SIH 90TU
Data sheet

Experience Better Living.

High-temperature brine-to-water heat pump for indoor installation.

Heat pump for heating purposes with two performance levels for increased efficiency in partial load operation for indoor installation with integrated heat pump manager WPM Econ5Plus with standard display. Heat pump white textured (similar to RAL 9003). Dirt trap for brine circuit and external sensor (standard NTC-2)in the scope of supply. FWO function for more efficient domestic hot water preparation with increased domestic hot water temperatures and volumes of water to be drawn through optimised tank charging. Brine circulating pump 12 m delivery height at 11 m3/h, flange connection DN 65, installation length 340 mm, heat generator circuit pump 11.5 m delivery height at 6 m3/h, flange connection DN 50, installation length 280 mm. Use of load-variable tariffs (SG Ready) Soft starter, flow and return sensors for the brine and heating circuit integrated. High coefficient of performance through electronic expansion valve, COP booster and electronic pump control depending on the temperature spread in the brine and generator circuit. Sensor monitoring of the refrigeration circuit for a high degree of operational safety and integrated thermal energy metering (display of the calculated quantity of thermal energy for heating, domestic hot water and swimming pool water preparation). Brine circuit manifold must be ordered separately. Variable connection options for brine and heating connections on the back board of the casing. Bivalent or bivalent-renewable operating mode Distribution systems with unmixed and mixed heating circuits Access for service work from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. Universal design with two compressors for output regulation when operating at partial load, optional domestic hot water preparation and flexible expansion options for: A sound-optimised metal casing and the integrated solid-borne sound insulation with free-swinging compressor base plate make direct connection with the heating system possible.



Technical Data

Order reference	SIH 90TU
Heating water flow rate acc. EN 1511	15.4
Heating water flow rate pressure drop according to EN 14511	64800
Heat source flow (min.)	15.5
Nominal power consumption according to EN 14511 at B0/W35	20.4
Maximum electric power consumption	45
Seasonal space heating energy efficiency in average climate conditions (NT)	184
Energy efficiency class with 55 °C flow temperature	A+
Energy efficiency class with 35 °C flow temperature	A+++
Seasonal room heating energy efficiency (high temperature)	115
Connection voltage	3/N/PE ~400 V, 50 Hz
Dimensions (W x H x D)**	1350 x 1890 x 775 mm

Glen Dimplex Deutschland GmbH
Geschäftsbereich
Heating & Ventilation / Dimplex
Am Goldenen Feld 18
D-95326 Kulmbach

T + 49 9221 709 -101
F + 49 9221 709 -339
info@dimplex.de
www.dimplex.de

17.04.2024

WEEE-Reg-Nr. DE 26295273

Technical alterations, delivery possibilities, and errors are subject to change.

SIH 90TU
Data sheet

Experience Better Living.

Order reference	SIH 90TU
Weight	807 kg

* Heating and cooling capacity and coefficients of performance (COP/EER) in accordance with EN 14511
** Please note that additional space is required for pipe connection, operation and maintenance.
*** The fuse protection must be designed as an all-pole disconnecting device (common disconnection of all phases)!

Glen Dimplex Deutschland GmbH
Geschäftsbereich
Heating & Ventilation / Dimplex
Am Goldenen Feld 18
D-95326 Kulmbach

T + 49 9221 709 -101
F + 49 9221 709 -339
info@dimplex.de
www.dimplex.de

17.04.2024

WEEE-Reg-Nr. DE 26295273

Technical alterations, delivery possibilities, and errors are subject to change.

SIH 90TU
System accessories

Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
Heat pump brine monobloc indoor					
High-temperature brine-to-water heat pump for indoor installation.	SIH 90TU	368350	1		
3-way reversing valve DN 50	DWV 50	374800	1		
Domestic hot water cylinder (500l) with temperature sensor	WWSP 556	370080	1		
Accessories hydraulic					
Mixed heating circuit module with temperature sensor	MMH 50	364260	1		
Universal buffer tank (500 l)	PSW 500	339210	1		
Electronically controlled wet-running pump, self-regulating	UPE 120-32K	374740	1		
Electronically controlled circulating pump with coupling relay	UPH 120-50F	379020	1		
Electronically controlled circulating pump with coupling relay	UPH 80-40F	371800	1		
Domestic hot water module/unmixed heating circuit module	WWM 50	364250	1		
Accessories for heating					
Heat pump heater heating/passive cooling, depth 16.5 cm	WPHK 1650100	381220	1		
Heat pump heater heating/passive cooling, depth 16.5 cm	WPHK 1650140	381230	1		
Heat pump heater heating/passive cooling, depth 16.5 cm	WPHK 1650180	381240	1		
Heat pump heater heating/passive cooling, depth 16.5 cm	WPHK 165080	381210	1		
Heat pump heater heating/passive cooling, depth 21.5 cm	WPHK 2150100	381250	1		
Heat pump heater heating/passive cooling, depth 21.5 cm	WPHK 2150140	381260	1		
Heat pump heater heating/passive cooling, depth 21.5 cm	WPHK 2150180	381270	1		
Heat pump heater vertical	WPHKV 1220053	381280	1		

Glen Dimplex Deutschland GmbH
Geschäftsbereich
Heating & Ventilation / Dimplex
Am Goldenen Feld 18
D-95326 Kulmbach

T + 49 9221 709 -101
F + 49 9221 709 -339
info@dimplex.de
www.dimplex.de

17.04.2024

WEEE-Reg-Nr. DE 26295273

Technical alterations, delivery possibilities, and errors are subject to change.

SIH 90TU
System accessories

Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
Accessories domestic hot water					
Flow rate measurement for central domestic hot water heater	DFM 1988-500	377650	1		
Flow rate measurement for central domestic hot water heater	DFM 1988-700	379150	1		
3-way reversing valve DN 50	DWV 50	374800	1		
Electronically controlled circulating pump with coupling relay	UPH 80-40F	371800	1		
Domestic hot water cylinder (500l) with temperature sensor	WWSP 556	370080	1		
Domestic hot water cylinder, 700 litres	WWSP 770	376730	1		
Accessories solar					
400l solar cylinder for heat pump	WWSP 432 SOL	361080	1		
500 l solar cylinder for heat pump	WWSP 540 SOL	361090	1		
Accessories controls					
Outside temperature sensor with casing	FG 3115	336620	1		
Expansion module WPM for a KNX/EIB connection	KNX WPM	376350	1		
Extension for a Modbus RTU connection	LWPM 410	339410	1		
Temperature sensor NTC-10 with metal sleeve	NTC-10M	363600	1		
Extension for an Ethernet network connection	NWPM Touch	378800	1		
Smart RTC+ - intelligent room temperature control	RTM Econ A	367210	1		
Smart RTC+ - intelligent room temperature control	RTM Econ U	367200	1		
Accessories for cooling					
3-way reversing valve DN 50	DWV 50	374800	1		

Glen Dimplex Deutschland GmbH
Geschäftsbereich
Heating & Ventilation / Dimplex
Am Goldenen Feld 18
D-95326 Kulmbach

T + 49 9221 709 -101
F + 49 9221 709 -339
info@dimplex.de
www.dimplex.de

17.04.2024

WEEE-Reg-Nr. DE 26295273

Technical alterations, delivery possibilities, and errors are subject to change.

SIH 90TU
System accessories

Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
Room climate station for temperature and humidity measurement	RKS WPM	342220	1		
Dew point monitor	TPW WPM	350970	1		
Passive cooling controller	WPM Econ PK	360000	1		
Plate heat exchanger for SI 100	WTE 100	358460	1		
Plate heat exchanger for SI 75	WTE 75	358450	1		
Plate heat exchanger, copper-soldered	WTU 100	362390	1		
Plate heat exchanger, copper-soldered	WTU 75	362380	1		
Accessories heat source					
Connecting flange for heating and brine circuits	AF 80	351930	1		
Antifreeze for the brine circuit 200 l	AFN 824	324610	1		
Strap-on thermostat for temperature monitoring	RAT 060I	361470	1		
Low-pressure brine switch	SWPR 200	359470	1		
Brine package for SIH 90TU / SI 130TU	SZB 80F-50	368600	1		
Plate heat exchanger for SI 100	WTE 100	358460	1		

* Additional specific accessories available/required

Important notice

The combination of components and the specified quantities represent a non-binding example system that must be reviewed and, if necessary, adjusted individually.
The pumpsizing needs to be checked according to the system's pressure loss and the minimum heating water flow rate of the heat pump.

Glen Dimplex Deutschland GmbH
Geschäftsbereich
Heating & Ventilation / Dimplex
Am Goldenen Feld 18
D-95326 Kulmbach

T + 49 9221 709 -101
F + 49 9221 709 -339
info@dimplex.de
www.dimplex.de

17.04.2024

WEEE-Reg-Nr. DE 26295273

Technical alterations, delivery possibilities, and errors are subject to change.