

# PHS\_MEV\_P - Mechanical Extract & Ventilation

## Consultants Specification:

1. EC external rotor motors fitted as standard for energy saving. Provided with integral thermal protection, mounted on sealed for life ball bearings, and anti-vibration supports.
2. *Forward curved centrifugal impeller which is dynamically balanced and directly driven by the motor to provide a smooth airflow through the unit.*
3. *SAP PCDB tested with 3 pipe type results. With readings up to K+6 capacity (achieving at least 60 litres/second) and meeting the following max K+6 specific fan powers (SFP):*
  - ! *K+6 = 0.30 (w/l/s) for rigid pipe.*
  - ! *K+6 = 0.30 (w/l/s) 75mm semi-rigid pipe.*
  - ! *K+6 = 0.29 (w/l/s) 90mm semi-rigid pipe.*

*The chosen machine must use the same pipe type & manufacturer as tested during the SAP testing process!*

4. *Integral humidity sensor with an adjustable humidity response.*
5. *There must be a minimum of 4nr X 125mm inlets and 1nr outlet with tapered connection points.*
6. *Must facilitate vertical or horizontal installation on ceiling, floor or wall and must have a profile of max 250mm when installed.*
7. *The unit shall be constructed with one removable panel for full access to the control board the fan.*
8. *Acoustic foam lining to further suppress any sound.*
9. *Designed and manufactured in accordance with EN60335-2-80 (Low voltage Directive) and the EMC Directive.*
10. *The machine must be supplied with a fault indicator which must indicate a fault when the air flow stops or falls under a certain threshold. The fault indicator must clearly show "Normal" and "fault" statues with green and red LEDs respectively and be located in a common area (Landing or kitchen).*
11. Controls:
  - ! *Variable speed with local controller.*
  - ! *Variable speed with a BMS or potentiometer.*
  - ! *3 speed with 3 speed controller.*
  - ! *Manual boost.*