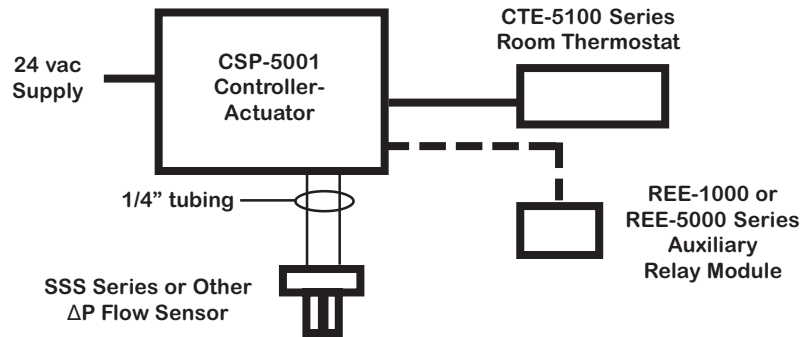


ELECTRONIC CSP-5001 Series
VAV TERMINAL UNIT CONTROL SYSTEM
System Configurations
Pressure Independent

BASIC CONTROL LOGIC

1. In response to space temperature, the room thermostat sends a 0 to 10 vdc "desired air flow" signal to the CSP-5001 controller-actuator.
2. The controller-actuator compares this "desired air flow" signal to "actual air flow" as derived electronically from its onboard flow-through sensor which is connected to the SSS duct sensor or other ΔP pick-up.
3. The controller-actuator drives the VAV damper box open or closed as required to match airflow requirements.



For individual model specifications, see following pages in this section.

- Airflow sensed by using single or multi-point differential (velocity) pressure airflow sensor.
- CSP-5001 onboard flow-through sensor electronically measures air velocity in the duct.
- Airflow velocity flow limits set at either the thermostat or at the CSP-5001 controller-actuator.
- CSP-5001 direct couples to damper shaft; has adjustable stroke, LED, and manual clutch.
- REE series relay modules available for reheat, heating/cooling changeover, and other applications.

TYPICAL CSP-5001 SERIES SYSTEM CONFIGURATIONS

Single Duct Cooling with Airflow Limits set at Thermostat or at CSP-5001 Controller-Actuator					
	Heating or Cooling Only	With Electric Reheat	With Automatic H/C Changeover	H/C Changeover & Electric Reheat	With Proportional Hot Water Reheat
Controller-Actuator	CSP-5001	CSP-5001	CSP-5001	CSP-5001	CSP-5001
Flow Sensor	SSS series sensor or other ΔP pick-up				
Room Thermostat	CTE-5101	CTE-5104	CTE-5103	CTE-5103	CTE-5104
Relay Module	-----	REE-5001	REE-1005	REE-1005 and REE-5001	-----
Other Controls	-----	contactors for heating elements	STE series duct sensor	STE series sensor and contactors	VEP43 series 2-10 vdc valve
	APE-1-5001	APE-1-5012	APE-1-5014	APE-1-5014A	APE-1-5017

	Dual Duct (Hot and Cold Decks) with Airflow Limits set at Thermostat or CSP-5001	Fan Powered Induction Boxes with Airflow Limits set at Thermostat or CSP-5001
	With Minimum Air Flow From Cold Deck	With 2 Stages of Electric Reheat
Controller-Actuator	(2) CSP-5001	CSP-5001
Flow Sensor	(2) SSS sensors or other ΔP pick-ups	SSS series sensor or other ΔP pick-up
Room Thermostat	CTE-5103	CTE-5101
Relay Module	-----	REE-5002
Other Controls	-----	contactors for fan & heating elements
	APE-2-5001	APE-3-5001