ABOUT THE i-TEMP RANGE

The i-Temp Max wi collection has been developed to offer a large performance range by means of modular design with various combinations of heating and cooling elements which cater for a wide variety of applications. Providing complete reliability, highly accurate control, ease of handling and a favourable cost/performance ratio, these versatile heaters offer any industrial process application a consistent yet flexible temperature control solution.

The i-Temp Max wi units are designed as water heaters with indirect cooling for usage with open tank up to 95°C and as a closed system up to 160°C.

Furthermore all units feature intelligent controllers as standard offering accurate temperature measurement, indication and monitoring.

TOUCHSCREEN ADVANCED CONTROLLER

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- Full diagnostics
- Flow monitoring
- Pre-selection of heating and cooling times (ramping) for greater automation
- Reporting on alarms
- Return temperature (Delta T) monitoring
- Multiple languages
- Data capture and recipe storage
- Optional machine and PLC interfaces with full bidirectional mimic of the machine control with VNC

SITE ACCEPTANCE TEST

Equipment is fully tested once commissioned on site.

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COMPATIBLE WITH OIL/STEAM

Ensures a flexible, extended working temperature range to suit individual process needs.

ATEX RATING

Units can be manufactured to Atex zone 1 or 2 Classification to provide maximum site and equipment safety in volatile environments.
**i-TEMP MAX**  
*Up to 150°C | 12 to 360kW*

<table>
<thead>
<tr>
<th>Model</th>
<th>i-Temp Max wi 5</th>
<th>i-Temp Max wi 7</th>
<th>i-Temp Max wi 8</th>
<th>i-Temp Max wi 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluid</strong></td>
<td>water</td>
<td>water</td>
<td>water</td>
<td>water</td>
</tr>
<tr>
<td><strong>Temperature max. (°C)</strong></td>
<td>140 (150)</td>
<td>140 (150)</td>
<td>140 (150)</td>
<td>140 (150)</td>
</tr>
<tr>
<td><strong>Pump flow capacity max. (m³/hr)</strong></td>
<td>20</td>
<td>35</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td><strong>Pump pressure max. Hm</strong></td>
<td>63</td>
<td>65</td>
<td>65</td>
<td>63</td>
</tr>
<tr>
<td><strong>Heating capacity, electric options (kW)</strong></td>
<td>12/24/30/48/60/72/84/90/96/120/150/180</td>
<td>15/30/45/60/90/120/150/180/210/240/270</td>
<td>15/30/45/60/90/120/150/180/210/240/270</td>
<td>30/45/60/90/120/150/180/210/240/270/300/360</td>
</tr>
<tr>
<td><strong>Heating capacity Max, Steam options (kW)</strong></td>
<td>62/98</td>
<td>162/270</td>
<td>270/410</td>
<td>410/605</td>
</tr>
<tr>
<td><strong>Cooling</strong></td>
<td>Indirect</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Indirect</td>
</tr>
<tr>
<td><strong>Cooling Capacity (kW)</strong></td>
<td>Max 465</td>
<td>Max 800</td>
<td>Max 1150</td>
<td>Max 1600</td>
</tr>
<tr>
<td><strong>Process circuit supply and return connections</strong></td>
<td>DN 50</td>
<td>DN 65</td>
<td>DN 80</td>
<td>DN 100</td>
</tr>
<tr>
<td><strong>Housing dimensions Min. (l x w x h) (mm)</strong></td>
<td>1840 x 695 x 1720</td>
<td>1840 x 695 x 1720</td>
<td>1840 x 695 x 1720</td>
<td>2090 x 1070 x 1720</td>
</tr>
<tr>
<td><strong>Housing dimensions Max. (l x w x h) (mm)</strong></td>
<td>1840 x 1320 x 2060</td>
<td>1840 x 1320 x 2265</td>
<td>2090 x 1320 x 2265</td>
<td>2090 x 1320 x 2505</td>
</tr>
<tr>
<td><strong>Control of cooling with 2-way motor control valve</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Automatic fill</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Automatic venting and pressure relief</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Electronic level control with dry-running protection</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Safety temperature limitation against overheating and safety valves against overpressure</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Adjustable set value limitation</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Ramp function for temperature alteration</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Cooling down to safety temperature when switching off</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Control valve in circulation medium supply side and with pressure gauge at the pump pressure side</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Connection for external Fe-CuNi or Pt 100</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Interface for central machine control - PROFIBUS PROFINET, Analogue interface or serial interface</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Strainer in circulation medium return</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Stop-off valve in circulation medium return</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Ball valves in cooling water supply and return</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Adjustable bypass (valve) between circulation medium supply and return</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td><strong>Audible alarm</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Visual alarm</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Electronic level control and dry running protection with float switch instead of level detector</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Return temperature indication (PT 100 temperature sensor)</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Lockable operating panel cover</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Flow rate indication and monitoring</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Internal drip tray (integrated into framework)</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Pneumatic control valves</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td><strong>Stainless steel execution</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Execution for higher ambient temperature &gt;40°C</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>ATEX-execution “Explosion protection”</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

● = Standard / ○ = Option / – = not available / Values in ( ) optional

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E&OE. All data is subject to change and continuous improvement without notice.  
Equipment designed to ISO 9001 and all relevant electrical, pressure and mechanical directives.  
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ABOUT THE i-TEMP RANGE

The i-Temp Max wh water heaters have an advantage over oil heat transfer units especially if large amounts of heat needs to be extracted from small cooling surfaces. Particularly for injection moulding and some extrusion processes it is advantageous as it uses pressurised hot water instead of oil because the heat transfer capability is more effective, typically by a factor of three.

Pump flow rates and the surface area of tooling in contact with the product can also be reduced accordingly at the design stage if it is known that water is to be used, this leads to a more efficient system in terms of power and fluid cost.

The use of water as a fluid of heat transfer has a further advantage with the amount of liquid which is circulated by the pump and is reduced by a factor of two compared to three with the transfer of heat using oil.

The i-Temp Max wh range is specifically designed for special applications requiring temperatures in the range of 220°C.

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## FEATURES

### i-TEMP MAX

**Up to 220°C | 12 to 360kW**

<table>
<thead>
<tr>
<th>Model i-Temp</th>
<th>i-Temp Max wh 4</th>
<th>i-Temp Max wh 5</th>
<th>i-Temp Max wh 7</th>
<th>i-Temp Max wh 8</th>
<th>i-Temp Max wh 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid</td>
<td>water</td>
<td>water</td>
<td>water</td>
<td>water</td>
<td>water</td>
</tr>
<tr>
<td>Temperature max. (°C)</td>
<td>180 (optional 200/220)</td>
<td>180 (optional 200/220)</td>
<td>180 (optional 200/220)</td>
<td>180 (optional 200/220)</td>
<td>180 (optional 200/220)</td>
</tr>
<tr>
<td>Pump - Flow capacity Max m³/h</td>
<td>12</td>
<td>20</td>
<td>35</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>Pump - Pressure Max Hm</td>
<td>50</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>Heating capacity, electric options (kW)</td>
<td>12-120</td>
<td>12-180</td>
<td>15-270</td>
<td>270-410</td>
<td>410-605</td>
</tr>
<tr>
<td>Cooling capacity Max kW</td>
<td>465</td>
<td>465</td>
<td>800</td>
<td>1150</td>
<td>1600</td>
</tr>
<tr>
<td>Process circuit flow and return connections</td>
<td>DN40/PN40</td>
<td>DN50/PN40</td>
<td>DN65/PN40</td>
<td>DN80/PN40</td>
<td>DN100/PN40</td>
</tr>
<tr>
<td>Housing dimensions Min. (L x W x H)</td>
<td>1840 x 695 x 1720</td>
<td>1840 x 695 x 1720</td>
<td>1840 x 820 x 1720</td>
<td>1840 x 820 x 1720</td>
<td>2090 x 1320 x 1720</td>
</tr>
<tr>
<td>Housing dimensions Max. (L x W x H)</td>
<td>1840 x 1070 x 1960</td>
<td>1840 x 1070 x 1960</td>
<td>2090 x 1320 x 2165</td>
<td>2090 x 1320 x 2165</td>
<td>2340 x 1320 x 2405</td>
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<tr>
<td>Sealless pump with magnetic coupling</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Temperature controlled pressure overlay</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Condensing unit to prevent steam impacts in cooling medium return</td>
<td>●</td>
<td>●</td>
<td>●</td>
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</tr>
<tr>
<td>Return temperature indication</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Return flow temperature monitoring and limiting</td>
<td>●</td>
<td>●</td>
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</tr>
<tr>
<td>Built-in high-pressure makeup feed unit</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Automatic venting and pressure relief</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Electronic level control with dry-running protection</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Safety thermostat</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Adjustable set point limits</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ramp function for temperature alteration</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Cooling down to safety temperature when switching off</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Strainer in return line circulation medium</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Continuous heater control with switch cabinet fan</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Acoustic alarm</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Connection for external probe (Fe-CuNi or Pt.100)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Interface for central machine control</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Separate fill line</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Strainer in return line process fluid</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Control of cooling with motor valve</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Additional expansion tank for large external volumes</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
ABOUT THE i-TEMP RANGE

The i-Temp Max wd series offers both heating and cooling and is set-up and ready for connection to the process with direct cooling, specifically designed for operation with water as the circulation fluid. Direct cooling comes as an advantage when a high cooling capacity is required directly at low temperature differences between cooling water and the circulation medium. In this case the cooling water will be fed without temperature loss into the circulation circuit. Water circuits are designed as a closed system which allows pressurised heating of up to 150°C. Depending on the operating condition, the heat will either be removed from the application by cooling or transferred to the application by heating.

Heat transfer occurs by the circulation of water which is transferred through to the application by an efficient pump. A special sensor monitor is featured as standard within the i-Temp Max wd which measures the current temperature and the intelligent microprocessor controller compares the measured value with the adjusted set value which switches the heating and cooling accordingly. A trouble-free operation is guaranteed thanks to a comprehensive safety system.

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- **i-TEMP MAX**
- **Up to 150°C | 12 to 360kW**

### Model

<table>
<thead>
<tr>
<th>Fluid</th>
<th>i-Temp Max wd 5</th>
<th>i-Temp Max wd 7</th>
<th>i-Temp Max wd 8</th>
<th>i-Temp Max wd 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Water</td>
<td>Water</td>
<td>Water</td>
<td>Water</td>
</tr>
</tbody>
</table>

### Fluid Temperature Max. (°C)

- i-Temp Max wd 5: 140 (150)
- i-Temp Max wd 7: 140 (150)
- i-Temp Max wd 8: 140 (150)
- i-Temp Max wd 10: 140 (150)

### Pump Flow Capacity Max. Hm

- i-Temp Max wd 5: 20
- i-Temp Max wd 7: 35
- i-Temp Max wd 8: 50
- i-Temp Max wd 10: 70

### Pump Pressure Max. Hm

- i-Temp Max wd 5: 49/62
- i-Temp Max wd 7: 62
- i-Temp Max wd 8: 62
- i-Temp Max wd 10: 62

### Heating Capacity, Electric Options (kW)

- i-Temp Max wd 5: 12/24/30/48/60/72/84/90/120/150/180
- i-Temp Max wd 7: 15/30/45/60/90/120/150/180/210/240/270
- i-Temp Max wd 8: 15/30/45/60/90/120/150/180/210/240/270
- i-Temp Max wd 10: 30/60/90/120/150/180/210/240/270/300/360

### Heating Capacity Max, Steam Options (kW)

- i-Temp Max wd 5: 62/98
- i-Temp Max wd 7: 162/270
- i-Temp Max wd 8: 270/410
- i-Temp Max wd 10: 410/605

### Cooling

- Direct

### Cooling Capacity (kW)

- i-Temp Max wd 5: Max 465
- i-Temp Max wd 7: Max 800
- i-Temp Max wd 8: Max 1150
- i-Temp Max wd 10: Max 1600

### Process Circuit Supply and Return Connections

- DN 50
- DN 65
- DN 80
- DN 100

### Housing Dimensions Min. (l x w x h) (mm)

- i-Temp Max wd 5: 1840 x 695 x 1720
- i-Temp Max wd 7: 1840 x 695 x 1720
- i-Temp Max wd 8: 1840 x 695 x 1720
- i-Temp Max wd 10: 2090 x 1070 x 1720

### Housing Dimensions Max. (l x w x h) (mm)

- i-Temp Max wd 5: 1840 x 1320 x 2060
- i-Temp Max wd 7: 1840 x 1320 x 2265
- i-Temp Max wd 8: 1840 x 1320 x 2265
- i-Temp Max wd 10: 2090 x 1320 x 2505

### Control of Cooling with 2-way Motor Control Valve

- •
- •
- •
- •

### Automatic Fill

- •
- •
- •
- •

### Automatic Venting and Pressure Relief

- •
- •
- •
- •

### Electronic Level Control with Dry-running Protection

- •
- •
- •
- •

### Safety Temperature Limitation Against Overheating and Safety Valves Against Overpressure

- •
- •
- •
- •

### Adjustable Set Value Limitation

- •
- •
- •
- •

### Ramp Function for Temperature Alteration

- •
- •
- •
- •

### Cooling Down to Safety Temperature When Switching Off

- •
- •
- •
- •

### Strainer in Cooling Water Inlet

- •
- •
- •
- •

### Control Valve in Circulation Medium Supply with Pressure Gauge at the Pump Pressure Side

- •
- •
- •
- •

### Connection for External Fe-CuNi or Pt 100

- ○
- ○
- ○
- ○

### Interface for Central Machine Control - PROFIBUS, PROFINET, Analogue Interface or Serial Interface

- ○
- ○
- ○
- ○

### Strainer in Circulation Medium Return

- ○
- ○
- ○
- ○

### Shut-off Valve in Circulation Medium Return

- ○
- ○
- ○
- ○

### Ball Valves in Cooling Water Supply and Return

- ○
- ○
- ○
- ○

### Adjustable Bypass (Valve) Between Circulation Medium Supply and Return

- ○
- ○
- ○
- ○

### Audible Alarm

- ○
- ○
- ○
- ○

### Visual Alarm

- ○
- ○
- ○
- ○

### Electronic Level Control and Dry Running Protection with Float Switch Instead of Level Detector

- ○
- ○
- ○
- ○

### Return Temperature Indication (PT 100 Temperature Sensor)

- ○
- ○
- ○
- ○

### Lockable Operating Panel Cover

- ○
- ○
- ○
- ○

### Flow Rate Indication and Monitoring

- ○
- ○
- ○
- ○

### Internal Drip Tray (Integrated into Framework)

- ○
- ○
- ○
- ○

### 150°C Execution (Only in Combination with Bypass Cooling)

- ○
- ○
- ○
- ○

### Standby-pump

- ○
- ○
- ○
- ○

### Stainless Steel Execution

- ○
- ○
- ○
- ○

### Execution for Higher Ambient Temperature >40°C

- ○
- ○
- ○
- ○

### ATEX-execution "Explosion Protection"

- ○
- ○
- ○
- ○
ABOUT THE i-TEMP RANGE

This collection of units uses heat transfer oil as the circulating medium for temperatures up to 400°C. Depending on the process application and the media present on site, heating and cooling can be executed in different ways. For example, if a primary circuit with gas or heating oil is already installed or desired, the i-Temp Max tt/th range can be configured to heat or cool directly using the on-site ring main and site utilities as required.

Designed specifically for applications requiring high temperatures, the tt/th series uses low watts/cm² heating elements resulting in low film temperatures at normal flow rates, flow monitoring is built into the system which sets off an alarm if the flow rate becomes too low.

The i-Temp Max tt/th units feature a layer of cold oil within the expansion vessel which can also be equipped with a nitrogen supply device upon request.

TOUCHSCREEN ADVANCED CONTROLLER

The C8 Advanced Controller provides users with a high level of system analysis. The simple to use LCD touch screen enables users to evaluate processes in detail, ensuring every aspect of temperature control is performing to meet the assigned parameters and stringent industry standards.

- Full diagnostics
- Flow monitoring
- Pre-selection of heating and cooling times (ramping) for greater automation
- Reporting on alarms
- Return temperature (Delta T) monitoring
- Multiple languages
- Data capture and recipe storage
- Optional machine and PLC interfaces with full bidirectional mimic of the machine control with VNC
## FEATURES

| Model | i-TEMP Max tt 4 | i-TEMP Max tt 5 | i-TEMP Max tt 7 | i-TEMP Max tt 8 | i-TEMP Max tt 10 | i-TEMP Max th 4 | i-TEMP Max th 5 | i-TEMP Max th 7 | i-TEMP Max th 8 | i-TEMP Max th 10 |
|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Fluid | thermal oil    | thermal oil    | thermal oil    | thermal oil    | thermal oil    | thermal oil    | thermal oil    | thermal oil    | thermal oil    | thermal oil    |
| Temperature max. (°C) | 300 | 300 | 300 | 300 | 300 | 400 | 400 | 400 | 400 | 400 |
| Pump flow capacity max. (m³/hr) | 12 | 20 | 35 | 45 | 70 | 12 | 20 | 35 | 45 | 70 |
| Pump pressure max. (m) | 54 | 60 | 61 | 61 | 61 | 54 | 60 | 61 | 61 | 61 |
| Heating capacity, electric options (kW) | 12-120 | 12-180 | 15-270 | 15-270 | 30-360 | 9-54 | 9-72 | 12-96 | 15-180 | 30-300 |
| Heating capacity, Steam options (kW) | 50-78 | 50-78 | 130-190 | 190-330 | 330-480 | 50-78 | 50-78 | 130-190 | 190-330 | 330-480 |
| Cooling Capacity Max. (kW) | 92 | 148 | 272 | 32 | 392 | 586 | 92 | 148 | 272 | 392 |

### Process circuit supply and return connections

<table>
<thead>
<tr>
<th>DN40</th>
<th>DN50</th>
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### Housing dimensions Min. (l x w x h) (mm)

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### Control of cooling with 2-way motor control valve

- •  •  •  •  •  •  •  •  •  •

### Automatic fill

- •  •  •  •  •  •  •  •  •  •

### Automatic venting and pressure relief

- •  •  •  •  •  •  •  •  •  •

### Electronic level control with dry-running protection

- •  •  •  •  •  •  •  •  •  •

### Safety temperature limitation against overheating and safety valves against overpressure

- •  •  •  •  •  •  •  •  •  •

### Adjustable set value limitation

- •  •  •  •  •  •  •  •  •  •

### Ramp function for temperature alteration

- •  •  •  •  •  •  •  •  •  •

### Cooling down to safety temperature when switching off

- •  •  •  •  •  •  •  •  •  •

### Strainer in cooling water inlet

- •  •  •  •  •  •  •  •  •  •

### Control valve in circulation medium supply with pressure gauge at the pump pressure side

- •  •  •  •  •  •  •  •  •  •

### Connection for external Fe-CuNi or Pt 100

- •  •  •  •  •  •  •  •  •  •

### Interface for central machine control - PROFIBUS, PROFINET, Analogue interface or serial interface

- •  •  •  •  •  •  •  •  •  •

### Shutter in circulation medium return

- •  •  •  •  •  •  •  •  •  •

### Shut-off valve in circulation medium return

- •  •  •  •  •  •  •  •  •  •

### Ball valves in cooling water supply and return

- •  •  •  •  •  •  •  •  •  •

### Adjustable bypass (valve) between circulation medium supply and return

- •  •  •  •  •  •  •  •  •  •

### Audible alarm

- •  •  •  •  •  •  •  •  •  •

### Visual alarm

- •  •  •  •  •  •  •  •  •  •

### Electronic level control and dry running protection with float switch instead of level detector

- •  •  •  •  •  •  •  •  •  •

### Return temperature indication (PT 100 temperature sensor)

- •  •  •  •  •  •  •  •  •  •

### Lockable operating panel cover

- •  •  •  •  •  •  •  •  •  •

### Flow rate indication and monitoring

- •  •  •  •  •  •  •  •  •  •

### Internal drip tray (integrated into framework)

- •  •  •  •  •  •  •  •  •  •

### Pneumatic control valves

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### Nitrogen overlay system for expansion tank

- •  •  •  •  •  •  •  •  •  •

### Stainless steel execution

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### Execution for higher ambient temperature (°C)

- •  •  •  •  •  •  •  •  •  •

### ATEX-execution “Explosion protection”

- •  •  •  •  •  •  •  •  •  •