Ultra-Efficient & Intelligent Energy Recovery Ventilators (ERV) Ventacality’s VS Line of ERVs are dedicated outside air systems (DOAS), offering:

A part of the HVAC² Next Generation Building™

Our ventilation equipment connects seamlessly to our building controls and cloud-based user interface to take HVAC systems to the next level of energy efficiency and control. We call this new system HVAC².

VS400 CMe

Ventacality’s VS-CM Series helps building owners and HVAC contractors working on multi-level building projects reduce heating and cooling installation and operating costs while improving energy efficiency, health and comfort. Unlike other ventilation products, the Ventacality VS-CM Series operates at much higher energy efficiency (up to 86.1%) which saves much more energy and significantly lowers operating costs. With improved energy efficiency, building owners and occupants can afford to operate ventilation continuously, which improves air quality, and occupant health and comfort. When connected to the optional SBC100 Smarter Building Controller, the VS-CM Series ventilators are able to be monitored and controlled from anywhere via any Internet connected device, making them the easiest ventilation products to manage and operate.

SPECIFICATIONS

- Flow Rate: 120 - 400 cfm / 204 - 680 m³/h
- Max External Static Pressure: 2” W.C. / 498 Pa
- Ventilation Type: Energy Recovery Ventilator (ERV)
- Heat Exchanger: Counterflow Polymer Static Plate
- Fan Type: Backward Curved, Centrifugal, EC
- Exchanger Efficiency (AHRI 1060) Max: Sensible – 86.1%
  Latent – 79.2%
  Total – 82.3%
- Outdoor Temp. Conditions: -22° to 104° F
- Ambient Temp. Conditions: 41° to 104° F
- Max Return Air Humidity: 90%
- Insulation & Thermal Conductivity: 2” Foam @ 0.042 W/mK 0.024 BTU/(hr ft °F)
- Nominal Duct Connection: 12” x 8” / Diameter 10”
- Operation Modes: CAV, DCV, VAV, BMS, Economizer
- Certifications: TÜV SUD: (UL 1812, CSA 22.2 No. 113) Pending
  Passive House: Pending
  FCC: Class A

MECHANICAL

- Weight: 203 lbs
- Shipping Weight: 260 lbs
- Dimensions: 42.52” L x 12.2” H x 55.12” W
- Shipping Dimensions: 51” L x 18” H x 67” W
- OA Filter Dimensions: 18” L x 9.25” W x 3.75” D
  Filter Class: MERV13
- RA Filter Dimensions: 18” L x 9.25” W x 3.75” D
  Filter Class: MERV9

ELECTRICAL

- Voltage: 208 VAC
  *Preheater: 2.57 kW 12.2 A
  De-Ice Preheater: 9.4° C
- Voltage: 240 VAC
  *Preheater: 3.29 kW 13.7 A
  De-Ice Preheater: 12.5° C
- Power Supply: 208 VAC
  - Preheater: 360 W 1.7 A
  - Inactive: 360 W 1.6 A
  - Active: 360 W 5 A
  - MOP: 5 A
- Power Supply: 240 VAC
  - Preheater: 360 W 1.7 A
  - Inactive: 360 W 1.6 A
  - Active: 360 W 5 A
  - MOP: 5 A
- Preheater Temp Rise: - 12.5° C
- Max Power per Fan: 170 W (0.23 hp)

OPTIONAL ACCESSORIES**

- External Outside Air & Exhaust Air Damper Modules
- External DX or WCO Postheater Modules
- Internally Mounted or Room Mounted CO₂ Sensor
- External Condensate Pump
- External Condensate Ball Siphon
- SBC100 Smarter Building Controller

**All optional accessories are field installed.
**DIMENSIONS (IN.)**

- **H**: 42.52
- **h**: 38.19
- **a**: 55.12
- **B**: 12.20
- **k**: 0.83
- **i**: 52.36
- **c**: 11.81
- **j**: 39.37
- **d**: 7.87
- **C**: 12.76
- **X**: 9.53
- **y**: 20.35
- **Z**: 9.53
- **X**: 9.53
- **y**: 20.35
- **Z**: 9.53

**FAN OPERATING RANGE**

- 100% FAN SPEED
- External Static Pressure [in W.C.]
- Flow Rate [CFM]

<table>
<thead>
<tr>
<th>Ext. Static Pressure (in. W.C.)</th>
<th>0.52</th>
<th>1.27</th>
<th>2.01</th>
<th>2.70</th>
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</thead>
<tbody>
<tr>
<td>Maximum Flow (CFM)</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
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<tr>
<td>System Power (Watts)</td>
<td>815</td>
<td>390</td>
<td>389</td>
<td>357</td>
</tr>
</tbody>
</table>

**FAN VOLUME & POWER RANGE**

- Ext. Static Pressure (in. W.C.)
- Maximum Flow (CFM)
- System Power (Watts)

**PARTS**

- Condensate Pump
- Condensate Siphon
- Main Power Switch
- Service Access
- Control Panel
- Filter
- Regulator
- Condensate Drain

**LATENT EFFICIENCY**

- Heating Mode
- Cooling Mode

**SENSIBLE EFFICIENCY**

- Heating Mode
- Cooling Mode

**TOTAL EFFICIENCY**

- Heating Mode
- Cooling Mode