MEV - Microbox 125/2DC-B

- energy efficient EC motor
- efficient, low energy solution to controlling condensation and pollution
- provides low level continuous ventilation in a kitchen and up to 5 wet rooms
- variable choice of low (trickle) and boost speed at installation
- compact ultra low profile unit
- for loft, void, false ceiling or cupboard
- requires only one discharge grille
- low noise levels and running costs
- available with 204 x 60mm spigot
- available with humidistat
- compliant with Building Regulations Parts L1 2013 and F 2013
- manufactured in UK to ISO 9001
**GENERAL FEATURES**
- Up to 97 litre/sec at 50Pa - max 100 litre/sec capacity
- suitable for areas up to 270m²
- easy and economical installation and maintenance
- can be angled horizontally or vertically
- variable low (trickle) and boost options
- boost speed triggered by a switched live connection from:
  - a light switch (if more than one light switch is used, each one must be a double pole switch)
  - DRH240 [dynamic remote humidistat]
  - PIRFF [passive infra red]
  - THM [thermostat]
  - a remote switch/pull cord
- low noise levels (below 20dB(A)
- low running costs
- extra security - no need to open windows
- 2 year warranty

**TECHNICAL FEATURES**
- compact, ultra low profile unit
- casing from steel, lined with acoustic material
- low energy EC external rotor motor with sealed for life bearings
- backward curved impellors dynamically balanced
- thermal overload protection
- service and maintenance panel easily accessible
- pre-wired for easy electrical connection
- complete with mounting bracket and anti-vibration plate
- operates in temperature up to 60°C
- manufactured in UK to ISO 9001
- IPX4 rated

**CONTROL FEATURES**
- variable adjustment - trickle and boost speeds set at installation
- boost setting [via switched live]

**OTHER MODELS AVAILABLE:**
- MBOX125/2DCH - with integral humidistat
- MBOX125/2DC204 - with rectangular spigot - 204mm x 60mm
- MBOX125/2DC204H - with rectangular spigot and integral humidistat

**COMPLIES WITH**
- Part L1 2013 of Building Regulations for enhanced energy saving capability
- Part F 2013 of Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Conforms to requirements of EC Council directives relating to Electromagnetic Compatibility and Electrical Safety: 2006/95/CE (LVD), 2004/108/CE (EMC), EN 60335-2-80
- CE marked
- SAP Q eligible
- Energy Saving Trust Best Practice Compliant

Vectaire Ltd can supply all accessories for use with these units, including air filter cassettes, silencers, fire dampers, air valves, ducting, outside grilles and wall cowls. Additionally, Vectaire offers a design service to ensure that the unit installed is the best possible to provide efficient, effective, low energy and low running cost ventilation. Vectaire can also organise installation, commissioning and maintenance of these products.
TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Model</th>
<th>Airflow l/sec</th>
<th>Power - Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>max</td>
<td>max</td>
</tr>
<tr>
<td></td>
<td>boost</td>
<td>trickle</td>
</tr>
<tr>
<td>MBOX125/2DC-B</td>
<td>105</td>
<td>104</td>
</tr>
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</table>

RESULTS for SAP CALCULATIONS
ENERGY LEVEL PERFORMANCE - using rigid ducting only

<table>
<thead>
<tr>
<th>Exhaust Terminal Configuration</th>
<th>Specific Fan Power (W/l/sec)</th>
<th>EST Best Practice Performance Compliant</th>
<th>Total Flow Rate (l/sec)</th>
<th>Total Flow Rate (wind condition) (l/sec)</th>
<th>% reduction of Total Flow Rate</th>
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<tbody>
<tr>
<td>Kitchen + 1 additional wet room</td>
<td>0.20</td>
<td>Yes</td>
<td>21.0</td>
<td>19.3</td>
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<td>Kitchen + 2 additional wet rooms</td>
<td>0.26</td>
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<td>29.0</td>
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<td>Kitchen + 3 additional wet rooms</td>
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<td>37.0</td>
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<td>Kitchen + 5 additional wet rooms</td>
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<td>Yes</td>
<td>53.0</td>
<td>52.5</td>
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Figures from BRE test results at minimum flow rate conditions

MBOX125/2DC-B  

Sound Power Levels, $L_w$ (dB) - Octave Bands Frequency Hz.  

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<tr>
<th>Curve Ref</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1k</th>
<th>2k</th>
<th>4k</th>
<th>8k</th>
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<tr>
<td>Max Boost (105 l/sec)</td>
<td>Extract</td>
<td>62</td>
<td>66</td>
<td>68</td>
<td>62</td>
<td>59</td>
<td>60</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Supply</td>
<td>60</td>
<td>68</td>
<td>65</td>
<td>67</td>
<td>65</td>
<td>64</td>
<td>57</td>
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<tr>
<td></td>
<td>Breakout</td>
<td>62</td>
<td>66</td>
<td>68</td>
<td>62</td>
<td>59</td>
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<td>Max Trickle (104 l/sec)</td>
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<td>66</td>
<td>68</td>
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<td>59</td>
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<td>Breakout</td>
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<td>55</td>
<td>63</td>
<td>59</td>
<td>52</td>
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<td>80% [95 l/sec]</td>
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<td>60</td>
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<tr>
<td>60% [62 l/sec]</td>
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<td>56</td>
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<tr>
<td>40% [34 l/sec]</td>
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<td>50</td>
<td>42</td>
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<td>39</td>
<td>39</td>
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</tbody>
</table>

TYPICAL SPECIFICATION

Supply and install a Vectaire MBOX125/2DC energy efficient MEV which has been tested and is SAP Q Eligible as manufactured by Vectaire Ltd, Lincoln Road, Cresssex Business Park, High Wycombe, Bucks, HP12 3RH. The unit is to give low level, continuous ventilation to a kitchen and five other wet rooms. The unit should be for loft, void, false ceiling or cupboard, installation and be no more than 184 mm deep. The unit should incorporate a low energy EC external rotor motor with sealed for life bearings for low noise levels and low energy consumption with an SFP down to 0.20. It should have a variable choice of low (trickle) and boost options for optimum setting. The unit should be pre-wired for easy electrical connection. It should comply with Part L1 2013 and Part F 2013 of Building Regulations, be EU RoHS Directive Compliant, conform to the requirements of EC Council directives relating to Electromagnetic Compatibility and Electrical Safety: 2006/95/CE (LVD), 2004/108/CE (EMC), EN 60335-2-80, be CE marked, be SAP Q eligible, EST Best Practice Performance compliant and be IPX4 rated.
PERFORMANCE [curves are for guidance only]

DIMENSIONS - mm

Slimline, whole house, mechanical extract ventilation - MEV
Microbox 125/2DC-B

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