

Air Handling Units Weathermaster

Quality Standards

VES are members of the British Standards Institution, operating a quality management system in accordance with BS EN ISO 9001, certificate no. Q5375. All units tested to BS 848 Part 1.

Case

The Weathermaster cases are rigidly constructed using galvanised sheet steel, single skinned as standard. Units with heater have a 25mm thick polyurethane foam lining from the heater onwards. An acoustic lining of flame retardant acoustic foam is optional, as is double skinned internal panelling with mineral fibre slab infill. All units are externally finished in polyester powder coat, standard colour Signal grey to RAL7004. The cases have Mez flanges to outlet. The unit top is secured with four stainless steel lever clip fasteners and is easily removed, providing access to fan, filter and heater. The standard anti-vibration mounts are rubber compression type, designed to fit between unit and channel base. The flexible connections are PVC coated polyester.

Fans

Forward curved centrifugal fans multi-vane, double inlet double width, direct driven by hub mounted motors. The motors in all fans are fitted with high temperature automatic cut-out protection. All fans can be speed controlled using VES speed regulators.

Filters

Weathermaster supply units case size 1 & 2 contain a filter panel of continuously spun glass fibre filament, non-hydroscopic, with a dust arrestance of 84% to G3. The supply units case size 3 & 4 contain pleated synthetic filters grade G4. Where bag filters are specified, grade G4 are fitted in slide-in channels, and grades F5 and F6 front loading and clipped into frame, and provided with standard prefilters as described above.

Heater - Electric

Electric heater batteries consist of sheathed elements mounted in removable terminal boxes and fitted into galvanised mild steel ducts. For control purposes they are split into a number of required stages. Safety cut-outs are fitted. Fan over-run timers should always be incorporated into the control system where electric heaters are used. We also recommend the fitting of an airflow pressure switch.

Heater - Hot Water

The standard low pressure hot water heating coils consist of two rows of copper tubes mechanically expanded into plate type aluminium fins. The headers and return bends are also copper and the connections are standard BSP fittings. Frost coils have one row of copper tubes with fins spaced at 6mm. All heating coils are subjected to an air under water test of 17 bar. Neither a coil drain nor an air vent is fitted and should be installed on the adjacent connecting pipework.

Dampers

Inlet dampers are opposed blade aerofoil section, with rubber edge seals in an extruded aluminium frame, supplied with hand locking quadrant or suitable for motorising. VES can supply fitted damper actuator for 230 volt or 24 volt supply if required.

Cooling Coils

Selected to provide exact duty requirements, cooling coils are available for chilled water and DX applications. Copper tubes with aluminium fins, vinyl coated and copper fins also available. All cooling coils are of fully boxed and insulated construction and have integral moisture eliminators as standard. Drain pan has threaded drain connection. All chilled water cooling coils subjected to an air under water pressure test at 17 bar, and DX coils a pressure test at 24 bar.

Silencers

The standard WA Silencers are designed to fit straight on to the Weathermaster unit on both the inlet and outlet. The splitters and side liners are non-combustible resin bonded mineral fibre slab, faced with bonded glass tissue to prevent erosion of the attenuating material. The splitters are supported with galvanised sheet steel frames, and the silencer case is galvanised sheet steel of lock formed construction, terminating in proprietary duct flanges. The silencers have cases manufactured in galvanised sheet steel, with an optional external finish in polyester powder coat paint colour Signal grey to RAL7004.

Download specification from www.ves.co.uk/information-centre