Ecoflair Air Economizers
with Indirect Evaporative Cooling
250-500kW

Ultra-efficient economizer units that consume zero white space and allow more power to IT. Configurable and customizable solution to match your specific data center needs.

1 Trim cooling coil
2 Polymer heat exchanger
3 Micro-channel condenser coil
4 Ambient air fans
5 Evaporative cooling spray system
6 Walkable roof
7 IT air fans
8 Service vestibule
9 VSD scroll compressors
10 IT air filters
11 Water treatment system
12 Water circulating pumps
13 Air intake grilles
14 Evaporative water basin
**Standard Features**

- Variable speed backward curved IT fans and Acousti-Composite axial ambient air fans with Electronically Commutated motors
- Easy-to-replace high efficiency IT air filters
- Modular self-cleaning air-to-air hat exchanger, fully constructed with corrosion-proof polymer materials, including header system
- Evaporative cooling system with integrated water recirculation and water filtering system
- Evaporative water basin with freeze protection and continuous water condition monitoring system
- Self-supporting galvanized steel frame with sectional lifting eyes, powder coated exterior panels, fiber reinforced plastic roof panels with skid resistance surface, fiber reinforced ambient air supply grilles
- Double layer of panels, internal air blocks for air containment and exterior panels for environmental protection
- Access panels with handles and fast release screws
- Microprocessor controls with external touchscreen user interface display and network management card

**Water system options**

- Integrated hydronic system with dual circulation pumps in 1+1 logic, managed by microprocessor control
- Electro-pulse water treatment

**Air pattern options**

- Bottom flow for roof installations
- Side flow for building perimeter installations

**Dual and/or separate power supply options**

- Dual power supply with automatic transfer switch (ATS) for complete redundancy without single point of failure
- Separate power supplies for critical and non-critical sub-systems

**Trim cooling options**

- Proportional DX system with single or dual circuited brushless variable speed scroll compressors and micro-channel condenser coils
- Chilled water coil with modulating valve
- Heat reclaim coil

---

**Models**

<table>
<thead>
<tr>
<th>Models</th>
<th>IAEC25</th>
<th>IAEC50</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economizer Type</strong></td>
<td>Indirect Evaporative Air-to-Air</td>
<td></td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>V/Ph/Hz</td>
<td>400/3/50 or 460/3/60</td>
</tr>
<tr>
<td><strong>IT Air Fans</strong></td>
<td>nr.</td>
<td>4</td>
</tr>
<tr>
<td><strong>Max Air Flow per Fan</strong></td>
<td>m³/hr (ACFM)</td>
<td>13864 (8160)</td>
</tr>
<tr>
<td><strong>Outdoor Air Fans</strong></td>
<td>nr.</td>
<td>4</td>
</tr>
<tr>
<td><strong>Max Air Flow per Fan</strong></td>
<td>m³/hr (ACFM)</td>
<td>8495 (5000)</td>
</tr>
<tr>
<td><strong>Nominal Cooling Capacity</strong></td>
<td>kW</td>
<td>250</td>
</tr>
<tr>
<td><strong>DX Trim Cooling</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Refrigerant Type</strong></td>
<td></td>
<td>R-410A</td>
</tr>
<tr>
<td><strong>Compressors – Single Circuit</strong></td>
<td>nr.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Compressors – Dual Circuit</strong></td>
<td>nr.</td>
<td>2</td>
</tr>
<tr>
<td><strong>Dry Weight - Base Unit</strong></td>
<td>kg (lb)</td>
<td>6800 (14991)</td>
</tr>
<tr>
<td><strong>Operating Weight - Base Unit</strong></td>
<td>kg (lb)</td>
<td>7525 (16589)</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>mm (in)</td>
<td>6500 (256)</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>mm (in)</td>
<td>2400 (94.5)</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>mm (in)</td>
<td>4545 (179)</td>
</tr>
</tbody>
</table>