

## Highline Waterside 300i Fan Coil Unit



- Features:
- Full sound power levels available
  - Multi-tapped fan speed transformer
  - Easy to install
  - Wide range of standard options available
  - Suitable for mounting in ceiling or floor void
  - Ideal for new build and refurbishment projects

### ENGINEERING SPECIFICATION

#### DESCRIPTION AND FEATURES

The units shall be manufactured from minimum 1.2mm hot dipped galvanised steel. The overall size of each unit shall be as detailed on drawings issued for the particular model. Each model shall be tested before leaving the factory to ensure it will continue to meet the specified performance, with the minimum of maintenance, throughout its life. All electrical components shall be tested to ensure each unit and its associated wiring complies with the 16<sup>th</sup> edition of I.E.E. All bearings and moving surfaces in contact shall operate without requiring further lubrication. The units shall be constructed without using self tapping screws.

#### FAN AND MOTOR ASSEMBLY

Each fan and motor assembly shall be fitted with a high output split phase capacitor motor continuously rated and complete with a built-in thermal over load protector to DIN IEC38. The external rotor shall be rated to IP44 and fitted with sealed for life ball bearing and with insulation rated to Class 'B'.

The fans shall be double inlet, double width centrifugal type and dynamically balanced in two planes according to DIN standards ISO 1940. Each fan coil shall be set to operate at three speeds with the availability for further on site training via a multi-tapped transformer of up to eleven fan speeds. Each fan coil shall be fitted with a ON/OFF switch and a three position fan speed switch mounted as detailed on the relevant drawing.

#### HEAT EXCHANGERS

The coils shall be manufactured from solid drawn copper tubes, mechanically expanded into accurately pre-formed collars in aluminium fins. The coils shall be arranged for single or multi circuit operation with headers. Each coil shall be fitted with a manual air vent and drain point. All coils shall be factory tested to 20 Bar and shall be suitable for operating pressure up to 12 Bar static head. They shall be fitted with 15mm O/D plain copper tails.

#### CONDENSATE DRIP TRAY

The condensate drip tray shall be manufactured from 1.2mm hot dipped galvanised steel welded at each corner. The tray shall be degreased before anti-condensation insulation is applied to all internal and external surfaces. It shall be fitted with a 15mm O/D plain tail brass connection. The tray shall be fitted to ensure all condensate drains effectively when the unit is installed correctly.

#### TEMPERATURE CONTROL [OPTIONAL]

The temperature controls are designed to operate at 24 volts A.C. through a 240/24v transformer installed on each unit. The standard temperature control components for an waterside controlled units when fitted, comprise 2 - valves; 2 - actuators; 1 - controller and 1 - sensor. The air temperature sensor shall be fitted in the return air stream via which the controller drives the actuators to modulate the valves to maintain the required supply air temperature.

#### FILTER

The filter shall be manufactured from a fine woven mesh of galvanised steel welded to a rigid galvanised steel frame. It shall be easily removable for cleaning and shall be designed to last for the life of the fan coil unit.