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VTS GROUP

1.1 VTS: no. 1 worldwide
1.2 3 constituents of success

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2.1 ClimaCAD Online 4.0 [CCOL 4]
2.2 VTS BIM

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3.2 DESIGN
3.3 AIR TIGHTNESS
3.4 ROOFTOP APPLICATIONS
3.5 VENTUS KEY COMPONENTS
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REFERENCE FACILITIES
VTS GROUP – is a manufacturer of technologically advanced equipment for the HVAC Sector; using innovative technologies in the spheres of project research, production and logistics.

MARKET'S **BEST LEAD TIME**

* Logistics center
** Factory will confirm lead time based on the units selected.
OUR MISSION

AHU#1
THE 3 ELEMENTS OF SUCCESS
Consistently superior product quality. Unbeatable market prices. The shortest lead time. These three elements of market policy ensure that VTS is always one step ahead, in every region of the world.

Following the proven assembly method of the automotive Industry, VTS created a network of 6 efficiently functioning logistics centers: Atlanta, Dubai, Moscow, Shanghai, Warsaw and Bangalore. Thereby guaranteeing the shortest delivery terms in the market, regardless of the region in the world.

Mass scale production of reproducible devices makes it possible for VTS to offer our product at the most competitive price while retaining the best quality.

Multilevel quality control systems enables VTS to offer a 2 year optional warranty for each unit.
ClimaCAD Online 4.0 [CCOL 4]

Customized configuration

User friendly interface

Fast & Easy selection

Integrated with CRM, ERP, WMA system

CCOL 4 IS ADJUST TO

» all browsers

» all operating system

» all devices

DATA EXPORT TO

PDF  CAD 2D  CAD 3D  SUBMITTAL  QUOTATION  TECH CARD
CCOL 4.0 uses the latest technology and development platforms, which will be accessible from anywhere in the world through our software as service models. All you need is a device with a web browser and access to the internet.

THE VERSATILITY OF DESIGNING

- unlimited number of device configurations
- detection of illogical configurations

DYNAMIC COUNTING OF DEVICES DIMENSIONS

- CCOL offers the optimal length of the control panel and the optimal section length adapted to the device functions and device design

MANAGING YOUR OWN DATABASE

- the possibility of creating your own project database (selection)
- the possibility of exporting own selections to quotation by VTS technical engineers

www.ccol4.com
VTS BIM - a new approach to digital models of air-handling units

VTS has created the possibility of generating digital models of VENTUS VVS and American VENTUS air-handling models on-line. This is possible thanks to the implementation of a new ClimaCAD OnLine 4.0 selection tool, equipped with .rfa (Revit®) files generator.

The process of model generation comes down to the following 3 steps:

1. **Login to CCOL 4.0 website**
   Login to the CCOL 4.0 using the following web address:
   
   [www.ccol4.com](http://www.ccol4.com)

2. **Unit configuration**
   Use the intuitive selection tool to select your Air Handling Unit and set its working parameters to fit the specified project demands.

3. **Data export to .rfa file**
   In order to generate a model in .rfa file, it is enough to enter the name and surname plus the email address of the person dedicated to receive the file. The system will automatically send a link to download the model. The entire process lasts approximately 15 minutes.
The release of families for the Autodesk Revit® environment by VTS makes it easier to design agencies for model the building installations on the basis of using the same platform. At present the on-line generator is a unique solution in BIM environment. It enables the generation of a VENTUS air-handling unit model practically in no time in any configuration and with any parameters.

As a result, the client receives:

The generated objects contain detailed parameters connectors:
- air systems,
- hydraulic systems,
- sanitary systems,
- electric systems,
as well as the complete dimensional data, the device maintenance zone and the service (repair) zone.

VTS also provides digital models of WING air curtains and VOLCANO heating units. The models contain:
- parametrized electric and hydraulic connectors,
- mount options vertically and horizontally,
- presentation of the range of air stream,
- parameter of any inclination angle of a heater in relation to the horizontal plane.

Models can be downloaded from http://vtsgroup.us/vtsbim.html
American VENTUS

AVS

from 800 CFM to 38 000 CFM in total capacity

premium efficiency motors
energy recovery system:
- cross-flow plate
- energy wheel

2 000 h salt spray test resistance on the external coating

right or left hand inspection site

fully assembled unit or delivered by sections

inlet and outlet locations

2 inch polyurethane sandwich panels which eliminates thermal bridges
AVS LITE

- Premium efficiency motors
- Energy recovery system:
  - Cross-flow plate
  - Energy wheel

2,000 h salt spray test resistance on the external coating

Right or left hand inspection site

Inlet and outlet locations

Horizontal or vertical configurations.

AVS VERTICAL

- Premium efficiency motors

2,000 h salt spray test resistance on the external coating

Right or left hand inspection site

Factory assembled unit

2 inch polyurethane sandwich panels which eliminates thermal bridges

Inlet and outlet locations
MORE THAN 2,000 HOURS SALT SPRAY TEST PROTECTION

CASING SKIN
- high rigidity and durability of the AHU structure
- low absorption of heat radiation and UV
- perfect resistance to weather conditions

FAN SECTION CAGE
- high longitudinal stiffness of the structure
- easy section assembly

RESISTANCE TO CORROSION

Salt spray test according to ASATMB - 117

VENTUS AHU
new coating resistance
ALUMINUM POSTS AS STANDARD FOR ALL TYPES OF UNITS

CONVENIENT

» easy transport
» great profile resistance to deflection

STRUCTURAL POSTS

» thermally broken as standard
» high resistance to weather conditions and UV radiation

GALVANIZED STEEL SUPPORT AS STANDARD FOR ALL TYPES OF UNITS

Z PROFILE AVS040-AVS085

C PROFILE AVS100-AVS380

CURB READY RAILS AVS040-AVS380

Product range - American VENTUS
Product range - American VENTUS

AIR TIGHTNESS

ERGONOMIC INSPECTION PANEL LOCK

- All units come with hinged panels
- VTS utilizes their patented Smart Hinge System with prevents seal damage when the panels are open
- Perfect ergonomics with integrated handle and hinge function
- Easy to use with quick opening and closing of inspection panels
ALUMINUM STRUCTURAL POSTS WITH AN ADDITIONAL SEALING FIN AND A THERMAL INSERT

» thermal break as standard - ensures no condensation outside the AHU
» the fin ensures labyrinth sealing – currently the most effective solution on the market, mainly used in laboratory equipment
» original solution consisting in the use of symmetrical channel tension filled with a sealing compound, which provides 100% tightness of the connection between the column and construction structure
ROOFTOP APPLICATIONS

SECTIONAL ROOF

» prevents water penetration during service
» additional weather protection

VARIABLE INTAKE CONFIGURATIONS

» top, bottom and side intake options
» end – optional full face intake damper available units
» dampers:
  - gear system for even distribution of the torque
  - extruded aluminum construction
  - low leakage
  - double wall blade construction
CURB READY RAILS

» design - overhangs the side of the curb to avoid the need of flashing
» integrated lifting lugs

VARIABLE DISCHARGE CONFIGURATION

» end, top, bottom and side discharge options
» optional discharge dampers and full end discharge dampers available
VENTUS KEY COMPONENTS

FAN SECTIONS

- Depending on unit size, VTS will use either 1, 2, 3, 4, or 5 fans
- Utilize ABB variable frequency drives
- Utilize Baldor premium efficient motors (TEFC); Baldor EC Gold Series permanent magnet motors are an option. EC Gold meets the more stringent IE 4 requirements.
- Motor bearing life is standard L10-400,000 hrs
- All motors 7.5 HP and larger come standard with shaft grounding rings
- Backdraft dampers are available
- Available voltages depending on size: 115/1, 208/1, 230/1, 208/3, 230/3, 460/3
- Single point power for fans
- Impeller is made from fiber reinforced polymer
- Capable of 10” of total static pressure
- Extremely quiet and energy efficient
- Fan combination is more efficient than ECM/forward curved fan configurations

ENERGY RECOVERY WHEELS

- VTS manufactured wheels up from AVS-012 up to AVS-170
- Class leading efficiencies
- Silica gel over aluminum foil single wound construction
- Klingenburg wheels for AVS-230 and up
- All wheels are total energy wheels
- All wheels are AHRI 1060 certified
- All wheels are equipped with VFD speed control

DAMPERS

- Dampers are manufactured in house by VTS
- Gears are made with fiber reinforced polymer and infused with nylon for long life and quiet operation
- AMCA certified for 1”, 4” and 8” of pressure.
- Square shaft preventing actuator slippage
- Indicator position shown on outside of damper for externally mounted dampers
- Opposed blade
FILTERS

- 2” MERV 8 or 4” MERV 13 pre filters
- 12” MERV 13, 14, or 16 final filters
- Final filters are Camfil Farr Durafil ® 4V
- Final filters have lowest pressure drop of their respective ratings in the industry (initial pressure drops at 500 FPM of 0.33”, 0.37”, and 0.80”)
- All filters are UL 900 Class 2

ENERGY RECOVERY PLATES

- Dry efficiencies up to 87%
- AHRI 1060 certified
- Sensible only
- Crossflow configuration
- The exchanger consists of aluminum plates, the casing of aluminum extrusions, and side walls of Aluzinc sheet steel. The exchangers are silicone free

ULTRA LOW LEAKAGE DAMPERS

- Dampers are Tamco Series 9000
- Aluminum construction with polyurethane foam
- AMCA certified for Class 1A low leakage for 1”, Class 1 for 1”, 4” and 8” of pressure.
- Insulated blades with an R-value of 2.29

WATER / REFRIGERANT / STEAM COILS AND DRAIN PANS

- Hot water, chilled water, refrigerant, and steam
- All coils are AHRI certified
- Optional stainless steel coil casing
- Standard stainless steel drain pans
- Coils can be swapped out typically in less than one hour
- Coils can be provided with optional Blygold coating

ELECTRIC HEATER

- Standard SCR controls
- Door interlocking disconnect switch
- 6 kW to 297 kW
- Air flow switch
WING is the new generation device created from a passion for a light and modern design representing characteristics of gliders. A minimal housing with a streamlined form of a wing that seems to float in the air. The diamond style side panels hide the excellent components in an innovative curtain body to set new standards for air curtains. WING combines the unique design and excellent efficiency to redefine the air curtain image.
SIMPLE CLEANING
Thanks to the optimized construction of the covers, cleaning the curtain is comfortable and does not require the disassembly of any part, always ensuring hygienic operation.

GALVANIZED STEEL CASING
Double coating (galvanization + powder paint) provides long-term protection against corrosion and consistent aesthetic qualities. Casing colour RAL 9016.

SMART DOOR PROTECTION
Air curtain with advanced WING EC CONTROLLER may perform according to the door opening sensor. Smart Door protection gives you not only permanent temperature comfort but also secure inside environment from dust, pollution, insects and unpleasant scents.

ELECTRICITY SAVINGS
Modern design of the EC motor and fan saves up to 40% of energy compared to old generation solutions.
**DEVICE TYPE SERIES**

### WATER HEAT EXCHANGER
- **HEATING POWER RANGE:** 13-160 MBH
- **EXHAUST FLOW RATE:** 1089-2589 CFM
- **MAXIMUM AIR COVERAGE:** 12 ft

### ELECTRIC HEATING COIL
- **HEATING POWER RANGE:** 7-51 MBH
- **EXHAUST FLOW RATE:** 1088-2648 CFM
- **MAXIMUM AIR COVERAGE:** 12 ft

### AMBIENT (no heat)
- **EXHAUST FLOW RATE:** 1147-2707 CFM
- **MAXIMUM AIR COVERAGE:** 13 ft

---

### STREAM RANGE

**Vertical air stream range**
(maximum installation height)

<table>
<thead>
<tr>
<th>Installation Height [ft]</th>
<th>1 SPEED</th>
<th>2 SPEED</th>
<th>3 SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-1/2</td>
<td>16 ft/s*</td>
<td>23 ft/s*</td>
<td>29 ft/s*</td>
</tr>
<tr>
<td>9-1/2</td>
<td>23 ft/s*</td>
<td>29 ft/s*</td>
<td>36 ft/s*</td>
</tr>
<tr>
<td>12 [13**]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - air flow rate [ft/s]
** - ambient curtain

---

**Horizontal air stream range**
(for vertical installation)

<table>
<thead>
<tr>
<th>Air stream range [ft]</th>
<th>1 SPEED</th>
<th>2 SPEED</th>
<th>3 SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-1/2</td>
<td>16 ft/s*</td>
<td>23 ft/s*</td>
<td>29 ft/s*</td>
</tr>
<tr>
<td>9-1/2</td>
<td>23 ft/s*</td>
<td>29 ft/s*</td>
<td>36 ft/s*</td>
</tr>
<tr>
<td>12 [13**]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - air flow rate [ft/s]
** - ambient curtain
# PARAMETERS OF WING AIR CURTAINS

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Unit of measure</th>
<th>WING W100-200</th>
<th>WING W150-200</th>
<th>WING W200-200</th>
<th>WING E100-200</th>
<th>WING E150-200</th>
<th>WING E200-200</th>
<th>WING C100-200</th>
<th>WING C150-200</th>
<th>WING C200-200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum width of a single door for one device</td>
<td>in</td>
<td>39</td>
<td>59</td>
<td>79</td>
<td>39</td>
<td>59</td>
<td>79</td>
<td>39</td>
<td>59</td>
<td>79</td>
</tr>
<tr>
<td>Maximum height of door</td>
<td>ft</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Heating output range</td>
<td>MBH</td>
<td>13-58</td>
<td>34-109</td>
<td>58-160</td>
<td>7/20 or 14/20</td>
<td>14/41 or 27/41</td>
<td>20/51 or 31/51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>CFM</td>
<td>1089</td>
<td>1824</td>
<td>2589</td>
<td>1088</td>
<td>1854</td>
<td>2648</td>
<td>1147</td>
<td>1883</td>
<td>2707</td>
</tr>
<tr>
<td>Maximum temperature of heating medium</td>
<td>°F</td>
<td>203</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum working pressure</td>
<td>psi</td>
<td>232</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water volume</td>
<td>in³</td>
<td>97</td>
<td>158</td>
<td>219</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter of stub pipe connectors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor supply voltage</td>
<td>V/ph/Hz</td>
<td>~120/1/60 or ~240/1/60</td>
<td>~240/1/60 or ~240/3/60 or ~480/3/60</td>
<td>~240/3/60 or ~480/3/60</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric heater supply voltage</td>
<td>V/ph/Hz</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of the electric heater</td>
<td>MBH</td>
<td>-</td>
<td>7 and 14</td>
<td>14 and 27</td>
<td>20 and 31</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Rated current of the electric heater</td>
<td>A</td>
<td>-</td>
<td>9/18/26 or 5/10/15 or 3/5/8</td>
<td>10/20/30 or 5/10/15 or 8/11/18</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC Motor power</td>
<td>HP</td>
<td>1/5</td>
<td>1/4</td>
<td>1/3</td>
<td>1/5</td>
<td>1/4</td>
<td>1/3</td>
<td>1/5</td>
<td>1/4</td>
<td>1/3</td>
</tr>
<tr>
<td>EC Motor rated current</td>
<td>A</td>
<td>1.1</td>
<td>1.3</td>
<td>1.9</td>
<td>1.1</td>
<td>1.3</td>
<td>1.9</td>
<td>1.1</td>
<td>1.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Weight</td>
<td>lbs</td>
<td>47</td>
<td>64</td>
<td>83</td>
<td>49</td>
<td>67</td>
<td>86</td>
<td>42</td>
<td>56</td>
<td>72</td>
</tr>
</tbody>
</table>

### FAN SPEED

<table>
<thead>
<tr>
<th>NOISE LEVEL</th>
<th>WING W100-200</th>
<th>WING E100-200</th>
<th>WING C100-200</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>61</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>II</td>
<td>59</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>I</td>
<td>56</td>
<td>57</td>
<td>60</td>
</tr>
</tbody>
</table>

### CONTROLS

**ALL EC AIR CURTAINS ARE CHARACTERIZED BY EASE AND SIMPLICITY OF CONNECTION**

<table>
<thead>
<tr>
<th>Controller WING EC</th>
<th>Valve with actuator (VA-VEH202TA)</th>
<th>Door sensor (reed switch)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTS product number</td>
<td>1-4-0101-0451</td>
<td>1-2-1204-2019</td>
</tr>
<tr>
<td>Power supply voltage</td>
<td>V/ph/Hz</td>
<td>~120/1/60 or ~240/1/60</td>
</tr>
<tr>
<td>Permissible load</td>
<td>A</td>
<td>1A for 110-240V 0.015A for 9-10V</td>
</tr>
<tr>
<td>Setting range</td>
<td>°F</td>
<td>41...104</td>
</tr>
<tr>
<td>Protection rating</td>
<td>IP</td>
<td>30</td>
</tr>
</tbody>
</table>

* available heating power in the control option configuration: Wing E100 7/20 MBH or 14/20 MBH; for Wing E150 14/41 MBH or 27/41 MBH; for Wing E200 20/51 MBH or 31/51 MBH
** air stream range depends on curtain operation speed
*** measurement conditions: semi-open space, horizontal installation on the wall, measurement performed 10 ft away from the device
The Volcano hydronic heaters are a new generation of devices, combining innovative technical solutions with a modern pattern design. Our precisely executed and light housing resembles the beautiful diamond shape; ideal in its simplicity. The character of the device is emphasized by the composition of the selected materials and dynamically shaped air guide vane.
MODERNITY

ELECTRICITY SAVINGS
Modern design of the EC motor and fan saves up to 40% of energy compared to old generation solutions.

DESIGN
Highly developed casing form guarantees optimal exchanger surface exposure while hiding all structural elements.

MATERIAL
Made of the highest class ABS with an anti-UV pigment mixture. The casing is characterized by high mechanical strength, durability, and resistance to high temperatures. The material used guarantees unchangeable aesthetics, easy to clean surfaces and long-term durability.

SMART LOCK
Our patented locking system guarantees a durable and precise fit for all casing elements.
## DEVICE TYPE SERIES

<table>
<thead>
<tr>
<th>VOLCANO</th>
<th>VR Mini EC</th>
<th>VR1 EC</th>
<th>VR2 EC</th>
<th>VR3 EC</th>
<th>VR-D Mini EC</th>
<th>VR-D EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEATING POWER RANGE</td>
<td>10-68 MBH</td>
<td>17-102 MBH</td>
<td>27-171 MBH</td>
<td>44-256 MBH</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>MAXIMUM AIR OUTPUT*</td>
<td>1236 CFM</td>
<td>3119 CFM</td>
<td>2855 CFM</td>
<td>3355 CFM</td>
<td>1371 CFM</td>
<td>3826 CFM</td>
</tr>
<tr>
<td>HORIZONTAL RANGE (MAX.)</td>
<td>46 ft</td>
<td>75 ft</td>
<td>72 ft</td>
<td>82 ft</td>
<td>52 ft</td>
<td>92 ft</td>
</tr>
<tr>
<td>VERTICAL RANGE (MAX.)</td>
<td>26 ft</td>
<td>39 ft</td>
<td>36 ft</td>
<td>39 ft</td>
<td>33 ft</td>
<td>49 ft</td>
</tr>
</tbody>
</table>

* maximum speed 1.5 ft/s

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### ASSEMBLY

VOLCANO heaters are furnished with a standard assembly console for wall and ceiling mounting of the device.

The maximum vertical range of the devices are 10-39 ft, depending on the type of heater. The maximum horizontal range of the devices are 16-92 ft.

Notice! If the minimum distance of 1.3 ft and 1 ft [VR Mini] is not maintained from the wall or ceiling during assembly, the device may operate incorrectly. The fan may be damaged or the entire device may work louder.
### TECHNICAL PARAMETERS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>VOLCANO VR MINI</th>
<th>VOLCANO VR1</th>
<th>VOLCANO VR2</th>
<th>VOLCANO VR3</th>
<th>VOLCANO VR-D MIN</th>
<th>VOLCANO VR-D</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTS product number</td>
<td></td>
<td>1-4-0101-0455</td>
<td>1-4-0101-0442</td>
<td>1-4-0101-0443</td>
<td>1-4-0101-0444</td>
<td>1-4-0101-0498</td>
<td>1-4-0101-0450</td>
</tr>
<tr>
<td>Number of heater rows</td>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Maximum air output</td>
<td>CFM</td>
<td>1236</td>
<td>3119</td>
<td>2855</td>
<td>3355</td>
<td>1371</td>
<td>3826</td>
</tr>
<tr>
<td>Heating power range</td>
<td>MBH</td>
<td>10-68</td>
<td>17-102</td>
<td>27-171</td>
<td>44-256</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Maximum temperature of heating medium °F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200</td>
<td>---</td>
</tr>
<tr>
<td>Maximum working pressure PSI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>---</td>
</tr>
<tr>
<td>Maximum horizontal air range ft</td>
<td></td>
<td>46</td>
<td>75</td>
<td>72</td>
<td>82</td>
<td>52</td>
<td>92</td>
</tr>
<tr>
<td>Maximum vertical air range ft</td>
<td></td>
<td>26</td>
<td>39</td>
<td>36</td>
<td>39</td>
<td>33</td>
<td>49</td>
</tr>
<tr>
<td>Water capacity in³</td>
<td></td>
<td>68</td>
<td>76</td>
<td>131</td>
<td>188</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Connection stub pipe diameter &quot;</td>
<td></td>
<td>3/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>---</td>
</tr>
<tr>
<td>Device weight (without water) lbs</td>
<td></td>
<td>30</td>
<td>46</td>
<td>47</td>
<td>54</td>
<td>18</td>
<td>34</td>
</tr>
<tr>
<td>Power supply voltage V/ph/Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120/1/60</td>
<td>240/1/60</td>
</tr>
<tr>
<td>EC motor power HP</td>
<td></td>
<td>0.12</td>
<td>0.33</td>
<td>0.49</td>
<td>0.12</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>EC motor rated current A</td>
<td></td>
<td>0.51</td>
<td>1.3</td>
<td>1.7</td>
<td>0.51</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>EC motor rotations rpm</td>
<td></td>
<td>1200</td>
<td>1430</td>
<td>1400</td>
<td>1200</td>
<td>1400</td>
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<tr>
<td>EC motor protection rating IP</td>
<td></td>
<td>54</td>
<td>44</td>
<td>54</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casing color palette</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Front: RAL 9016 Traffic White, rear + console: RAL 7036 Platinum Gray, fan (EC): RAL 6038 Green</td>
<td></td>
</tr>
</tbody>
</table>

### CONTROLS

#### Parameters

<table>
<thead>
<tr>
<th>Model</th>
<th>VTS product number</th>
<th>Motor support</th>
<th>Power supply voltage V/ph/Hz</th>
<th>Permissible load A</th>
<th>Setting range °F</th>
<th>Work mode</th>
<th>Hourly-weekly calendar</th>
<th>Temperature measurement</th>
<th>The possibility of connecting a separate temperature sensor</th>
<th>Output signal</th>
<th>Protection rating</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>~120/1/60 / ~240/1/60</td>
<td>1A for 110-240V 0,015A for 0-10V</td>
<td>41...104</td>
<td>Manual / automatic</td>
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<tr>
<td>Controller Volcano EC</td>
<td>1-4-0101-0457</td>
<td>EC</td>
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<td></td>
<td></td>
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<td></td>
<td>Integrated in the device</td>
<td>1 or 4</td>
<td>IP</td>
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#### Valve with actuator (VA-VEH202TA)

<table>
<thead>
<tr>
<th>VTS product number</th>
<th>Power supply voltage V/ph/Hz</th>
<th>Power consumption W</th>
<th>Connection &quot;</th>
<th>Kvs flow ratio gpm</th>
<th>Opening/ closing time min.</th>
<th>Protection rating IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2-1204-2019</td>
<td>~120/1/60 / ~240/1/60</td>
<td>1</td>
<td>3/4</td>
<td>19.82</td>
<td>3/3</td>
<td>54</td>
</tr>
</tbody>
</table>
REFERENCES

Marriott Hotel
USA/ Hilton Head

TESLA Gigafactory
USA/ Sparks

Alamodome
USA/ San Antonio

Rollie Johnson Inc
USA/ St. Louis
University of Kentucky
Good Samaritan Hospital
USA/ Kentucky

Penn State University
- Old Main- State College
USA/ Pennsylvania

Cathedral of the Holy Cross
USA/ Boston, MA

Presbyterian Weill Cornell Medical Center
USA/ New York
REFERENCES

Concord Gardens
Canada/Vancouver

Opus Hotel
Canada/Vancouver

Iolani School Campus
USA/ Hawaii

Aruba Renaissance Resort
Aruba/ Oranjestad
Reference facilities

The Corners of Brookfield
USA/ Brookfield

Uni Wright Hall
USA/ Iowa

Mallers building – Historic Jewelers Row
USA/ Chicago

Residence Hall University of Notre Dame
USA/ Notre Dame
REFERENCES

Lutheran Church of the Good shepherd
USA/ Moorhead

Southeastern Kentucky Community College
USA/ Kentucky

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USA/ Stratham
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The features mentioned are subject to continuous upgrade and can change any time.
VTS assuring continuous improvement for product and data and reserves the right to change design and specifications without notice.
2019, version A.

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