

Descriptions and Applications

The analog electronic CEP-4000 series is a pressure-independent combination controller-actuator designed primarily for use on variable air volume terminal units. Cooling and heating air flow is sensed by a temperature-compensated hot-wire anemometer. Velocity sensing is unaffected by changes in the duct air temperature.

The CEP-4000 series offers full-range flow control of VAV terminal units when used with the CTE-1000/1100/5000 series as well as the CTE-5202 room thermostats. Air-velocity flow control limits are set at the room thermostat or remotely with the REE-1012 remote-limits accessory module.

The actuator section provides a magnetic clutch that allows the actuator to be stalled at either end of stroke, eliminating the requirement for mechanical stops or end switches. It is available with (100° and 60°) built-in stops.

Accessories

Air Flow Sensors, Standard

SSE-1001/1002	4"/8" insertion (see Models chart)
SSE-2001/2002	4"/8" insertion, with thermistor

Air Flow Sensors, Silicone Conformal Coated*

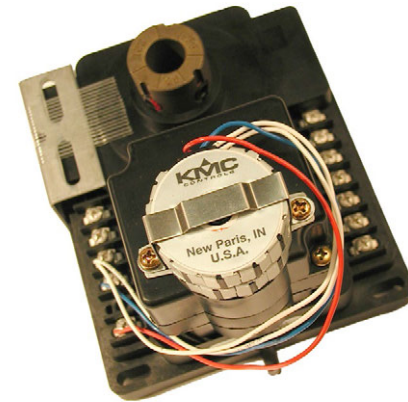
SSE-1011/1012	4"/8" insertion
SSE-2011/2012	4"/8" insertion, with thermistor

Thermostats

CEE-1100 Series	Thermostats, remote
CTE-1000 Series	Thermostats
CTE-1100 Series	Thermostats
CTE-5000 Series	Thermostats
CTE-5202	Thermostat with LCD display

Miscellaneous

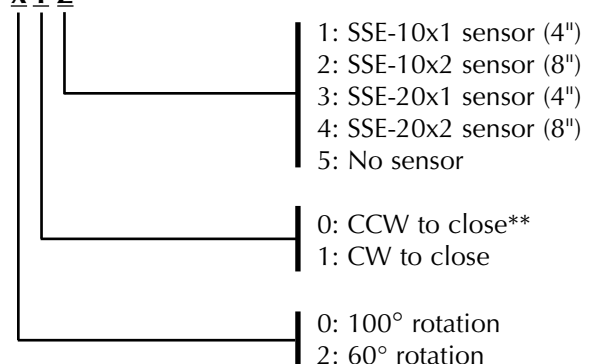
HFO-0011	Mounting adaptor for 3/8" shaft
REE-10xx/400x	Relay modules



Models

Use this chart to make your selection (but not all possible model configurations may still be available—check the [web site](#) for current information):

CEP-4 X Y Z*

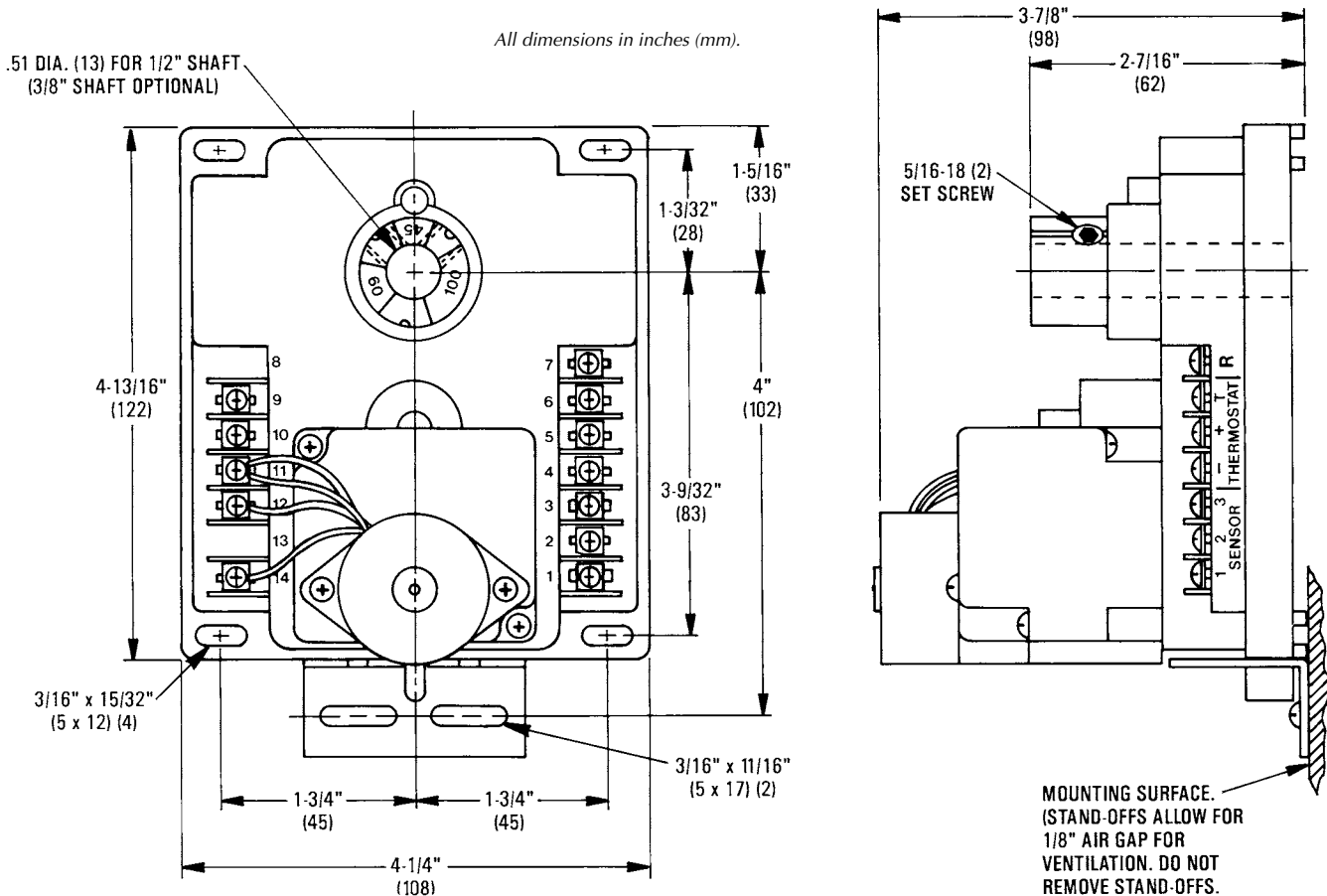


*NOTE: (Not all possible model number configurations may be available. See the [web site](#).)

**NOTE: The default rotation direction can easily be reversed by swapping the red and blue motor wires.

When replacing an older model, the **CEP-4995** (100° rotation, CW to close, no sensor) is a “universal replacement” for most applications and will replace **MOST** CEP-1000/3000/4000 series controllers. If replacing a CEP-1000 or CEP-3000 series controller, the REE-1000 series relay may also need to be replaced with the equivalent REE-4000 series module. See the [CEP-4000 Applications Guide](#) for more information.

Details



Specifications

Supply Voltage	24 VAC (-15/+20%), 50/60 Hz, Class 2 only
Supply Power	9 VA
Output Supply	9.1 VDC (22 mA)
Output Torque	45 ±10 in-lbs. (5 ±1 N•m)
Velocity Range	0–3000 fpm (15.24 m/s)
Velocity Deadband	±50 fpm
Velocity Output	1–5 VDC (0–3000 fpm)
Reset Voltage	3–6 VDC (0–3000 fpm)
Angular Rotation	60° or 100°
Stroke Time	18° per minute @ 60 Hz, 15° per minute @ 50 Hz
Mounting	Direct to 1/2" (13 mm) diameter shaft or with an HFO-0011 adaptor to 3/8" (10 mm) diameter shaft
Material	Glass-filled nylon
Weight	1.75 lb. (0.79 kg)
Connections	Plated screw terminals

Temperature Limits

Operating	40 to 120° F (4 to 49° C)
Shipping	-40 to 140° F (-40 to 60° C)

More Information

For installation instructions, see the [CEP-4000 Installation Guide](#).

For principles of operation, troubleshooting, calibration procedures, and sample applications, see the [CEP-4000 Applications Guide](#) and the [CTE-5202 Applications Guide](#).

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