

Device information	LA 35TUR+
Design	
- Heat source	Outside air
- Model	Universal design reversible
- Regulation	WPM EconR, wall-mounted
- Thermal energy metering	Integrated
- Installation location	Outdoors
- Performance levels	2
Operating limits	
- Min. return temperature / Max. flow temperature 7)	18 / 60 °C +- 2K
- Flow temperature cooling min. / Flow temperature cooling max.	9 / 20 °C
- Lower operating limit heat source (heating operation) / Upper operating limit heat source (heating operation)	-25 / 40 °C
- Lower operating limit heat source (cooling operation) / Upper operating limit heat source (cooling operation)	10 / 45 °C
Flow / sound	
- Max. heating water flow rate / Pressure drop	5,2 m³/h / 2900 Pa
- Minimum heating water flow rate / Pressure drop	3 m³/h / 1000 Pa
- Cooling water flow according to EN 14511 / Pressure drop 12)	5,2 m³/h / 2900 Pa
- Additional heat exchanger flow / Internal pressure drop of additional heat exchanger	3 m³/h / 9400 Pa
- Heat source flow (min.)	5000 m³/h
- Sound power level device	72 dB (A)
- Sound power level in accordance with EN 12012 (lowered operation)	70 dB (A)
- Sound pressure level in 10 m 2)	43 dB (A)
Dimensions/weight and filling quantities	
- Dimensions (W x H x D) 3)	1735 x 2100 x 980 mm
- Weight	595 kg
- Thread type, heating connection / Connection heating	G / 1 ½ inch
- Thread type connection additional heat exchanger / Connections heating additional heat exchanger	G / 1 ¼ inch
- Refrigerant / Amount of refrigerant	R417A / 22 kg
- Oil type / Oil quantity	Polyolester (POE) / 4,1 l
Electrical connection	
- Rated voltage / Fuse protection	3/N/PE ~400 V, 50 Hz / C 25 A
- Control voltage / Control voltage fuse protection	1/N/PE ~230 V, 50 Hz / C 16 A
- Degree of protection	IP 24
- Initial current limiter	Yes
- Starting current with soft starter	30 A
- Nominal power consumption according to EN 14511 at A7/W35 1)	6,3 kW
- Power consumption of the compressor protection	70 W
Complies with the European safety regulations	
Additional model features	
- Type of defrosting	Reverse circulation
- Water in device protected against freezing 4)	Yes

Heat output / coefficient of performance (COP) according to EN 14511: 1)8)9)10)

Heating compressor 1	W35	W45	W55
A-20	7,05 kW / 2,10	6,50 kW / 1,66	6,00 kW / 1,29
A-15	7,70 kW / 2,28	7,10 kW / 1,79	6,70 kW / 1,44
A-7	9,90 kW / 2,90	9,20 kW / 2,32	8,60 kW / 1,79
A2	13,60 kW / 4,00	12,60 kW / 3,17	11,60 kW / 2,40
A7	17,30 kW / 4,00	16,20 kW / 3,89	15,40 kW / 3,10
A10	17,50 kW / 5,10	16,90 kW / 4,21	16,10 kW / 3,38
Heating compressor 2	W35	W45	W55
A-20	12,20 kW / 1,98	11,50 kW / 1,63	10,70 kW / 1,30
A-15	13,90 kW / 2,24	13,20 kW / 1,84	12,40 kW / 1,49
A-7	17,60 kW / 2,81	16,40 kW / 2,23	15,40 kW / 1,79
A2	23,60 kW / 3,70	22,20 kW / 2,84	20,90 kW / 2,24
A7	30,20 kW / 4,50	27,10 kW / 2,80	28,97 kW / 2,89
A10	32,60 kW / 4,90	31,50 kW / 3,83	30,40 kW / 3,10

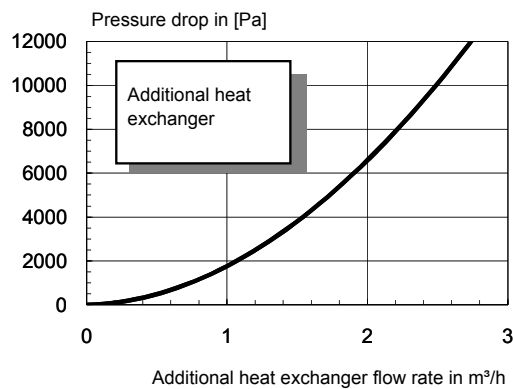
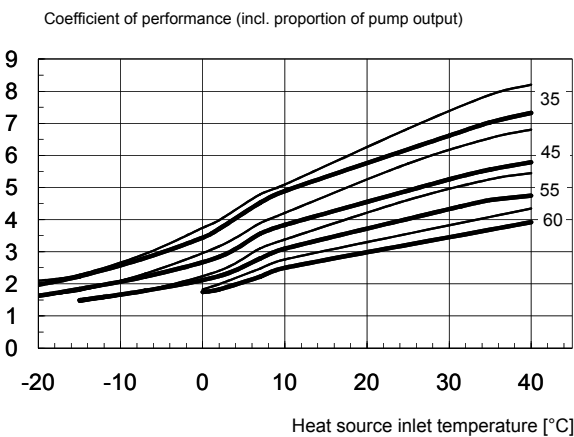
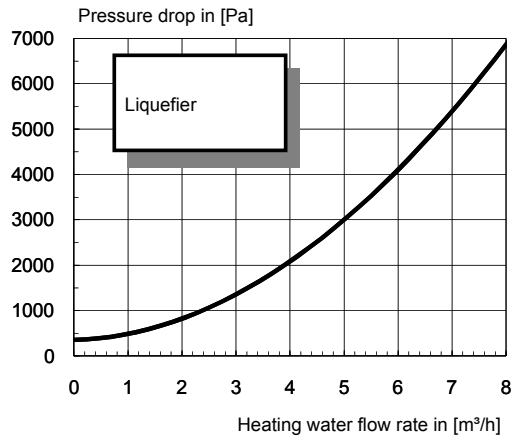
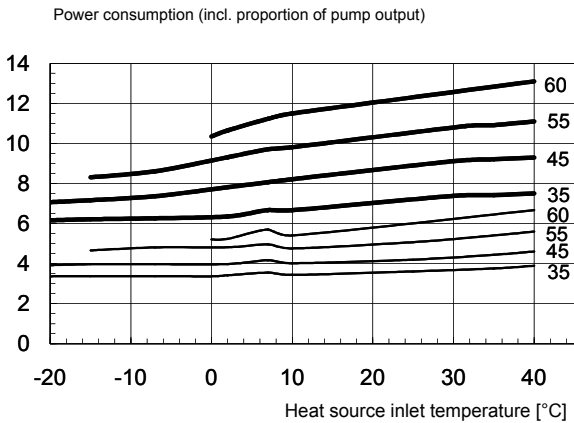
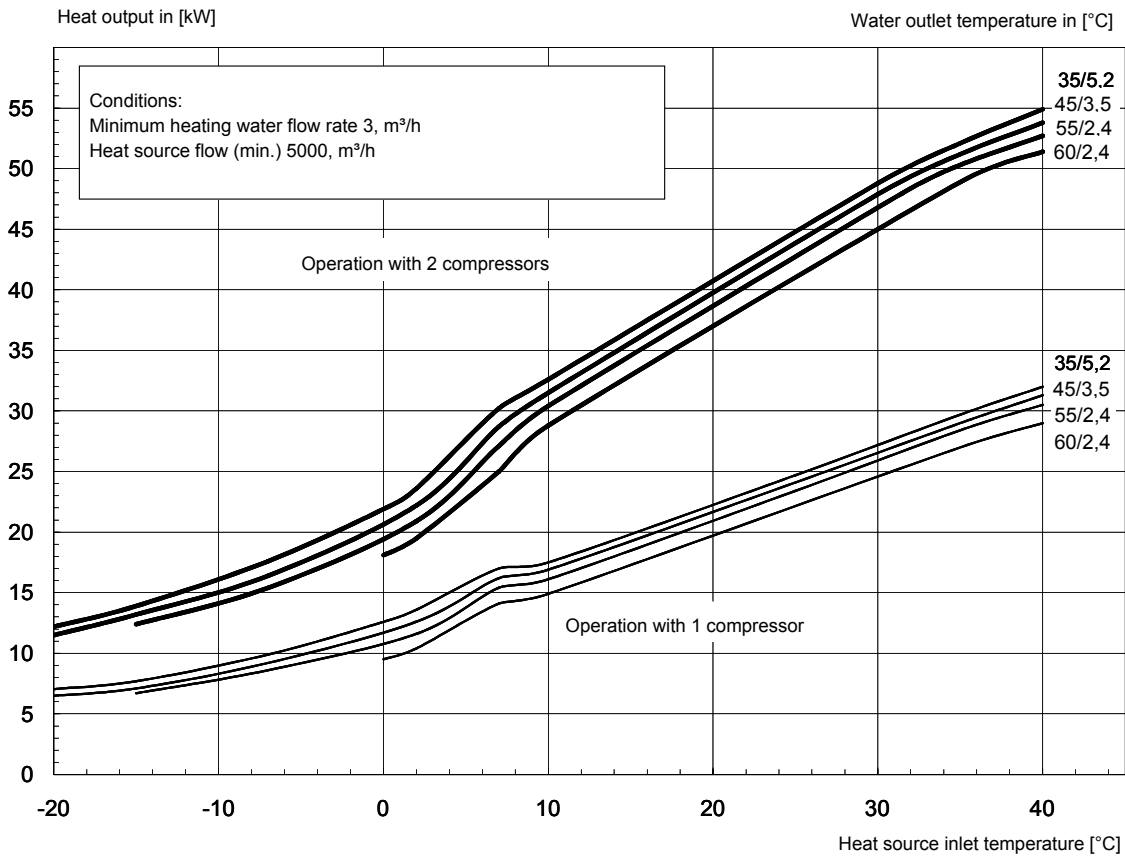
Cooling capacity / energy efficiency ratio (EER) according to EN 14511: 8)11)

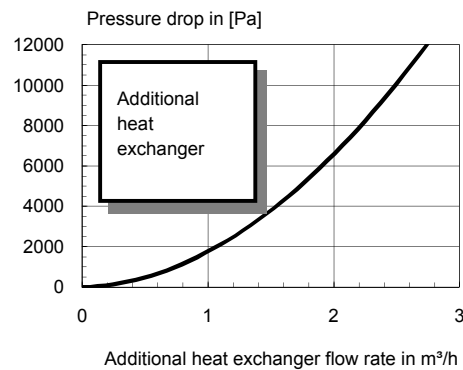
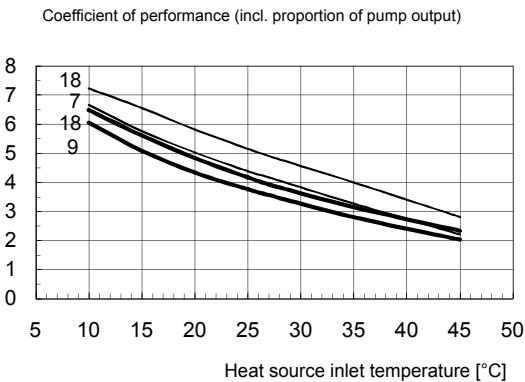
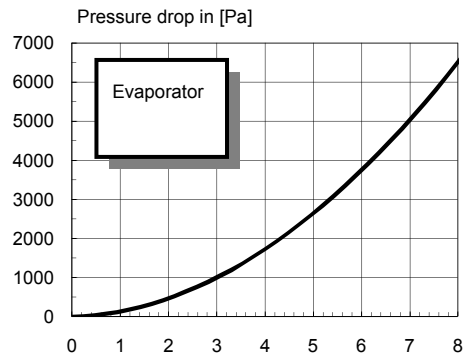
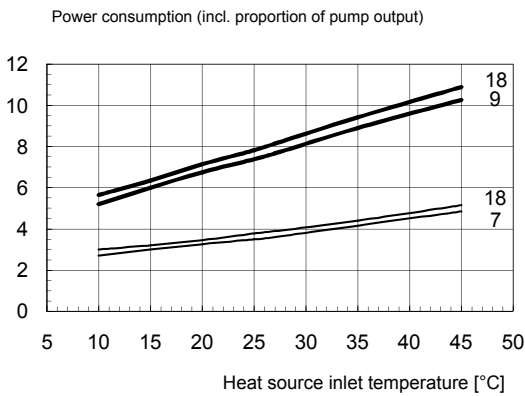
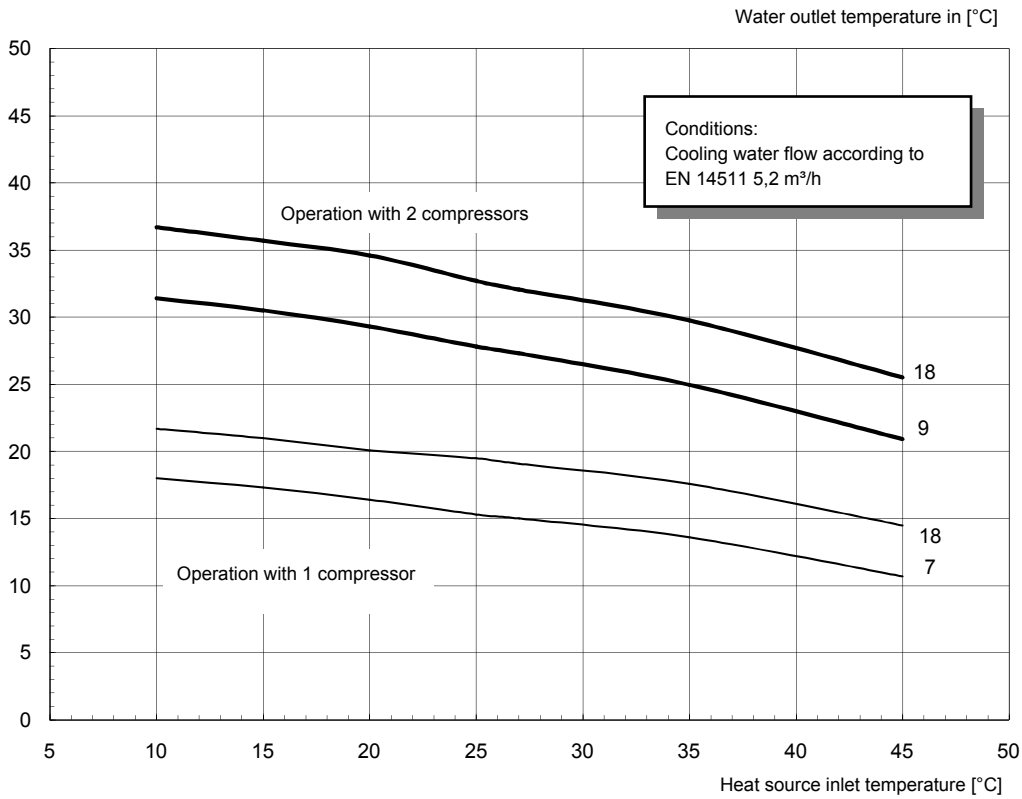
Cooling compressor 1	W7	W18
A27	15,00 kW / 4,20	19,10 kW / 4,90
A35	13,60 kW / 3,30	17,60 kW / 4,00
Cooling compressor 2	W8	W18
A27		32,00 kW / 3,90
A35	24,90 kW / 2,80	29,70 kW / 3,20

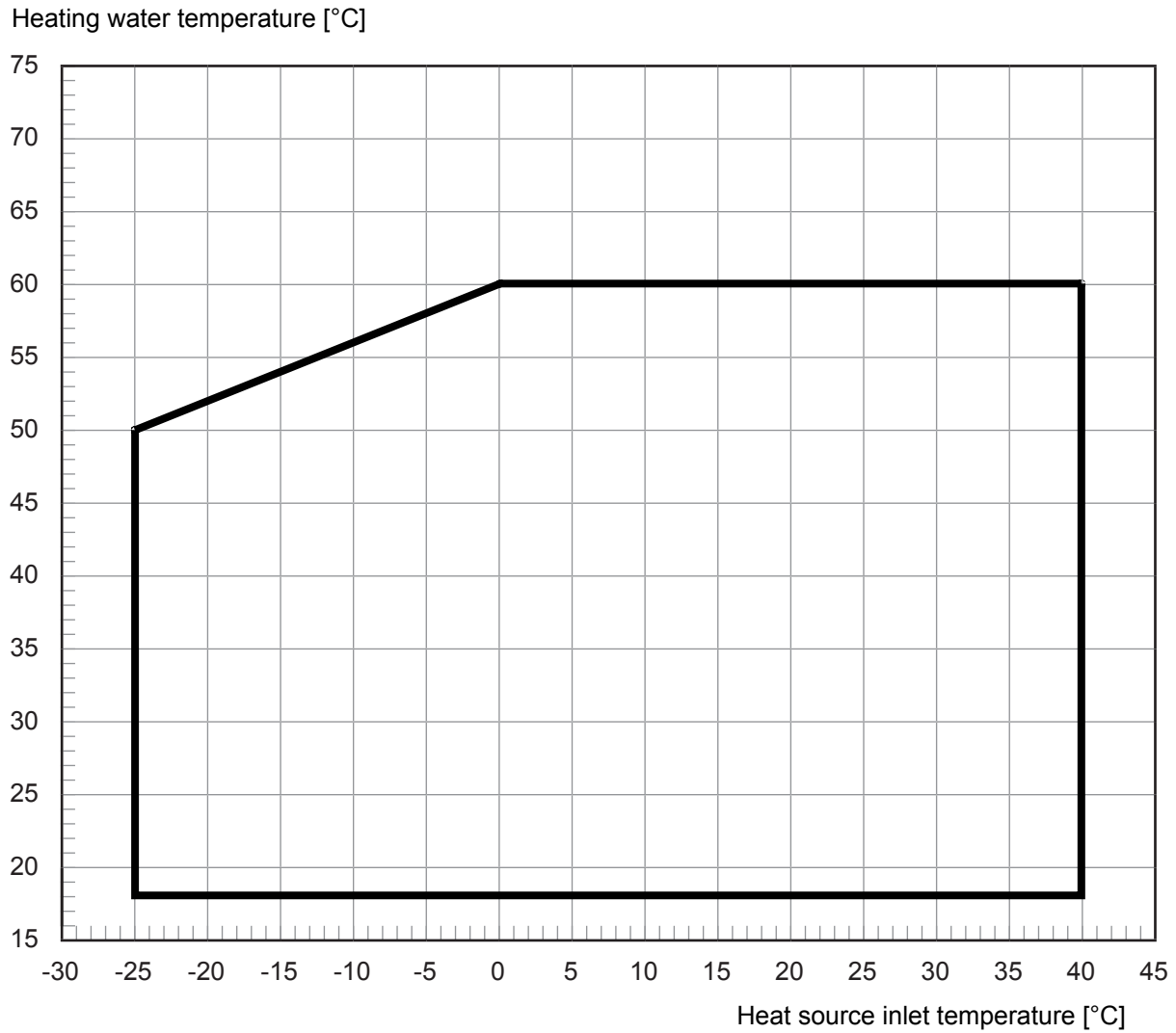
Note:

- 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.

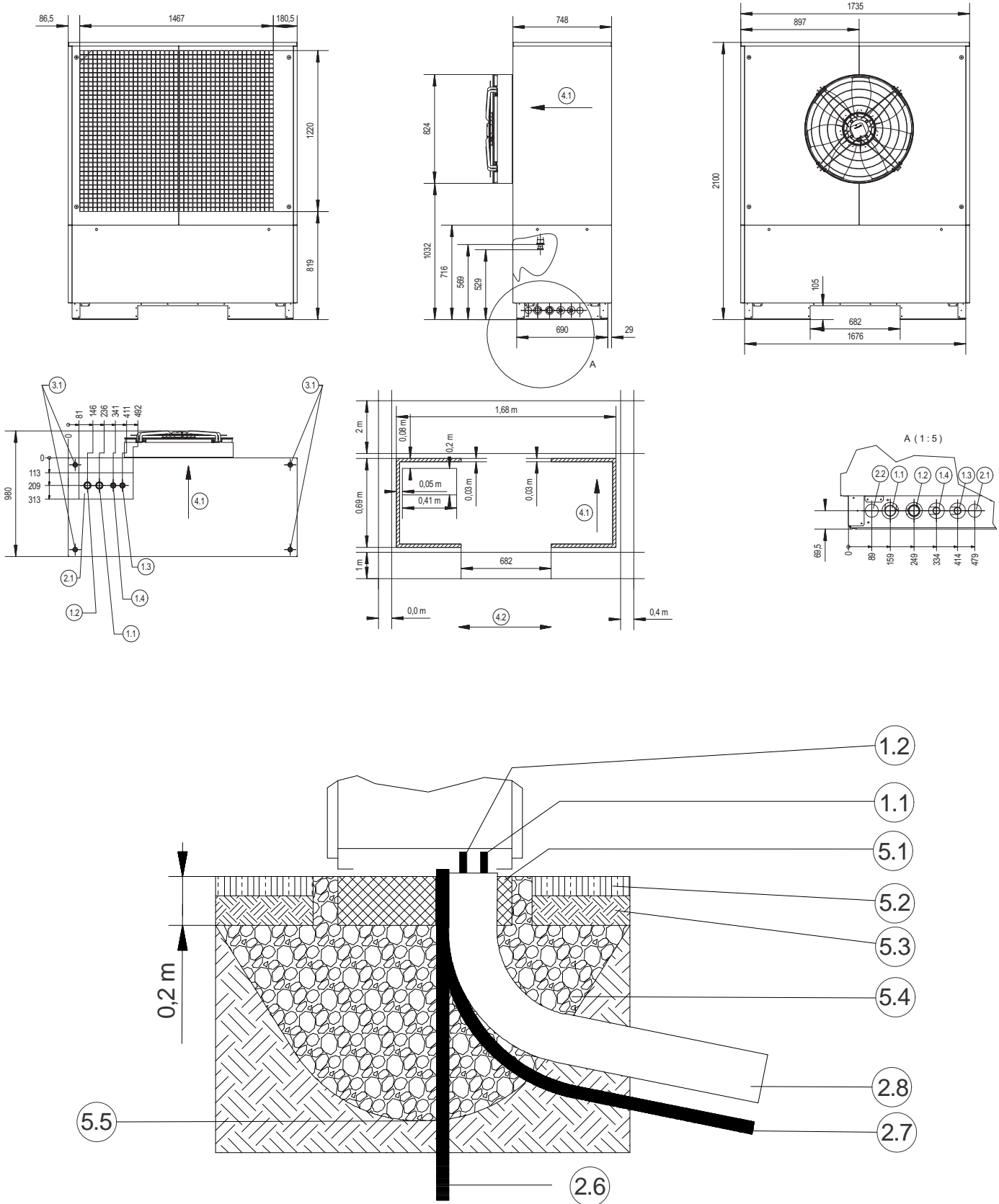
- 2) The specified sound pressure level corresponds to the operating noise of the heat pump in heating operation with a flow temperature of 35°C. The specified sound pressure level represents the free sound area level. The measured value can deviate by up to 16 dB(A), depending on the installation location.
- 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).
- 8) Domestic hot water preparation via additional heat exchanger operating in parallel: The waste heat output and/or the attainable cylinder temperature is dependent on the respective operating point (temperature level/performance level). The waste heat output falls as the cylinder temperature rises.
- 9) The specified coefficients of performance are also achieved in parallel domestic hot water preparation via additional heat exchangers.
- 10) The values specified apply when using the hydraulic 4-way reversing valve, available as an option (observe instructions for accessories). The heat outputs are reduced by approximately 10%, and the COPs by approximately 12%, when the 4-way reversing valve is not used.
- 11) Considerably higher COPs are achieved with cooling operation and waste heat recovery using additional heat exchangers.
- 12) This results in a cooling water temperature difference of 5K +/-1K for the A35/W18, B20/W18 or W20/W18 in 2 compressor operating mode. This is necessary for ensuring waste heat recovery in cooling operation.







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.



1. Hydraulic connections
- 1.1 Flow
- 1.2 Return
- 1.11 Flow (optional)
- 1.21 Return (optional)
- 1.3 Domestic hot water flow
- 1.4 Hot water return
- 1.5 Heat source flow
- 1.6 Heat source return
- 1.7 Filling and drain cock
- 1.8 Combined heating/domestic hot water return
2. Feed-throughs/pipes
- 2.1 Feed-through - condensate pipe
- 2.2 Feed-through - electric wire
- 2.11 Feed-through condensate pipe (optional)
- 2.21 Feed-through electric wire (optional)
- 2.5 Condensate drain
- 2.6 Condensate pipe
- 2.7 Electric empty conduit
- 2.8 District heating pipe
3. Transport/operation
- 3.1 Ring bolt for crane transport
- 3.2 Transport tunnel
- 3.3 Transport opening for carrier pipe
- 3.4 Operator side
4. Air circuit
- 4.1 Direction of air flow
- 4.2 Main wind direction with free-standing installation
- 4.3 Air inlet
- 4.4 Air outlet
- 4.31 Air inlet (optional)
- 4.41 Air outlet (optional)
5. Foundation
- 5.1 Foundation
- 5.2 Green field
- 5.3 Earth
- 5.4 Layer of gravel
- 5.5 Frost line
- 5.6 Contact surface floor frame (all-round)

Notes:

The condensate pipe must lead to the drainage facilities. The frost line can vary according to the climatic region.

The regulations of the countries in question must be observed. For unprotected free-standing installation, heat pumps without deflector hoods must be installed at right angles to the main wind direction.

Depending on the heat pump type, not all points of the legend are included in the drawing.