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# Chillers Blue e

Targeted cooling output with exceptional efficiency



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# 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

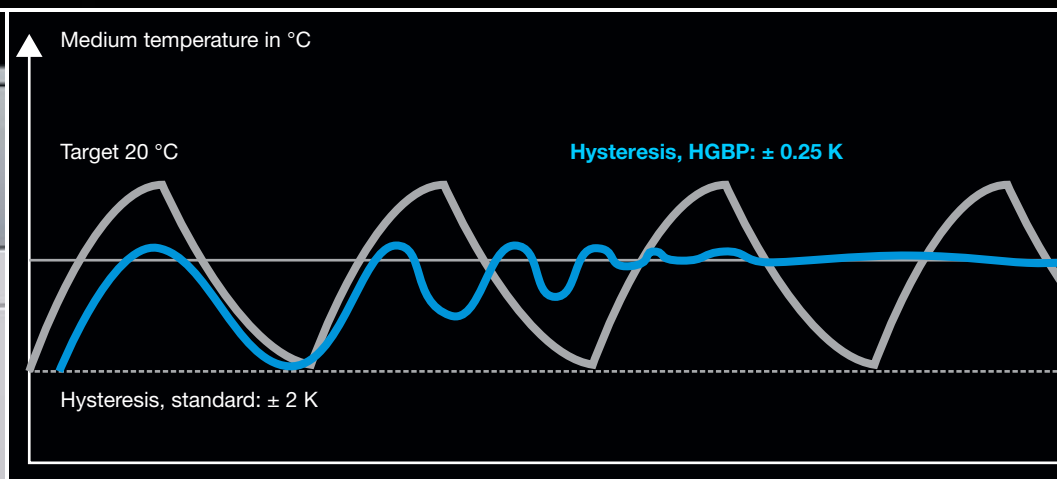
- Central activation of the fan and compressor via a digital controller
- Hysteresis:
  - Standard  $\pm 2$  K
  - With optional precision controller (HGBP)  $\pm 0.25$  K

## 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



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# 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) | 6 Precision controller (HGBP) |
| 2 Pumps: Multi-circuit systems        | 7 Special spray finish        |
| 3 Outdoor (down to -20 °C)            | 8 Water-cooled condenser      |
| 4 Heater                              | 9 Laser application           |
| 5 Industrial connector                |                               |

# Chillers Blue e



## Accessories for climate control Page 8 Cooling medium Page 8

### 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

### Approvals:

- Available on the Internet

## Output class 11 – 15 kW

Model No.	Packs of	3336.400	3336.405	3336.410	3336.415	Page
Total cooling output at $T_w = 10\text{ °C}/T_u = 32\text{ °C}$ kW		10.2 / 11.7	10.2 / 11.7	12.2 / 12.3	12.2 / 12.3	
<b>Total cooling output at <math>T_w = 18\text{ °C}/T_u = 32\text{ °C}</math> kW</b>		<b>11.8 / 13.2</b>	<b>11.8 / 13.2</b>	<b>14.3 / 14.8</b>	<b>14.3 / 14.8</b>	
Power consumption $P_{el}$ 50/60 Hz kW		6.3 / 8.8	6.3 / 8.8	7.02 / 8.75	7.7 / 9.9	
Rated operating voltage V, ~, Hz		400, 3~, 50 460, 3~, 60	400, 3~, 50 460, 3~, 60	400, 3~, 50 460, 3~, 60	400, 3~, 50 460, 3~, 60	
Width mm		660	660	660	660	
Height mm		1265	1265	1265	1265	
Depth mm		1315	1315	1315	1315	
Rated current max. A		10.2 / 11.3	11.1 / 13.1	12.9 / 12.9	13.8 / 14.65	
Performance-enhanced pump		-	■	-	■	
Control voltage 24 V DC		-	■	-	■	
Precision controller		-	■	-	■	
Operating temperature range		+10 °C...+43 °C	+10 °C...+43 °C	+10 °C...+43 °C	+10 °C...+43 °C	
Refrigerant g		R410a, 1350	R410a, 1350	R410a, 1350	R410a, 1350	
Water connection	R 1" internal thread	■	■	■	■	
Pump pressure bar		2 / 2	5 / 7	2 / 2	5 / 7	
Pump capacity l/min		30, 55	30, 55	35, 55	30, 55	
Air throughput of fans (unimpeded air flow), 50/60 Hz m <sup>3</sup> /h		6000 / 7200	6000 / 7200	6000 / 7200	6000 / 7200	
Temperature hysteresis		± 2 K	± 0.25 K	± 2 K	± 0.25 K	
Temperature of liquid		+10 °C...+25 °C	+10 °C...+25 °C	+10 °C...+25 °C	+10 °C...+25 °C	
Tank		PE plastic	PE plastic	PE plastic	PE plastic	
Tank capacity l		49	49	49	49	
Weight as delivered kg		247.0	247.0	253.0	253.0	
Operating weight kg		316.0	316.0	302.0	302.0	

### Accessories

Cooling medium (ready-mixed)		see page	see page	see page	see page	8
Metal filter	2 pc(s).	3286.560	3286.560	3286.560	3286.560	8

## Output class 20 – 25 kW

Model No.	Packs of	3336.430	3336.435	3336.450	3336.455	Page
Total cooling output at $T_w = 10\text{ °C}/T_u = 32\text{ °C}$ kW		16.3 / 19.2	16.3 / 19.2	19.9 / 22.9	19.9 / 22.9	
<b>Total cooling output at <math>T_w = 18\text{ °C}/T_u = 32\text{ °C}</math> kW</b>		<b>19.3 / 22</b>	<b>19.3 / 22</b>	<b>24.4 / 26.3</b>	<b>24.4 / 26.3</b>	
Power consumption $P_{el}$ 50/60 Hz kW		8.5 / 10.9	8.5 / 10.9	10.6 / 13.3	11.3 / 14.4	
Rated operating voltage V, ~, Hz		400, 3~, 50 460, 3~, 60	400, 3~, 50 460, 3~, 60	400, 3~, 50 460, 3~, 60	400, 3~, 50 460, 3~, 60	
Width mm		760	760	760	760	
Height mm		1265	1265	1265	1265	
Depth mm		1515	1515	1515	1515	
Rated current max. A		19 / 15.9	19.9 / 17.2	21.7 / 22.4	22.6 / 24.1	
Performance-enhanced pump		–	■	–	■	
Control voltage 24 V DC		–	■	–	■	
Precision controller		–	■	–	■	
Operating temperature range		+10 °C...+43 °C	+10 °C...+43 °C	+10 °C...+43 °C	+10 °C...+43 °C	
Refrigerant g		R410a, 1450	R410a, 1450	R410a, 1450	R410a, 1450	
Water connection	R 1¼" internal thread	■	■	■	■	
Pump pressure bar		2 / 2	4.75 / 6.8	2 / 2	4.5 / 6.7	
Pump capacity l/min		45, 75	45, 75	55, 75	55, 75	
Air throughput of fans (unimpeded air flow), 50/60 Hz m³/h		12000 / 14500	12000 / 14500	12000 / 14500	12000 / 14500	
Temperature hysteresis		± 2 K	± 0.25 K	± 2 K	± 0.25 K	
Temperature of liquid		+10 °C...+25 °C	+10 °C...+25 °C	+10 °C...+25 °C	+10 °C...+25 °C	
Tank		PE plastic	PE plastic	PE plastic	PE plastic	
Tank capacity l		78	78	78	78	
Weight as delivered kg		310.0	310.0	326.0	326.0	
Operating weight kg		388.0	388.0	404.0	404.0	
<b>Accessories</b>						
Cooling medium (ready-mixed)		see page	see page	see page	see page	8
Metal filter	2 pc(s).	3286.570	3286.570	3286.570	3286.570	8

## 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](http://www.rittal.com/contact)

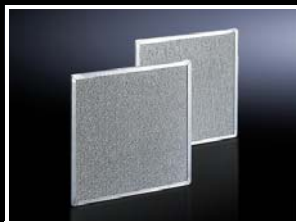


Rittal Service

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

# Chillers Blue e

## 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

To fit Model No.	for chillers	W x H x D mm	Packs of	Model No.
3336.400/3336.405/ 3336.410/3336.415	■	700 x 724 x 20	2 pc(s).	<b>3286.560</b>
3336.430/3336.435/ 3336.450/3336.455	■	945 x 765 x 20	2 pc(s).	<b>3286.570</b>



### Cooling medium (ready-mixed)

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

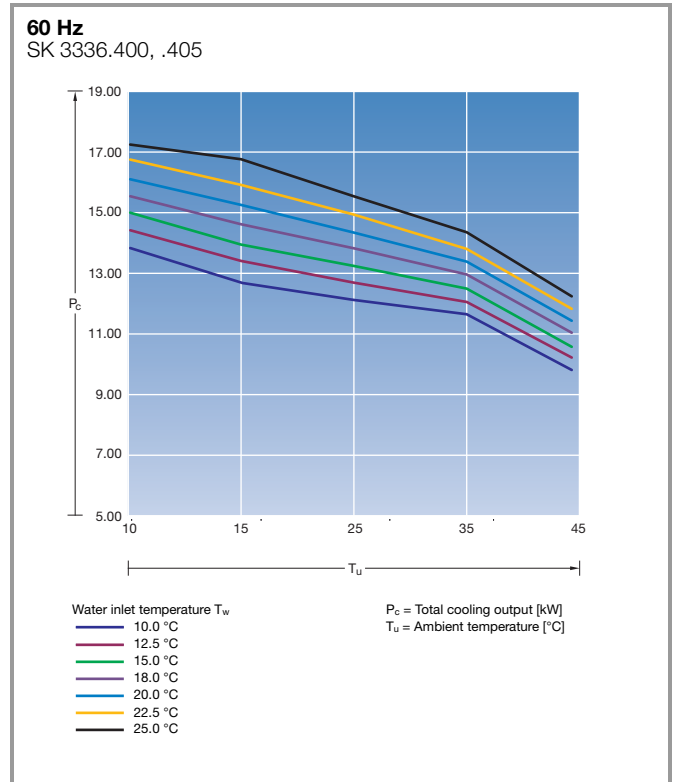
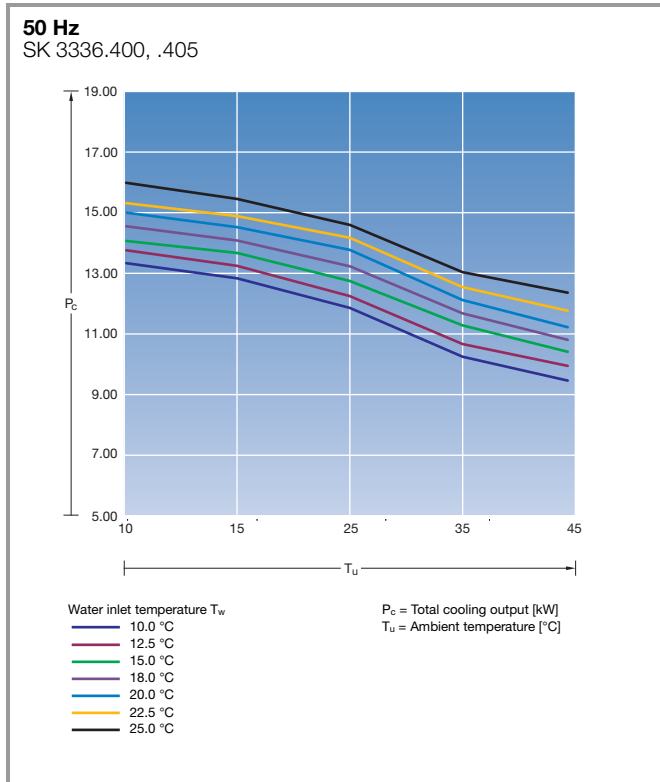
As well as protecting against frost, this cooling medium also serves to inhibit bacterial growth and provide optimum corrosion protection.

Application	Antifreeze/water mixture	Container	Contents l	Operating temperature range	Packs of	Model No.
Outdoor	1 : 2	Canister	10	-20 °C...+60 °C	1 pc(s).	<b>3301.950</b>
Outdoor	1 : 2	Canister	25	-20 °C...+60 °C	1 pc(s).	<b>3301.955</b>
Standard	1 : 4	Canister	10	-10 °C...+60 °C	1 pc(s).	<b>3301.960</b>
Standard	1 : 4	Canister	25	-10 °C...+60 °C	1 pc(s).	<b>3301.965</b>

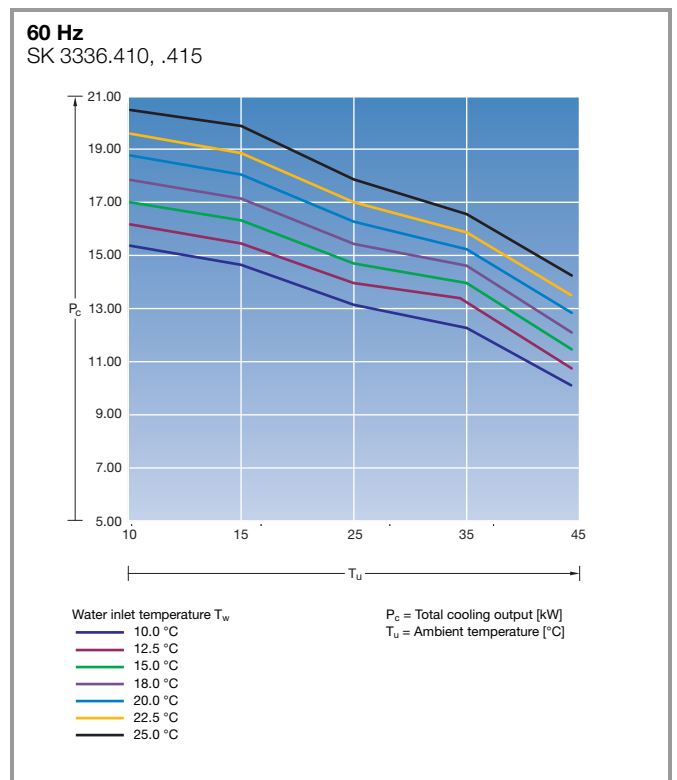
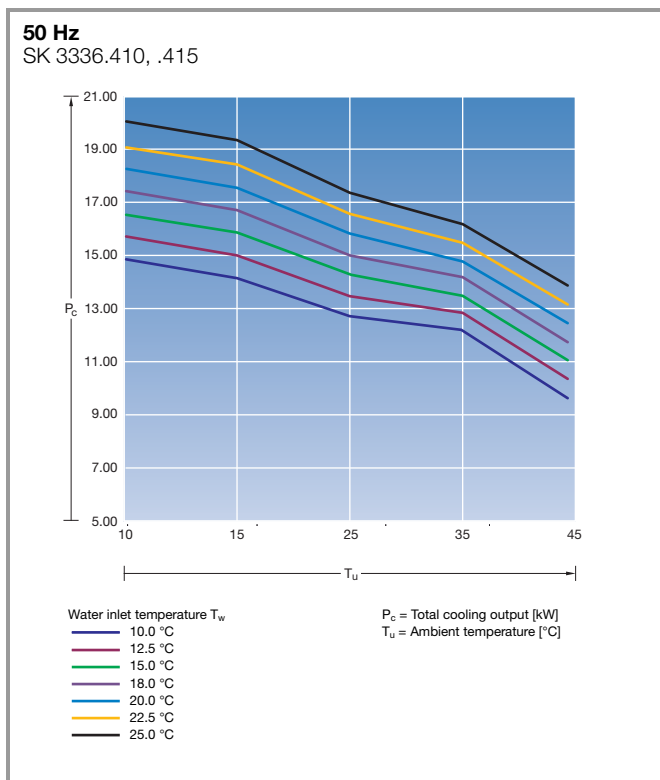


### Blue e chillers

Output class 11.8 kW



### Output class 14.3 kW

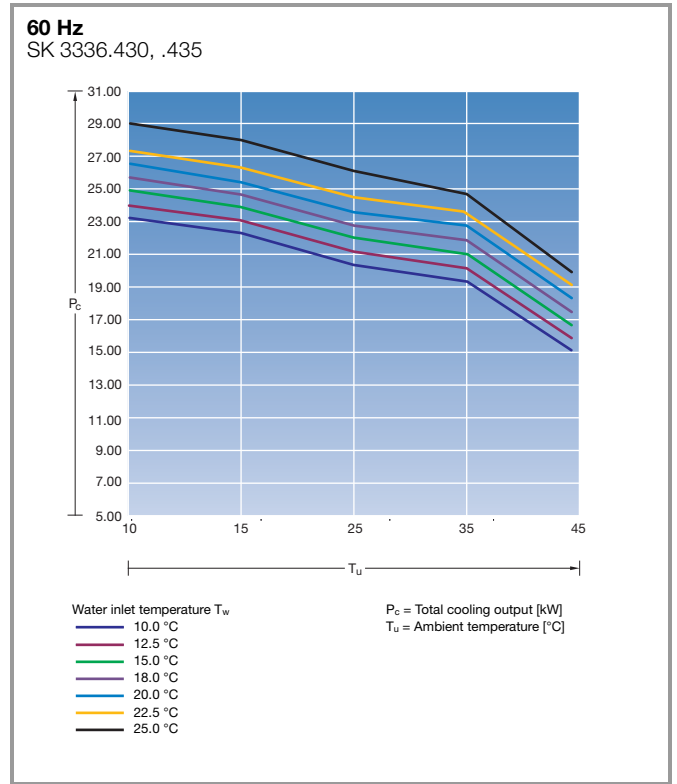
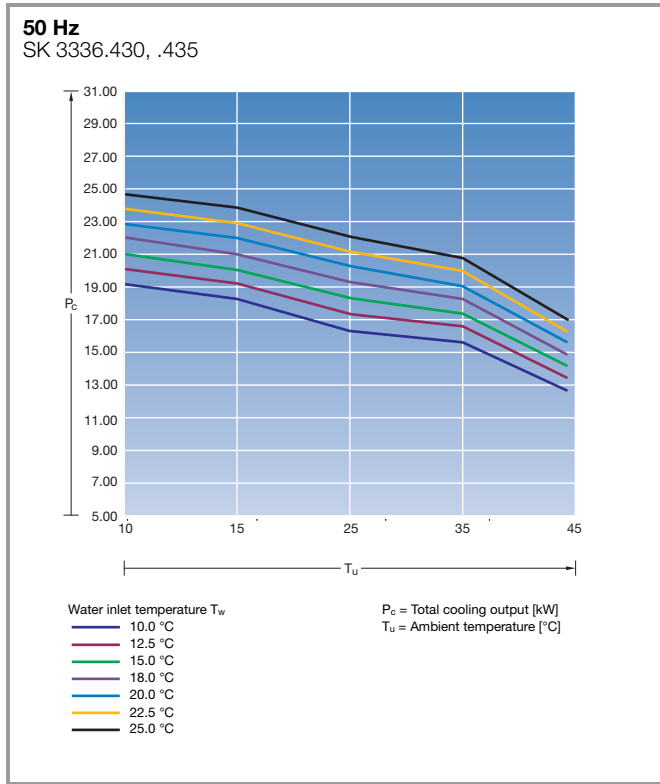


# Chillers Blue e

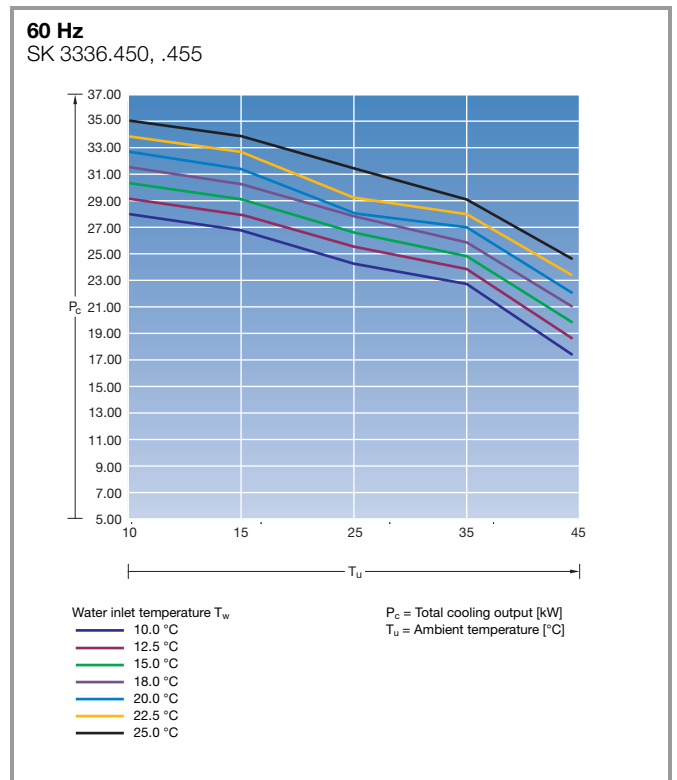
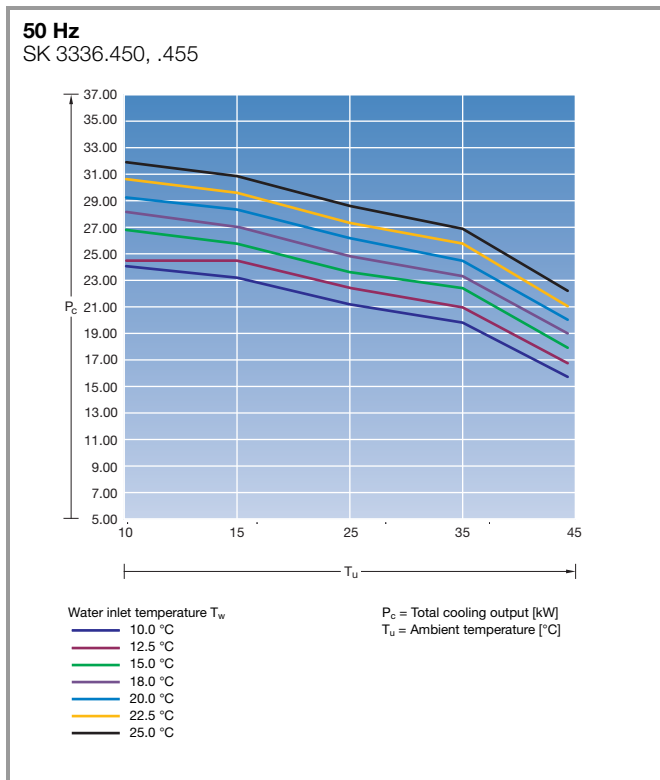
## Technical details/Performance diagrams

### Blue e chillers

Output class 19.3 kW



### Output class 24.4 kW

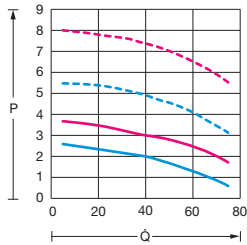


### Blue e chillers

#### Output class 11.8 kW

##### 50/60 Hz

SK 3336.400, .405



##### Standard pump

P = External static pressure [bar]  
Q = Delivery flow Q [l/min]

— = 50 Hz  
— = 60 Hz

##### Reinforced pump (optional)

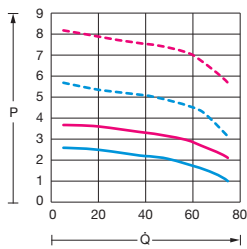
P = External static pressure [bar]  
Q = Delivery flow Q [l/min]

- - - = 50 Hz  
- - - = 60 Hz

#### Output class 14.3 kW

##### 50/60 Hz

SK 3336.410, .415



##### Standard pump

P = External static pressure [bar]  
Q = Delivery flow Q [l/min]

— = 50 Hz  
— = 60 Hz

##### Reinforced pump (optional)

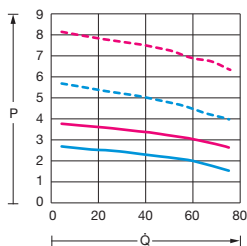
P = External static pressure [bar]  
Q = Delivery flow Q [l/min]

- - - = 50 Hz  
- - - = 60 Hz

#### Output class 19.3/24.4 kW

##### 50/60 Hz

SK 3336.430, .435, .450, .455



##### Standard pump

P = External static pressure [bar]  
Q = Delivery flow Q [l/min]

— = 50 Hz  
— = 60 Hz

##### Reinforced pump (optional)

P = External static pressure [bar]  
Q = Delivery flow Q [l/min]

- - - = 50 Hz  
- - - = 60 Hz

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