



## Compact Brine-to-Water Heat Pump

with high flow temperatures for domestic hot water preparation

### Optimal utilisation of the living space in new buildings

The high level of thermal insulation in new buildings makes the use of heat pumps even more efficient. Due to the low heat outputs, heat pumps are the clear winner in investment and operating cost comparisons with other heating systems. And the trend is towards compact heat pumps with integrated domestic hot water preparation for optimal utilisation of the living space. This demand for compact dimensions coupled with a high degree of comfort when it comes to domestic hot water preparation, however, is a challenge for the heat pump technology used.

### The compact heat pump that does not require a heating element

The high-temperature brine-to-water heat pump with hot water cylinder meets the high demands of the technicians and customers. The heat pump contains all components required for direct connection of the heating and brine circuits. With monovalent systems the heat pump fully meets the heating requirements of the building. The heat pump is installed on a separately delivered 200 l hot water cylinder. The heat pump heats the hot water cylinder to max. 60 °C without the use of supplementary electric heating systems. With a desired tapping temperature of 45 °C and fully heated cylinder, approximately 300 litres of hot water can be removed

**Dimplex**

INNOVATIVE HEATING AND COOLING



### Compact brine-to-water heat pumps with domestic hot water preparation

- ✓ Compact design for direct connection of the heating and brine circuits
- ✓ Sound-insulated refrigerating circuit with economiser for high coefficients of performance
- ✓ Hot water temperatures up to 60 °C with heat-pump-only operation
- ✓ Wired ready for use for an unmixed heating circuit
- ✓ Heat pump and hot water cylinder can be transported separately

### Heat pump manager – the intelligent regulation

The heat pump manager monitors the operation of the heat pump and offers all the functions of a modern heating regulation system, such as a remote diagnostics system and timer programs for heating and domestic hot water preparation. Furthermore, this is an energy-optimised way of meeting all heating and domestic hot water requirements. The display integrated into the design screen shows the current operating status as text message. Dynamic menus hide any settings not required for safe and easy operation. The removable control panel can be removed from the heat pump and installed in any position desired by the customer (special accessory).

Compact brine-to-water heat pumps with built-under hot water tank

Order reference		SIKH 9ME	SIKH 6TE	SIKH 9TE
Design		Compact	Compact	Compact
Connection voltage	V	230	400	400
Maximum flow temperature	°C	70	70	70
Heat output according to EN 255 at B0/W35	kW	9,4	6,4	9,4
COP according to EN 225 at B0/W35	-	4,4	4,7	4,7
COP according to EN 14511 at B0/W35	-	4,2	4,5	4,5
COP according to EN 14511 at B0/W45	-	3,4	3,5	3,5
Width	mm	652	652	652
Height	mm	1115	1115	1115
Depth	mm	688	688	688

### Heat pump operation without buffer tank

To ensure the minimum runtime of a brine-to-water heat pump, Dimplex recommends a buffer tank connected in series with a volume of 10 % of the heating water flow of the heat pump per hour. In heat pump heating systems, the underfloor heating system can perform the tasks of the buffer tank connected in series as long as several heating circuits are operated so that they cannot be shut-off. For well-insulated buildings in open-plan design, heat pump regulation should not be based on the external temperature but on the temperature of a reference room. Room temperature regulation of the reference room is in turn carried out via an adjustment of the system temperature with the flow temperatures actually required.