



# Studio Bypass

- The unit will:
  - be manufactured by Vectaire Ltd.
  - be constructed from galvanised steel sheet with a thermo-acoustic lining to ensure extremely low noise levels.
  - for 1 or 2 bedroom apartments, hotel rooms, student accommodation, extra care facilities, multi-purpose occupancy etc
  - for fitting into voids, false ceilings or cupboards (bottom access only)
  - have drain connection for connection by others.
  - have a high efficiency counterflow heat exchanger with a thermal efficiency of up to 80% .
  - have two low energy, high efficiency EC fan motor assemblies.
  - have a specific fan power from 0.87 W/l/s.
  - have G3 grade filters to protect the heat exchanger.
  - have an automatic summer bypass
  - have an integral frost-stat
- Access to filters shall be from the rear by removing two magnetic strips.
- The unit shall incorporate the following control features:
  - Standard**
    - independent variable speed adjustment for each motor for trickle, boost and purge speeds.
    - adjustable boost speed over-run timer from 0 to 90 minutes.
    - adjustable boost speed delay from 0 to 5 minutes
      - remote purge cable connection on circuit board (for optional purge facility)
    - adjustable night time boost and purge inhibitor
    - integral frost-stat - proportionally reduces intake motor speed as temperature falls
    - summer bypass - automatic bypass of heat exchanger in hot weather
  - Factory Set**
    - change of ductwork handing on humidistat version (humidity threshold can be set at manufacture)
    - integral humidistat - proportionally increases motor speeds with rising humidity
    - 0-10V connections can be added for:
      - BMS - for remote motor shut-off
      - CO<sub>2</sub> detector
      - home automation system
      - external pre-heater
      - 3 speed selector switch
    - optional remote purge cable - factory connected - adjustable over-run timer from 0 to 250 minutes, Pre-set to 15 minutes (adjustable at factory)
    - holiday mode for reduced speeds when property is unoccupied (factory set option)
    - run -time and power outage counters downloadable via QR code.
- Remote (optional) LCD touch screen informs user of:
  - operating speed (user adjustable)
  - internal and external temperatures
  - status icons shows which functions currently controlling fan speed
  - date and time (user adjustable)
  - relative humidity level
  - bypass status
  - error and service notifications
  - filter saturation level (reset after changing)
  - user can also set system to holiday mode and set language
- A Commissioning Kit (or LCD touch screen) will allow the commissioning engineer or installer to set the following parameters:
  - Time and Date
  - Holiday Mode
  - Trickle, boost and purge speeds for each motor
  - Boost speed delay time duration
  - Boost over-run time duration
  - Night time boost inhibitor times
  - Touch screen sensitivity calibration
  - Pre-heater threshold (if fitted)
  - Handed installations
  - Activate CO<sub>2</sub> detector or home automation system (if fitted)
- The unit will:
  - be CE marked
  - comply with:
    - Building Regulations for enhanced energy saving capability
    - Building Regulations for reliable, efficient ventilation
    - EU RoHS Directive Compliant
    - IEC60335-2-80, LVD2006/95/CE and
    - EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility)
  - manufactured in UK to ISO 9001:2015 and 14001:2015
  - be SAP PCDB Listed
  - have a 5 year warranty -1 year parts and labour and 4 years parts only
- Please contact your Vectaire representative via Head Office on 01494 522333 for any assistance.
- An electronic copy of this specification is available on request.