

Reversible air-to-water heat pump with additional heat exchanger

Order reference: LA 16ASR Installation location: Outdoors

Flow temperature max 55 °C Casing, powder-coated

Air-to-water heat pump for outdoor installation with outside temperature controlled heat pump controller (manager) and reversible refrigeration cycle for heating and cooling. An additional heat exchanger increases the hot water temperature in the heating mode and uses the waste heat generated in the cooling mode; sound-optimized through use of low-noise sickle-blade axial fans and air deflection hoods; stainless steel base frame; energy-efficient defrosting through cycle reversal and inclined evaporator. Return sensor and outside temperature sensor supplied with the unit, soft starter is integrated. Electric connecting cable EVL..R between heat pump and heat pump controller must be ordered separately.

The heat pump complies with the valid standards and safety regulations as well as the Technical Specifications for Electrical Installations (TAB) of the electrical utility companies and is VDE certified.



Technical data LA 16ASR

Order reference		LA 16ASR		
Set-up / Colour		Outdoors / White aluminium		
Temperature operating limits for heating water / Air		55 °C / -20 °C		
Temperature operating limits for air		-20 °C to 35 °C		
Temperature operating limits for cooling	ng limits for cooling			
Heat output / COP at A-7/W35*	kW/-	10,60 / 3,00		
Heat output / COP at A+2/W35*	kW/-	12,80 / 3,40		
Heat output / COP at A+7/W35*	kW/-	15,10 / 3,80		
Heat output / COP at A+10/W35*	kW/-	16,70 / 4,10		
Cooling capacity / COP at A+27/W18*	kW/-	16,40 / 2,80		
Cooling capacity / COP at A+35/W8*	kW/-	11,10 / 2,10		
Electrical nominal power consumption at A+2/W35	kW	3,00		
Sound power level	db(A)	64		
Sound pressure level at a distance of 10 m (air outlet side)	db(A)	34		
Sound pressure level at a distance of 1 m (air outlet side)	db(A)	51		
Refrigerant R404A	kg	5,70		
Flow rate (heat source)	m³/h	4000		
Heating water flow rate with an int. pressure differential of	m³/h / Pa	1.4 / 4500		
Dimensions (W x D x H)**	mm	1550 x 850 x 1570		
Weight (incl. packing)	kg	289		
Control voltage	V	230		
pply voltage		3/PE~400V, 50 Hz		
Starting current with soft starter	A	25		
Fuse	Α	20		
Defrosting / type of defrosting		Reverse cycle		
Device connections for heating		1"		

^{*} The specified values have the following meaning, e.g. A+2/W35: heat source temperature +2 °C, heat outlet temperature 35 °C.

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



Description	Order ref.	Article	Sample item	Item	Price
		number			
Heat pumps					
Reversible air-to-water heat pump with additional heat exchanger	LA 16ASR	340090	1		
Control line for heating/cooling heat pump manager (10 m)	EVL 10 R	342510	1		
Control line for heating/cooling heat pump manager (20 m)	EVL 20 R	342520			
Control line for heating/cooling heat pump manager (30 m)	EVL 30 R	342530			
Hydraulic accessories					
Floor-mounted buffer tank (200 I)	PSW 200	339830	1		
2 kW immersion heater for back-up heating	CTHK 631	336180	'		
2.9 kW immersion heater for back-up heating	CTHK 632	335910			
4.5 kW immersion heater for back-up heating	CTHK 633	322140	2		
6 kW immersion heater for back-up heating	CTHK 634	322150	_		
Universal buffer tank (500 I)*	PSW 500	339210			
Immersion heater pipe assembly*	HDLR 450	337450			
3 kW radiator	HCT 300	351210			
Compact manifold with overflow valve	KPV 25	346590	1		
Differential pressureless manifold extension module	EB KPV	348650	1		
Circulating pump for main heat pump circuit	UP 60	340300	1		
Circulating pump for main heat pump circuit	UP 80	340310			
Dual differential pressureless manifold*	DDV 32	348450			
Manifold bar for connecting two heating circuits	VTB 25	339870			
Unmixed heating circuit module*	WWM 25	346600			
Mixed heating circuit with temperature sensor	MMH 25	348640	1		
Circulating pump depending on heating system pressure drop	bauseits				
Mixer module for bivalent systems	MMB 25	348880			
Fan convector for heating/cooling with integrated thermostat*	HL 11C	351730			
Fan convector for heating/cooling with integrated thermostat*	HL 16C	351740			
Fan convector for heating/cooling with integrated thermostat*	HL 26C	351760			
Fan convector for heating/cooling with integrated thermostat*	HL 36C	351760			
Fan convector for heating/cooling with external thermostat*	HL 11SK	351770			
Fan convector for heating/cooling with external thermostat*	HL 16SK	351780			
Fan convector for heating/cooling with external thermostat*	HL 26SK	351790			
Fan convector for heating/cooling with external thermostat*	HL 36SK	351800			
DHW preparation accessories					
Hot water cylinder (400 l) with temperature sensor	WWSP 880	337880	1		
6 kW flange heater for hot water cylinder	FLH 60	338060			
2/2.7/4 kW flange heater for hot water cylinder	FLHU 70	338070	1		
Flange heater for hot water cylinder 230 V/2.5 kW	FLH 25M	349430			
Safety valve combination	SVK 852	326660			
Solar station for hot water	SST 25	348430			
Hot water cylinder (500 I) with temperature sensor*	WWSP 900	339220			
Hot water module	WWM 25	346600	1		
Circulating pump for main heat pump circuit	UP 80	340310	1		
Thermostat for heating and domestic hot water	KRRV 003	322070			
Control accessories					
External temperature sensor with casing	FG 3115	336620			
Heat pump manager remote control*	FWPM 470	337470			
Remote diagnostics hardware package	RDS	353790			
Remote diagnostics hardware package (serial)	LDS	353770			
Remote diagnostics hardware package (USB)	LDS USB	353780			
Control accessories (cooling)					
Room climate control system for temperature and humidity	RKS WPM	342220	1		
measurement					
Heating/cooling on/off room temperature controller*	RTK 501	343080			
Heating/cooling on-off room temperature controller in flat switch	RTK 501 U	350960			
mounting frame for flush mounting*					
Extended dew point monitoring*	TPW WPM	350970			
Start-up (no discount available)					
Heat pump (heating only) start-up	IN 01 WP	341750	1		
* Other specific accessories available / required	II V O I VVI	UT 17 UU			

^{*} Other specific accessories available / required

Notes:

Room climate control station and mixer module enable silent cooling via panel heating systems.

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System accessories LA 16ASR



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.

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