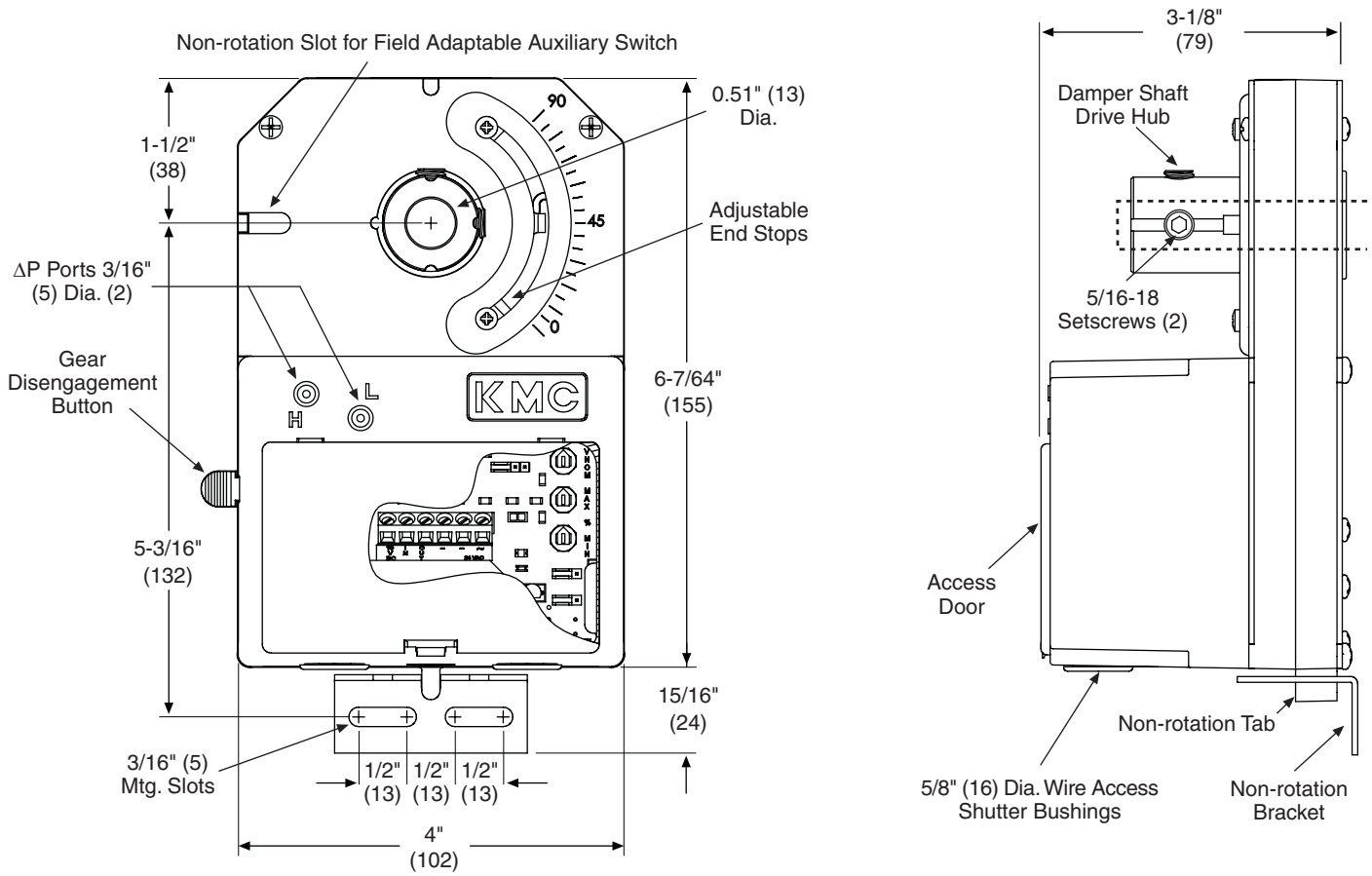
Accessories

The following accessories are available:

CME-1002	Single auxiliary cam switch
CME-1004	Dual auxiliary cam switch
CME-2001	Rotary feedback pot., 10 k Ω (7.5 k Ω at 90°)
CME-2002	Rotary feedback pot., 1 k Ω (750 Ω at 90°)
HFO-0011	Adaptor for 3/8" shaft
HMO-4518	Snap-in connector for 1/2" flexible metal conduit
HMO-4520	Compression connector for plenum cable
HMO-4526	Female connector for 1/2" conduit
HSO-5001	Test leads
SSS-1002	Airflow sensor, 1 sensing point, 3-5/32" length (80 mm)
SSS-1003	Airflow sensor, 2 sensing points, 5-13/32" length (137 mm)
SSS-1004	Airflow sensor, 3 sensing points, 7-21/32" length (195 mm)
SSS-1005	Airflow sensor, 4 sensing points, 9-29/32" length (252 mm)

Details

All dimensions are in inches (mm).



Specifications

Supply Voltage	24 VAC -15/+20%, 50/60 Hz
Input Power	4 VA max.
Output Supply	16 VDC (22 mA)
Output Torque	50 in. lb. min., 70 in. lb. max. (5.6 N•m min., 7.9 N•m max.)
Velocity Range	0 to 3300 fpm (16.76 m/s), dependent on DP pickup, tubing size/length, and connections
Velocity Output	0 to 10 VDC (0 to 100% flow)
Angular Rotation	0° to 95° (both end stops adjustable)
Stroke Time	18° per minute @ 60 Hz, 15° per minute @ 50 Hz
Reset Voltage	0 to 10 VDC
Reset Limits	Adjustable, 0 to 100%
Mounting	Direct to 1/2" (13 mm) diameter shaft or 3/8" (10 mm) diameter with adaptor

Connections	Wire clamp type, 14 to 22 AWG, Cu
Material	Flame-retardant polymer, UL94-5V plenum-rated, black housing with white cover
Weight	2.4 lbs. (1 kg.)
Temperature Limits	
Operating	32° to 120° F (0° to 49° C)
Shipping	-40° to 140° F (-40° to 60° C)

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