

## Technical data eChiller2-35\_K3.1

### Type

Refrigeration capacity	35 kW
Chilled water in/out	28 / 22 °C
Cooling water	40 °C
Max. cooling water	45 °C
Max. ambient temperature	40 °C
Refrigerant	R718 (Water)
Capacity control range	20 <sup>1)</sup> 50 – 100 %
Accoustic 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	2

### Pumps

Water pump, number	3
Vacuum pump, number	1

### Electrical data

Power consumption (nominal capacity)	9.7 kW
Power consumption, min., max.	0.3 kW, 11.5 kW
Current (nominal capacity)	19 A
Power Supply	400 V / 50 Hz / 3 Ph + N + PE
Electrical connection	Terminal block, supply cable
Supply cable, min. cross-section area	5 x 4 mm <sup>2</sup>
Fuse	32 A type C; sensitive to universal current RCCB

### 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 / Color 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
Connection on chilled water side	internal screw thread G 1 ½"
Δp heat exchanger at Pnom cooling water customer side (heat exchanger incl. connectors) Flows 2,4 l/s Medium Ethylenglycol 34 Vol%	34 kPa
Connection on cooling water side	internal screw thread G 2"

### Dimensions and weight

Height x Width x Depth	1,980 x 1,300 x 700 mm <sup>3</sup>
Water charge system	ca. 60 L
Water charge tank	ca. 6 L
Operating weight	ca. 560 kg

(Subject to change)

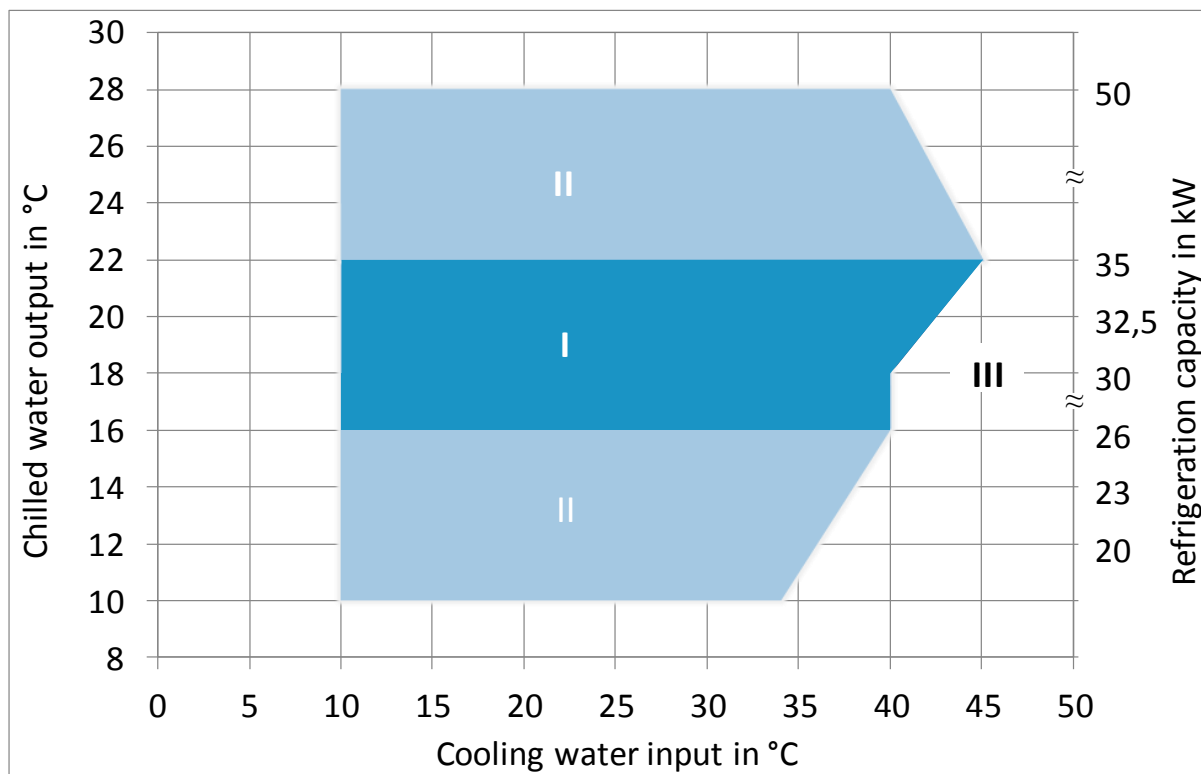
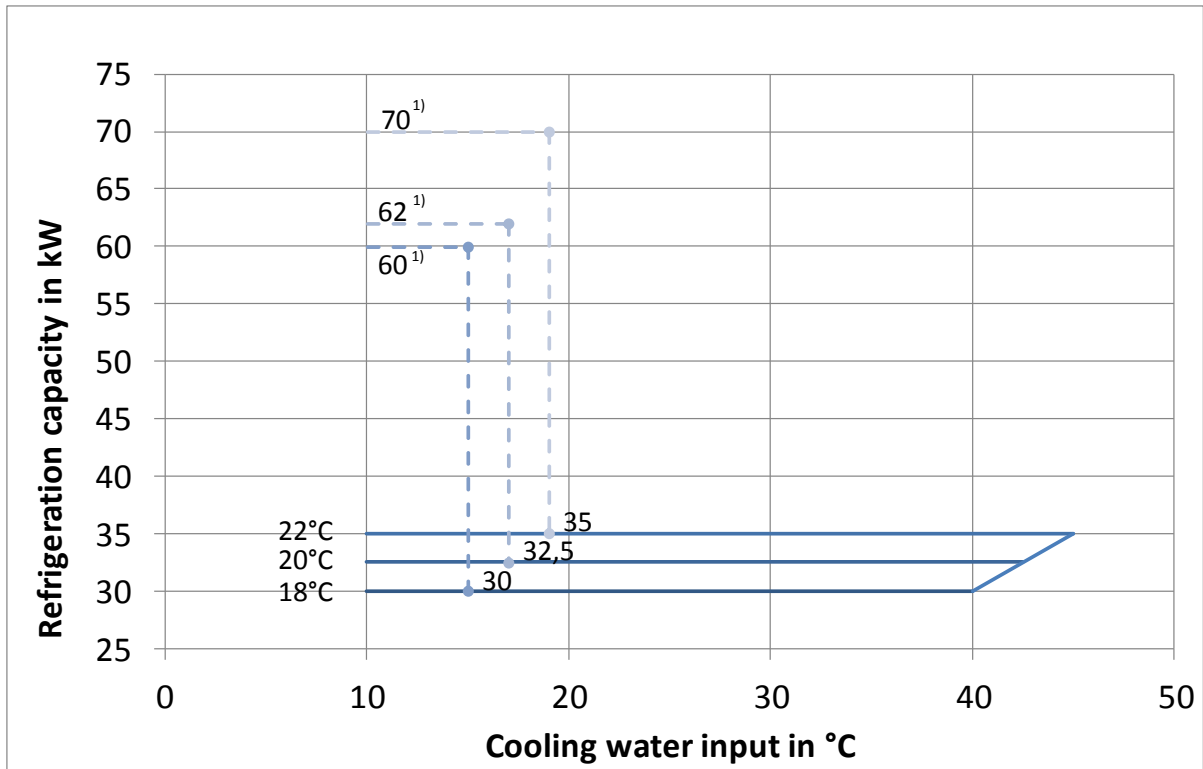


Figure 1: Operating Limits of the eChiller.

#### 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).
- III: The cooling water input temperature can turn out higher. In this case the according chilled water output temperature will turn out higher as well.



- 1) 60 kW, 62 kW and 70kW are feasible in operating mode Free Cooling with the corresponding adjustment of the external pumps, assuming a suitable external dry cooler

**Figure 2: Refrigeration capacity in accordance with chilled water output and cooling water input.**

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

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