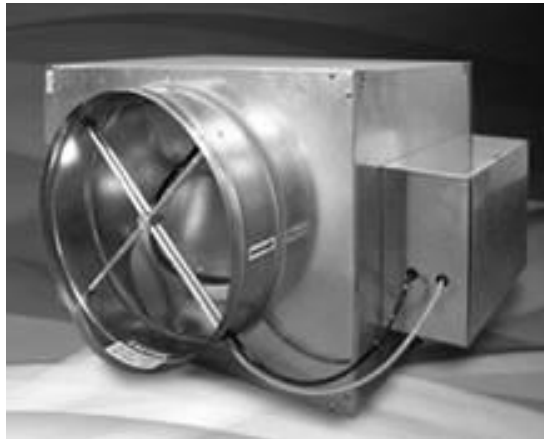




EB Air VAV Terminal Box Unit (Non Fan Powered)



The EB Air terminal units are among the most versatile single duct air control products in the market. The unit provides compact design, versatility and easy integration with most building automation control packages. The compact design with easy maintenance helps these units to be laid out for any application in the buildings or enclosed space where control and sequence of air flow is of utmost importance. The EB-TB-001 series are available with pneumatic, analog or electronic control options for proper maintenance of design CFM regardless of system pressure by using control packages designed to be compatible with control systems produced by industry standard manufacturers. Proper integration and robust quality makes EB Air Terminal units choice of the industry.

Notes;

1. CFM ranges are factory set on all pressure independent pneumatic and analog control schemes.
2. Factory set minimum CFMs are based on controllers ability to accurately maintain flow settings. The controls will not be set outside the ranges indicated.
3. Pressure independent controls (pneumatic or electrical) do not ability to control CFM settings. The minimum set point is always zero. A maximum set flow rate is not possible.
4. Minimum CFM settings can be as low as 0 CFM although set ventilation requirement calls for setting minimum point more than zero. It is recommended a minimum set point equal to 20% of nominal flow rating of the box. Less than 20% may result is higher variation of over +/-5%

Casing

All terminal boxes casing panels shall be constructed of 20/22 gage galvanized steel. The inlet collars are also made of similar materials to accommodate standard spiral of flex duct sizes. Inlet is located at the center of the unit. Controller location is determined by looking at the direction of airflow with the unit in installed position.

Damper assembly

Unit sizes (6-14) utilizes round volume control damper. All damper assemblies utilize a solid shaft that rotates in self lubricating bearings. The damper blade incorporates a flexible gasket for tight airflow shutoff and operates over a full 90 deg rotation.

Insulation

Standard unit insulation is ½ inch thick, 1-1/2 lb/ ft3 density liner meeting NFPA-90A and UL-181 code. Optional 1" thick and 1-1/2 lb/ft3 density liner meeting similar code is also available.

Flow sensor

All units are equipped with a factory installed air flow sensing device. The sensor is cross flow, multi point velocity averaging sensor with amplified signal. Balancing taps may be provided for easy airflow verification.

Controls

Pneumatic, analog electronic or direct digital controls types are available that is accepted per standard industry requirement for easy integration to BMS system.

Access Panel

An optional access panel in the terminal unit casing is available for viewing damper and other components and for cleaning and maintenance.

Hot Water Coils

Hot water coils are constructed of 10/12 fins per inch with sweat type connection either left or right hand tubing connections. The coil tubes are water leakage tested to 250PSIG and has thickness of 0.016". The coils are selected based on capacity requirement of the terminal unit.

Electric heat can also be incorporated as an option and constructed of 20 gage galvanized steel. Available combinations are 120, 208/240, 277 volt single phase or 208/240 volt, 3 phase or 480 volt, 4 wire phase. Heaters can be provided with standard primary automatic and secondary manual reset thermal cut out, de-energizing magnetic contactors airflow proving switch and other elements.

Packaging;

Multiple units are palletized. Each pallet of units is banded and stretch wrapped with shrink wrap. Units can be shipped in Card Board carton, is also available.

Standard Features;

EB-TB 001 series are available in 5 sizes for Variable and Constant Volume applications.

22 gage. galvanized steel construction with mechanically sealed damper for low leakage.

Damper construction is generally of two layers made with galvanized steel and sandwiched with rubber, flexible gasket, fastened to provide tight seal. (Less than 1% leakage at 3.0 wg static pressure)

0.50- 0.75 inches thick (1.5lb / ft³ min) fibreglass insulation with coated edges to prevent erosion of fibres in the air stream. The insulation shall meet the NFPA 90A and UL 181 Code.

Attached external control cabinet with mounting plate for controller and other mechanism

Averaging cross flow sensor (accuracy +/- 10%) flow reading with varying inlet duct conditions after balancing at job site.

Rectangular discharge with slip and drive cleat connection.

Full NEMA 1 type controls enclosure for factory mounted controls.

Right Hand controls location is standard when looking at direction of airflow. Optional left hand controls mounting is also available.

The unit offers low pressure drop, low sound levels and characteristics which create stable control conditions within the conditioned space.

Dimensional Data

| Unit No | Air Flow Range (CFM) | Width | Height | Inlet Size (inches) |
|---------|----------------------|-------|--------|---------------------|
| 6 | 0-450 | 10 | 10 | 5.88 |
| 8 | 0-900 | 12 | 12.5 | 7.88 |
| 10 | 0-1500 | 14 | 12.5 | 9.88 |
| 12 | 0-2050 | 18 | 12.5 | 11.88 |
| 14 | 0-2550 | 24 | 12.5 | 13.88 |

Optional accessories;

Fiber free liner

Solid Metal Liner

Perforate Metal Liner

Access Door

Hangar brackets

Controls enclosure

Optional internal foil faced insulation

