

## Technical data eChiller

Unit designation	eChiller1-35_K3.3	eChiller2-35_K3.3	eChiller1-45_K3.3	eChiller2-45_K3.3
Refrigeration capacity	35 kW	35 kW	40 kW	40 kW
Chilled water in /out	28/22 °C	28/22 °C	26/20 °C	26/20 °C
Cooling water	30 °C	40 °C	27.5 °C	40 °C
Max. cooling water	32 °C	45 °C	28.5 °C	40 °C
Max. ambient temperature	40 °C			
Refrigerant	R 718 (Water)			
Capacity control range	(20) <sup>1)</sup> 50 – 100 %			
Acoustic power (DIN EN ISO 3744)	68,6 dB(A)			

<sup>1)</sup> Together with a buffer storage unit.

### Compressor

Type	Direct driven radial centrifugal compressor			
Max. rotation speed	88,000 rpm			
Number of compressors	1	2	1	2

### Pumps

Water pump, number	2	3	2	3
Vacuum pump, number	1			

### Electrical data

Power consumption (nominal capacity)	4.4 kW	9.7 kW	5.5 kW	12.3 kW
Power consumption, min., max.	0.3 kW / 5.4 kW	0.3 kW / 11.5 kW	0.3 kW / 6.4 kW	0.3 kW / 14.5 kW
Current (nominal capacity)	10 Aeff	19 Aeff	12 Aeff	26 Aeff
Power factor λ	0.75			
Power Supply	400 V ; 50 Hz ; 3 /N/PE			
Electrical connection	Terminal block, supply cable			
Supply cable, min. cross-section area	5 x 4 mm <sup>2</sup>	5 x 6 mm <sup>2</sup>	5 x 4 mm <sup>2</sup>	5 x 6 mm <sup>2</sup>
Fuse (Type C)	25 A	32 A	25 A	32 A
Optional additional RCD (all-current capable, type B, 30 mA residual current, short-time delayed)	25 A	32 A	25 A	32 A

### PLC and interfaces

Interface	3 Ethernet 0 RJ45 1 Ethernet 1 RJ45 3 RS485
Transmission rate	10/100 Mbit/s dual speed

### Touch-Display

Display / Diagonal	QVGA / 4.3" with resistive Touchscreen
Resolution / Colors	480 x 272 Pixel / Farbe TFT:65535 (8 Bit / Pixel)
Dimension (WxHxD [mm])	~161 x 103 x 57

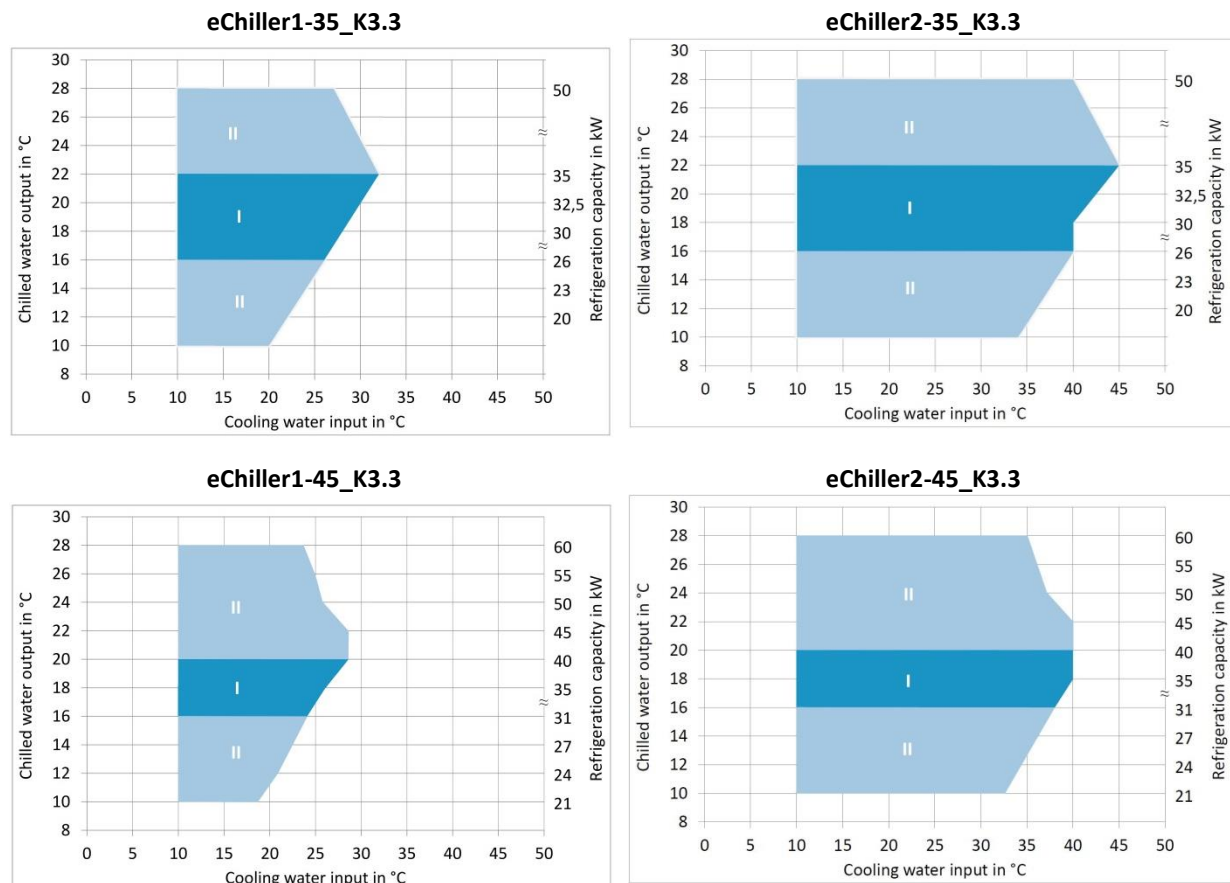
**Customer side hydraulic connection and pressure loss (nominal capacity)**

Δp heat exchanger at Pnom chilled water (heat exchanger incl. connectors) Flow 1.4 l/s Medium Water	14 kPa	14 kPa	15 kPa	15 kPa
Connection on chilled water side	Innengewinde Rp 1 ½"			
Δp heat exchanger at Pnom cooling water customer side (heat exchanger incl. connectors) Flows Medium Ethylenglycol 34 Vol%	29.3 kPa	34 kPa	35.7 kPa	44 kPa
Connection on cooling water side	internal screw thread Rp 2"			

**Dimensions and weight**

Height x Width x Depth	1.830 x 1.300 x 700 mm			
Water charge system	ca. 38 L	ca. 60 L	ca. 38 L	ca. 60 L
Water charge tank	ca. 6 L			
Operating weight	ca. 530 kg	ca. 560 kg	ca. 530 kg	ca. 560 kg

(Subject to change)



**Figure 1: Operating limits of the eChiller.**

**Important:**

- I: The optimal operating range is shown in figure 1 (blue area).
- II: The chilled water output temperature can be adjusted on request (light blue area).

For more information please see us at: [www.efficient-energy.com/en](http://www.efficient-energy.com/en)

Or use these contact possibilities:

Efficient Energy GmbH  
Hans-Riedl-Str. 5  
85622 Feldkirchen

Phone + 49 89 693369 500

Mail [vertrieb@efficient-energy.de](mailto:vertrieb@efficient-energy.de)