

# SI 18TU

## Data sheet

Experience Better Living.

### Highly efficient brine-to-water heat pump for indoor installation.

Heat pump for heating purposes for indoor installation with integrated heat pump manager WPM Econ5Plus with touch display. Heat pump white textured (similar to RAL 9003). Dirt trap for installation in the brine circuit (return to the heat pump) included in the scope of supply. Use of load-variable tariffs (SG Ready) High-efficiency brine package with electronic control of the brine pump and the brine circuit manifold must be ordered separately. Sound-optimised through encapsulated compressor housing and free-swinging compressor baseplate. High coefficients of performance (COPs) thanks to electronic expansion valve, COP booster and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. 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 and domestic hot water preparation on the heat pump manager). Variable connection options for brine and heating connections on the back board of the casing. Distribution systems with unmixed and mixed heating circuits Bivalent or bivalent-renewable operating mode Universal design with optional domestic hot water preparation and flexible expansion possibilities for: Flow and return sensor integrated, external sensor (standard NTC-2) in the scope of supply. Integrated solid-borne sound insulation for direct connection to the heating system.



### Technical Data

Order reference	SI 18TU
Heating water flow rate acc. EN 1511	3
Heating water flow rate pressure drop according to EN 14511	18000
Heat source flow (min.)	4.3
Nominal power consumption according to EN 14511 at B0/W35	3.72
Maximum electric power consumption	7.2
Seasonal space heating energy efficiency in average climate conditions (NT)	196
Seasonal room heating energy efficiency (high temperature)	140
Energy efficiency class with 55 °C flow temperature	A++
Energy efficiency class with 35 °C flow temperature	A+++
Connection voltage	3/N/PE ~400 V, 50 Hz
Dimensions (W x H x D)**	650 x 845 x 665 mm
Weight	163 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)!



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## System accessories



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Description	Order-ref.	Article-number	Example Piece	Units	Price
<b>Heat pump brine monobloc indoor</b>					
Highly efficient brine-to-water heat pump for indoor installation.	SI 18TU	364120	1		
Dual differential pressureless manifold	DDV 32	348450	1		
3-way reversing valve DN 32	DWV 32	374780	1		
Free-standing buffer tank 200 l	PSW 200	339830	1		
Brine circuit accessories for SI 18TU	SZB 180E	365990	1		
Domestic hot water cylinder (400 l) with temperature sensor	WWSP 442	372840	1		
<b>Accessories hydraulic</b>					
Connection hose 1¼" (32 x 5.5 mm)	AS 976-1	330530	1		
Dual differential pressureless manifold	DDV 32	348450	1		
3-way ball valve DN 32	DWK 32	364690	1		
Immersion heater pipe assembly	HDLR 450	337450	1		
Hydraulic tower 300 litres	HPK 300	371600	1		
DN 32 double-sphere rubber expansion joint	KOMP 32	362060	1		
Transitional screw connection 1 1/4" internal thread to 1" external thread	KUP G1	366900	1		
Transitional screw connection 1 1/4" internal thread to R 1" GDD-01-375810	KUP G32	375810	1		
Mixer module for bivalent systems	MMB 32	367780	1		
Mixed heating circuit module	MMH 32	367790	1		
Free-standing buffer tank 200 l	PSW 200	339830	1		
Universal buffer tank (500 l)	PSW 500	339210	1		



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Description	Order-ref.	Article-number	Example Piece	Units	Price
Electronically controlled wet-running pump, self-regulating	UPE 100-32K	374730	1		
High-efficiency circulating pump DN 32 with coupling relay	UPH 90-32	370420	1		
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-100	362530	1		
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-150	362540	1		
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-200	362550	1		
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-300	362560	1		
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-50	362520	1		
Manifold bar DN 32	VTB 32-2	374920	1		
Manifold bar DN 32	VTB 32-3	374930	1		
Domestic hot water module/unmixed heating circuit module	WWM 32	367800	1		
<b>Accessories for heating</b>					
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		
<b>Accessories domestic hot water</b>					



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Description	Order-ref.	Article-number	Example Piece	Units	Price
Flow rate measurement for central domestic hot water heater	DFM 1988-400	379110	1		
Flow rate measurement for central domestic hot water heater	DFM 1988-500	377650	1		
3-way reversing valve DN 32	DWV 32	374780	1		
High-efficiency circulating pump DN 32 with coupling relay	UPH 90-32	370420	1		
Pump unit DN 32 for direct connection of the domestic hot water cylinder	WPG 32	356040	1		
Domestic hot water cylinder (400 l) with temperature sensor	WWSP 442	372840	1		
Domestic hot water cylinder (500l) with temperature sensor	WWSP 556	370080	1		
<b>Accessories solar</b>					
400l solar cylinder for heat pump	WWSP 432 SOL	361080	1		
500 l solar cylinder for heat pump	WWSP 540 SOL	361090	1		
<b>Accessories controls</b>					
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		
Heat pump manager incl. software adaptation for use as a master controller	WPM Touch Master	379130	1		
<b>Accessories for cooling</b>					



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Passive cooling station with cooling controller and 3-way reversing valve DN 25	PKS 14 Econ	362930	1		
Room climate station for temperature and humidity measurement	RKS WPM	342220	1		
Dew point monitor	TPW WPM	350970	1		
<b>Accessories heat source</b>					
Antifreeze for the brine circuit 20 l	AFN 825	328610	1		
Brine circuit manifold connection package	AP SVT	348900	1		
DN 40 double-sphere rubber expansion joint	KOMP 40	362070	1		
Transitional screw connection 1 1/2" internal thread to R 1 1/4"  GDD-01-370090	KUP G40	370090	1		
Strap-on thermostat for temperature monitoring	RAT 060I	361470	1		
Brine circuit manifold (2-fold) with clamping ring fittings	SVT 200KV	363860	1		
Brine circuit manifold (3-fold) with clamping ring fittings	SVT 300KV	363870	1		
Brine circuit manifold (4-fold) with clamping ring fittings	SVT 400KV	363880	1		
Brine circuit accessories for SI 18TU	SZB 180E	365990	1		
Plate heat exchanger for SIH 20	WTE 20	358400	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.



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