**Characteristics**

- Energy saving heat pump air curtains: Up to 70% reduction in costs and CO₂ emissions (heating mode).
- Decorative air curtain in contemporary architectural style. Its minimalist and smart design integrates in any environment and offers infinite options to customize.
- Can include personalized logotypes, signs or graphic designs. It can even incorporate clocks or lighting.
- Front anodized aluminium panels. Optionally manufactured in brushed or mirror polished stainless steel. Other materials are possible, such as wood, metal, etc.
- Central structure made of galvanized steel finished in black forge as standard. Other colours are available on request.
- Anodized aluminium outlet vanes, airfoil shaped, adjustable in both directions.
- EC Double-inlet centrifugal fans driven by an external rotor motor and low noise level, with very low consumption efficiency fans.
- Includes direct expansion coil with sensors. Optional condensate water pump.
- CS-5DX-NE Plug&Play control with 5 speeds and telephone cable 7m included.
- Requires TOSHIBA DX Interface KIT adapted for air curtain and programmable control, please consult.
- Ready to connect to TOSHIBA Inverter outdoor heat pump unit (R410A / R32) with expansion valve, not included, the customer should purchase it.

**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Airflow m³/h</th>
<th>Outdoor Unit (*)</th>
<th>Outdoor Unit (*)</th>
<th>Power Fan 230V/50Hz kW</th>
<th>Current Fan 230V/50Hz A</th>
<th>Noise Level (5m) dB(A)</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZEN ECG 1000 DX10-TO</td>
<td>2190</td>
<td>230Vx1</td>
<td>400Vx3</td>
<td>0.213</td>
<td>1.86</td>
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<td>40</td>
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<td>ZEN ECG 1500 DX15-TO</td>
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<td>230Vx1</td>
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</table>

(*) Includes direct expansion valve.

**TOSHIBA Inverter Outdoor Units**

<table>
<thead>
<tr>
<th>Model</th>
<th>Heating Capacity kW</th>
<th>Heating Power kW</th>
<th>SCOP or COP</th>
<th>Cooling Capacity kW</th>
<th>Cooling Power kW</th>
<th>SEER or EER</th>
<th>Power Supply</th>
<th>Pipes Gas Liquid inch</th>
<th>Pipes Minimum Length m</th>
<th>Pipes Maximum Length m</th>
<th>Pipes Maximum Height m</th>
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<tbody>
<tr>
<td>RAV-SM110ATF-E</td>
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<td>230Vx1</td>
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<td>8</td>
<td>5</td>
<td>10</td>
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<td>RAV-SP110AT8-E</td>
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<td>4.09</td>
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<td>RAV-SM160ATF-E</td>
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<td>230Vx1</td>
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<tr>
<td>RAV-SP160AT8-E</td>
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<td>10</td>
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<td>RAV-SM224ATF-E</td>
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<td>11/18</td>
<td>1/2</td>
<td>7.5</td>
<td>10</td>
</tr>
</tbody>
</table>

Energy efficiency: SCOP/SEER seasonal <12kW, COP/EER >12kW.
Outdoor unit capacities depending on standard conditions: heating 20°CDB indoor / 7°CDB and 6°CWB outdoor, cooling 27°CDB and 19°CWB indoor / 35°CDB outdoor.
When adverse weather conditions, the outdoor unit capacity can decrease. It is recommendable to oversize the units.

(*) Also compatible with outdoor units with R32 gas: RAV-GM110ATJ-F-E, RAV-GM110ATJ5-E, RAV-GM140ATJ-F-E, RAV-GM140ATJ5-E
ZEN VRF-TO | Heat Pump Energy Saving Air Curtains For
TOSHIBA Outdoor Units (VRF)

Characteristics

- Energy saving heat pump air curtains: Up to 70% reduction in costs and CO2 emissions (heating mode).
- Decorative air curtain in contemporary architectural style. Its minimalist and smart design integrates in any environment and offers infinite options to customize.
- Can include personalized logotypes, signs or graphic designs. It can even incorporate clocks or lighting.
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- EC Double-inlet centrifugal fans driven by an external rotor motor and low noise level, with very low consumption efficiency fans.
- Includes direct expansion coil with sensors. Optional condensate water pump.
- CS-5DX-NE Plug&Play control with 5 speeds and telephone cable 7m included.
- Requires TOSHIBA VRF Interface KIT adapted for air curtain, programmable control and expansion valve, please consult.
- Ready to connect to TOSHIBA VRF outdoor heat pump unit (R410A), not included, the customer should purchase it.

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Airflow m³/h</th>
<th>Toshiba Direct Expansion Valve</th>
<th>Power Fan 230V-50Hz kW</th>
<th>Current Fan 230V-50Hz A</th>
<th>Noise Level (5 m) dB(A)</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZEN ECG 1000 VRF10-TO</td>
<td>2190</td>
<td>MMDXV140</td>
<td>0.213</td>
<td>1.86</td>
<td>61</td>
<td>40</td>
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<tr>
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</table>

When adverse weather conditions, the outdoor unit capacity can decrease. It is recommendable to oversize the units.
**Dimensions**

<table>
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<tr>
<th>ZEN</th>
<th>L</th>
<th>I</th>
<th>A</th>
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<td>1620</td>
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</tr>
<tr>
<td>2500</td>
<td>2620</td>
<td>2544</td>
<td>2515</td>
</tr>
</tbody>
</table>

**Finishes**

- Painted any RAL colour or metal
- Different materials: aluminium, stainless steel AISI 304 (brushed or polished), wood, glass, PVC/PES, etc.
- Logos, lights, clocks, signs, vinyls, patterns, etc.