Enclosure Air Conditioners

Applications

Designed to maintain the temperature inside an electrical enclosure at or below a safe level for the enclosed equipment, while maintaining a closed loop environment inside the enclosure to keep out contaminants that can be in the ambient air. Can be used in environments such as steel, food processing, petro-chemical, cement, paper/pulp and plastics industries, provided there are no corrosive gases or liquids that could damage internal components.

Features

- Programmable temperature controller with visible alarm features in a 0.57 x 0.29 in [14.5 x 7.3 mm] panel
- 70˚F to 95˚F (20˚C to 35˚C) temperature control range
- 50˚F to 125˚F (10˚C to 52˚C) ambient temperature range
- Pre-wired for external alarm monitoring connections (22 AWG three-conductor cable, 7ft (2.3 m) long)
- Active condensate evaporation system with safety overflow
- Protective coated condenser coils on NEMA Type 4 and 4X for corrosion resistance.
- Thermal expansion valve for maximum efficiency over wide range of temperatures and loads
- Anti short-cycle compressor protection
- High and low refrigerant cut-outs with fault indication
- Highly energy-efficient compressors
- UL/cUL listed

Construction

- Free-standing rigid chassis for easy installation and maintenance
- All mounting hardware, full-size template and instruction manual included
- Power input terminal block on all models
- All Type 4 and 4x models come with condenser coils coated with an electrically applied corrosion-resistant coating

Stratus Air Conditioners General Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Nominal Cooling Capacity (BTU/H)</th>
<th>Operating Voltage</th>
<th>Inrush Current (A)</th>
<th>Running Current (A)</th>
<th>Recommended Fuse Size/Time Delay (A)</th>
<th>SCCR (A)</th>
<th>Connection</th>
<th>Refrigerant</th>
<th>Refrigerant Amount (oz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA10-010-16-xx</td>
<td>1000</td>
<td>115VAC/60Hz</td>
<td>14.50</td>
<td>3.44</td>
<td>12</td>
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<td>R134a</td>
<td>4.00</td>
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<td>TA10-040-26-xx</td>
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<td>R422d</td>
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<tr>
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<td>R422d</td>
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<td>TA10-050-26-xx</td>
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<td>7.26</td>
<td>12</td>
<td>&quot;</td>
<td></td>
<td>R422d</td>
<td>18.00</td>
</tr>
<tr>
<td>TA10-050-46-xx</td>
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<td>12</td>
<td>&quot;</td>
<td></td>
<td>R422d</td>
<td>18.00</td>
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</tbody>
</table>

Notes: *SCCR rating is based on the SCCR rating for the circuit protection device installed in the panel/enclosure per UL484 & UL4848a to protect the AC unit. Typically, 100kA - 200kA for Time-Delay Fuses. Atmosphere: No corrosive gases or liquids.
TA10 Series Enclosure Air Conditioners, Frame Size TA10-2

NEMA 12 Construction
- Fabricated from 16-gauge cold rolled steel
- ANSI-61 gray polyester powder coating inside and out
- Pre-cut mounting gasket included, to be field installed
- All mounting hardware, full-size template and instruction manual included
- Power input terminal block on all models

Features
- Fits 12in deep enclosures that have smooth/flat sides. Check enclosure dimensions/specifications before ordering.
- Protective coated condenser coils on NEMA Type 4 and 4X for corrosion resistance.

NEMA 4 Construction
- Fabricated from 16-gauge cold rolled steel
- ANSI-61 gray polyester powder coating inside and out
- Pre-cut mounting gasket installed for NEMA/UL type rating on all units
- All mounting hardware, full-size template and instruction manual included
- Power input terminal block on all models

NEMA 4X Construction
- Fabricated from 16-gauge 304 stainless steel
- Pre-cut mounting gasket installed for NEMA/UL type rating on all units
- All mounting hardware, full-size template and instruction manual included
- Power input terminal block on all models

Listings
- UL File: SA3404
- UL 50, Type 12, 4, and 4X
- Made in USA

<table>
<thead>
<tr>
<th>TA10 Enclosure Air Conditioners, Frame Size TA10-2</th>
<th>Nominal Cooling Capacity (BTU/H)</th>
<th>Operating Voltage</th>
<th>Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEMA 12</strong></td>
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<td>TA10-020-16-12</td>
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<td>TA10-020-16-04</td>
<td>$2,711.00</td>
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<tr>
<td>TA10-020-26-12</td>
<td>$2,708.00</td>
<td>TA10-020-26-04</td>
<td>$2,775.00</td>
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<tr>
<td>TA10-020-46-12</td>
<td>$3,007.00</td>
<td>TA10-020-46-04</td>
<td>$3,034.00</td>
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<tr>
<td><strong>NEMA 4</strong></td>
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<td>TA10-040-16-12</td>
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<td>TA10-040-26-12</td>
<td>$2,737.00</td>
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<td>$3,041.00</td>
<td>TA10-040-46-04</td>
<td>$3,069.00</td>
</tr>
</tbody>
</table>

Note: * Voltage variation no greater than ± 10% from nameplate rating and Frequency variation no greater than ± 3Hz from nameplate rating.
TA10 Series Enclosure Air Conditioners, Frame Size TA10-2

Air Conditioner Performance Curves

Air Conditioner Dimensions

Dimensions in inches [millimeters]
Air Conditioner Filters

Replacement filters are identical to the original filters supplied with the air conditioners. Clean/replace the filter regularly to keep the air conditioner working at its highest efficiency.

Features
- 250 micron expanded aluminum filter element
- 60% filter efficiency
- Washable and reusable

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Price</th>
<th>Description</th>
<th>Frame Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA10-FILTER-1</td>
<td>$22.50</td>
<td>Replacement filter for TA10 series air conditioning units, 1000 to 1500 BTU/H</td>
<td>TA10-1</td>
</tr>
<tr>
<td>TA10-FILTER-2</td>
<td>$24.50</td>
<td>Replacement filter for TA10 series air conditioning units, 2000 to 4000 BTU/H</td>
<td>TA10-2</td>
</tr>
<tr>
<td>TA10-FILTER-3</td>
<td>$28.00</td>
<td>Replacement filter for TA10 series air conditioning units, 5000 to 6000 BTU/H</td>
<td>TA10-3</td>
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<tr>
<td>TA20-FILTER-1</td>
<td>$26.00</td>
<td>Replacement filter for TA20 series air conditioning units, 2000 BTU/H</td>
<td>TA20-1</td>
</tr>
</tbody>
</table>

Dimensions

Dimensions in inches [millimeters]

Please see our website www.AutomationDirect.com for complete engineering drawings.
2” Louvered Frame and Filter Kits

2-inch louvered frame and filter kits are ideal in food processing or dirty environments where filter maintenance is crucial. Stratus offers extended surface, 2-inch deep filter and sliding filter frame assemblies. In wash-down applications, stainless steel filters are preferred over aluminum filters.

Features

- 2in louvered frame and filter kit
- 250 micron stainless steel mesh filter
- 97% efficiency extends filter capacity 400%
- Washable and reusable
- Deep filter frames easily retrofitted on existing units with standard filters using the same mounting hole and screws on your unit

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA10-LVFIL-2-04</td>
<td>$333.00</td>
<td>Stratus louvered filter frame assembly, carbon steel, ANSI 61 gray finish, with filter, washable, 2in filter depth, 250 micron stainless steel mesh, 97% filter efficiency. For use with 2000-4000 BTU/H TA10 series enclosure air conditioners on NEMA 4 or NEMA 12 enclosures.</td>
</tr>
<tr>
<td>TA10-LVFIL-3-04</td>
<td>$362.00</td>
<td>Stratus louvered filter frame assembly, carbon steel, ANSI 61 gray finish, with filter, washable, 2in filter depth, 250 micron stainless steel mesh, 97% filter efficiency. For use with 5000-6000 BTU/H TA10 series enclosure air conditioners on NEMA 4 or NEMA 12 enclosures.</td>
</tr>
<tr>
<td>TA10-LVFIL-2-4X</td>
<td>$345.00</td>
<td>Stratus louvered filter frame assembly, 304 stainless steel, with filter, washable, 2in filter depth, 250 micron stainless steel mesh, 97% filter efficiency. For use with 2000-4000 BTU/H TA10 series enclosure air conditioners on NEMA 4X enclosures.</td>
</tr>
<tr>
<td>TA10-LVFIL-3-4X</td>
<td>$382.00</td>
<td>Stratus louvered filter frame assembly, 304 stainless steel, with filter, washable, 2in filter depth, 250 micron stainless steel mesh, 97% filter efficiency. For use with 5000-6000 BTU/H TA10 series enclosure air conditioners on NEMA 4X enclosures.</td>
</tr>
<tr>
<td>TA20-LVFIL-1-04</td>
<td>$256.00</td>
<td>Stratus louvered filter frame assembly, carbon steel, ANSI 61 gray finish, with filter, washable, 2in filter depth, 250 micron stainless steel mesh, 97% filter efficiency. For use with 2000 BTU/H TA20 series enclosure air conditioners on NEMA 4 or NEMA 12 enclosures.</td>
</tr>
<tr>
<td>TA20-LVFIL-1-4X</td>
<td>$264.00</td>
<td>Stratus louvered filter frame assembly, 304 stainless steel, with filter, washable, 2in filter depth, 250 micron stainless steel mesh, 97% filter efficiency. For use with 2000 BTU/H TA20 series enclosure air conditioners on NEMA 4X enclosures.</td>
</tr>
</tbody>
</table>

Dimensions

Dimensions in inches [millimeters]

Please see our website www.AutomationDirect.com for complete engineering drawings.
Industrial strength cooling options for your enclosure from AutomationDirect

- Both intake (FPI) and exhaust (FPO) fans are available.
- Exhaust fans and grilles available with air flaps or filters. Using air flaps on the exhaust reduces the number of filters to maintain.

Filter Fan Kits

- Easy filter change
- Outer door lock for outdoor models
- Impact resistant
- Weather/UV resistant -f1
- Flammability Rating: UL94V-0
- Adhesive mounting for non-screw installation (except outdoor models)
- Low noise
- 120VAC and 24VDC models available

Filter Fan Plus

- Easy filter change
- Hinged cover
- Impact resistant
- Weather/UV resistant-UL-f1
- Flammability Rating: UL94V-0
- Unique ratchet mechanism for no-screw installation
- Low noise
- 120, 230VAC and 12, 24, 48VDC models available

Hose-Proof Filter Fan Hoods

- Stainless steel hood with food-grade silicone seal
- Fits all Stego Filter Fan and Filter Fan Plus fans and exhaust grilles (except outdoor Filter Fans)
- Maintains an enclosure’s NEMA/UL Type 4 or 4X rating in washdown environments

Fan Kits

- All models are 115V with an expected service life of 30,000 hours
- High-performance fan motors and finger guards
- Polycarbonate fire retardant plastic grilles, UL94-V0
- Durable, reusable filter mat included
- Patented “Click and Fit” system allows for rapid filter fan and exhaust filter installation without screws
Industrial strength cooling options for your enclosure from AutomationDirect

Heat Exchangers
- For NEMA 4 and 4X enclosures
- Closed loop cooling
- Energy efficient: uses approximately the same power as a filtered fan system
- 120VAC and 24VDC models available
- UL
- Made in the USA

Air Conditioning Units
- For NEMA 12, 4, 4X type enclosures
- Digital temperature controller
- Active condensate evaporation system
- High unit efficiency
- Tough industrial construction
- Compressor protection system

Enclosure Vortex Coolers
- For NEMA 12, 4, 4X type enclosures
- Operates on compressed air
- Stainless steel construction
- No moving parts, no maintenance required
- Vortex coolers can be “resized” for changing applications by simply replacing the generator inside the cooler. No need to purchase a new unit
- Replacing the vortex generator takes minutes

Seifert Thermoelectric Cooling Units
- For NEMA 4, 4X and 12 enclosures
- Stainless steel housing
- 170, 340, 510, 680 BTU/H cooling capacity
- Recessed mounting
- No maintenance required
- 24VDC and 120VAC power options