

SI 50TU

Data sheet



Experience Better Living.

Highly efficient 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 and integrated heat pump manager WPM Econ5Plus with standard display. Heat pump white textured (similar to RAL 9003). Brine circulating pump 12 m delivery height at 6 m³/h, flange connection DN 40, installation length 250 mm, heat generator circuit pump 12 m delivery height at 5 m³/h (thread connection R 1 1/4", (pump thread 2"), inside micrometer 180 mm! Use of load-variable tariffs (SG Ready) 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. 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. Dirt trap for brine circuit, external sensor (standard NTC-2), circulating pumps for brine and heat generator circuit in the scope of supply (observe the free compression). Soft starter, flow and return sensors for the brine and heating circuit integrated. 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). Bivalent or bivalent-renewable operating mode Variable connection options for brine and heating connections on the back board of the casing. Brine package SZB must be ordered separately. Access for service work from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. Distribution systems with unmixed and mixed heating circuits 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. Universal design with two compressors for output regulation when operating at partial load, optional domestic hot water preparation and flexible expansion options for:



Technical Data

Order reference	SI 50TU
Heating water flow rate acc. EN 1511	8.8
Heating water flow rate pressure drop according to EN 14511	5000
Heat source flow (min.)	9.6
Nominal power consumption according to EN 14511 at B0/W35	10.4
Maximum electric power consumption	18.4
Seasonal space heating energy efficiency in average climate conditions (NT)	213
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)	136
Dimensions (W x H x D)**	1000 x 1665 x 805 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

SI 50TU

Data sheet



Experience Better Living.

Order reference	SI 50TU
Weight	465 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

SI 50TU

System accessories



Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
Heat pump brine monobloc indoor					
Highly efficient brine-to-water heat pump for indoor installation.	SI 50TU	368460	1		
Dual differential pressureless manifold	DDV 50	364240	1		
3-way reversing valve DN 50	DWV 50	374800	1		
Universal buffer tank (500 l)	PSW 500	339210	1		
Brine package for SI 50TU	SZB 65F-25	368580	1		
Accessories hydraulic					
Dual differential pressureless manifold	DDV 50	364240	1		
3-way ball valve DN 50	DWK 50	364710	1		
DN 50 double-sphere rubber expansion joint	KOMP 50	362080	1		
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 80-40F	371800	1		
Manifold bar for DN 50 modules	VTB 50	367730	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		



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

SI 50TU

System accessories

Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
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		
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		
Pump unit DN 32 for direct connection of the domestic hot water cylinder	WPG 32	356040	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		



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

SI 50TU

System accessories



Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
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		
Passive cooling station with cooling controller and 3-way reversing valve DN 40	PKS 25 Econ	362940	1		
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 50	WTE 50	358440	1		
Plate heat exchanger, copper-soldered	WTU 50	362370	1		
Accessories heat source					
Connecting flange for heating and brine circuits	AF 65	351920	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 SI 50TU	SZB 65F-25	368580	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

SI 50TU

System accessories



Experience Better Living.

Description	Order-ref.	Article-number	Example Piece	Units	Price
Plate heat exchanger for SI 50	WTE 50	358440	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