Industrial Thermoregulation

NEW

Products for panels and enclosures

7T Series - Thermo-Hygrostat and Thermostats
7F Series - Filter Fans
7H Series - Panel Heaters
Perfect climate inside panels

A range of products dedicated to maintaining constant temperature in control panels and enclosures.

- Climate control
- High precision
- Compact size

**Thermo-hygrostat and Thermostats**

*7T Series*

Ensures performance of components and instrumentation in control panels and enclosures, and can prolong product life.

**Filter Fans**

*7F Series*

New filter fan range to ventilate and safeguard against high enclosure temperatures.

**Panel Heaters**

*7H Series*

Prevents the formation of condensation and ensures the optimum temperature within electrical enclosures. Heating power from 50 W to 400 W.
**Panel Thermo-Hygrostat**

**Type 7T.S1.0.230.4360**

Electronic control
Small, compact size (17.5 mm wide)
1 NO 10 A - 250 V AC
4 functions
Nominal voltage 110...240 V AC/DC
Temperature ranges from +10°...+60°C (+50°...+140°F)
Humidity range up to 90%
LED status indication contact ON

Approvals (according to type):  

**HT: RH > RHset OR Tamb > Tset**

Power is permanently applied to the thermo-hygrostat.
The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset) OR if the ambient temperature (Tamb) is > of set temperature (Tset).

When contact is closed, LED is ON

**TH: RH > RHset OR Tamb < Tset**

The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset) OR if the ambient temperature (Tamb) is < of set temperature (Tset).

When contact is closed, LED is ON

**HL: RH < RHset**

The contact 13-14 closes if the ambient humidity (RH) is < of set humidity (RHset).

When contact is closed, LED is ON

**HM: RH > RHset**

The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset).

When contact is closed, LED is ON
Panel Thermostats

Small, compact size (17.5 mm wide)
10 A - 250 V AC1
Snap action thermostatic bimetal sensor
Wide temperature setting range
Long electrical life
35 mm rail (EN 60715) mount

Approvals (according to type):

**Type 7T.81.0.000.240x**
Direct switching of heater loads up to 2500 VA

**Heating control**
Should the panel temperature fall below the (minimum) set temperature the contact will close to call for heat. The contact will open when this set temperature is exceeded.

Heating: Red Dial
Temperature ranges:
-20° ... +40°C  (-4° ... +104°F)
0° ... +60°C  (+32° ... +140°F)

**Type 7T.81.0.000.230x**
Direct switching of fans up to 130 W

**Ventilation control**
Should the panel temperature exceed the (maximum) set temperature then the contact will close to call for cooling. The contact will open when the temperature falls below this set temperature.

Ventilation: Blue Dial
Temperature ranges:
-20° ... +40°C  (-4° ... +104°F)
0° ... +60°C  (+32° ... +140°F)
Filter Fans

Easily replaceable filter mat
Minimal depth within enclosure
Air flow volume \((24 \ldots 100) \text{m}^3/\text{h}\) (14.13 \ldots 58.8)CFM
Time-saving installation and maintenance
Very low acoustic noise
Protection category IP54
UL Type 12

Approvals (according to type):

**Type 7F.20.8.xxx.1020**
- Operating voltage (120 or 230)V AC
- Air flow volume 24 m\(^3\)/h (14.13 CFM)
- Rated power 13 W
- Size 1 (4")

**Type 7F.20.9.024.1020**
- Operating voltage 24 V DC
- Air flow volume 24 m\(^3\)/h (14.13 CFM)
- Rated power 3.6 W
- Size 1 (4")

**Type 7F.20.8.xxx.2055**
- Operating voltage (120 or 230)V AC
- Air flow volume 55 m\(^3\)/h (32.37 CFM)
- Rated power 22 W
- Size 2 (6")

**Type 7F.20.9.024.2055**
- Operating voltage 24 V DC
- Air flow volume 55 m\(^3\)/h (32.37 CFM)
- Rated power 9 W
- Size 2 (6")

**Type 7F.20.8.xxx.3100**
- Operating voltage (120 or 230)V AC
- Air flow volume 100 m\(^3\)/h (58.86 CFM)
- Rated power 22 W
- Size 3 (8")

**Type 7F.20.9.024.3100**
- Operating voltage 24 V DC
- Air flow volume 100 m\(^3\)/h (58.86 CFM)
- Rated power 22 W
- Size 3 (8")
Exhaust Filters

The size of the exhaust filter should match the size of the filter fan to achieve the best ventilation within the cabinet.

Time-saving installation and maintenance

Easily replaceable filter mat

Protection category IP54

UL Type 12

Approvals (according to type):

Type 7F.02.0.000.1000
for filter fans
Type 7F.20.x.xxx.1020
Size 1 (4“)

Type 7F.02.0.000.2000
for filter fans
Type 7F.20.x.xxx.2055
Size 2 (6“)

Type 7F.02.0.000.3000
for filter fans
Type 7F.20.x.xxx.3100
Size 3 (8“)
Filter Fans

Minimal depth within enclosure
Air flow volume (230 ... 630)m\(^3\)/h \(\text{135.4 ... 370.8}\text{CFM}\)
Very low acoustic noise
Protection category IP54
Type 12

Approvals (according to type):

- **Type 7F.50.8.xxx.4230**
  - Operating voltage (120 or 230)V AC
  - Air flow volume 230 m\(^3\)/h \(\text{135.4 CFM}\)
  - Rated power 40 W
  - Size 4 (10”)

- **Type 7F.50.9.024.4230**
  - Operating voltage 24 V DC
  - Air flow volume 230 m\(^3\)/h \(\text{135.4 CFM}\)
  - Rated power 26 W
  - Size 4 (10”)

- **Type 7F.50.8.xxx.4370**
  - Operating voltage (120 or 230)V AC
  - Air flow volume 370 m\(^3\)/h \(\text{217.8 CFM}\)
  - Rated power 70 W
  - Size 4 (10”)

- **Type 7F.50.8.xxx.5500**
  - Operating voltage (120 or 230)V AC
  - Air flow volume 500 m\(^3\)/h \(\text{294.3 CFM}\)
  - Rated power 70 W
  - Size 5 (12”)

- **Type 7F.50.8.xxx.5630**
  - Operating voltage 230 V AC
  - Air flow volume 630 m\(^3\)/h \(\text{370.8 CFM}\)
  - Rated power 130 W
  - Size 5 (12”)

Drying kilns
Textile machines
Machines for paper processing
Machines for ceramics
Wood-processing machines
Panels for electrical distribution
Control panels
Forced-air ventilators
The size of the exhaust filter should match the size of the filter fan to achieve the best ventilation within the cabinet. Minimal depth within enclosure Protection category IP54 Type 12

Approvals (according to type):

Type 7F.05.0.000.4000 for filter fans
Type 7F.50.x.xxx.4230 or Type 7F.50.8.xxx.4370

Size 4 (10")

Type 7F.05.0.000.5000 for filter fans
Type 7F.50.8.xxx.5500 or Type 7F.50.8.xxx.5630

Size 5 (12")

Filter fans - available versions

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<th>Size</th>
<th>Air Flow Volume</th>
<th>Supply Voltage</th>
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<td>120V AC</td>
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<tr>
<td>7F.20.8.120.2055</td>
<td>7F.21.8.120.2055</td>
<td>Size 2 (6&quot;)</td>
<td>32.4 CFM</td>
<td>120V AC</td>
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<tr>
<td>7F.20.8.120.3100</td>
<td>7F.21.8.120.3100</td>
<td>Size 3 (8&quot;)</td>
<td>58.9 CFM</td>
<td>120V AC</td>
</tr>
<tr>
<td>7F.50.8.120.4230</td>
<td>7F.80.8.120.4230</td>
<td>Size 4 (10&quot;)</td>
<td>135.4 CFM</td>
<td>120V AC</td>
</tr>
<tr>
<td>7F.50.8.120.4370</td>
<td>7F.80.8.120.4370</td>
<td>Size 4 (10&quot;)</td>
<td>135.4 CFM</td>
<td>120V AC</td>
</tr>
<tr>
<td>7F.50.8.120.5500</td>
<td>7F.80.8.120.5500</td>
<td>Size 5 (12&quot;)</td>
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<td>7F.20.8.230.2055</td>
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<td>7F.20.8.230.3100</td>
<td>7F.21.8.230.3100</td>
<td>Size 3 (8&quot;)</td>
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<td>230V AC</td>
</tr>
<tr>
<td>7F.50.8.230.4230</td>
<td>7F.80.8.230.4230</td>
<td>Size 4 (10&quot;)</td>
<td>135.4 CFM</td>
<td>230V AC</td>
</tr>
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<td>7F.80.8.230.4370</td>
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<td>7F.80.8.230.5500</td>
<td>Size 5 (12&quot;)</td>
<td>294.3 CFM</td>
<td>230V AC</td>
</tr>
<tr>
<td>7F.20.9.024.1020</td>
<td>7F.21.9.024.1020</td>
<td>Size 1 (4&quot;)</td>
<td>14.1 CFM</td>
<td>24V DC</td>
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<td>7F.20.9.024.2055</td>
<td>7F.21.9.024.2055</td>
<td>Size 2 (6&quot;)</td>
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</table>

Components

<table>
<thead>
<tr>
<th>Standard-Filter Fan</th>
<th>Standard-Exhaust Filter</th>
<th>Filter Mat</th>
<th>Size</th>
</tr>
</thead>
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<tr>
<td>7F.20.8.xxx.1020</td>
<td>7F.02.0.000.1000</td>
<td>07F.15</td>
<td>Size 1 (4&quot;)</td>
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<tr>
<td>7F.20.8.xxx.2055</td>
<td>7F.02.0.000.2000</td>
<td>07F.25</td>
<td>Size 2 (6&quot;)</td>
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<tr>
<td>7F.20.8.xxx.3100</td>
<td>7F.02.0.000.3000</td>
<td>07F.35</td>
<td>Size 3 (8&quot;)</td>
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<td>7F.50.8.xxx.4230</td>
<td>7F.05.0.000.4000</td>
<td>07F.45</td>
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<td>7F.50.8.xxx.4370</td>
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</tr>
</tbody>
</table>

Size 1 (4") Size 2 (6") Size 3 (8") Size 4 (10") Size 5 (12")

(all dimensions are in mm)
Panel Heaters

Nominal voltage 120 V AC / 230 V AC
PTC resistor, self regulating heating system
Fan assisted heaters
Air flow volume 30 m³/h  (17.65 CFM)
Fast wiring terminals
Safe touch
Clip for 35 mm rail (EN 60715) mount

Approvals (according to type):

Type 7H.51.8.110.0250 (120 V AC)
Type 7H.51.8.230.0250 (230 V AC)
Heater power 250 W
Fan assisted
Dimensions (w x h x d): 67 x 88.2 x 97 mm

Type 7H.51.8.110.0400 (120 V AC)
Type 7H.51.8.230.0400 (230 V AC)
Heater power 400 W
Fan assisted
Dimensions (w x h x d): 67 x 88.2 x 97 mm

NOTE
Separate supply (L) terminals for the heater and the internal fan allow them to be powered independently. So, dependent on the specific situation, the installer might wish the heating element to be controlled by an upstream thermostat but require the fan to run continuously (although the latter will significantly reduce the product’s life).
Panel Heaters

Nominal voltage 110...230 V AC/DC
PTC self regulating heating system
Screw terminals
Safe touch
Clip for 35 mm rail (EN 60715) mount

Approvals (according to type):

Type 7H.51.0.230.0025
Heater power 25 W

Type 7H.51.0.230.0050
Heater power 50 W

Type 7H.51.0.230.0100
Heater power 100 W
Dimensions (w x h x d): 70 x 140 x 63 mm

Type 7H.51.0.230.0150
Heater power 150 W
Dimensions (w x h x d): 70 x 220 x 63 mm

Dimensions (w x h x d): 41 x 125 x 41 mm