Medium-temperature air-to-water heat pumps

Order reference: LA 11PS

Installation location: Outdoors
Flow temperature max 65 °C
Casing, powder-coated

Medium-temperature air-to-water heat pumps for outside installation with external temperature controlled WPM 2006 plus heat pump manager; sound-optimised through the use of low-noise crescent wing axial-flow fans and air deflection covers; stainless steel base frame; energy-efficient hot gas defrosting. Integrated soft starter; return flow sensor and external temperature sensor included in the scope of supply.

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.

Technical data LA 11PS

Dimplex Medium-temperature air-to-water heat pumps (Medium temperature)		
Order reference		**LA 11PS**
Set-up / Colour		Outdoors / White aluminium
Temperature operating limits for heating water / Air		65 °C / -25 °C
Temperature operating limits for air		-25 °C to 35 °C
Heat output / COP at A-7/W35*	kW/-	6,70 / 2,40
Heat output / COP at A+2/W35*	kW/-	9,20 / 3,10
Heat output / COP at A+7/W35*	kW/-	11,50 / 3,80
Heat output / COP at A+10/W35*	kW/-	12,50 / 4,10
Electrical nominal power consumption at A+2/W35	kW	2,98
Sound power level	db(A)	64
Sound pressure level at a distance of 10 m (air outlet side)	db(A)	34
Refrigerant R290	kg	1,50
Flow rate (heat source)	m³/h	4000
Heating water flow rate with an int. pressure differential of	m³/h / Pa	1.1 / 2600
Dimensions (W x D x H)**	mm	1550 x 850 x 1570
Weight (incl. packing)	kg	259
Control voltage	V	230
Supply voltage		3/PE~400V, 50 Hz
Starting current with soft starter	A	30
Fuse	A	16
Defrosting / type of defrosting		
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.
** Please note that additional space is required for pipe connections, operation and maintenance.

Description	Order ref.	Article number	Sample item	Item	Price
Heat pumps					
Medium-temperature air-to-water heat pumps	LA 11PS	353320	1		
Heat pump manager control line (10 m)	EVL 996-1	321990	1		
Heat pump manager control line (20m)	EVL 997-1	322000			
Heat pump manager control line (30m)	EVL 998-1	322010			
Hydraulic accessories					
1" connecting hose (10 m)*	AS 976	322180			
Floor-mounted buffer tank (200 l)	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			
6 kW immersion heater for back-up heating	CTHK 634	322150	1		
Universal buffer tank (500 l)*	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			
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			
Mixer module for bivalent systems	MMB 25	348880			
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 (300 l) with temperature sensor	WWSP 332	346610	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			
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 (400 l) with temperature sensor*	WWSP 880	337880			
Hot water cylinder (500 l) with temperature sensor*	WWSP 900	339220			
Combination cylinder for heating and DHW preparation*	PWS 332	348620			
Manifold bar for KPV 25 and HHM 25 connection	VTB 25	339870	1		
Hot water module	WWM 25	346600	1		
Circulating pump for main heat pump circuit	UP 60	340300	1		
Circulating pump for main heat pump circuit	UP 80	340310			
Combi cylinder for heating and domestic hot water preparation with central flow*	PWD 750	349100			
Thermostat for heating and domestic hot water	KRRV 003	322070			
Control accessories					
Swimming pool / remote fault indicator relay module	RBG WPM	339700			
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			
Start-up (no discount available)					
Heat pump (heating only) start-up	IN 01 WP	341750	1		

* 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.

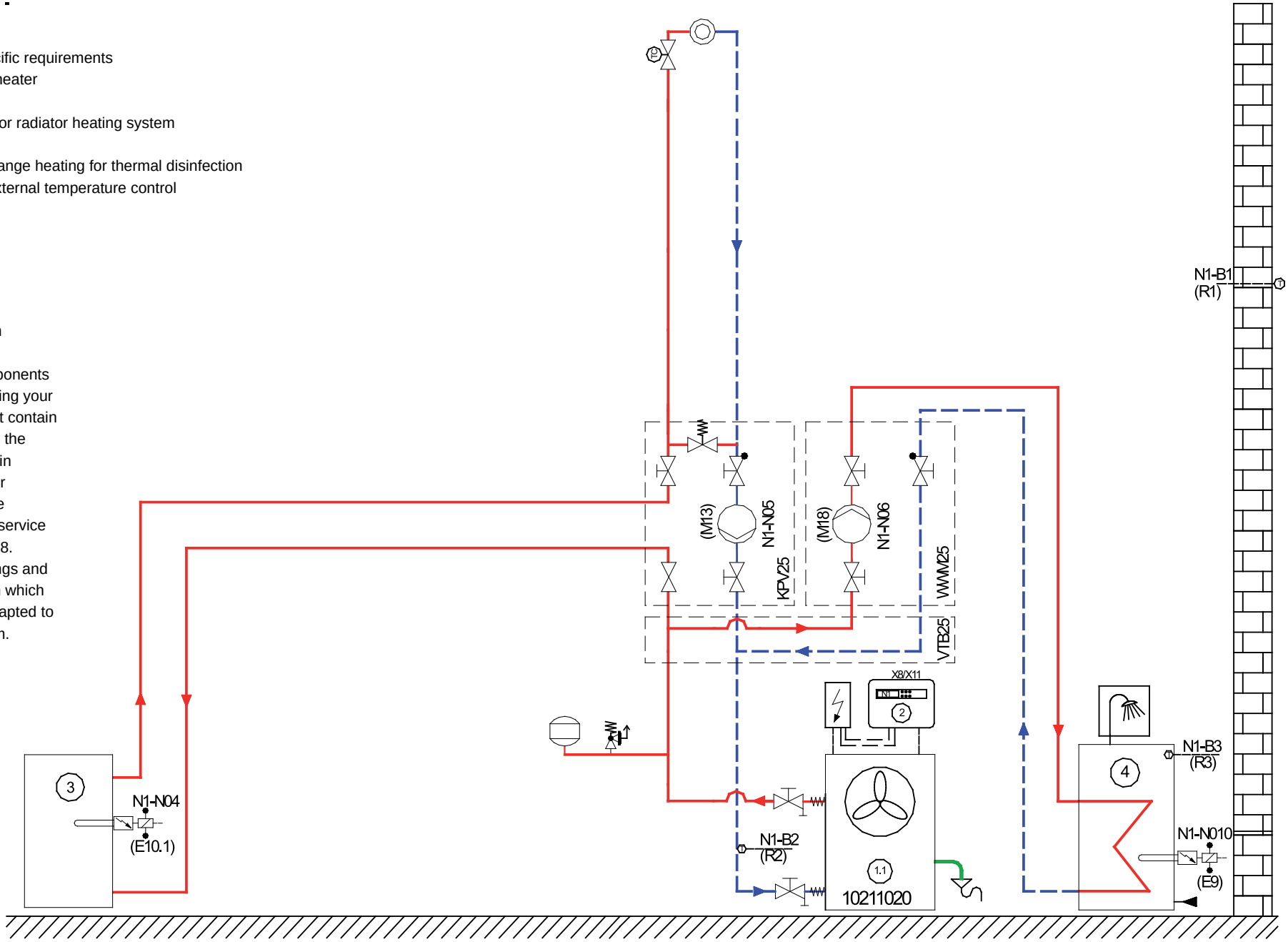
Air-to-water heat pump, Integration Diagram, Heat pump and immersion heater

SELECTED STEPS:

1. Air-to-water heat pump
2. Universal for customer-specific requirements
3. Heat pump and immersion heater
4. Overflow valve
5. 1 heating circuit for a panel or radiator heating system
6. Without cooling
7. DHW with heat pump and flange heating for thermal disinfection
8. Heat pump manager with external temperature control

Note:

The given hydraulic integration schematic is a schematic representation of the key components and serves as an aid for planning your customized system. It does not contain all the required safety devices, the components needed to maintain constant pressure, or any other additional valves which may be required for maintenance and service work as stipulated by EN 12828.
The heat pump manager settings and any external regulation system which may be connected must be adapted to the present integration diagram.



Glen Dimplex Deutschland GmbH
Dimplex Division
Am Goldenen Feld 18
95326 Kulmbach

Subject to change and errors!

E-mail: dimplex@dimplex.de
Internet: www.dimplex.de

Internet: 25.07.2007

Phone: +49 (0)9221 709-201
Fax: +49 (0)9221 709-339

Legend:

1.	Heat Pump
1.1	Air-to-water heat pump
1.2	Brine-to-water heat pump
1.3	Water-to-water heat pump
1.4	Reversible air-to-water heat pump
1.5	Reversible brine-to-water heat pump
1.6	Reversible water-to-water heat pump
2.	Heat pump manager
3.	Buffer tank
3.1	Parallel buffer tank
4.	Hot water cylinder
5.	Swimming pool heat exchanger
6.	Passive cooling station with cooling controller N6
7.	Heating and silent or dynamic cooling
8.	Fan convector with 4-wire connection
9.	Cooling circuit only
10.	Heating circuit only
13.	Heat source

Domestic hot water distribution system:

DDV 32	Dual differential pressureless manifold (up to 2.5 m³/h)*
EB KPV	Extension module for compact manifold (up to 2.0 m³/h)*
KPV 25	Compact manifold with overflow valve (up to 1.3 m³/h)*
	In combination with EB KPV (up to 2.0 m³/h)*
MMB 25	Mixer module, bivalent (up to 2.0 m³/h)*
MMH 25	Mixer module for heating circuit
SST 25	Solar station for hot water
VTB 25	Manifold bar (up to 2.5 m³/h)*
WWM 25	Hot water module / unmixed heating circuit (up to 2.5 m³/h)*

*** Recommended max. heating waterflow**

E9	Flange heater, hot water
E10	2nd heat generator (HG2)
E10.1	Immersion heater
E10.2	Oil/gas boiler
E10.3	Solid fuel boiler
E10.5	Solar energy system
F7	Safety temperature monitor
K20	Contactor for 2nd heat generator
K21	Contactor for immersion heater hot water
M11	Primary pump for heating operation
M12	Primary pump for cooling operation
M13	Heat circulating pump for main circuit
M14	Heat circulating pump for heating circuit 1
M15	Heat circulating pump for heating circuit 2
M16	Auxiliary circulating pump
M17	Cooling circulating pump
M18	Hot water circulating pump
M19	Swimming pool water circulating pump
MA	Mixer open
MZ	Mixer closed
N1	Heating controller
N2	Cooling controller for reversible heat pumps
N3/N4	Room climate control stations
N6	Cooling controller for passive cooling
N12	Solar controller
R1	External wall sensor
R2	Return flow sensor
R3	Hot water sensor
R4	Return flow sensor for cooling water
R5	Temperature sensor for heating circuit 2
R9	Flow sensor (antifreeze)
R11	Flow sensor for cooling water
R13	Sensor for heating circuit 3 / bivalent-renewable
TC	Room temperature controller
Y5	Three-way distribution valve
Y6	Two-way valve
Y7	Three-way mixing valve
Y8	Three-way valve (closing time max. 10 sec.)