

Packaged VAV Box Systems



The Facility Explorer Packaged Variable Air Volume Box System provides an integrated VAV box with controls. You get direct, closed-loop control specifically designed to deliver occupant comfort and installation flexibility. This pre-configured system with factory installed FX-PCV Programmable Controllers eliminates the coordination and difficulties associated with field mounting. These terminal units are specifically designed for precise air delivery throughout the entire operating range, regardless of the installed inlet conditions. Plus, these VAV boxes deliver quiet, efficient air flow.

The integrated FX-PCV controllers feature automatic self tuning algorithms to deliver optimal control with less wear and tear on the equipment. These controllers include a rich set of embedded and optional features, enabling you to quickly and simply build a control strategy based on VAV box type.

- Application flexibility meets a wide variety of facility air flow requirements
- Superior flow measuring provides for lower minimum cubic feet per minute (CFM) values, which reduces energy costs and noise while maintaining comfort in the zone
- Integrated DDC controller, pressure sensor and actuator - all factory mounted to a VAV terminal unit - reduces installation time
- Seamlessly integrates into the Facility Explorer building management system
- Advanced diagnostics increase reliability and reduce maintenance needs

**FACILITY
EXPLORER**

BY JOHNSON CONTROLS

Standard Features

Construction

- ARI 880 certified and labeled
- 22-gauge galvanized steel casing and valve
- Dual density fiberglass insulation

Hot Water Coils

- ARI 410 certified and labeled
- 1-, 2-, 3-, and 4-row coils
- Copper tubes leak tested to 350 psig air pressure
- Male sweat type water connections

Primary Air Valve

- Embossed rigidity rings
- Low-thermal conducting damper shaft with position indicator
- Mechanical stops for open and closed position
- Multi-point center-averaging airflow sensor

Electrical Components

- cETL listed for safety compliance
- NEMA Type 1 wiring enclosure

Electric Heat

- ETL listed as an assembly for safety compliance
- Automatic reset primary and back-up secondary thermal limits
- Single-point power connection
- Fusing per NEC
- Airflow switch
- Ni-chrome elements
- Primary/Secondary power terminations

Optional Features

Construction

- 20-gauge galvanized steel construction
- 3/4" or 1" fiberglass insulation
- Scrim-reinforced, foil-faced insulation meeting ASTM C1136 for mold, mildew, and humidity resistance
- 1/2" or 1" Elastomeric closed-cell foam insulation
- Double wall construction with 22-gauge liner
- Mounting brackets to accept all-thread hanging rods or wire hangers
- Low temperature construction for use in thermal storage applications

Hot Water Coils

- Multi-circuit coils for reduced water pressure drop
- Opposite hand water connections
- Bottom access plates for cleaning

Electrical Components

- Full unit toggle disconnect and inline motor fusing
- Primary and secondary transformer fusing

Electric Heat

- Proportional solid state relay (SSR) heater control
- Door interlocking disconnect switches
- Disconnect (toggle or door interlocking)
- Mercury and magnetic contactors
- Manual reset secondary limit
- 24 volt control transformer
- Special watt densities

Model	Description	Available Inlet Sizes (Inches)	Standard Insulation Liner
TSS	Single duct, cooling only and cooling with reheat (electric or hot water)	4, 5, 6, 8, 10, 12, 14, 16, 19, 22	1/2" fiberglass
TCS	Series fan-powered, cooling only and cooling with reheat (electric or hot water)	4, 5, 6, 8, 10, 12, 14, 16, 18	3/4" fiberglass
TVS	Parallel fan-powered, cooling only and cooling with reheat (electric or hot water)	4, 5, 6, 8, 10, 12, 14, 16	3/4" fiberglass
TDS	Dual duct for hot and cold ducting control	4, 5, 6, 8, 10, 12, 14, 16	1/2" fiberglass

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