XAFT

Provide and install Anemostat Model XAFT exhaust valves where shown on drawings or schedule, that comply with the indicated size, capacity, and performance ratings. The exhaust valves shall have been tested and performance determined in accordance with industry standards ARI 880 and ASHRAE 130.

Acoustical Performance
Exhaust valve radiated and discharge sound levels shall not exceed the power levels as scheduled, at the differential static pressure (ΔPs) shown.

Construction
The valve shall be constructed of minimum 20 gauge (zinc-coated sheet steel) (304 stainless steel) (316 stainless steel) (aluminum) and shall include a steel control enclosure, housing all primary flow controls, including actuators, controllers, relays, etc. (Optional) All metal parts exposed to the air stream shall be coated with a phenolic material for improved fume protection.

Air Valve:
The damper assembly shall consist of a round blade that requires nominal 90-degree rotation from fully opened to fully closed positions on sizes 05 through 16. The damper blade shall be mechanically attached to the die-cast metal damper shaft with through the shaft machine-applied rivets. The low leakage damper shall be constructed of a gasket material sandwiched between two 22-gauge zinc coated steel plates. Leakage through the damper shall be less than 1% of the maximum rated airflow at 3" w.g. inlet static pressure. The damper gasket material is securely fastened between the two damper plates using machine applied rivets. The damper assembly shall rotate freely in self-lubricating bearings. Damper position shall be indicated on the end of the shaft on the outside of the casing. Outlet connection and damper on size 24 x 16 shall be rectangular.

The damper leakage shall not exceed 2% of the maximum rated capacity of the inlet at 4" differential static pressure. Damper position shall be indicated on the end of the shaft on the outside of the casing. The primary damper fail positions for pneumatic applications (normally open / normally closed) shall be easily re-configured in the field.

Air Flow Sensor
A multi-point, cross style airflow sensor (Velocity Wing) of the center averaging type shall be located in the terminal inlet. The sensor shall be aerodynamically designed to provide low pressure loss, quiet operation, and shall incorporate at least 20 sensing points for all diameters/sizes. The sensor shall amplify the velocity pressure signal and provide feedback of actual flow to the controller with an accuracy of ± 5%. An identification label with piping / wiring diagram and air flow calibration chart shall be affixed to each unit. Flow taps with caps, separate from the airflow sensor or controller taps shall be provided for flow measurement and adjustment.

(Optional)
A multi-point, cross style airflow sensor (PX-2) of the center averaging type shall be located in the terminal inlet. The sensor shall consist of (aluminum)(304 stainless steel)(316 stainless steel) construction utilizing a PVC center averaging hub. The sensor shall be capable of measuring flow with an accuracy of ± 5%. Where scheduled, sharp-edged orifice plates shall be provided in conjunction with the sensor to increase the signal flow pressure for improved controllability and accuracy at the design flow rate shown. Orifice plates shall be constructed from (aluminum)(304 stainless steel)(316 stainless steel). Air flow calibration charts shall be attached to each terminal unit.

Control System
The controls shall be pneumatic, analog electronic, or direct digital controls (DDC) based on Anemostat Control Package _____.