| Device information | SI 50TU |
|---|---|
| **Design** | |
| - Heat source | Brine |
| - Model | Universal design |
| - Regulation | WPM Econ5Plus integrated |
| - Thermal energy metering | Integrated |
| - Installation location | Indoors |
| - Performance levels | 2 |
| **Operating limits** | |
| - Max. flow temperature **7)** | 62 °C +/- 2 |
| - Lower operating limit heat source (heating operation) / Upper operating limit heat source (heating operation) | -5 / 25 °C |
| - Antifreeze | Monoethylenglycol |
| - Minimum brine concentrate | 25 % |
| - Free compression circulating pump heating (max. level) | 35000 Pa |
| - Free compression of circulating pump for brine (max. level) | 37000 Pa |
| **Flow / sound** | |
| - Max. heating water flow rate / Pressure drop | 8,8 m³/h / 5000 Pa |
| - Minimum heating water flow rate | 4,8 m³/h |
| - Heat source flow (min.) / Pressure drop evaporator EN 14511 | 9,6 m³/h / 9900 Pa |
| - Sound power level device | 61 dB (A) |
| - Sound pressure level in 1 m (indoors) **2)** | 45 dB (A) |
| **Dimensions/weight and filling quantities** | |
| - Dimensions (W x H x D) **3)** | 1000 x 1665 x 805 mm |
| - Weight | 465 kg |
| - Thread type, heating connection / Connection heating | Rp / 1 ½ inch |
| - Thread type, heat source connection / Heat source connection | Rp / 2 ½ inch |
| - Refrigerant / Amount of refrigerant | R410A / 16,8 kg |
| - Oil type / Oil quantity | Polyolester (POE) / 7,3 l |
| - Water content | 13 l |
| - Contains heat transfer medium | 13 l |
| **Electrical connection** | |
| - Rated voltage / Fuse protection | 3/PE ~400 V, 50 Hz / C 40 A |
| - Control voltage / Control voltage fuse protection | 1/N/PE ~230 V, 50 Hz / C13A |
| - Fuse protection HP with separate infeed | C 40 A |
| - Degree of protection | IP 21 |
| - Initial current limiter | Yes |
| - Starting current with soft starter | 56 A |
| - Nominal power consumption according to EN 14511 at B0/W35 / Maximum electric power consumption **1)** | 10,4 / 18,4 kW |
| - Nominal current at B0/W35 / Nominal current cos phi | 21,5 A / 0,8 |
| - Power consumption of the compressor protection | 90 W |
| - Power input of integrated pump | 0,6 kW |
| **Complies with the European safety regulations** | |
| **Additional model features** | |
| - Water in device protected against freezing **4)** | Yes |

**Heat output / coefficient of performance (COP) according to EN 14511: 1)**

| Heating compressor 1 | W35 | W45 | W55 |
|---|---|---|---|
| B-5 | | 21,90 kW / 3,60 | |
| B0 | 27,40 kW / 5,40 | 25,10 kW / 4,00 | 23,10 kW / 2,90 |
| B10 | 37,00 kW / 7,10 | 33,30 kW / 5,40 | 31,50 kW / 4,20 |
| **Heating compressor 2** | **W35** | **W45** | **W55** |
| B-5 | | 41,30 kW / 3,30 | |
| B0 | 52,00 kW / 5,00 | 47,80 kW / 3,70 | 44,10 kW / 2,80 |
| B10 | 68,10 kW / 6,80 | 62,70 kW / 5,20 | 59,20 kW / 4,10 |

**Note:**

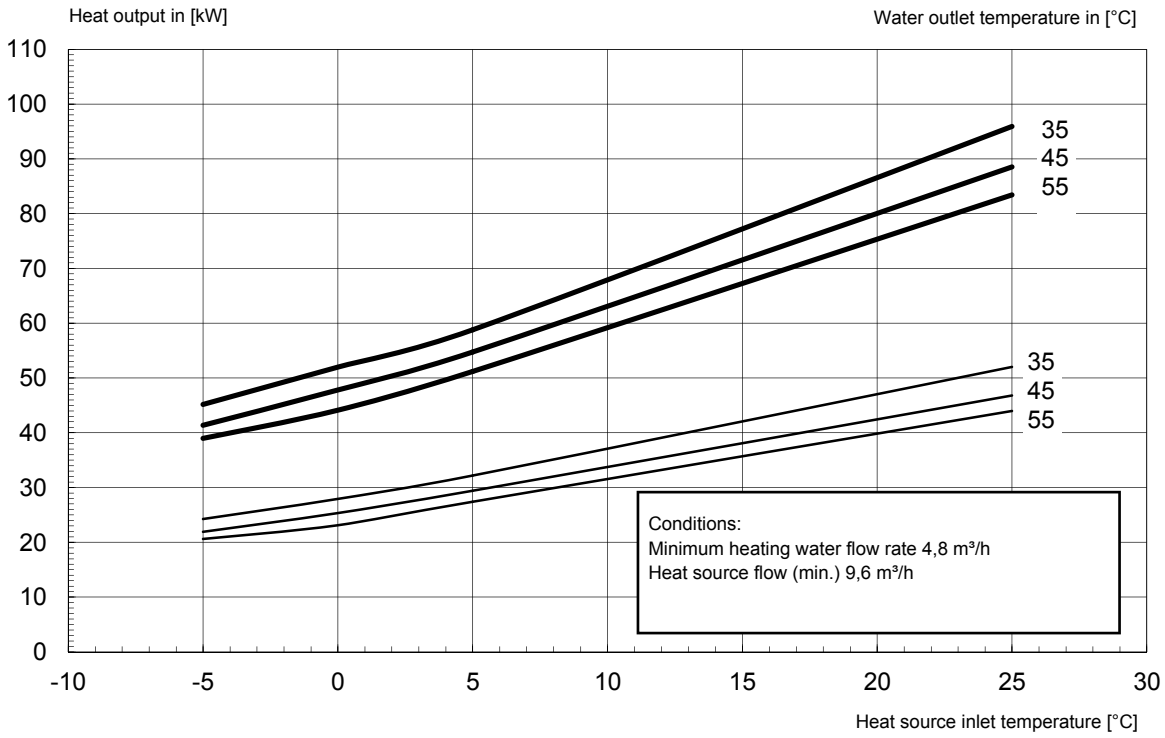
1) This data indicates the size and capacity of the system according to EN 14511. For an analysis of the economic and energy efficiency of the system, the bivalence point and regulation should be taken into consideration. These specifications can only be achieved with clean heat exchangers. Information on maintenance, commissioning and operation can be found in the respective sections of the installation and operating instructions. The specified values have the following meaning, e.g. A7 / W35: Heat source temperature 7 °C and heating water flow temperature 35 °C.
2) The specified sound pressure level corresponds to the operating noise of the heat pump in heating operation with a flow temperature of 35°C. The specified sound pressure level represents the free sound area level. The measured value can deviate by up to 16 dB(A), depending on the installation location.
3) Please note that additional space is required for pipe connections, operation and maintenance.
4) The heat circulating pump and the heat pump manager must always be ready for operation.
7) Depending on the heat pump type and refrigerant used, the maximum flow temperatures in heating operation may be reduced when the outside temperature falls. Further information can be found in the operating limit diagram for the heat pump. If the supporting feet are used, the level can increase by up to 3 dB (A).

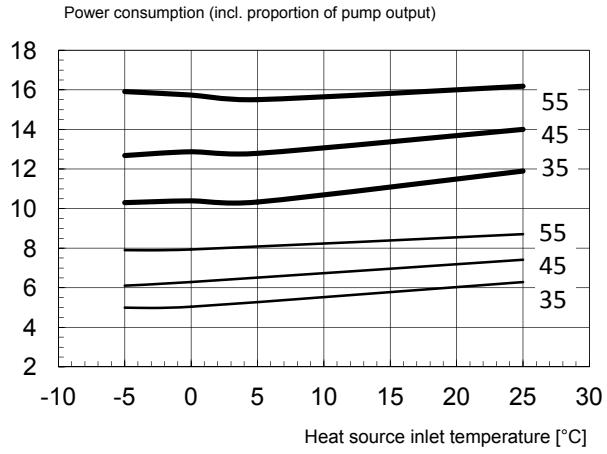


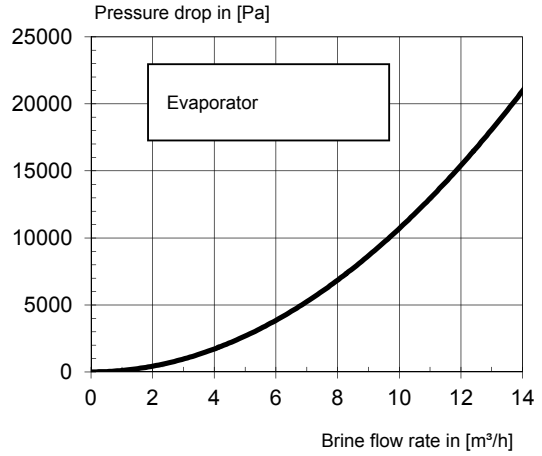
Am Goldenen Feld 18
95326 Kulmbach

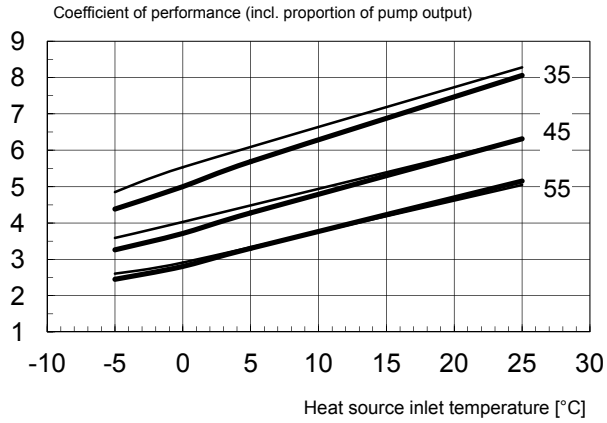
E-Mail: info@dimplex.de
Internet: www.dimplex.de

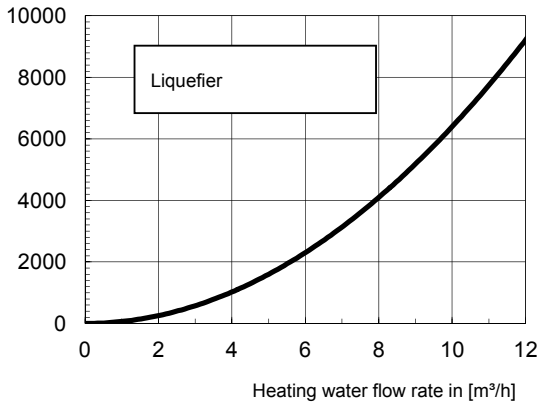
Telephone: +49 (0)9221 709-562
Fax: +49 (0)9221 709-565



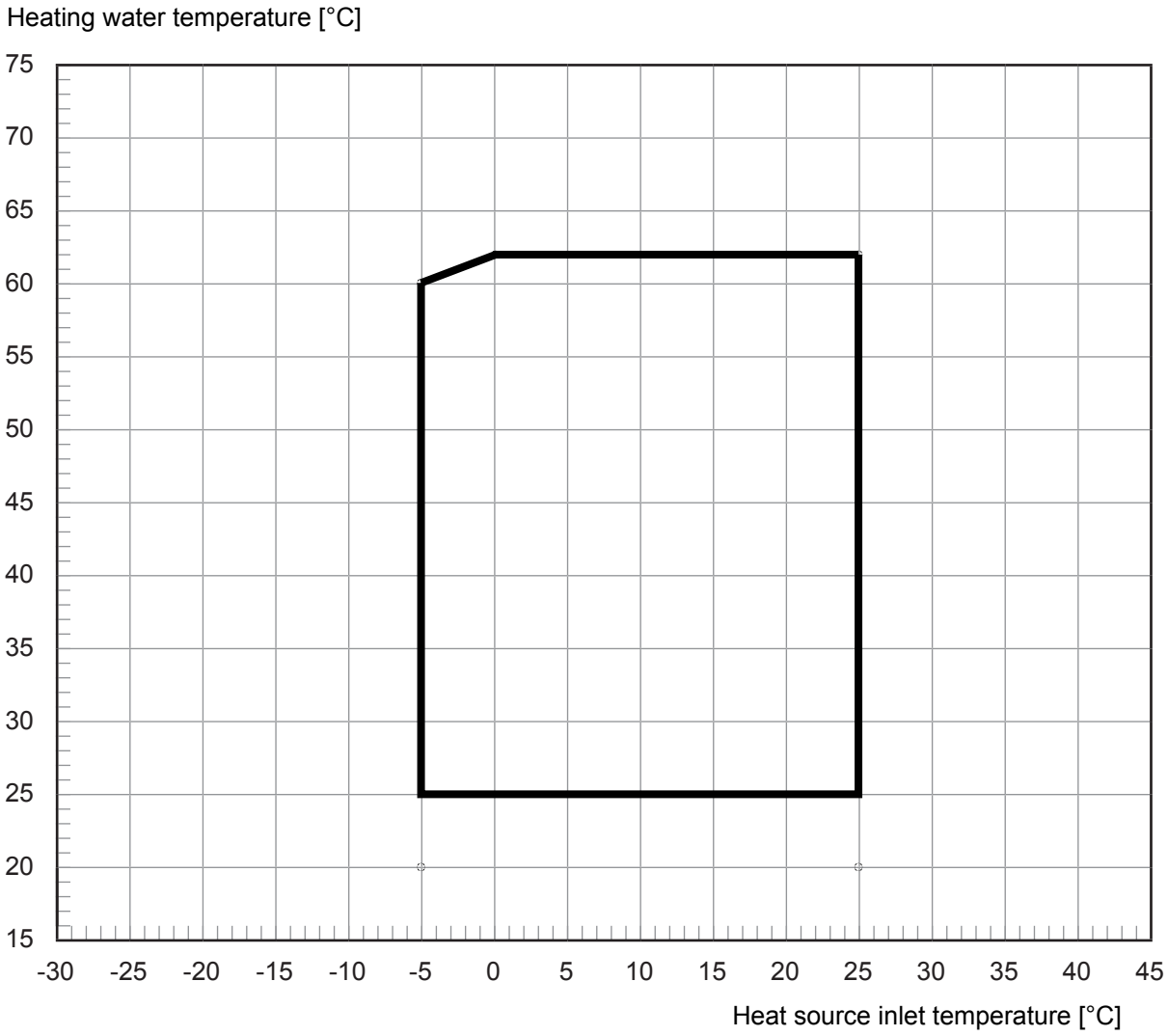




Am Goldenen Feld 18
95326 Kulmbach

E-Mail: info@dimplex.de
Internet: www.dimplex.de

Telephone: +49 (0)9221 709-562
Fax: +49 (0)9221 709-565




Note:
The maximum possible flow temperature and the operating limits vary by +- 2K due to component tolerances.
The minimum volume flow specified in the device information must be ensured at the lower operating limit.
In mono energy operating mode with the heating element activated, the maximum flow temperature increases by approximately 3K.



Am Goldenen Feld 18
95326 Kulmbach

E-Mail: info@dimplex.de
Internet: www.dimplex.de

Telephone: +49 (0)9221 709-562
Fax: +49 (0)9221 709-565