ESS & EDS Overhead Models

ESS and EDS are ductable cooling/heating units designed for overhead installation beneath a flybridge or other enclosed location. The unit is completely encased in an aluminum cabinet, which serves as a return-air plenum and mounting frame. Return air is pulled directly from the compartment below, through the evaporator coil, and discharged upward into ducts to the discharge grills.

ESS models have a single cooling/heating module, containing the evaporator coil, variable-speed blower and refrigerant connections. This module can be detached and removed for service.

EDS models have two separate cooling/heating modules on either side of a common return-air plenum. As with the ESS units, the modules are detachable from the aluminum frame.

Each blower module has an integral condensate drain pan, which is filled with anti-slosh, antifungal foam.

A hose adaptor will be needed to connect blower outlet to flexible duct.

EDS models include a built-in refrigerant line splitter. A full-length drain pan is available as an option on the EDS units.

ESS units are available in 12,000 and 16,000 Btu/hr models for operation on 115 or 230 VAC power. EDS units are available in 24,000 and 30,000 Btu/hr models and require 230 VAC power. They may be used with any Cruisair reverse-cycle condensing unit.

All ESS and EDS models can be used with either rotary-knob switches or with Cruisair’s SMX family of computerized controls.

Features

- Ductable, overhead cooling/heating unit
- Detachable cooling/heating modules for easy service
- Aluminum cabinet includes return-air plenum and mounting frame
- Variable speed blower with fixed vertical discharge
- Integral condensate drain pan with anti-slosh, antifungal foam

ESS Models

- Single blower
- 12,000 and 16,000 Btu/hr
- 115 and 230 VAC, 50/60 Hz

EDS Models

- Dual blowers
- 24,000 and 30,000 Btu/hr
- 230 VAC, 50/60 Hz
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (Btu/hr)</th>
<th>Voltage</th>
<th>Amps</th>
<th>Height* (in/mm)</th>
<th>Width (in/mm)</th>
<th>Depth (in/mm)</th>
<th>Weight (lb/kg)</th>
<th>Air Flow cfm/cmh</th>
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<tbody>
<tr>
<td>ESS12</td>
<td>12,000</td>
<td>115</td>
<td>2.4</td>
<td>16/405</td>
<td>27.5/700</td>
<td>18.5/470</td>
<td>45/20.5</td>
<td>400/670</td>
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<tr>
<td>ESS12C</td>
<td>12,000</td>
<td>230</td>
<td>1.2</td>
<td>16/405</td>
<td>27.5/700</td>
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<td>530/890</td>
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<td>88/40.0</td>
<td>800/1340</td>
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<td>88/40.0</td>
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*Does not include discharge air ducts or refrigerant connections.

### INTERPRETING MODEL NUMBERS

- **E** Type Of Air Mover: E: Environmental Systems
- **S** Model Group: S: Single Blower D: Dual Blower
- **12** Voltage No Letter: 115V C: 230V
- **C** Capacity x 1000 Btu/hr

### RECOMMENDED GRILL & DUCT SIZES

<table>
<thead>
<tr>
<th>Unit Capacity Btu/hr</th>
<th>Return Air Grill Size (sq in/cm)</th>
<th>Minimum Discharge Grill Area (sq in/cm)</th>
<th>Recommended Duct Size (in/mm)</th>
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</thead>
<tbody>
<tr>
<td>12,000</td>
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<td>70/455</td>
<td>6/150</td>
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<tr>
<td>16,000</td>
<td>12 x 12</td>
<td>80/520</td>
<td>7/175</td>
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<td>24,000</td>
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<td>(2x) 70/455</td>
<td>(2x) 6/150</td>
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<td>30,000</td>
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<td>(2x) 80/520</td>
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</table>

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