Chillers Blue e
Targeted cooling output with exceptional efficiency
Rittal – The System.

Faster – better – everywhere.
Chiller Blue e – All-round efficiency

Sustainable and environmentally friendly
- 40% less refrigerant, thanks to microchannel technology
- No galvanic corrosion, as the microchannel heat exchanger is made from 100% aluminium

Targeted climate control
- Central activation of the fan and compressor via a digital controller
- Hysteresis:
  - Standard ± 2 K
  - With optional precision controller (HGBP) ± 0.25 K

Simple user prompting
- Fast parameterisation, data reading and plain-text system messages via the smart, multilingual, industry-grade touch screen
- Prioritised error messages with three escalation levels (warning, error, maintenance)

Simple assembly
- Plug & play
- Fully wired ready for connection (3 m cable for electrical power and signal exchange)
- Eyebolts and a forklift truck-friendly base/plinth for easier transportation
- Standardised water connections and externally adjustable overflow valve (bypass valve)
- Just two enclosure sizes for four output categories
- Easy replacement of components
- Service-friendly, thanks to optimum accessibility of all components

Medium temperature in °C

Target 20 °C

Hysteresis, HGBP: ± 0.25 K

Hysteresis, standard: ± 2 K
Rittal – The System.

Faster – better – everywhere.
Integrated safety

Integral safety functions
- Integrated valves ensure constant cooling water circulation with the equipment sealed and the pump running, to balance out pressure differences in the system as a whole.
- Fill level monitoring ensures maximum operational reliability and increases availability.
- A flow monitor (optional) emits an alarm if the flow rate drops too low, there is no control function on the hydraulics and cooling circuit.
- Flow monitors ensure that any hydraulic malfunctions, such as contamination or blockages in the system, are quickly identified.

Add-on packages available
- Off the shelf as standard
- Applies to all model numbers ending in .XX5.
- Increased-output pumps (4 bar) extend the range of applications to even more areas.
- Precision control (HGBP) improves regulatory accuracy from 2 K to 0.25 K.
- Control voltage 24 V DC, e.g. for use in automotive applications.

Pre-configured options
(also available as add-on packages)
- For shorter delivery times and a simplified ordering process

1. Increased-output pump (4 and 6 bar)
2. Pumps: Multi-circuit systems
3. Outdoor (down to -20 °C)
4. Heater
5. Industrial connector
6. Precision controller (HGBP)
7. Special spray finish
8. Water-cooled condenser
9. Laser application
Chillers Blue e

**Design:**
- Robust industrial standard
- Variable air routing is possible via the l/h or r/h side panel
- Floating contact for collective fault signal

**Benefits:**
- Reduced volume of refrigerant, thanks to microchannel technology
- Touch display for simplified user guidance
- Intelligent interfaces
- Integral safety functions
- Pre-configured options

**Colour:**
- Enclosure: RAL 7035
- Base/plinth: RAL 7016

**Protection category IP to IEC 60 529:**
- IP 44 (electrics)

**Supply includes:**
- Chiller wired ready for connection
- Multilingual documentation including functional diagram and wiring plans

### Output class 11 – 15 kW

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Packs of</th>
<th>3336.400</th>
<th>3336.405</th>
<th>3336.410</th>
<th>3336.415</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cooling output at Tw = 10 °C/Tu = 32 °C kW</td>
<td>-10.2 / 11.7</td>
<td>10.2 / 11.7</td>
<td>12.2 / 12.3</td>
<td>12.2 / 12.3</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Total cooling output at Tw = 18 °C/Tu = 32 °C kW</td>
<td>11.8 / 13.2</td>
<td>11.8 / 13.2</td>
<td>14.3 / 14.8</td>
<td>14.3 / 14.8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Power consumption Pn 50/60 Hz kW</td>
<td>6.3 / 8.8</td>
<td>6.3 / 8.8</td>
<td>7.02 / 8.75</td>
<td>7.7 / 9.9</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Rated operating voltage V ~, Hz</td>
<td>400, 3–, 50</td>
<td>400, 3–, 50</td>
<td>400, 3–, 50</td>
<td>400, 3–, 50</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Width mm</td>
<td>660</td>
<td>660</td>
<td>660</td>
<td>660</td>
<td>8</td>
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<tr>
<td>Height mm</td>
<td>1265</td>
<td>1265</td>
<td>1265</td>
<td>1265</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Depth mm</td>
<td>1315</td>
<td>1315</td>
<td>1315</td>
<td>1315</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Rated current max. A</td>
<td>10.2 / 11.3</td>
<td>11.1 / 13.1</td>
<td>12.9 / 12.9</td>
<td>13.8 / 14.66</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Performance-enhanced pump</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Control voltage 24 V DC</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Precision controller</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>+10 °C...+43 °C</td>
<td>+10 °C...+43 °C</td>
<td>+10 °C...+43 °C</td>
<td>+10 °C...+43 °C</td>
<td>8</td>
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</tr>
<tr>
<td>Refrigerant g</td>
<td>R410a, 1350</td>
<td>R410a, 1350</td>
<td>R410a, 1350</td>
<td>R410a, 1350</td>
<td>8</td>
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</tr>
<tr>
<td>Water connection</td>
<td>1” 1” internal thread</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Pump pressure bar</td>
<td>2 / 2</td>
<td>5 / 7</td>
<td>2 / 2</td>
<td>5 / 7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Pump capacity l/min</td>
<td>30, 55</td>
<td>30, 55</td>
<td>35, 55</td>
<td>30, 55</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Air throughput of fans (unimpeded air flow), 50/60 Hz m³/h</td>
<td>6000 / 7200</td>
<td>6000 / 7200</td>
<td>6000 / 7200</td>
<td>6000 / 7200</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Temperature hysteresis</td>
<td>± 2 K</td>
<td>± 0.25 K</td>
<td>± 2 K</td>
<td>± 0.25 K</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Tank</td>
<td>PE plastic</td>
<td>PE plastic</td>
<td>PE plastic</td>
<td>PE plastic</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Tank capacity l</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Weight as delivered kg</td>
<td>247.0</td>
<td>247.0</td>
<td>253.0</td>
<td>253.0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Operating weight kg</td>
<td>316.0</td>
<td>316.0</td>
<td>302.0</td>
<td>302.0</td>
<td>8</td>
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<tr>
<td>Accessories</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**Cooling medium (ready-mixed)**: see page see page see page see page

**Metal filter**: 2 pc(s) 3286.560 3286.560 3286.560 3286.560

Further technical information available on the Internet.

Rittal Climate control/Chillers Blue e
## Chillers Blue e

### Output class 20 – 25 kW

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Packs of</th>
<th>3336.430</th>
<th>3336.435</th>
<th>3336.450</th>
<th>3336.455</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cooling output at Tw = 10 °C/Tu = 32 °C kW</td>
<td>16.3 / 19.2</td>
<td>16.3 / 19.2</td>
<td>19.9 / 22.9</td>
<td>19.9 / 22.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cooling output at Tw = 18 °C/Tu = 32 °C kW</td>
<td>19.3 / 22</td>
<td>19.3 / 22</td>
<td>24.4 / 26.3</td>
<td>24.4 / 26.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power consumption Peln 50/60 Hz kW</td>
<td>8.5 / 10.9</td>
<td>8.5 / 10.9</td>
<td>10.6 / 13.3</td>
<td>11.3 / 14.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated operating voltage V, ~, Hz</td>
<td>400, 3~, 50</td>
<td>400, 3~, 50</td>
<td>400, 3~, 50</td>
<td>400, 3~, 50</td>
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<td></td>
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<tr>
<td>Width mm</td>
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<td>760</td>
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<td>760</td>
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<tr>
<td>Height mm</td>
<td>1265</td>
<td>1265</td>
<td>1265</td>
<td>1265</td>
<td></td>
<td></td>
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<tr>
<td>Depth mm</td>
<td>1515</td>
<td>1515</td>
<td>1515</td>
<td>1515</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated current max. A</td>
<td>19 / 15.9</td>
<td>19.9 / 17.2</td>
<td>21.7 / 22.4</td>
<td>22.6 / 24.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-enhanced pump</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control voltage 24 V DC</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precision controller</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>+10 °C...+43 °C</td>
<td>+10 °C...+43 °C</td>
<td>+10 °C...+43 °C</td>
<td>+10 °C...+43 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerant g</td>
<td>R410a, 1450</td>
<td>R410a, 1450</td>
<td>R410a, 1450</td>
<td>R410a, 1450</td>
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<td></td>
</tr>
<tr>
<td>Water connection</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump pressure bar</td>
<td>2 / 2</td>
<td>4.75 / 6.8</td>
<td>2 / 2</td>
<td>4.5 / 6.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump capacity l/min</td>
<td>45, 75</td>
<td>45, 75</td>
<td>55, 75</td>
<td>55, 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air throughput of fans (unimpeded air flow), 50/60 Hz m³/h</td>
<td>12000 / 14500</td>
<td>12000 / 14500</td>
<td>12000 / 14500</td>
<td>12000 / 14500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature hysteresis</td>
<td>± 2 K</td>
<td>± 0.25 K</td>
<td>± 2 K</td>
<td>± 0.25 K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank</td>
<td>PE plastic</td>
<td>PE plastic</td>
<td>PE plastic</td>
<td>PE plastic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank capacity l</td>
<td>78</td>
<td>78</td>
<td>78</td>
<td>78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight as delivered kg</td>
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<td>310.0</td>
<td>326.0</td>
<td>326.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating weight kg</td>
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<td>388.0</td>
<td>404.0</td>
<td>404.0</td>
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<td></td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling medium (ready-mixed)</td>
<td>see page</td>
<td>see page</td>
<td>see page</td>
<td>see page</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Metal filter</td>
<td>2 pc(s)</td>
<td>3296.570</td>
<td>3296.570</td>
<td>3296.570</td>
<td>3296.570</td>
<td>8</td>
</tr>
</tbody>
</table>

### Any questions about our services or maintenance agreements?

Do you need an individual, personal consultation or a service quote? Our service specialists will be happy to assist you. Please direct enquiries to the local Rittal Service organisation, either by e-mail or phone. www.rittal.com/contact

- Manufacturers’ warranty
- Configuration and assembly
- Inspection
- Climate control pipework
- Commissioning
- Leak test
- Modernisation
- Maintenance
- Service agreements
- Spare parts
- Response time
- Wearing parts
## Accessories

### Metal filter

Particularly when cooling units are used in dusty and oily environments, it is advisable to use washable metal filters. If air or steam condenses on the metal surfaces, any particles present will adhere to the metal, and can easily be washed out with water or grease-dissolving detergents.

**Material:**
- Aluminium

**Note:**
- 2 metal filters are required for 3334.660, 3335.880 and 3335.890

### Cooling medium (ready-mixed)

**for chillers and air/water heat exchangers**

As well as protecting against frost, this cooling medium also serves to inhibit bacterial growth and provide optimum corrosion protection.

<table>
<thead>
<tr>
<th>Application</th>
<th>Antifreeze/water mixture</th>
<th>Container</th>
<th>Contents l</th>
<th>Operating temperature range</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor</td>
<td>1 : 2</td>
<td>Canister</td>
<td>10</td>
<td>-20 °C...+60 °C</td>
<td>1 pc(s)</td>
<td>3301.950</td>
</tr>
<tr>
<td>Outdoor</td>
<td>1 : 2</td>
<td>Canister</td>
<td>25</td>
<td>-20 °C...+60 °C</td>
<td>1 pc(s)</td>
<td>3301.955</td>
</tr>
<tr>
<td>Standard</td>
<td>1 : 4</td>
<td>Canister</td>
<td>10</td>
<td>-10 °C...+60 °C</td>
<td>1 pc(s)</td>
<td>3301.960</td>
</tr>
<tr>
<td>Standard</td>
<td>1 : 4</td>
<td>Canister</td>
<td>25</td>
<td>-10 °C...+60 °C</td>
<td>1 pc(s)</td>
<td>3301.965</td>
</tr>
</tbody>
</table>
Blue e chillers
Output class 11.8 kW

50 Hz
SK 3336.400, .405

60 Hz
SK 3336.400, .405

Water inlet temperature $T_w$
- 10.0 °C
- 12.5 °C
- 15.0 °C
- 17.5 °C
- 20.0 °C
- 22.5 °C
- 25.0 °C

$P_c$ = Total cooling output [kW]
$T_u$ = Ambient temperature [°C]

Output class 14.3 kW

50 Hz
SK 3336.410, .415

60 Hz
SK 3336.410, .415

Water inlet temperature $T_w$
- 10.0 °C
- 12.5 °C
- 15.0 °C
- 17.5 °C
- 20.0 °C
- 22.5 °C
- 25.0 °C

$P_c$ = Total cooling output [kW]
$T_u$ = Ambient temperature [°C]
Blue e chillers
Output class 19.3 kW

50 Hz
SK 3336.430, 435

Output class 24.4 kW

50 Hz
SK 3336.450, 455

60 Hz
SK 3336.430, 435

60 Hz
SK 3336.450, 455
Chillers Blue e

Technical details/Characteristic curves of pump

Blue e chillers
Output class 11.8 kW

50/60 Hz
SK 3336.400, .405

![Graph showing characteristic curves for output class 11.8 kW]

Output class 14.3 kW

50/60 Hz
SK 3336.410, .415

![Graph showing characteristic curves for output class 14.3 kW]

Output class 19.3/24.4 kW

50/60 Hz
SK 3336.430, .450, .455

![Graph showing characteristic curves for output class 19.3/24.4 kW]
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