Air-to-water heat pump with two performance levels

Order reference: LA 28AS

Max. flow temperature for heating: 58 °C
Casing colour: white aluminium

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager and two compressors for output reduction when operating at partial load. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.
Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Technical data LA 28AS

Dimplex Air-to-water heat pump with two performance levels (Low temperature)		
Order reference		**LA 28AS**
Casing colour		white aluminium
Max. flow temperature for heating		58 °C
Temperature operating limits for air		-25 °C to 35 °C
Heat output / COP at A-7/W35	kW/-	1 compr.: 9,90 / 2,40 2 compr.: 19,10 / 2,70
Heat output / COP at A+2/W35	kW/-	1 compr.: 12,80 / 3,00 2 compr.: 22,30 / 3,00
Heat output / COP at A+7/W35	kW/-	1 compr.: 14,20 / 3,10 2 compr.: 25,80 / 3,40
Heat output / COP at A+10/W35	kW/-	1 compr.: 14,70 / 3,10 2 compr.: 29,10 / 3,60
Electrical nominal power consumption at A+2/W35	kW	7,40
Sound pressure level at a distance of 10 m (air outlet side)	dB (A)	41
Sound power level	dB (A)	68
Refrigerant R404A	kg	4,20
Flow rate (heat source)	m³/h	8000
Heating water flow rate with an int. pressure differential of	m³/h / Pa	2,30 / 3100
Dimensions (W x D x H)	mm	1680 x 1000 x 1710
Weight (incl. packing)	kg	355
Voltage regulation	V	230
Connection voltage		3/N/PE ~400 V, 50 Hz
Starting current with soft starter	A	25
Fuse protection	A	25
Type of defrosting		Reverse circulation
Connection heating		1 1/4

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)
Please note that additional space is required for pipe connections, operation and maintenance.

System accessories LA 28AS

Description	Order ref.	Article number	Sample item	Item	Price
Heat pumps					
Air-to-water heat pump with two performance levels	LA 28AS	339990	1		
10 m control line	EVL 996-1	321990			
20m control line	EVL 997-1	322000	1		
30m control line	EVL 998-1	322010			
Hydraulic accessories					
1 1/4" connecting hose*	AS 976-1	330530			
Floor-mounted buffer tank (200l)	PSW 200	339830	1		
CTHK 631 immersion heater, 2.0 kW	CTHK 631	336180			
CTHK 632 immersion heater, 2.9 kW	CTHK 632	335910			
CTHK 633 immersion heater, 4.5 kW	CTHK 633	322140			
CTHK 634 immersion heater, 6.0 kW	CTHK 634	322150	2		
Universal buffer tank (500 l)*	PSW 500	339210			
Dual differential pressureless manifold	DDV 32	348450	1		
Circulating pump for heating water	UP 60-32	355970			
Circulating pump for heating water	UP 70-32	354020	1		
Manifold bar	VTB 25	339870			
Hot water module / unmixed heating circuit module	WWM 25	346600	1		
Mixed heating circuit module with temperature sensor	MMH 25	348640			
District heating lines with ready-to-use 90° bend*	HVL 25-50	358650			
District heating lines with ready-to-use 90° bend*	HVL 25-75	358660			
District heating lines with ready-to-use 90° bend*	HVL 25-100	358670			
District heating lines with ready-to-use 90° bend*	HVL 25-150	358880			
District heating lines with ready-to-use 90° bend*	HVL 32-150	358680			
District heating lines with ready-to-use 90° bend*	HVL 32-200	358690			
District heating lines with ready-to-use 90° bend*	HVL 32-250	358700			
Heating accessories					
Fan convector for heating 800 W	SRX 080M	359080			
Fan convector for heating 1200 W	SRX 120M	359090			
Fan convector for heating 1400 W	SRX 140M	359100			
Fan convector for heating 1800 W	SRX 180M	359110			
Fan convector for heating/cooling	HL 11C	351730			
Fan convector for heating/cooling	HL 16C	351740			
Fan convector for heating/cooling	HL 26C	351750			
Fan convector for heating/cooling	HL 36C	351760			
Immersion heater pipe assembly*	HDLR 450	337450			
DHW preparation accessories					
Hot water cylinder (400l) 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		
FLH 25M flange heater	FLH 25M	349430			
Safety valve combination	SVK 852	326660			
Solar station for hot water	SST 25	348430			
Design hot water cylinder with sheet metal coverings and temperature sensor*	WWSP 442E	353370			
Hot water cylinder (500 l) with temperature sensor*	WWSP 900	339220			
Pump unit DN 25 for direct connection of the hot water cylinder	WPG 25	356030	1		
Circulating pump for heating water	UP 80	340310	1		
Combo tank for heating and domestic hot water preparation with central flow*	PWD 750	349100			
Control accessories					
Data bus plug-in card for heat pump manager	LWPM 410	339410			
External temperature sensor with casing	FG 3115	336620			
Swimming pool / remote fault indicator relay module	RBG WPM	339700			
Temperature sensor	Norm NTC-2	353400			
Strap-on sensor	FA 550	338550			
Thermostat for heating and domestic hot water	KRRV 003	322070			
Remote control for WPM 2006/2007/EconPlus/R*	AP PGD	356570			
Solar thermal systems accessories					
Solar collector 2 m² Al/Cu absorber, meander 4 connections	SOLK 1204 AM	356190			
Solar station	SOLPU 1	356230			

System accessories LA 28AS

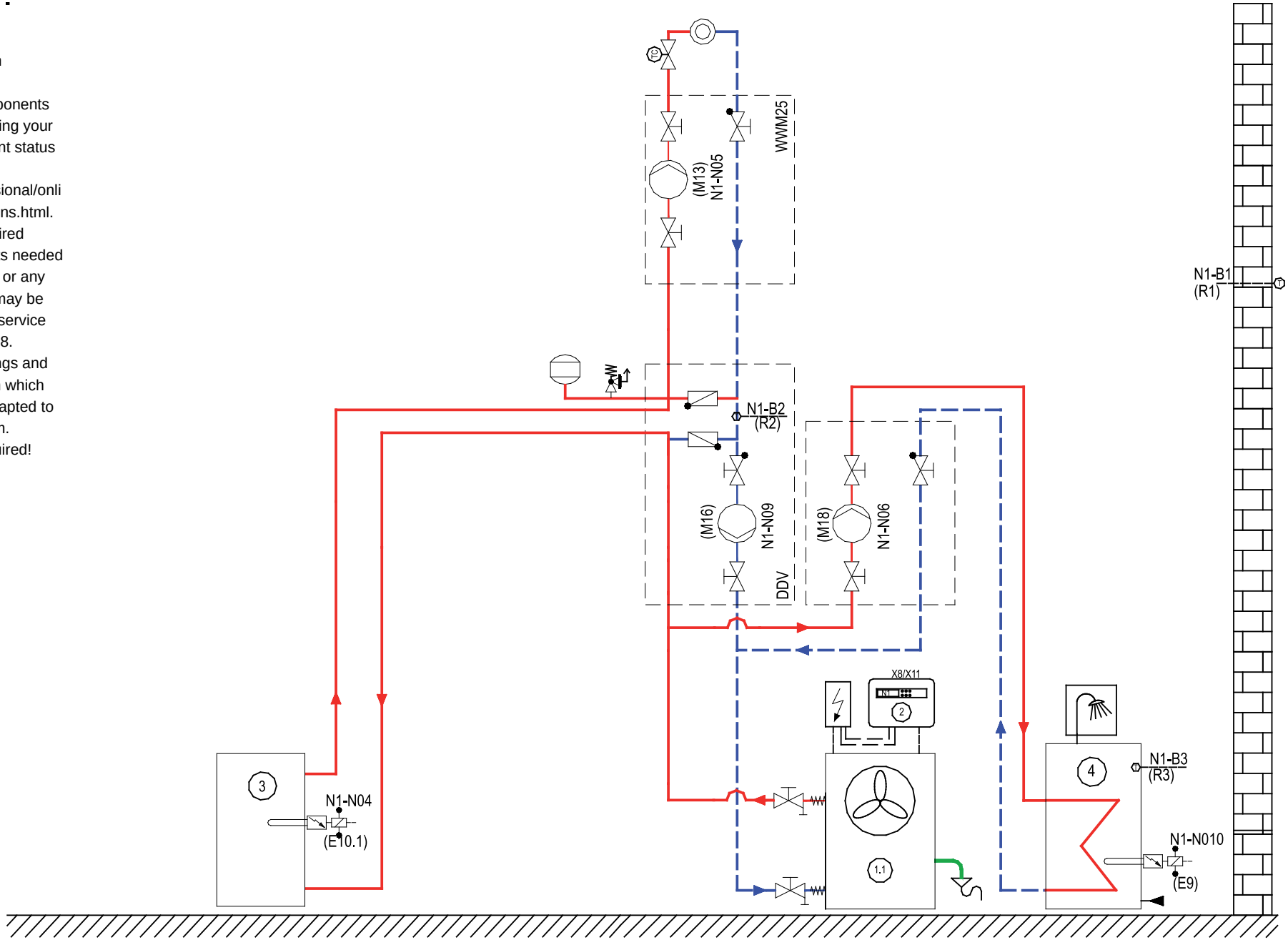
Description	Order ref.	Article number	Sample item	Item	Price
Solar station for hot water	SST 25	348430			
Solar expansion vessel, 12l	SOLEV 12	356240			
Solar expansion vessel, 18l	SOLEV 18	356250			
Heat carrier fluid	SOLHT 20	356260			
Test set	SOLH TTK	356270			
Purging and filling station	SOL FFP	356300			

* 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.

Note:

The given hydraulic integration schematic is a schematic representation of the key components and serves as an aid for planning your customized system. The current status is available at all times under www.dimplex.de/nc/en/professional/online-planner/hydraulic-integrations.html. 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. Software updates may be required!



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.	Parallel buffer tank
3.1	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
15.	Hydraulic tower

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**

Solarthermics:

SOLK 1204	Collector field
SOLPU 1	Solar station
SOLCU 1	Solar controller
SOLCU 2	Solar controller
T1	Temperature sensor (collector sensor)
T2	Temperature sensor (cylinder 1)
T3	Temperature sensor (cylinder 2 /optional display function)

B3	Hot water thermostat
B4	Swimming pool thermostat
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
M21/M22	Mixer
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 / 2.1	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.)
Y12	External 4-way reversing valve