

Reversible air-to-water heat pump with waste heat recovery

Max. flow temperature: 58 °C
 Casing colour: White (similar to RAL 9003)
 Brown-red design screen (RAL 3011)

Heat pump for heating and cooling for indoor installation with integrated WPM 2007 R controller. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air circuit enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial fan and vibration-isolated compressor. High coefficients of performance (COP) using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Reversible refrigeration circuit with additional heat exchanger for higher domestic hot water temperatures in heating operation and waste heat recovery in cooling operation. Universal design with flexible expansion options for:

- Bivalent operation (bivalent-renewable not possible)
- Combined distribution systems for heating and cooling
- Unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Soft starter, integrated flow and return sensors; external sensor (standard NTC-2) included in the scope of supply.



Technical data

Dimplex Reversible air-to-water heat pump with waste heat recovery (Low temperature)	
Order reference	LI 16TER+
Casing colour	White (similar to RAL 9003)
Max. flow temperature	58 °C
Lower operating limit heat source (heating operation) / Upper operating limit heat source (heating operation)	-25 to 35 °C
Lower operating limit heat source (cooling operation) / Upper operating limit heat source (cooling operation)	15 to 40 °C
Standard temperature spread heating EN 14511	5,0 K
Heat output with 1 compressor / COP A7/W35*	10,5 kW / 2,9
Heat output 1 compressor / COP A2/W35*	12,7 kW / 3,2
Heat output with 1 compressor / COP A7/W35*	14,9 kW / 3,6
Heat output with 1 compressor / COP A10/W35*	16,6 kW / 3,9
Standard temperature spread cooling EN 14511	5,0 K
Cooling capacity 1 compressor / COP A35/W7*	10,6 kW / 2
Cooling capacity 1 compressor / COP A27/W18*	16,4 kW / 2,8
Nominal power consumption according to EN 14511 at A2/W35	4 kW
Sound power level device	62 dB (A)
Sound pressure level in 1 m (indoors)	52 dB (A)
Refrigerant / Amount of refrigerant	R404A / 5,7 kg
Heat source flow (min.)	4000 m³/h
Max. heating water flow rate / Pressure drop	2,6 m³/h / 14600 Pa
Dimensions (W x H x D)**	750 x 1570 x 880 mm
Weight	270 kg
Connection voltage	3/N/PE ~400 V, 50 Hz
Starting current with soft starter	25 A
Fuse protection	C 20 A
Type of defrosting	Reverse circulation
Connection heating	1 ¼ inch

*Heat output and COP according to EN 14511 at A2/W35 (A2 = air intake temp. +2 °C, W35 = heating water outlet temp. +35 °C)

**Please note that additional space is required for pipe connections, operation and maintenance.

Description	Order ref.	Article number	Sample item	Item	Price
Heat pumps					
Reversible air-to-water heat pump with waste heat recovery	LI 16TER+	352780	1		
Elasticated sound insulation underlay strips	SYL 250	352260	2		
DN 32 double-sphere rubber expansion joint	KOMP 32	362060			
DN 32 dirt trap	SMF 32	362140			
Heat source accessories					
Long air duct	LKL 700	339770			
Short air duct	LKK 700	339780			
90° air duct bend	LKB 700	339790			
90° air duct bend	LKB 700A	366160	1		
Installation hardware	VSK 700	341220			
Sealing collar 700	DMK 700	340280	1		
Deflector hood	LUH 700	358630			
Rain guard for LI	RSG 700	340240	1		
Hydraulic accessories					
Built-under buffer tank (140 l) for LI 11-20	PSP 140E	353970	1		
Immersion heater 4.5 kW; ~230 V	CTHK 630	363610			
Immersion heater 2.0 kW; ~230 V	CTHK 631	336180			
Immersion heater 2.9 kW; ~400 V	CTHK 632	335910			
Immersion heater 4.5 kW; ~400 V	CTHK 633	322140			
Immersion heater 6.0 kW; ~400 V	CTHK 634	322150	1		
Immersion heater 7.5 kW; ~400 V	CTHK 635	322160			
Immersion heater 9.0 kW; ~400 V	CTHK 636	322170			
Free-standing buffer tank 200 l*	PSW 200	339830			
Universal buffer tank (500 l)*	PSW 500	339210			
Compact manifold with overflow valve	KPV 25	346590	1		
EB KPV expansion module	EB KPV	348650	1		
Dual differential pressureless manifold	DDV 25	358390			
Circulating pump for heating water	UP 60	340300	1		
Circulating pump for heating water	UP 80	340310			
Manifold bar	VTB 25	339870			
Domestic hot water module/unmixed heating circuit module	WWM 25	346600			
Mixed heating circuit module with temperature sensor	MMH 25	348640	1		
Electronically controlled circulating pump for heating water	UPE 60	358870	1		
Electronically regulated wet running pump (0-10 V) with coupling relay	UPE 70-25	362790			
Mixer module for bivalent systems	MMB 25	348880			
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-50	362520			
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-100	362530			
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-150	362540			
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-200	362550			
Ready-for-use DN 32 stainless steel Wellflex pipe	VSE 32-300	362560			
Heating accessories					
Fan convectors heating 800 W	SRX 080M	359080			
Fan convectors heating 1200 W	SRX 120M	359090			
Fan convectors heating 1400 W	SRX 140M	359100			
Fan convectors heating 1800 W	SRX 180M	359110			
Immersion heater pipe assembly*	HDLR 450	337450			
DHW preparation accessories					
Domestic hot water cylinder (400 l) with temperature sensor	WWSP 880	337880	1		
Flange heater for domestic hot water	FLH 60	338060			
Flange heater for domestic hot water	FLHU 70	338070	1		
Flange heater for domestic hot water	FLH 90	366130			
FLH 25M flange heater	FLH 25M	349430			
Safety valve combination	SVK 852	326660			
Design domestic hot water cylinder with sheet metal coverings and temperature sensor*	WWSP 442E	353370			
Domestic hot water cylinder (500 l) with temperature sensor*	WWSP 900	339220			
500 l solar cylinder for heat pump	WWSP 540 SOL	361090			
Manifold bar	VTB 25	339870	1		
Domestic hot water module/unmixed heating circuit module	WWM 25	346600	1		

Description	Order ref.	Article number	Sample item	Item	Price
Pump unit DN 25 for direct connection of the domestic hot water cylinder	WPG 25	356030			
Circulating pump for heating water	UP 80	340310	1		
Control accessories					
Extension for an Ethernet network connection	NWPM	356960			
Extension for a KNX/EIB bus connection	EWPM	356970			
Extension for a Modbus connection	LWPM 410	339410			
Swimming pool/remote fault indicator relay module	RBG WPM	339700			
MS PGD wall mounting kit	MS PGD	353810			
Remote control for WPM 2006/2007/EconPlus/R*	AP PGD	356570			
External temperature sensor with casing	FG 3115	336620			
Temperature sensor NTC-10 with metal sleeve	NTC-10M	363600			
Thermostat for heating and domestic hot water	KRRV 003	322070			
Control accessories (cooling)					
Room climate station for temperature and humidity measurement	RKS WPM	342220	1		
Room temperature controller heating/cooling*	RTK 601U	355610			
Room temperature controller heating/cooling	RTK 602U	355620			
Dew point monitor*	TPW WPM	350970			

* Other specific accessories available / required

Important information:

The combination of the components and the quantities indicated represent a non-binding sample system, which needs to be tested and individually adapted as required. Pump dimensioning must be reviewed according to the pressure loss of the system and the minimum heating water flow rate of the heat pump.