

## Product Specification

### Colourfan<sup>®</sup> *Extract Acoustic Fan Small Ventilation Units*

#### 1.1. General

- A. Provide an extract fan unit to meet the performance and configuration as indicated in the schedule and detail drawings. The extract fan unit shall be tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007 and shall be of the Colourfan type as manufactured by VES Andover Ltd a company accredited with BS EN ISO 9001:2008.

#### 1.2. Unit Construction

- A. The unit shall be provided pre-assembled comprising of a rigidly constructed case, centrifugal backward curved fan with direct drive motor and rectangular spigots.
- B. The unit shall be supplied pre-wired to an external isolator.
- C. The unit shall be available in plantroom or weatherproof construction as indicated in the schedule and detail drawings.
- D. Sizes 0-10 shall have rectangular duct spigots complete with 30mm MEZ flange as indicated in the schedule and detail drawings.
- E. Weatherproof units shall be offered with an exhaust cowl or spigot, finished to match the unit casework.
- F. The unit casework shall incorporate high quality rubber gasket seals on service doors and panels.
- G. Sizes 0-10 shall be provided pre-assembled comprising of a rigidly constructed 50mm tubular aluminium case, double skinned galvanised sheet steel panels.
- H. Access for maintenance shall be via hinged panels, allowing access for the cleaning or removal of internal components as indicated in the schedule and detail drawings.
- I. Plantroom units shall be suitable for top, side or bottom access as indicated in the schedule and detail drawings. Weatherproof units shall be suitable for side access only.
- J. 1. Sizes 0-3 Weatherproof units shall be supplied as standard with mounting feet. Plantroom units shall be available with optional mounting feet as indicated in the schedule.  
2. Sizes 4-10 Weatherproof units shall be supplied as standard on a galvanised sheet steel channel base, the frame shall be 100mm high.
- K. Plantroom unit casework and spigots shall be supplied naturally finished in high quality galvanised steel as standard. Optional powdercoat colour as indicated in the schedule.
- L. Weatherproof units shall be supplied powdercoated signal grey RAL7004 as standard. Alternative colour according to schedule.
- M. The unit shall be designed to be secured to a suitable base, wall or ceiling, ensuring the use of correct fixings for the application and taking into account individual unit weight as indicated in the schedule and detail drawings.

#### 1.3. Fans

- A. The fan impellers shall be of PA6 glass-fibre reinforced, backward curved plastic blade construction with galvanised steel mounting plate.
- B. The impellers shall be statically and dynamically balanced to G 2.5 / G 6.3 according to ISO1940 part 1.
- C. The fan impellers shall be mated with aerodynamic bell inlet eyes for high efficiency and low noise generation.
- D. The fan impellers are supplied as standard in natural uncoated finish.

#### 1.4. Motors

- A. The fans shall incorporate external rotor motors to insulation class F, IP44 environmental protection rating and shall be supplied with thermal protection cut-out as standard.
- B. The integrated motor shall be supplied epoxy painted grey to RAL7032.

#### 1.5. Operation Environment

- A. The unit shall be designed to operate with process air temperatures from -20 °C to 40 °C, and humidity up to 80%.



## 1.6. Controls

A. The unit shall be supplied as standard pre-wired to an external isolator.

## 1.7. Ancillaries

- A. The unit shall be fully compatible with a standard range of spigot mounted silencers. The silencers shall be suitable for direct mounting to the unit as indicated in the schedule.
- B. The silencer shall be a rigidly constructed 50mm tubular aluminium case, double skinned galvanised sheet steel panels incorporating internal splitters lined with resin bonded mineral wool. Polythene and perforated metal sheet lining shall be available where indicated in the schedule.
- C. The silencer casework shall be provided naturally finished in high quality galvanised steel as standard. Internal and external powdercoat available as indicated in the schedule. Colour to be in accordance with schedule.
- D. The plantroom unit shall be fully compatible with loose spigot mounted dampers suitable for direct fitting to the unit.
- E. Dampers shall incorporate an aluminium extruded channel frame and aluminium damper blades, mounted on nylon cogs with nylon bearing inserts. Blade operation shall be via a 12mm sq. spindle mounted to one side of the damper.
- F. Dampers shall be of opposed blade type, incorporating gasket seals between blades and sealed angles on the frame to ensure maximum sealing efficiency when the blades are closed.
- G. Dampers shall be suitable for use with optional 230 VAC or 24 VAC open/close actuator as supplied by VES Andover Ltd.

Download specification from [www.ves.co.uk/information-centre](http://www.ves.co.uk/information-centre)

