

### Description

The analog electronic KMC CSP-5001/5002s 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 (CCW to close) and CSP-5002 (CW to close) offer full-range flow control of VAV terminal units when used with the CTE-5202 and 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 (hot water or electric) reheat, change-over, 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

CSP-5001	CCW to close
CSP-5002	CW to close

**NOTE:** Factory-set rotation direction of either model can be reversed by changing a jumper position.



### Accessories

#### Air Flow Sensors

SSS-1002	1 sensing point, 3-5/32" length
SSS-1003	2 sensing points, 5-13/32" length
SSS-1004	3 sensing points, 7-21/32" length
SSS-1005	4 sensing points, 9-29/32" length

#### Thermostats

CTE-5100 Series	Thermostats
CTE-5202	Thermostat w/ LCD display

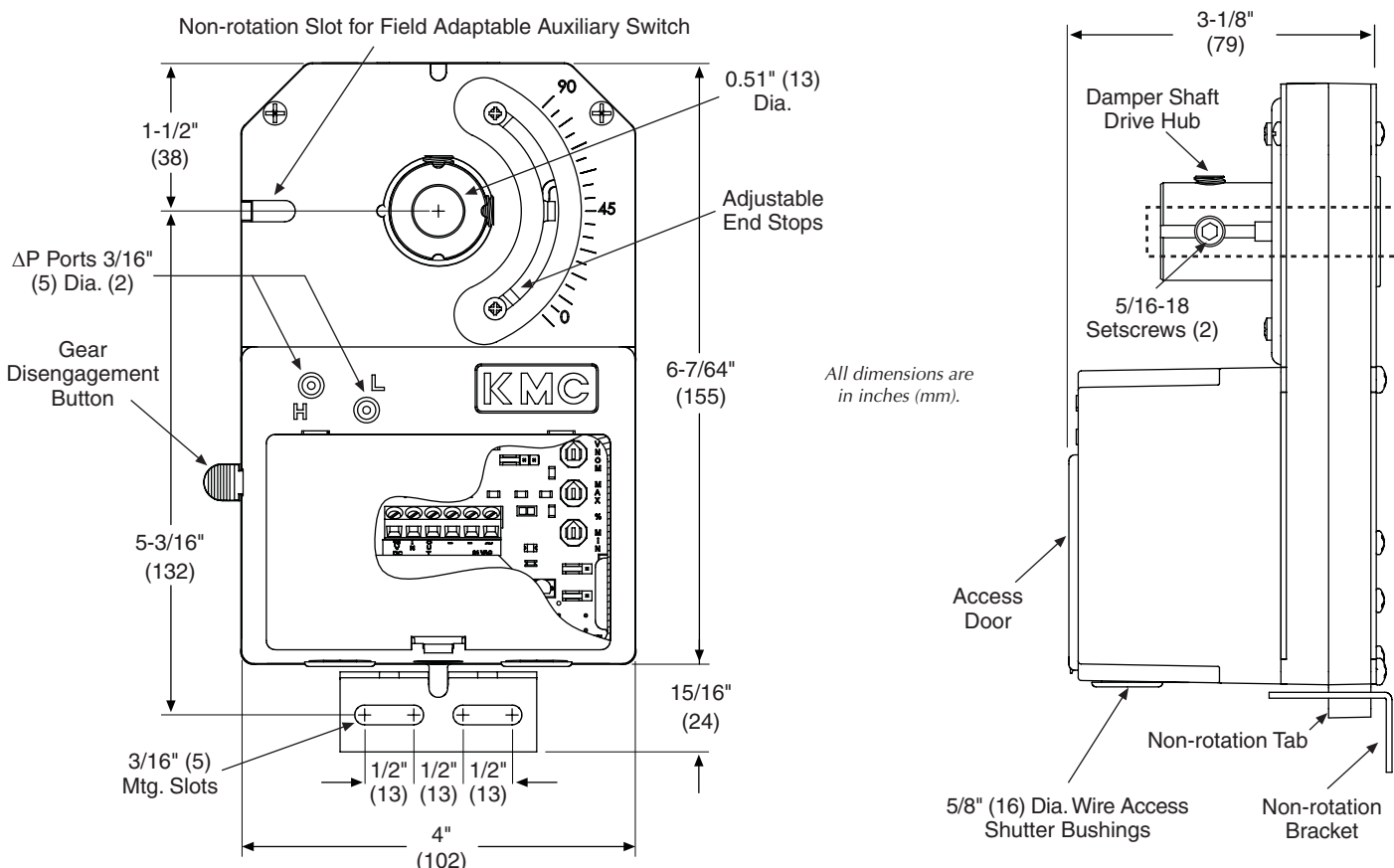
#### Auxiliary Switches and Feedback Potentiometers

CME-1002	Single auxiliary cam switch
CME-1004	Dual auxiliary cam switch
CME-2001	Rotary feedback pot., 10K ohms (7.5K ohms at 90°)
CME-2002	Rotary feedback pot., 1K ohms (750 ohms at 90°)

#### Miscellaneous

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

## Details



## Specifications

<b>Supply Voltage</b>	24 VAC -15/+20%, 50/60 Hz, Class 2
<b>Supply Power</b>	4 VA max.
<b>Output Supply</b>	16 VDC (22 mA)
<b>Output Torque</b>	50 in. lb. min., 70 in. lb. max. (5.6 N•m min., 7.9 N•m max.)
<b>Velocity Range</b>	0 to 3300 fpm (16.76 m/s), dependent on DP pickup, tubing size/length, and connections
<b>Velocity Output</b>	0 to 10 VDC (0 to 100% flow)
<b>Angular Rotation</b>	0° to 95° (both end stops adjustable)
<b>Stroke Time</b>	18° per minute @ 60 Hz, 15° per minute @ 50 Hz
<b>Reset Voltage</b>	0 to 10 VDC
<b>Reset Limits</b>	Adjustable, 0 to 100%
<b>Mounting</b>	Direct to 1/2" (13 mm) diameter shaft or 3/8" (10 mm) diameter with adaptor
<b>Weight</b>	2.4 lbs. (1 kg.)

<b>Material</b>	Flame-retardant polymer, UL94-5V plenum-rated, black housing with white cover
<b>Connections</b>	Wire clamp type, 14 to 22 AWG, copper
<b>Approvals</b>	CE compliant, SASO PCP Registration KSA R-103260
<b>Temperature Limits</b>	
Operating	32° to 120° F (0° to 49° C)
Shipping	-40° to 140° F (-40° to 60° C)

**NOTE:** For detailed applications, cross-references, troubleshooting, and other information, see the [CSP-5001/5002 Applications Guide](#) and the [CTE-5202 Applications Guide](#).

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