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Sherpa

Air-to-water heat
pumps

 **OLIMPIA
SPLENDID**
HOME OF COMFORT





Certified product quality

Performance and provisions in accordance with the most stringent standards

HP Keymark e EHPA Quality Label

The performance of all Sherpa heat pumps, split and monoblock, are HP Keymark certified. For the Austrian market, the Sherpa Aquadue [S3E] and Sherpa [S3E] models are also EHPA Quality Label certified. Both certifications attest to adherence to the stringent European performance and safety standards set by European standards EN 16147, EN 14825 and EN 12102.

Smart Grid Ready

All Sherpa heat pumps can have a contact that allows you to increase the self-consumption of the energy produced by the photovoltaic system, storing the overproduction and reducing the quantity to be purchased from the grid, even when solar radiation is absent. The set-up of the heat pumps to communicate with an electrical grid is certified by the German body BWP.





Maximum installation flexibility

To promote the energy transition with various application solutions

Wall-mounted or tower internal units

For applications where the building insulation and available space are suitable for a split heat pump, Olympia Splendid offers various types of internal units. Tower units, with an integrated 150 or 200L storage tank, to minimise the overall dimensions of the system. Or wall-mounted units, also compatible with a special technical cabinet that allows for the creation of a compact system with high installation flexibility.

Monobloc and water heater

The monobloc heat pumps and heat pump water heaters of the Olympia Splendid's Sherpa range – now also available in the version with R290 refrigerant – are offered as independent solutions or as part of the same system, aiming to achieve maximum performance by separating climate comfort generation from DHW production.



Air-to-water heat pumps



Sherpa Aquadue [S3E]

	EXTERNAL	INDOOR	TYPE	REFRIGERANT	DHW TEMPERATURE	ENERGY CLASS	SIZE
Sherpa Aquadue S3E 4	02284	02296	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	4
Sherpa Aquadue S3E 6	02285	02296	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	6
Sherpa Aquadue S3E 8	02286	02296	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	8
Sherpa Aquadue S3E 10	02287	02296	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	10
Sherpa Aquadue S3E 12	02288	02297	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	12
Sherpa Aquadue S3E 14	02289	02297	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	14
Sherpa Aquadue S3E 16	02290	02297	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	16
Sherpa Aquadue S3E 12T	02291	02297	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	12
Sherpa Aquadue S3E 14T	02292	02297	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	14
Sherpa Aquadue S3E 16T	02293	02297	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	16
Sherpa Aquadue Tower S3E 4	02284	02298	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	4
Sherpa Aquadue Tower S3E 6	02285	02298	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	6
Sherpa Aquadue Tower S3E 8	02286	02298	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	8
Sherpa Aquadue Tower S3E 10	02287	02298	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	10
Sherpa Aquadue Tower S3E 12	02288	02299	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	12
Sherpa Aquadue Tower S3E 14	02289	02299	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	14
Sherpa Aquadue Tower S3E 16	02290	02299	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	16
Sherpa Aquadue Tower S3E 12T	02291	02299	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	12
Sherpa Aquadue Tower S3E 14T	02292	02299	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	14
Sherpa Aquadue Tower S3E 16T	02293	02299	dual-circuit split	R32	75 °C	A+++ A+++ ↑ D	16

The refrigerant shown in the table refers to the circuit dedicated to comfort delivery. The circuit dedicated to DHW production uses R134A.



**Sherpa
[S3E]**

	EXTERNAL	INDOOR	TYPE	REFRIGERANT	DHW TEMPERATURE	ENERGY CLASS	SIZE
Sherpa S3 E 4	02284	02294	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	4
Sherpa S3 E 6	02285	02294	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	6
Sherpa S3 E 8	02286	02294	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	8
Sherpa S3 E 10	02287	02294	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	10
Sherpa S3 E 12	02288	02295	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	12
Sherpa S3 E 14	02289	02295	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	14
Sherpa S3 E 16	02290	02295	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	16
Sherpa S3 E 12T	02291	02295	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	12
Sherpa S3 E 14T	02292	02295	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	14
Sherpa S3 E 16T	02293	02295	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	16
Sherpa Tower S3 E 4	02284	02300	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	4
Sherpa Tower S3 E 6	02285	02300	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	6
Sherpa Tower S3 E 8	02286	02300	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	8
Sherpa Tower S3 E 10	02287	02300	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	10
Sherpa Tower S3 E 12	02288	02301	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	12
Sherpa Tower S3 E 14	02289	02301	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	14
Sherpa Tower S3 E 16	02290	02301	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	16
Sherpa Tower S3 E 12T	02291	02301	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	12
Sherpa Tower S3 E 14T	02292	02301	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	14
Sherpa Tower S3 E 16T	02293	02301	single-circuit split	R32	60 °C	A+++ A+++ ↑ D	16

Air-to-water heat pumps



Sherpa Monobloc [S2E]

	TYPE	REFRIGERANT	DHW TEMPERATURE	ENERGY CLASS	SIZE
Sherpa Monobloc S2 E 6 [02303]	monobloc	R32	60 °C	A+++ A+++ ↑ D	6
Sherpa Monobloc S2 E 8 [02304]	monobloc	R32	60 °C	A+++ A+++ ↑ D	8
Sherpa Monobloc S2 E 10 [02305]	monobloc	R32	60 °C	A+++ A+++ ↑ D	10
Sherpa Monobloc S2 E 12 [02306]	monobloc	R32	60 °C	A+++ A+++ ↑ D	12
Sherpa Monobloc S2 E 14 [02307]	monobloc	R32	60 °C	A+++ A+++ ↑ D	14
Sherpa Monobloc S2 E 16 [02308]	monobloc	R32	60 °C	A+++ A+++ ↑ D	16
Sherpa Monobloc S2 E 12T [02309]	monobloc	R32	60 °C	A+++ A+++ ↑ D	12
Sherpa Monobloc S2 E 14T [02310]	monobloc	R32	60 °C	A+++ A+++ ↑ D	14



Sherpa Monobloc [S4P]

Sherpa Monobloc S4 P 6 [02598]	NEW	monobloc	R290	70 °C	A+++ A+++ ↑ D	6
Sherpa Monobloc S4 P 9 [02599]	NEW	monobloc	R290	70 °C	A+++ A+++ ↑ D	9
Sherpa Monobloc S4 P 12 [02600]	NEW	monobloc	R290	70 °C	A+++ A+++ ↑ D	12
Sherpa Monobloc S4 P 15 [02601]	NEW	monobloc	R290	70 °C	A+++ A+++ ↑ D	15
Sherpa Monobloc S4 P 12T [02602]	NEW	monobloc	R290	70 °C	A+++ A+++ ↑ D	12
Sherpa Monobloc S4 P 15T [02603]	NEW	monobloc	R290	70 °C	A+++ A+++ ↑ D	15



Sherpa SHW [S2]

Sherpa SHW S2 200 [02385]	water heater	R134A	65 °C	A+ A+++ ↑ D	200
Sherpa SHW S2 260S [02386]	water heater	R513A	65 °C	A+ A+++ ↑ D	260S



Sherpa SHW [S3P]

Sherpa SHW S3 P 100 [02676]	NEW	water heater	R290	75 °C	A+ A+++ ↑ D	100
Sherpa SHW S3 P 200 [02677]	NEW	water heater	R290	75 °C	A+ A+++ ↑ D	200
Sherpa SHW S3 P 300S [02678]	NEW	water heater	R290	75 °C	A+ A+++ ↑ D	300S

Key

STANDARD CONTROLS



ILetComfort mobile application



OS Home mobile application



Touch screen display



Wired wall control



Possibility of connection to external home automation system



Possibility of connection to SiOS Control home automation system

AIR-TO-WATER HEAT PUMPS

SHERPA AQUADUE

[S3E]



Size	4, 6, 8, 10, 12, 14, 16, 12T, 14T, 16T
Energy class	A+++
Type	dual-circuit split
Refrigerant	R32
DHW Temperature	75°C

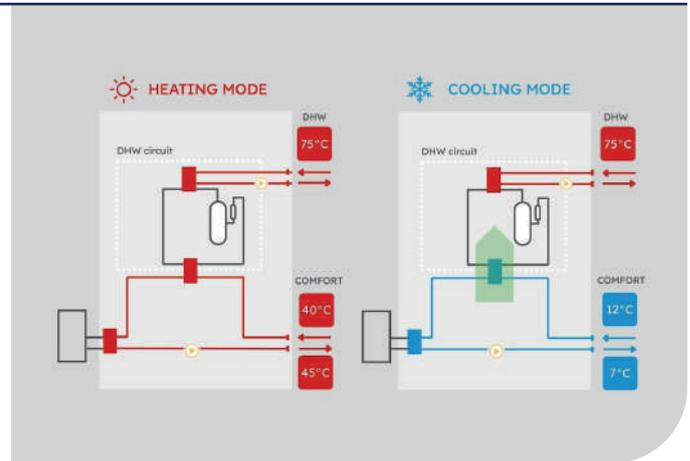


Double refrigeration circuit

It delivers climatic comfort and DHW production simultaneously, without interruption and ensuring continuity in DHW availability, regardless of outdoor conditions. In addition, during cooling operation, the dedicated DHW cycle subtracts heat from the return water from the system, increasing efficiency. Finally, the dual circuit allows DHW to be brought to 75°C without additional generators, avoiding anti-legionella cycles and reducing the volume of the storage tank by up to 30%.

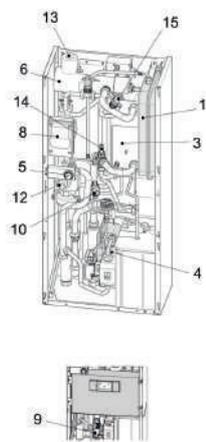
Photovoltaic integration

Thanks to the appropriate contact, it is possible to activate an increase in the heating/DHW temperature and a decrease in the cooling temperature, thereby accumulating thermal energy in the event of overproduction of the photovoltaic system.

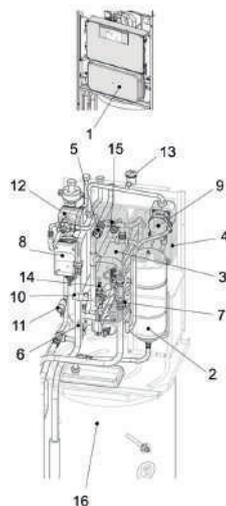


LAYOUT

INDOOR WALL-MOUNTED



TOWER INDOOR UNIT

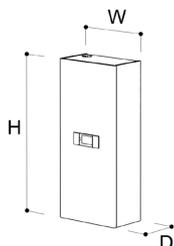


- Air conditioner circuit expansion tank
- DHW circuit expansion tank
- Air conditioning circuit heat exchangers
- DHW circuit heat exchangers
- Air conditioning circuit pressure gauge
- Standard dual-stage electric heating elements (factory disabled) which activate to support the heat pump by configuring the electronic control. Each stage is activated according to the actual thermal power demand.
- Electric heating elements safety thermostats
- Air conditioner circuit circulation pump
- DHW circuit circulation pump
- Safety valves air conditioner circuit 3 bar
- Safety valve - DHW circuit 6 bar
- 3-way valve
- Automatic air vent valve
- DHW circuit evaporator water flow rate regulator
- Flow switches
- 150L storage tank with a heat exchanger coil surface area of 1.5 m²
 - Integrated heating cable (from size 12) to prevent freezing of the water in the bowl: intervenes during machine defrost operations or when the ambient air is below -7°C and stops when it exceeds 4°C

DIMENSIONS AND WEIGHT

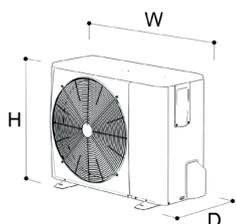
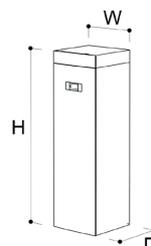
INDOOR WALL-MOUNTED

		4	6	8	10	12	14	16	12T	14T	16T
W	mm	500	500	500	500	500	500	500	500	500	500
H	mm	1116	1116	1116	1116	1116	1116	1116	1116	1116	1116
D	mm	288	288	288	288	288	288	288	288	288	288
WEIGHT	kg	70	70	70	70	70	70	70	70	70	70



TOWER INDOOR UNIT

		4	6	8	10	12	14	16	12T	14T	16T
W	mm	600	600	600	600	600	600	600	600	600	600
H	mm	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
D	mm	600	600	600	600	600	600	600	600	600	600
WEIGHT	kg	171	171	171	171	171	171	171	171	171	171



EXTERNAL

		4	6	8	10	12	12T	14	14T	16	16T
W	mm	1008	1008	1118	1118	1118	1118	1118	1118	1118	1118
H	mm	712	712	865	865	865	865	865	865	865	865
D	mm	426	426	523	523	523	523	523	523	523	523
WEIGHT	kg	58	58	77	77	96	112	96	112	96	112

COMPATIBLE ACCESSORIES

		WALL-MOUNTED	TOWER	
INSTALLATION	B0918	Sherpa Flex Box AS kit	≤10	-
	B0961	Sherpa Flex Box AS RAL 9016 kit	≤10	-
	B0931	Remote control display kit 10 m	○	○
HYDRAULICS	B0916	Kit 3-way valve for DHW	●	●
	B0971	Thermostatic mixing valve kit for DHW	-	●
	B0972	Expansion tank kit for DHW	-	●
ELECTRONICS	B0623	Outdoor air temperature probe kit	●	●
	B0624	DHW storage tank sensor kit	●	●
STORAGE TANKS	01804	HE 200 L storage tank	○	-
	01805	HE 300 L storage tank	○	-
	01806	HES 300 L solar storage tank	○	-
	01807	Hybride boiler HY 300 L	○	-
	01808	HYS 300 L solar hybrid storage tank	○	-
	01199	Thermal accumulation 50 L	○	○
RESISTANCES	01200	Thermal accumulation 100 L	○	○
	B0618	Resistance for boiler 2 kW	-	-
	B0666	Resistance for boiler 3 kW	-	-
	B0617	Resistance flange kit	-	-
	AV002	Heat pump startup	▼	▼

- Standard accessory; ○ Optional accessory; - Incompatible accessory;
- ▼ Necessary Accessory;

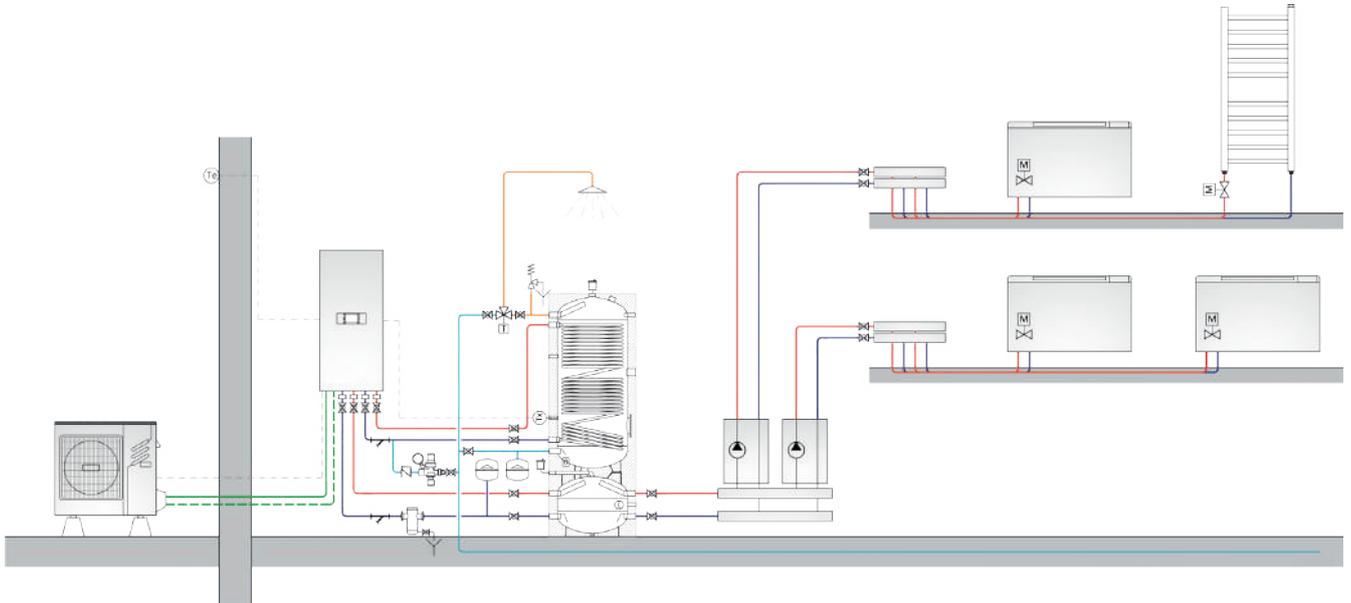
When compatibility is only possible with certain sizes or models, the information is given in the table. Accessory description available at end of chapter.



SYSTEM DIAGRAMS

INDOOR WALL-MOUNTED

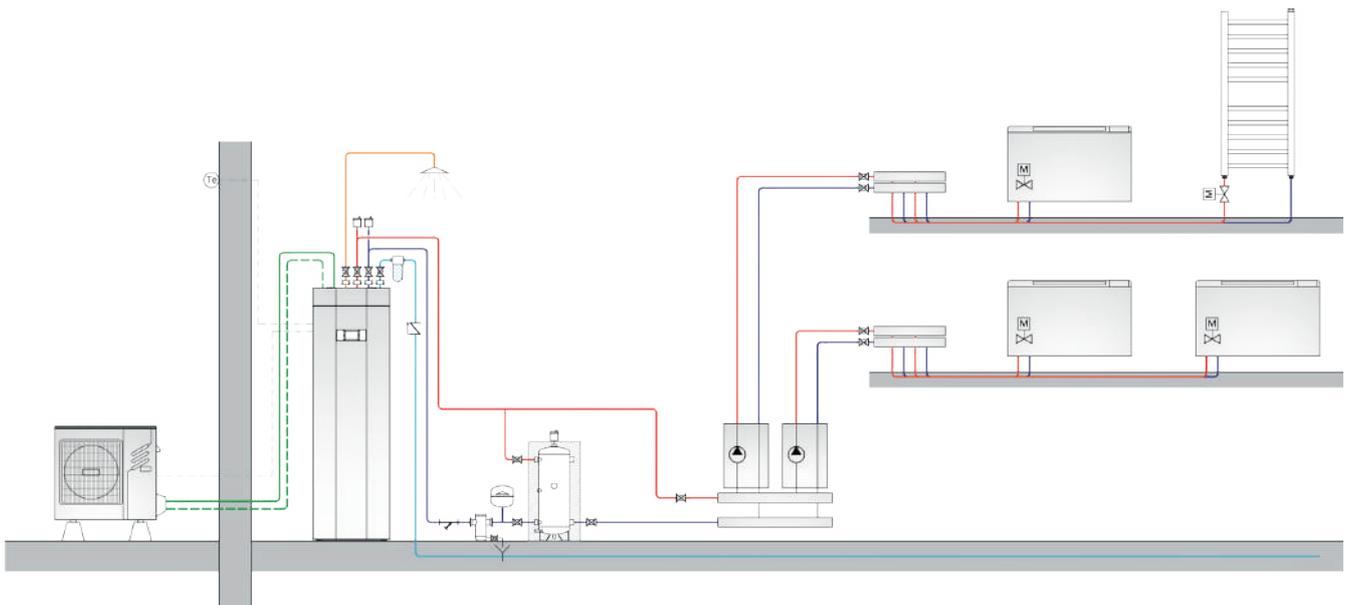
Sherpa Aquadue S3E heat pump (heating and air conditioning; production of high temperature DHW); Bi2 SLR fan coil radiator terminals; example of a two-zone configuration with a simple manifold and integrated inertial buffer tank (used as a hydraulic separator) for the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

TOWER INDOOR UNIT

Sherpa Aquadue Tower S3E heat pump (heating and air conditioning; production of high temperature DHW); Bi2 SLR fan coil radiator terminals; example of a two-zone configuration with a simple manifold and inertial buffer tank (used as a hydraulic separator) for the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

TECHNICAL DATA				4			6			8			10			
Outdoor unit wall-mounted				02284			02285			02286			02287			
Indoor unit wall-mounted				02296			02296			02296			02296			
Indoor unit tower				02298			02298			02298			02298			
Compressor frequency				Minimum	Nominal	Maximum										
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	KW	2,42	4,25	5,66	3,53	6,20	8,26	4,73	8,30	11,05	5,70	10,0	13,32
	COP	a7/6 - w30/35	(a)	W/W	-	5,15	-	-	5,00	-	-	5,20	-	-	5,00	-
	Heating power	a2/1 - w30/35	(a)	KW	2,54	4,45	5,93	3,13	5,50	7,32	4,05	7,10	9,46	4,67	8,20	10,92
	COP	a2/1 - w30/35	(a)	W/W	-	4,05	-	-	3,95	-	-	4,10	-	-	4,05	-
	Heating power	a-7/-8 - w30/35	(a)	KW	2,74	4,80	6,39	3,48	6,10	8,12	4,05	7,10	9,46	4,70	8,25	10,99
	COP	a-7/-8 - w30/35	(a)	W/W	-	3,15	-	-	3,05	-	-	3,25	-	-	3,15	-
	Heating power	a-15/-16 - w30/35	(a)	KW	1,75	3,07	4,09	2,15	3,77	5,02	3,31	5,80	7,72	3,48	6,10	8,12
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,88	-	-	2,83	-	-	2,98	-	-	3,01	-
	Heating power (fancoils)	a7/6 - w40/45	(a)	KW	2,48	4,35	5,79	3,62	6,35	8,46	4,67	8,20	10,92	5,70	10,00	13,32
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,80	-	-	3,75	-	-	3,95	-	-	3,80	-
	Heating power (fancoils)	a2/1 - w40/45	(a)	KW	2,91	5,10	6,79	3,31	5,80	7,72	4,22	7,40	9,86	4,47	7,85	10,45
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	3,00	-	-	3,00	-	-	3,25	-	-	3,20	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	KW	2,45	4,30	5,73	3,08	5,40	7,19	3,76	6,60	8,79	4,19	7,35	9,79
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,35	-	-	2,40	-	-	2,55	-	-	2,55	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	KW	1,52	2,66	3,54	1,86	3,27	4,35	2,87	5,04	6,71	3,03	5,31	7,07
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,02	-	-	1,98	-	-	2,32	-	-	2,34	-
	Cooling power	a35 - w23/18	(a)	KW	2,41	4,50	5,52	3,51	6,55	8,03	4,50	8,40	10,30	5,36	10,00	12,27
	EER	a35 - w23/18	(a)	W/W	-	5,55	-	-	4,90	-	-	5,05	-	-	4,80	-
	Cooling power (fancoils)	a35 - w12/7	(a)	KW	2,52	4,70	5,77	3,75	7,00	8,59	3,97	7,40	9,08	4,40	8,20	10,06
	EER (fancoils)	a35 - w12/7	(a)	W/W	-	3,45	-	-	3,00	-	-	3,38	-	-	3,30	-
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++			A+++		
	SCOP	Warmer Climate			6,46			6,57			6,99			7,09		
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %	255,4%			259,8%			276,6%			280,5%		
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++			A+++		
	SCOP	Average Climate			4,85			4,95			5,22			5,20		
	s (Seasonal efficiency for space heating)	Average Climate		ηs %	191,0%			195,0%			205,6%			204,8%		
	Energy efficiency class in water heating 35°C	Cold Climate			A++			A++			A++			A++		
	SCOP	Cold Climate			4,06			4,21			4,33			4,32		
	s (Seasonal efficiency for space heating)	Cold Climate		ηs %	159,5%			165,3%			170,0%			169,8%		
	Energy efficiency class in water heating 55°C	Warmer Climate			A+++			A+++			A+++			A+++		
	SCOP	Warmer Climate			4,15			4,21			4,51			4,62		
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %	163,1%			165,4%			177,2%			181,7%		
Energy efficiency class in water heating 55°C	Average Climate			A++			A++			A++			A++			
SCOP	Average Climate			3,31			3,52			3,37			3,47			
s (Seasonal efficiency for space heating)	Average Climate		ηs %	129,5%			137,9%			131,6%			135,7%			
Energy efficiency class in water heating 55°C	Cold Climate			A+			A+			A+			A+			
SCOP	Cold Climate			2,63			2,85			2,88			2,99			
s (Seasonal efficiency for space heating)	Cold Climate		ηs %	102,1%			111,1%			112,1%			116,5%			
NOISE LEVEL	Indoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	46/40			46/40			46/42			46/42		
	Indoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(b)	dB(A)	38/32			38/32			38/36			38/36		
	Outdoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	56/52			58/53			59/54			60/55		
	Outdoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(c)	dB(A)	36/32			38/33			39/34			40/35		
ELECTRICAL DATA	System circulator absorption			W	3 - 87			3 - 87			3 - 87			3 - 87		
	Indoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50			220-240/1/50		
	Maximum current absorbed indoor unit with additional resistors active			A	18,00			18,00			18,00			18,00		
	Maximum power absorbed indoor unit with additional active heating elements			KW	4,05			4,05			4,05			4,05		
	Additional electric heating elements			KW	1,5+1,5			1,5+1,5			1,5+1,5			1,5+1,5		
	Outdoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50			220-240/1/50		
	Outdoor unit maximum absorbed current			A	10			11			14			16		
Outdoor unit maximum absorbed power			KW	2,2			2,6			3,3			3,6			
COOLING CIRCUIT	Compressor type				Twin Rotary DC Inverter			Twin Rotary DC Inverter			Twin Rotary DC Inverter			Twin Rotary DC Inverter		
	Refrigerant inlet connection diameter			"	1/4"-5/8"			1/4"-5/8"			3/8"-5/8"			3/8"-5/8"		
	Refrigerant gas		(d)		R32			R32			R32			R32		
	Global warming potential			GWP	675			675			675			675		
	Refrigerant gas charge			kg	1,5			1,5			1,65			1,65		
	Additional charge for lengths over 15m			g/m	20			20			38			38		
	Refrigerant piping length limit	min - max		m	2 - 30			2 - 30			2 - 30			2 - 30		
Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	max	(e)	m	30			30			20			20			
HYDRAULIC DATA	System hydraulic connections			"	1"			1"			1"			1"		
	System expansion valve capacity			l	8			8			8			8		
	Load profile according to EN16147				L			L			L			L		
INTEGRATED DHW BOILER	DHW production energy efficiency class	Average Climate			A			A			A			A		
	ηHW (seasonal production efficiency DHW)	Average Climate		%	106%			106%			86%			86%		
	Boiler volume			l	150			150			150			150		
	Boiler interior surface material				DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR		
	Heat exchanger in the boiler			m²	1,5			1,5			1,5			1,5		
	Type and thickness of boiler insulation				Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm		
	Specific dispersion			W/K	2			2			2			2		
	DHW expansion tank capacity			l	7			7			7			7		
	DHW hydraulic connections			"	3/4"			3/4"			3/4"			3/4"		
	DHW circuit heating power	w35 - w55	(f)	KW	2,15			2,15			2,15			2,15		
SECONDARY DHW COOLING CIRCUIT	COP DHW circuit	w35 - w55	(f)	W/W	3,12			3,12			3,12			3,12		
	DHW circuit heating power	w12 - w55	(g)	KW	1,60			1,60			1,60			1,60		
	COP DHW circuit	w12 - w55	(g)	W/W	2,58			2,58			2,58			2,58		
	Sound power indoor unit in heating/cooling + DHW circuit			dB(A)	49			49			49			49		
	DHW circuit circulator absorption			W	3 - 43			3 - 43			3 - 43			3 - 43		
	DHW circuit coolant gas		(h)		R134a			R134a			R134a			R134a		
	DHW circuit global warming potential			GWP	1430			1430			1430			1430		
DHW circuit coolant gas load			kg	0,35			0,35			0,35			0,35			

- (a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).
(b) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber
(c) Sound pressure values measured at a distance of 4 m in free field distance
(d) Non-airtightly sealed equipment containing fluorinated GAS
(e) maximum length of the refrigeration pipes beyond which checks on the minimum

- surface of the installation rooms are necessary, check the technical manual
(r) Heating circuit water temperature 35°C/Outlet water temperature 55°C
(s) Heating circuit water temperature 12°C/Outlet water temperature 55°C
(t) Non-hermetically sealed equipment containing fluorinated GAS
Energy efficiency classes refer to a range between A+++ and D.

TECHNICAL DATA				12			14			16			
				Outdoor unit wall-mounted			Outdoor unit wall-mounted			Outdoor unit wall-mounted			
Indoor unit wall-mounted				02288			02289			02290			
Indoor unit wall-mounted				02297			02297			02297			
Indoor unit tower				02299			02299			02299			
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	KW	5,65	12,10	15,79	6,77	14,50	18,92	7,47	16,00	20,88
	COP	a7/6 - w30/35	(a)	W/W	-	4,95	-	-	4,70	-	-	4,50	-
	Heating power	a2/1 - w30/35	(a)	KW	4,34	9,30	12,14	5,32	11,40	14,88	6,07	13,00	16,96
	COP	a2/1 - w30/35	(a)	W/W	-	3,95	-	-	3,65	-	-	3,50	-
	Heating power	a-7/-8 - w30/35	(a)	KW	4,67	10,00	13,05	5,60	12,00	15,66	6,21	13,3	17,35
	COP	a-7/-8 - w30/35	(a)	W/W	-	3,00	-	-	2,80	-	-	2,70	-
	Heating power	a-15/-16 - w30/35	(a)	KW	3,43	7,35	9,59	3,71	7,94	10,36	4,37	9,35	12,20
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,88	-	-	2,85	-	-	2,66	-
	Heating power (fancoils)	a7/6 - w40/45	(a)	KW	5,74	12,30	16,05	6,63	14,20	18,53	7,47	16,00	20,88
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,80	-	-	3,65	-	-	3,60	-
	Heating power (fancoils)	a2/1 - w40/45	(a)	KW	5,00	10,70	13,96	5,46	11,70	15,27	5,98	12,80	16,70
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	3,00	-	-	2,86	-	-	2,85	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	KW	4,76	10,20	13,31	5,51	11,80	15,40	6,02	12,90	16,83
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,40	-	-	2,35	-	-	2,23	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	KW	3,10	6,63	8,65	3,34	7,16	9,34	3,93	8,41	10,97
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,32	-	-	2,29	-	-	2,03	-
	Cooling power	a35 - w23/18	(a)	KW	5,60	12,00	14,29	6,31	13,00	16,08	6,96	13,50	17,75
	EER	a35 - w23/18	(a)	W/W	-	4,00	-	-	3,70	-	-	3,61	-
	Cooling power (fancoils)	a35 - w12/7	(a)	KW	5,42	11,60	13,82	5,93	12,70	15,13	6,54	14,00	16,67
	EER (fancoils)	a35 - w12/7	(a)	W/W	-	2,75	-	-	2,55	-	-	2,45	-
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++		
	SCOP	Warmer Climate			6,48			6,58			6,47		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		256,1%			260,3%			255,6%		
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++		
	SCOP	Average Climate			4,81			4,72			4,62		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		189,4%			185,7%			181,7%		
	Energy efficiency class in water heating 35°C	Cold Climate			A+			A++			A++		
	SCOP	Cold Climate			4,08			4,07			4,02		
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %		160,2%			159,6%			157,8%		
	Energy efficiency class in water heating 55°C	Warmer Climate			A+++			A+++			A+++		
	SCOP	Warmer Climate			4,43			4,49			4,48		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		174,1%			176,5%			176,1%		
Energy efficiency class in water heating 55°C	Average Climate			A++			A++			A++			
SCOP	Average Climate			3,45			3,47			3,41			
s (Seasonal efficiency for space heating)	Average Climate	ηs %		135,1%			135,6%			133,3%			
Energy efficiency class in water heating 55°C	Cold Climate			A+			A+			A+			
SCOP	Cold Climate			3,02			3,05			3,12			
s (Seasonal efficiency for space heating)	Cold Climate	ηs %		117,8%			118,9%			121,8%			
NOISE LEVEL	Indoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	48/46			48/46			48/46		
	Indoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(b)	dB(A)	40/38			40/38			40/38		
	Outdoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	64/60			65/62			68/64		
	Outdoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(c)	dB(A)	44/40			45/42			48/44		
ELECTRICAL DATA	System circulator absorption			W	8 - 140			8 - 140			8 - 140		
	Indoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Maximum current absorbed indoor unit with additional resistors active			A	31,0			31,0			31,0		
	Maximum power absorbed indoor unit with additional active heating elements			KW	7,05			7,05			7,05		
	Additional electric heating elements			KW	3,0+3,0			3,0+3,0			3,0+3,0		
	Outdoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Outdoor unit maximum absorbed current			A	23			25			25		
Outdoor unit maximum absorbed power			KW	5,4			5,7			5,7			
COOLING CIRCUIT	Compressor type				Twin Rotary DC Inverter			Twin Rotary DC Inverter			Twin Rotary DC Inverter		
	Refrigerant inlet connection diameter			"	3/8"-5/8"			3/8"-5/8"			3/8"-5/8"		
	Refrigerant gas		(d)		R32			R32			R32		
	Global warming potential			GWP	675			675			675		
	Global warming potential			GWP	675			-			-		
	Refrigerant gas charge			kg	1,84			1,84			1,84		
	Additional charge for lengths over 15m			g/m	38			38			38		
Refrigerant piping length limit	min - max		m	2 - 30			2 - 30			2 - 30			
Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	max	(e)	m	15			15			15			
IR-DRILL DATA	System hydraulic connections			"	1"			1"			1"		
	System expansion valve capacity			l	8			8			8		
INTEGRATED DHW BOILER	Load profile according to EN16147				L			L			L		
	DHW production energy efficiency class	Average Climate			A			A			A		
	ηHW (seasonal production efficiency DHW)	Average Climate		%	81%			81%			81%		
	Boiler volume			l	150			150			150		
	Boiler interior surface material				DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR		
	Heat exchanger in the boiler			m²	1,5			1,5			1,5		
	Type and thickness of boiler insulation				Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm		
	Specific dispersion			W/K	2			2			2		
	DHW expansion tank capacity			l	7			7			7		
	DHW hydraulic connections			"	3/4"			3/4"			3/4"		
SECONDARY DHW COOLING CIRCUIT	DHW circuit heating power	w35 - w55	(f)	KW	2,15			2,15			2,15		
	COP DHW circuit	w35 - w55	(f)	W/W	3,12			3,12			3,12		
	DHW circuit heating power	w12 - w55	(g)	KW	1,60			1,60			1,6		
	COP DHW circuit	w12 - w55	(g)	W/W	2,58			2,58			2,58		
	Sound power indoor unit in heating/cooling + DHW circuit			dB(A)	49			49			49		
	DHW circuit circulator absorption			W	3 - 43			3 - 43			3 - 43		
	DHW circuit coolant gas		(h)		R134a			R134a			R134a		
DHW circuit global warming potential			GWP	1430			1430			1430			
DHW circuit coolant gas load			kg	0,35			0,35			0,35			

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).
 (b) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber
 (c) Sound pressure values measured at a distance of 4 m in free field distance
 (d) Non-airtightly sealed equipment containing fluorinated GAS
 (e) maximum length of the refrigeration pipes beyond which checks on the minimum

surface of the installation rooms are necessary, check the technical manual
 (r) Heating circuit water temperature 35°C/Outlet water temperature 55°C
 (s) Heating circuit water temperature 12°C/Outlet water temperature 55°C
 (t) Non-hermetically sealed equipment containing fluorinated GAS
 Energy efficiency classes refer to a range between A+++ and D.

TECHNICAL DATA				12T			14T			16T		
				Outdoor unit wall-mounted			Outdoor unit wall-mounted			Outdoor unit wall-mounted		
Indoor unit wall-mounted				02291			02292			02293		
Indoor unit wall-mounted				02297			02297			02297		
Indoor unit tower				02299			02299			02299		
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a) kW	5,65	12,10	15,79	6,77	14,50	18,92	7,47	16,00	20,88
	COP	a7/6 - w30/35	(a) W/W	-	4,95	-	-	4,70	-	-	4,50	-
	Heating power	a2/1 - w30/35	(a) kW	4,34	9,30	12,14	5,32	11,40	14,88	6,07	13,00	16,96
	COP	a2/1 - w30/35	(a) W/W	-	3,95	-	-	3,65	-	-	3,50	-
	Heating power	a-7/-8 - w30/35	(a) kW	4,67	10,00	13,05	5,60	12,00	15,66	6,21	13,30	17,35
	COP	a-7/-8 - w30/35	(a) W/W	-	3,00	-	-	2,80	-	-	2,70	-
	Heating power	a-15/-16 - w30/35	(a) kW	3,43	7,35	9,59	3,71	7,94	10,36	4,37	9,35	12,20
	COP	a-15/-16 - w30/35	(a) W/W	-	2,88	-	-	2,85	-	-	2,66	-
	Heating power (fancoils)	a7/6 - w40/45	(a) kW	5,74	12,30	16,05	6,63	14,20	18,53	7,47	16,00	20,88
	COP (fancoils)	a7/6 - w40/45	(a) W/W	-	3,80	-	-	3,65	-	-	3,60	-
	Heating power (fancoils)	a2/1 - w40/45	(a) kW	5,00	10,70	13,96	5,46	11,70	15,27	5,98	12,80	16,70
	COP (fancoils)	a2/1 - w40/45	(a) W/W	-	3,00	-	-	2,86	-	-	2,85	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a) kW	4,76	10,20	13,31	5,51	11,80	15,40	6,02	12,90	16,83
	COP (fancoils)	a-7/-8 - w40/45	(a) W/W	-	2,40	-	-	2,35	-	-	2,23	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a) kW	3,10	6,63	8,65	3,34	7,16	9,34	3,93	8,41	10,97
	COP (fancoils)	a-15/-16 - w40/45	(a) W/W	-	2,32	-	-	2,29	-	-	2,03	-
	Cooling power	a35 - w23/18	(a) kW	5,60	12,00	14,29	6,31	13,00	16,08	6,96	13,50	17,75
	EER	a35 - w23/18	(a) W/W	-	4,00	-	-	3,70	-	-	3,61	-
	Cooling power (fancoils)	a35 - w12/7	(a) kW	5,42	11,60	13,82	5,93	12,70	15,13	6,54	14,00	16,67
	EER (fancoils)	a35 - w12/7	(a) W/W	-	2,75	-	-	2,55	-	-	2,45	-
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate		A+++			A+++			A+++		
	SCOP	Warmer Climate		6,47			6,57			6,28		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %	255,6%			259,8%			248,1%		
	Energy efficiency class in water heating 35°C	Average Climate		A+++			A+++			A+++		
	SCOP	Average Climate		4,81			4,72			4,62		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %	189,3%			185,6%			181,6%		
	Energy efficiency class in water heating 35°C	Cold Climate		A++			A++			A++		
	SCOP	Cold Climate		4,08			4,07			4,02		
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %	160,2%			159,6%			157,8%		
	Energy efficiency class in water heating 55°C	Warmer Climate		A+++			A+++			A+++		
	SCOP	Warmer Climate		4,42			4,49			4,47		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %	173,8%			176,4%			175,9%		
	Energy efficiency class in water heating 55°C	Average Climate		A++			A++			A++		
	SCOP	Average Climate		3,45			3,47			3,41		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %	135,1%			135,6%			133,2%		
	Energy efficiency class in water heating 55°C	Cold Climate		A+			A+			A+		
SCOP	Cold Climate		3,02			3,05			3,12			
s (Seasonal efficiency for space heating)	Cold Climate	ηs %	117,7%			118,9%			121,8%			
NOISE LEVEL	Indoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)		dB(A)	48/46			48/46			48/46		
	Indoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		dB(A)	40/38			40/38			40/38		
	Outdoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)		dB(A)	64/60			65/62			68/64		
	Outdoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		dB(A)	44/40			45/42			48/44		
ELECTRICAL DATA	System circulator absorption		W	8 - 140			8 - 140			8 - 140		
	Indoor unit power supply		V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Maximum current absorbed indoor unit with additional resistors active		A	31,0			31,0			31,0		
	Maximum power absorbed indoor unit with additional active heating elements		kW	7,05			7,05			7,05		
	Additional electric heating elements		kW	3,0+3,0			3,0+3,0			3,0+3,0		
	Outdoor unit power supply		V/ph/Hz	380-415/3/50			380-415/3/50			380-415/3/50		
	Outdoor unit maximum absorbed current		A	8			8			8		
	Outdoor unit maximum absorbed power		kW	5,4			5,7			5,7		
COOLING CIRCUIT	Compressor type			Twin Rotary DC Inverter			Twin Rotary DC Inverter			Twin Rotary DC Inverter		
	Refrigerant inlet connection diameter		"	3/8"-5/8"			3/8"-5/8"			3/8"-5/8"		
	Refrigerant gas	(d)		R32			R32			R32		
	Global warming potential		GWP	675			675			675		
	Refrigerant gas charge		kg	1,84			1,84			1,84		
	Additional charge for lengths over 15m		g/m	38			38			38		
	Refrigerant piping length limit	min - max	m	2 - 30			2 - 30			2 - 30		
	Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	max	m	15			15			15		
HYDRAULIC DATA	System hydraulic connections		"	1"			1"			1"		
	System expansion valve capacity		l	8			8			8		
	Load profile according to EN16147			L			L			L		
	DHW production energy efficiency class	Average Climate		A			A			A		
INTEGRATED DHW BOILER	ηHW (seasonal production efficiency DHW)	Average Climate	%	81%			81%			81%		
	Boiler volume		l	150			150			150		
	Boiler interior surface material			DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR		
	Heat exchanger in the boiler		m²	1,5			1,5			1,5		
	Type and thickness of boiler insulation			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm		
	Specific dispersion		W/K	2			2			2		
	DHW expansion tank capacity		l	7			7			7		
	DHW hydraulic connections		"	3/4"			3/4"			3/4"		
	DHW circuit heating power	w35 - w55	(f) kW	2,15			2,15			2,15		
	COP DHW circuit	w35 - w55	(f) W/W	3,12			3,12			3,12		
SECONDARY DHW COOLING CIRCUIT	DHW circuit heating power	w12 - w55	(g) kW	1,6			1,6			1,6		
	COP DHW circuit	w12 - w55	(g) W/W	2,58			2,58			2,58		
	Sound power indoor unit in heating/cooling + DHW circuit		dB(A)	49			49			49		
	DHW circuit circulator absorption		W	3 - 43			3 - 43			3 - 43		
	DHW circuit coolant gas		(h)	R134a			R134a			R134a		
	DHW circuit global warming potential		GWP	1430			1430			1430		
	DHW circuit coolant gas load		kg	0,35			0,35			0,35		

- (a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).
 (b) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber
 (c) Sound pressure values measured at a distance of 4 m in free field distance
 (d) Non-airtightly sealed equipment containing fluorinated GAS
 (e) maximum length of the refrigeration pipes beyond which checks on the minimum

- surface of the installation rooms are necessary, check the technical manual
 (f) Heating circuit water temperature 35°C/Outlet water temperature 55°C
 (g) Heating circuit water temperature 12°C/Outlet water temperature 55°C
 (h) Non-hermetically sealed equipment containing fluorinated GAS
 Energy efficiency classes refer to a range between A+++ and D.

Aquadue technology

Innovation that ensures simultaneous air conditioning and domestic hot water up to 75°C, avoiding interruptions, improving comfort, and increasing energy efficiency, thanks to heat recovery



Double refrigeration circuit

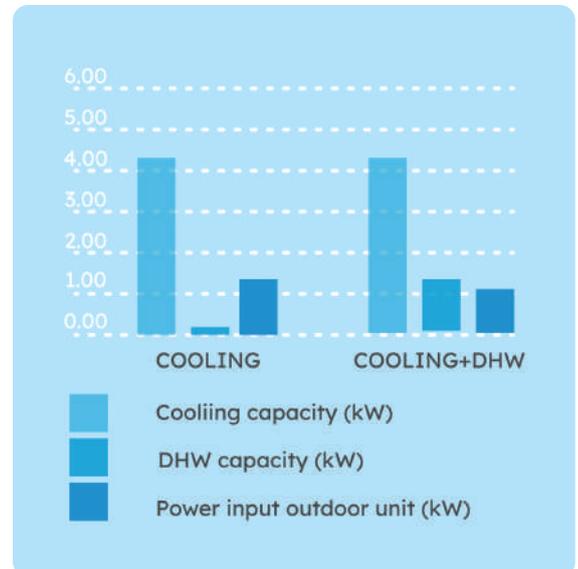
Sherpa Aquadue by Olimpia Splendid is a range of multi-purpose split air-to-water heat pumps for residential applications, which stands out for its patented dual cooling circuit, which improves comfort and increases efficiency.

Sherpa Aquadue allows for cooling in summer, heating in winter and DHW production at the same time: a feature that not only avoids interruptions in the delivery of indoor comfort, but also makes it possible to recover energy during summer cooling, increasing overall system efficiency. Sherpa Aquadue can also heat the DHW up to 75°C independently, without the use of electric heating elements or auxiliary generators (such as boilers or solar thermal systems).

Cooling and DHW production with energy recovery

During summer operation in cooling mode, the cycle dedicated to the production of DHW extracts heat from the water returning from the system circuit. The building's cooling demand is partially met by the DHW cycle, and the comfort refrigeration cycle must deliver less power, reducing the speed of the inverter compressor.

The heat removed from the system is recovered to produce domestic hot water, increasing the efficiency of the integrated system (ratio between energy produced and electricity drawn from the grid).



Domestic hot water at 75°C

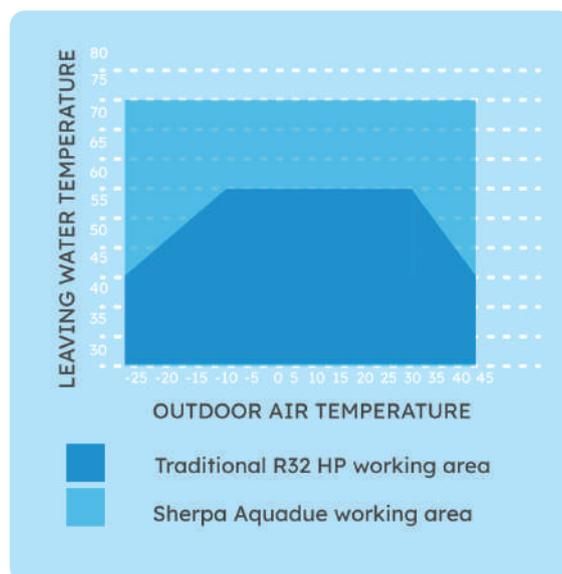
The possibility of storing DHW at high temperatures, in turn, makes it possible to avoid the periodic use of anti-legionella cycles (with their peaks in energy absorption) and to reduce the storage tank volume by up to 30% for the same amount of deliverable DHW, thus reducing overall space requirements.

It should be noted that the potential of this technology multiplies in the presence of a photovoltaic system: all Sherpa Aquadue heat pumps are indeed equipped with a contact that allows increased self-consumption of energy produced by the photovoltaic system, storing surplus energy and reducing the amount of electricity purchased from the grid, even when solar irradiation is absent.

Performance and energy benefits

In adverse weather conditions, traditional heat pumps reduce their thermal output, producing water at a lower temperature. Sherpa Aquadue, in addition to extending the operating range, guarantees constant thermal output for the production of DHW.

The dual cooling circuit makes it possible to achieve higher DHW production temperatures, independent of the outdoor air temperature, thanks to the water-to-water circuit.



First circuit +
second circuit
data

	4			6			8			10		
	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12
Cooling capacity	4,70	0,64	4,70	7,00	0,64	7,00	7,40	0,64	7,40	8,20	0,64	8,20
DHW yield	0,00	1,28	1,28	0,00	1,28	1,28	0,00	1,28	1,28	0,00	1,28	1,28
Absorption	1,36	0,56	1,17	2,33	0,56	2,00	2,19	0,56	1,87	2,48	0,56	2,13
EER COP	3,45	2,30	4,03	3,00	2,30	3,50	3,38	2,30	3,95	3,30	2,30	3,85

First circuit +
second circuit
data

	12			14			16		
	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12
Cooling capacity	11,60	0,64	11,60	12,70	0,64	12,70	14,00	0,64	14,00
DHW yield	0,00	1,28	1,28	0,00	1,28	1,28	0,00	1,28	1,28
Absorption	4,22	0,56	3,61	4,98	0,56	4,26	5,71	0,56	4,89
EER COP	2,75	2,30	3,21	2,55	2,30	2,98	2,45	2,30	2,86

First circuit +
second circuit
data

	12T			14T			16T		
	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12	Cooling w7 - a35	DHW w65 - w12	Cooling w7 - A35 ACS w65 - w12
Cooling capacity	11,60	0,64	11,60	12,70	0,64	12,70	14,00	0,64	14,00
DHW yield	0,00	1,28	1,28	0,00	1,28	1,28	0,00	1,28	1,28
Absorption	4,22	0,56	3,61	4,98	0,56	4,26	5,71	0,56	4,89
EER COP	2,75	2,30	3,21	2,55	2,30	2,98	2,45	2,30	2,86

AIR-TO-WATER HEAT PUMPS

SHERPA

[S3E]



Size	4, 6, 8, 10, 12, 14, 16, 12T, 14T, 16T
Energy class	A+++
Type	single-circuit split
Refrigerant	R32
DHW Temperature	60°C



Compact technology

The wall-mounted internal unit can be installed inside a kitchen cabinet, thanks to component engineering and compact dimensions. It can thus be easily integrated into the home interior, even in the case of retrofit installations.

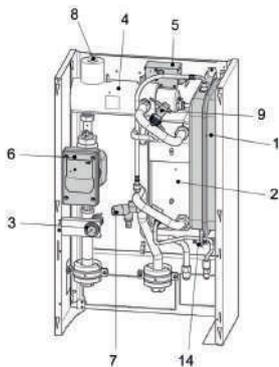
Photovoltaic integration

Thanks to the appropriate contact, it is possible to activate an increase in the heating/DHW temperature and a decrease in the cooling temperature, thereby accumulating thermal energy in the event of overproduction of the photovoltaic system.

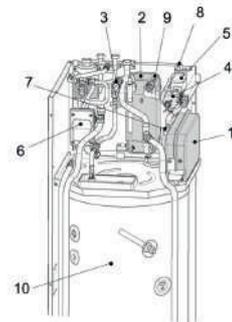


LAYOUT

INDOOR WALL-MOUNTED



TOWER INDOOR UNIT

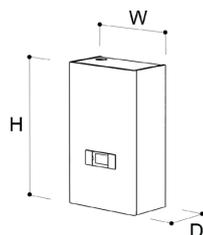


1. Air conditioner circuit expansion tank
2. Air conditioner circuit heat exchanger
3. Air conditioning circuit pressure gauge
4. Standard dual-stage electric heating elements (factory disabled) which activate to support the heat pump by configuring the electronic control. Each stage is activated according to the actual thermal power demand.
5. Electric heating elements safety thermostats
6. Air conditioner circuit circulation pump
7. Safety valves air conditioner circuit 3 bar
8. Automatic air vent valve
9. Flow switches
10. 200L storage tank with a heat exchanger coil surface area of 1.5 m²
 - Integrated heating cable (from size 12) to prevent freezing of the water in the bowl: intervenes during machine defrost operations or when the ambient air is below -7°C and stops when it exceeds 4°C

DIMENSIONS AND WEIGHT

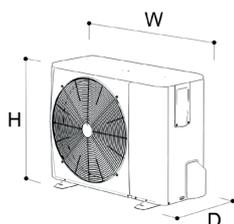
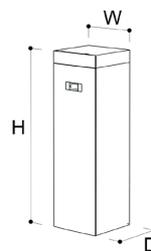
INDOOR WALL-MOUNTED

		4	6	8	10	12	14	16	12T	14T	16T
W	mm	500	500	500	500	500	500	500	500	500	500
H	mm	810	810	810	810	810	810	810	810	810	810
D	mm	296	296	296	296	296	296	296	296	296	296
WEIGHT	kg	36	36	36	36	36	36	36	36	36	36



TOWER INDOOR UNIT

		4	6	8	10	12	14	16	12T	14T	16T
W	mm	600	600	600	600	600	600	600	600	600	600
H	mm	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
D	mm	600	600	600	600	600	600	600	600	600	600
WEIGHT	kg	183	183	183	183	183	183	183	183	183	183



EXTERNAL

		4	6	8	10	12	12T	14	14T	16	16T
W	mm	1008	1008	1118	1118	1118	1118	1118	1118	1118	1118
H	mm	712	712	865	865	865	865	865	865	865	865
D	mm	426	426	523	523	523	523	523	523	523	523
WEIGHT	kg	58	58	77	77	96	112	96	112	96	112

COMPATIBLE ACCESSORIES

			WALL-MOUNTED	TOWER
INSTALLATION	B0918	Sherpa Flex Box AS kit	≤10	-
	B0961	Sherpa Flex Box AS RAL 9016 kit	≤10	-
	B0931	Remote control display kit 10 m	○	○
	B1120	Sherpa Flex Box adapter kit	≤10	-
HYDRAULICS	B0916	Kit 3-way valve for DHW	○	●
	B0971	Thermostatic mixing valve kit for DHW	-	○
	B0972	Expansion tank kit for DHW	-	○
ELECTRONICS	B0623	Outdoor air temperature probe kit	○	○
	B0624	DHW storage tank sensor kit	○	●
	B0917	Kit thermal solar probe	○	-
STORAGE TANKS	01804	HE 200 L storage tank	○	-
	01805	HE 300 L storage tank	○	-
	01806	HES 300 L solar storage tank	○	-
	01807	Hybride boiler HY 300 L	○	-
	01808	HYS 300 L solar hybrid storage tank	○	-
	01199	Thermal accumulation 50 L	○	○
RESISTANCES	01200	Thermal accumulation 100 L	○	○
	B0618	Resistance for boiler 2 kW	○	-
	B0666	Resistance for boiler 3 kW	○	-
	B0617	Resistance flange kit	○	-
AV002	Heat pump startup	▼	▼	

● Standard accessory; ○ Optional accessory; - Incompatible accessory;

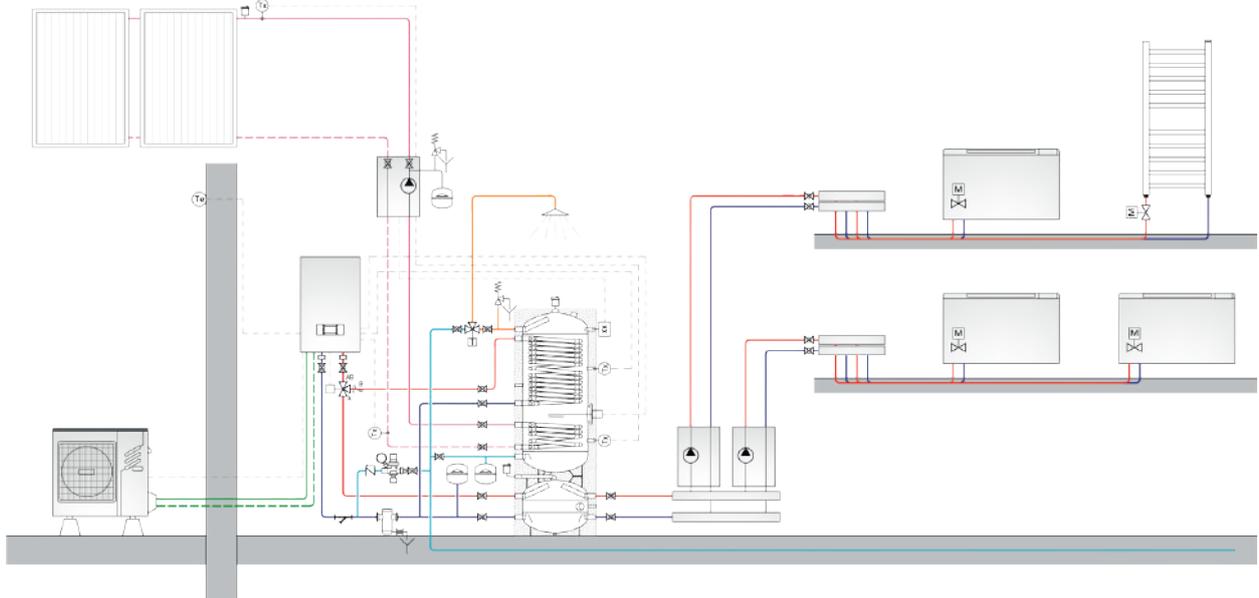
▼ Necessary Accessory;



SYSTEM DIAGRAMS

INDOOR WALL-MOUNTED

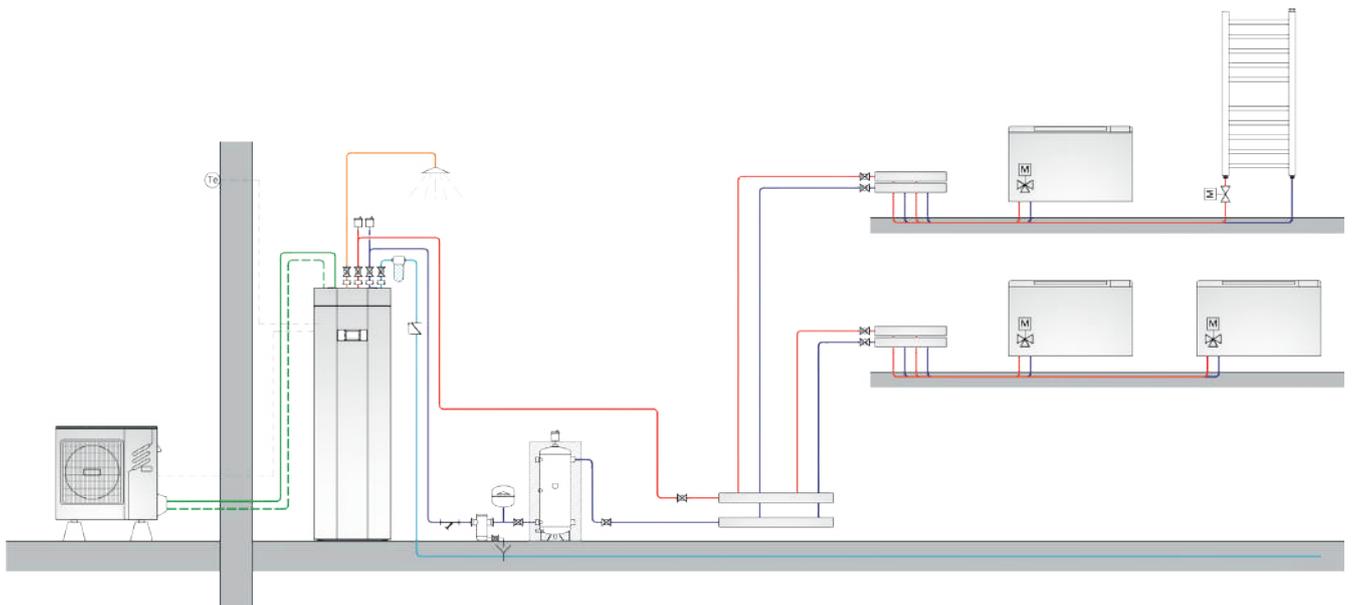
Sherpa S3E heat pump (heating and air conditioning; DHW production) Bi2 SLR fan coil radiator terminals; DHW integration with solar thermal system and integrated inertial buffer tank (used as a hydraulic separator) for the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

TOWER INDOOR UNIT

Sherpa Tower S3E heat pump (heating and air conditioning; DHW production) Bi2 SLR fan coil radiator terminals with 3-way valves and inertial buffer tank installed in series on the return line of the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown. N.B. Sherpa Tower S3E indoor unit with thermostatic mixer kit (B0971) and expansion tank kit for DHW (B0972).

TECHNICAL DATA				4	6	8	10									
Outdoor unit wall-mounted				02284	02285	02286	02287									
Indoor unit wall-mounted				02294	02294	02294	02294									
Indoor unit tower				02300	02300	02300	02300									
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum				
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	KW	2,42	4,25	5,66	3,53	6,20	8,26	4,73	8,30	11,05	5,70	10,0	13,32
	COP	a7/6 - w30/35	(a)	W/W	-	5,15	-	-	5,00	-	-	5,20	-	-	5,00	-
	Heating power	a2/1 - w30/35	(a)	KW	2,54	4,45	5,93	3,13	5,50	7,32	4,05	7,10	9,46	4,67	8,20	10,92
	COP	a2/1 - w30/35	(a)	W/W	-	4,05	-	-	3,95	-	-	4,10	-	-	4,05	-
	Heating power	a-7/-8 - w30/35	(a)	KW	2,74	4,80	6,39	3,48	6,10	8,12	4,05	7,10	9,46	4,70	8,25	10,99
	COP	a-7/-8 - w30/35	(a)	W/W	-	3,15	-	-	3,05	-	-	3,25	-	-	3,15	-
	Heating power	a-15/-16 - w30/35	(a)	KW	1,75	3,07	4,09	2,15	3,77	5,02	3,31	5,80	7,72	3,48	6,10	8,12
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,88	-	-	2,83	-	-	2,98	-	-	3,01	-
	Heating power (fancoils)	a7/6 - w40/45	(a)	KW	2,48	4,35	5,79	3,62	6,35	8,46	4,67	8,20	10,92	5,70	10,00	13,32
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,80	-	-	3,75	-	-	3,95	-	-	3,80	-
	Heating power (fancoils)	a2/1 - w40/45	(a)	KW	2,91	5,10	6,79	3,31	5,80	7,72	4,22	7,40	9,86	4,47	7,85	10,45
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	3,00	-	-	3,00	-	-	3,25	-	-	3,20	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	KW	2,45	4,30	5,73	3,08	5,40	7,19	3,76	6,60	8,79	4,19	7,35	9,79
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,35	-	-	2,40	-	-	2,55	-	-	2,55	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	KW	1,52	2,66	3,54	1,86	3,27	4,35	2,87	5,04	6,71	3,03	5,31	7,07
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,02	-	-	1,98	-	-	2,32	-	-	2,34	-
	Cooling power	a35 - w23/18	(a)	KW	2,41	4,50	5,52	3,51	6,55	8,03	4,50	8,40	10,30	5,36	10,00	12,27
	EER	a35 - w23/18	(a)	W/W	-	5,55	-	-	4,90	-	-	5,05	-	-	4,80	-
	Cooling power (fancoils)	a35 - w12/7	(a)	KW	2,52	4,70	5,77	3,75	7,00	8,59	3,97	7,40	9,08	4,40	8,20	10,06
	EER (fancoils)	a35 - w12/7	(a)	W/W	-	3,45	-	-	3,00	-	-	3,38	-	-	3,30	-
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++			A+++		
	SCOP	Warmer Climate			6,46			6,57			6,99			7,09		
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %	255,4%			259,8%			276,6%			280,5%		
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++			A+++		
	SCOP	Average Climate			4,85			4,95			5,22			5,20		
	s (Seasonal efficiency for space heating)	Average Climate		ηs %	191,0%			195,0%			205,6%			204,8%		
	Energy efficiency class in water heating 35°C	Cold Climate			A++			A++			A++			A++		
	SCOP	Cold Climate			4,06			4,21			4,33			4,32		
	s (Seasonal efficiency for space heating)	Cold Climate		ηs %	159,5%			165,3%			170,0%			169,8%		
	Energy efficiency class in water heating 55°C	Warmer Climate			A+++			A+++			A+++			A+++		
	SCOP	Warmer Climate			4,15			4,21			4,51			4,62		
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %	163,1%			165,4%			177,2%			181,7%		
	Energy efficiency class in water heating 55°C	Average Climate			A++			A++			A++			A++		
	SCOP	Average Climate			3,31			3,52			3,37			3,47		
	s (Seasonal efficiency for space heating)	Average Climate		ηs %	129,5%			137,9%			131,6%			135,7%		
	Energy efficiency class in water heating 55°C	Cold Climate			A+			A+			A+			A+		
SCOP	Cold Climate			2,63			2,85			2,88			2,99			
s (Seasonal efficiency for space heating)	Cold Climate		ηs %	102,1%			111,1%			112,1%			116,5%			
NOISE LEVEL	Indoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	46/40			46/40			46/42			46/42		
	Indoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)	(b)		dB(A)	38/32			38/32			38/36			38/36		
	Outdoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	56/52			58/53			59/54			60/55		
	Outdoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)	(c)		dB(A)	36/32			38/33			39/34			40/35		
ELECTRICAL DATA	System circulator absorption			W	3 - 87			3 - 87			3 - 87			3 - 87		
	Indoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50			220-240/1/50		
	Maximum current absorbed indoor unit with additional resistors active			A	14,10			14,10			14,10			14,10		
	Maximum power absorbed indoor unit with additional active heating elements			KW	3,22			3,22			3,22			3,22		
	Additional electric heating elements			KW	1,5+1,5			1,5+1,5			1,5+1,5			1,5+1,5		
	Outdoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50			220-240/1/50		
COOLING CIRCUIT	Outdoor unit maximum absorbed current			A	10			11			14			16		
	Outdoor unit maximum absorbed power			KW	2,2			2,6			3,3			3,6		
	Compressor type				Twin Rotary DC Inverter			Twin Rotary DC Inverter			Twin Rotary DC Inverter			Twin Rotary DC Inverter		
	Refrigerant inlet connection diameter			"	1/4"-5/8"			1/4"-5/8"			3/8"-5/8"			3/8"-5/8"		
R410A DRILLIC DATA	Refrigerant gas	(d)			R32			R32			R32			R32		
	Global warming potential			GWP	675			675			675			675		
	Refrigerant gas charge			kg	1,5			1,5			1,65			1,65		
	Additional charge for lengths over 15m			g/m	20			20			38			38		
	Refrigerant piping length limit	min - max		m	2 - 30			2 - 30			2 - 30			2 - 30		
	Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	max	(e)	m	30			30			20			20		
	System hydraulic connections			"	1"			1"			1"			1"		
	System expansion valve capacity			l	8			8			8			8		
INTEGRATED DHW BOILER	Load profile according to EN16147				XL			XL			XL			XL		
	DHW production energy efficiency class	Average Climate			A+			A+			A+			A+		
	ηHW (seasonal production efficiency DHW)	Average Climate		%	125%			125%			123%			123%		
	Boiler volume			l	200			200			200			200		
	Boiler interior surface material				DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR		
	Heat exchanger in the boiler			m²	2,4			2,4			2,4			2,4		
	Type and thickness of boiler insulation				Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm		
	Specific dispersion			W/K	2			2			2			2		
DHW expansion tank capacity			l	7			7			7			7			
DHW hydraulic connections			"	3/4"			3/4"			3/4"			3/4"			

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).

(b) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber

(c) Sound pressure values measured at a distance of 4 m in free field distance

(d) Non-airtightly sealed equipment containing fluorinated GAS

(e) maximum length of the refrigeration pipes beyond which checks on the minimum surface of the installation rooms are necessary, check the technical manual
Energy efficiency classes refer to a range between A+++ and D.

TECHNICAL DATA				12			14			16			
Outdoor unit wall-mounted				02288			02289			02290			
Indoor unit wall-mounted				02295			02295			02295			
Indoor unit tower				02301			02301			02301			
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	KW	5,65	12,10	15,79	6,77	14,50	18,92	7,47	16,00	20,88
	COP	a7/6 - w30/35	(a)	W/W	-	4,95	-	-	4,70	-	-	4,50	-
	Heating power	a2/1 - w30/35	(a)	KW	4,34	9,30	12,14	5,32	11,40	14,88	6,07	13,00	16,96
	COP	a2/1 - w30/35	(a)	W/W	-	3,95	-	-	3,65	-	-	3,50	-
	Heating power	a-7/-8 - w30/35	(a)	KW	4,67	10,00	13,05	5,60	12,00	15,66	6,21	13,3	17,35
	COP	a-7/-8 - w30/35	(a)	W/W	-	3,00	-	-	2,80	-	-	2,70	-
	Heating power	a-15/-16 - w30/35	(a)	KW	3,43	7,35	9,59	3,71	7,94	10,36	4,37	9,35	12,20
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,88	-	-	2,85	-	-	2,66	-
	Heating power (fancoils)	a7/6 - w40/45	(a)	KW	5,74	12,30	16,05	6,63	14,20	18,53	7,47	16,00	20,88
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,80	-	-	3,65	-	-	3,60	-
	Heating power (fancoils)	a2/1 - w40/45	(a)	KW	5,00	10,70	13,96	5,46	11,70	15,27	5,98	12,80	16,70
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	3,00	-	-	2,86	-	-	2,85	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	KW	4,76	10,20	13,31	5,51	11,80	15,40	6,02	12,90	16,83
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,40	-	-	2,35	-	-	2,23	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	KW	3,10	6,63	8,65	3,34	7,16	9,34	3,93	8,41	10,97
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,32	-	-	2,29	-	-	2,03	-
	Cooling power	a35 - w23/18	(a)	KW	5,60	12,00	14,29	6,31	13,00	16,08	6,96	13,50	17,75
	EER	a35 - w23/18	(a)	W/W	-	4,00	-	-	3,70	-	-	3,61	-
	Cooling power (fancoils)	a35 - w12/7	(a)	KW	5,42	11,60	13,82	5,93	12,70	15,13	6,54	14,00	16,67
	EER (fancoils)	a35 - w12/7	(a)	W/W	-	2,75	-	-	2,55	-	-	2,45	-
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++		
	SCOP	Warmer Climate			6,48			6,58			6,47		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		256,1%			260,3%			255,6%		
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++		
	SCOP	Average Climate			4,81			4,72			4,62		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		189,4%			185,7%			181,7%		
	Energy efficiency class in water heating 35°C	Cold Climate			A+			A++			A++		
	SCOP	Cold Climate			4,08			4,07			4,02		
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %		160,2%			159,6%			157,8%		
	Energy efficiency class in water heating 55°C	Warmer Climate			A+++			A+++			A+++		
	SCOP	Warmer Climate			4,43			4,49			4,48		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		174,1%			176,5%			176,1%		
	Energy efficiency class in water heating 55°C	Average Climate			A++			A++			A++		
	SCOP	Average Climate			3,45			3,47			3,41		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		135,1%			135,6%			133,3%		
	Energy efficiency class in water heating 55°C	Cold Climate			A+			A+			A+		
SCOP	Cold Climate			3,02			3,05			3,12			
s (Seasonal efficiency for space heating)	Cold Climate	ηs %		117,8%			118,9%			121,8%			
NOISE LEVEL	Indoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	48/46			48/46			48/46		
	Indoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(b)	dB(A)	40/38			40/38			40/38		
	Outdoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	64/60			65/62			68/64		
	Outdoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(c)	dB(A)	44/40			45/42			48/44		
ELECTRICAL DATA	System circulator absorption			W	8 - 140			8 - 140			8 - 140		
	Indoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Maximum current absorbed indoor unit with additional resistors active			A	27,20			27,20			27,20		
	Maximum power absorbed indoor unit with additional active heating elements			KW	6,22			6,22			6,22		
	Additional electric heating elements			KW	3,0+3,0			3,0+3,0			3,0+3,0		
	Outdoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Outdoor unit maximum absorbed current			A	23			25			25		
Outdoor unit maximum absorbed power			KW	5,4			5,7			5,7			
COOLING CIRCUIT	Compressor type				Twin Rotary DC			Twin Rotary DC			Twin Rotary DC		
	Refrigerant inlet connection diameter			"	3/8"-5/8"			3/8"-5/8"			3/8"-5/8"		
	Refrigerant gas		(d)		R32			R32			R32		
	Global warming potential			GWP	675			675			675		
	Refrigerant gas charge			kg	1,84			1,84			1,84		
	Additional charge for lengths over 15m			g/m	38			38			38		
	Refrigerant piping length limit	min - max		m	2 - 30			2 - 30			2 - 30		
Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	max	(e)	m	15			15			15			
HYDRAULIC DATA	System hydraulic connections			"	1"			1"			1"		
	System expansion valve capacity			l	8			8			8		
INTEGRATED DHW BOILER	Load profile according to EN16147				XL			XL			XL		
	DHW production energy efficiency class	Average Climate			A			A			A		
	ηHW (seasonal production efficiency DHW)	Average Climate		%	95%			95%			95%		
	Boiler volume			l	200			200			200		
	Boiler interior surface material				DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR		
	Heat exchanger in the boiler			m²	2,4			2,4			2,4		
	Type and thickness of boiler insulation				Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm		
	Specific dispersion			W/K	2			2			2		
	DHW expansion tank capacity			l	7			7			7		
	DHW hydraulic connections			"	3/4"			3/4"			3/4"		

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).
 (b) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber
 (c) Sound pressure values measured at a distance of 4 m in free field distance
 (d) Non-airtightly sealed equipment containing fluorinated GAS

(q) maximum length of the refrigeration pipes beyond which checks on the minimum surface of the installation rooms are necessary, check the technical manual
 Energy efficiency classes refer to a range between A+++ and D.

TECHNICAL DATA				12T			14T			16T			
Outdoor unit wall-mounted				02291			02292			02293			
Indoor unit wall-mounted				02295			02295			02295			
Indoor unit tower				02301			02301			02301			
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	KW	5,65	12,10	15,79	6,77	14,50	18,92	7,47	16,00	20,88
	COP	a7/6 - w30/35	(a)	W/W	-	4,95	-	-	4,70	-	-	4,50	-
	Heating power	a2/1 - w30/35	(a)	KW	4,34	9,30	12,14	5,32	11,40	14,88	6,07	13,00	16,96
	COP	a2/1 - w30/35	(a)	W/W	-	3,95	-	-	3,65	-	-	3,50	-
	Heating power	a-7/-8 - w30/35	(a)	KW	4,67	10,00	13,05	5,60	12,00	15,66	6,21	13,30	17,35
	COP	a-7/-8 - w30/35	(a)	W/W	-	3,00	-	-	2,80	-	-	2,70	-
	Heating power	a-15/-16 - w30/35	(a)	KW	3,43	7,35	9,59	3,71	7,94	10,36	4,37	9,35	12,20
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,88	-	-	2,85	-	-	2,66	-
	Heating power (fancoils)	a7/6 - w40/45	(a)	KW	5,74	12,30	16,05	6,63	14,20	18,53	7,47	16,00	20,88
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,80	-	-	3,65	-	-	3,60	-
	Heating power (fancoils)	a2/1 - w40/45	(a)	KW	5,00	10,70	13,96	5,46	11,70	15,27	5,98	12,80	16,70
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	3,00	-	-	2,86	-	-	2,85	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	KW	4,76	10,20	13,31	5,51	11,80	15,40	6,02	12,90	16,83
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,40	-	-	2,35	-	-	2,23	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	KW	3,10	6,63	8,65	3,34	7,16	9,34	3,93	8,41	10,97
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,32	-	-	2,29	-	-	2,03	-
	Cooling power	a35 - w23/18	(a)	KW	5,60	12,00	14,29	6,31	13,00	16,08	6,96	13,50	17,75
	EER	a35 - w23/18	(a)	W/W	-	4,00	-	-	3,70	-	-	3,61	-
	Cooling power (fancoils)	a35 - w12/7	(a)	KW	5,42	11,60	13,82	5,93	12,70	15,13	6,54	14,00	16,67
	EER (fancoils)	a35 - w12/7	(a)	W/W	-	2,75	-	-	2,55	-	-	2,45	-
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++		
	SCOP	Warmer Climate			6,47			6,57			6,28		
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %	255,6%			259,8%			248,1%		
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++		
	SCOP	Average Climate			4,81			4,72			4,62		
	s (Seasonal efficiency for space heating)	Average Climate		ηs %	189,3%			185,6%			181,6%		
	Energy efficiency class in water heating 35°C	Cold Climate			A++			A++			A++		
	SCOP	Cold Climate			4,08			4,07			4,02		
	s (Seasonal efficiency for space heating)	Cold Climate		ηs %	160,2%			159,6%			157,8%		
	Energy efficiency class in water heating 55°C	Warmer Climate			A+++			A+++			A+++		
	SCOP	Warmer Climate			4,42			4,49			4,47		
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %	173,8%			176,4%			175,9%		
	Energy efficiency class in water heating 55°C	Average Climate			A++			A++			A++		
	SCOP	Average Climate			3,45			3,47			3,41		
	s (Seasonal efficiency for space heating)	Average Climate		ηs %	135,1%			135,6%			133,2%		
	Energy efficiency class in water heating 55°C	Cold Climate			A+			A+			A+		
SCOP	Cold Climate			3,02			3,05			3,12			
s (Seasonal efficiency for space heating)	Cold Climate		ηs %	117,7%			118,9%			121,8%			
NOISE LEVEL	Indoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	48/46			48/46			48/46		
	Indoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(b)	dB(A)	40/38			40/38			40/38		
	Outdoor unit sound power (reg. EU 811-2013/UNI EN 12102:2022)			dB(A)	64/60			65/62			68/64		
	Outdoor unit sound pressure (reg. EU 811-2013/UNI EN 12102:2022)		(c)	dB(A)	44/40			45/42			48/44		
ELECTRICAL DATA	System circulator absorption			W	8 - 140			8 - 140			8 - 140		
	Indoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Maximum current absorbed indoor unit with additional resistors active			A	27,20			27,20			27,20		
	Maximum power absorbed indoor unit with additional active heating elements			KW	6,22			6,22			6,22		
	Additional electric heating elements			KW	3,0+3,0			3,0+3,0			3,0+3,0		
	Outdoor unit power supply			V/ph/Hz	380-415/3/50			380-415/3/50			380-415/3/50		
	Outdoor unit maximum absorbed current			A	8			8			8		
Outdoor unit maximum absorbed power			KW	5,4			5,7			5,7			
COOLING CIRCUIT	Compressor type				Twin Rotary DC			Twin Rotary DC			Twin Rotary DC		
	Refrigerant inlet connection diameter			"	3/8"-5/8"			3/8"-5/8"			3/8"-5/8"		
	Refrigerant gas		(d)		R32			R32			R32		
	Global warming potential			GWP	675			675			675		
	Refrigerant gas charge			kg	1,84			1,84			1,84		
	Additional charge for lengths over 15m			g/m	38			38			38		
	Refrigerant piping length limit	min - max		m	2 - 30			2 - 30			2 - 30		
Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	max	(e)	m	15			15			15			
HYDRAULIC DATA	System hydraulic connections			"	1"			1"			1"		
	System expansion valve capacity			l	8			8			8		
INTEGRATED DHW BOILER	Load profile according to EN16147				XL			XL			XL		
	DHW production energy efficiency class	Average Climate			A			A			A		
	ηHW (seasonal production efficiency DHW)	Average Climate		%	95%			95%			95%		
	Boiler volume			l	200			200			200		
	Boiler interior surface material				DD12 glazed steel S235JR			DD12 glazed steel S235JR			DD12 glazed steel S235JR		
	Heat exchanger in the boiler			m²	2,4			2,4			2,4		
	Type and thickness of boiler insulation				Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm			Hard expanded polyurethane 55 mm		
	Specific dispersion			W/K	2			2			2		
	DHW expansion tank capacity			l	7			7			7		
	DHW hydraulic connections			"	3/4"			3/4"			3/4"		

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).

(b) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber

(c) Sound pressure values measured at a distance of 4 m in free field distance

(d) Non-airtightly sealed equipment containing fluorinated GAS

(e) maximum length of the refrigeration pipes beyond which checks on the minimum surface of the installation rooms are necessary, check the technical manual
Energy efficiency classes refer to a range between A+++ and D.

AIR-TO-WATER HEAT PUMPS



SHERPA MONOBLOC

[S2E]

Size	6, 8, 10, 12, 14, 16, 12T, 14T
Energy class	A+++
Type	monobloc
Refrigerant	R32
DHW Temperature	60°C



Compact single-fan unit

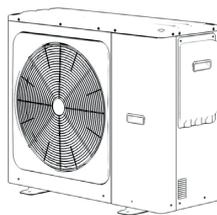
Compact heat pump with particularly small dimensions: all power sizes have the same dimensions (footprint 104x42 cm) and a single fan unit (86 cm high), making it suitable for any renovation or new-build application.

Cascade management

Up to 6 units (of the same size) can be connected to make up a system with power up to 96 kW. The system consists of 1 master and 5 slaves, and only the master unit can produce domestic hot water.

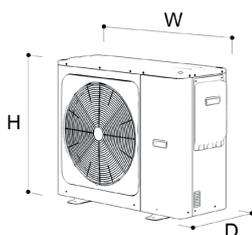


LAYOUT



- Twin Rotary DC Compressor
- Electronic expansion valve
- Fan with Brushless DC Motors
- External air probe integrated with the machine
- Circulation pump
- DHW boiler probe supplied as standard

DIMENSIONS AND WEIGHT



		6	8	10	12	14	16	12T	14T
W	mm	1040	1040	1040	1040	1040	1040	1040	1040
H	mm	865	865	865	865	865	865	865	865
D	mm	523	523	523	523	523	523	523	523
WEIGHT	kg	87	87	87	106	106	106	120	120

COMPATIBLE ACCESSORIES

CATEGORY	ACCESSORY CODE	DESCRIPTION	COMPATIBILITY
HYDRAULICS	B0916	Kit 3-way valve for DHW	○
STORAGE TANKS	01804	HE 200 L storage tank	○
	01805	HE 300 L storage tank	○
	01806	HES 300 L solar storage tank	○
	01807	Hybride boiler HY 300 L	○
	01808	HYS 300 L solar hybrid storage tank	○
RESISTANCES	B0618	Resistance for boiler 2 kW	○
	B0666	Resistance for boiler 3 kW	○
	B0617	Resistance flange kit	○
STORAGE TANKS	01199	Thermal accumulation 50 L	○
	01200	Thermal accumulation 100 L	○
SERVICES	AV001	Heat pump startup	○

● Standard accessory; ○ Optional accessory; - Incompatible accessory

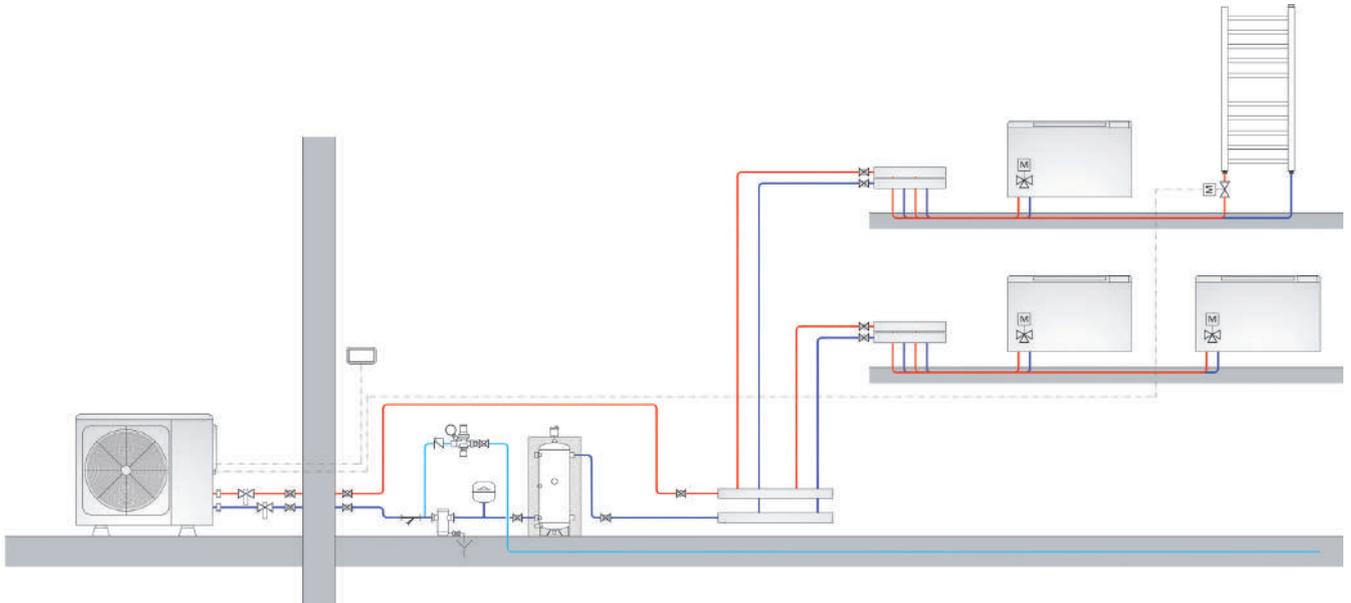
When compatibility is only possible with certain sizes or models, the information is given in the table. Accessory description available at end of chapter.



SYSTEM DIAGRAMS

WITHOUT SOLAR THERMAL SYSTEM AND INTEGRATED INERTIAL BUFFER TANK

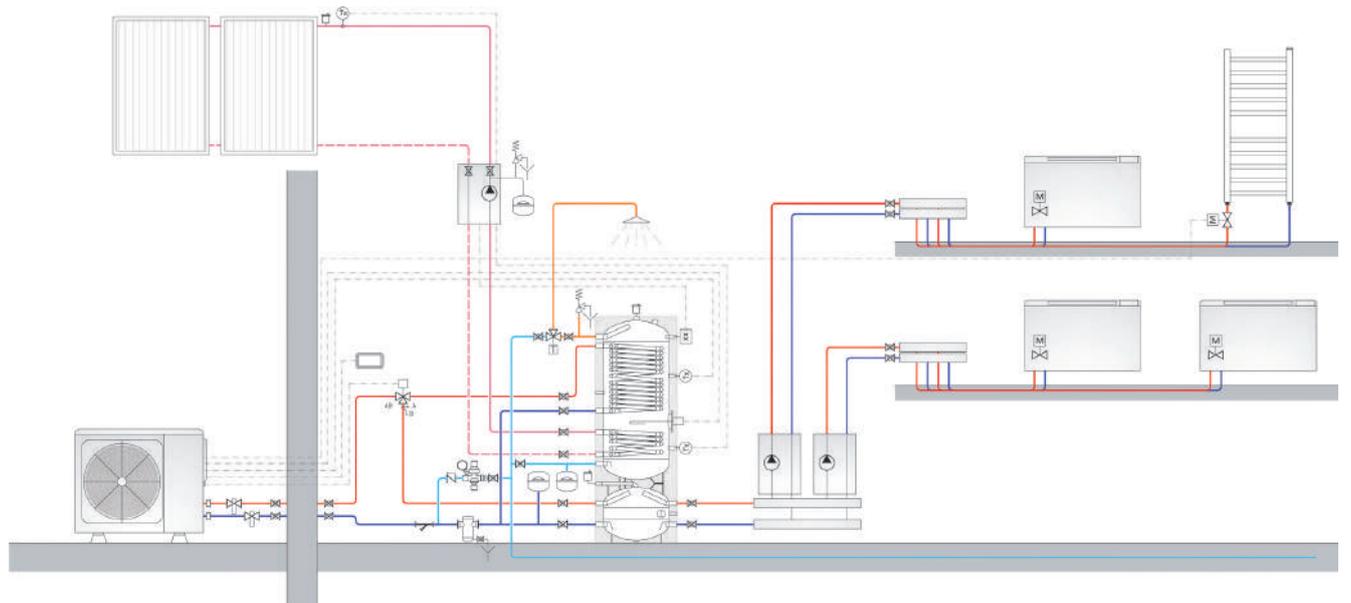
Monobloc heat pump (heating and air conditioning) and Bi2 SLR fan coil radiator terminals with 3-way valves and inertial buffer tank installed in series on the return line of the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

WITH SOLAR THERMAL AND INTEGRATED INERTIAL BUFFER TANK

Monobloc heat pump (heating and air conditioning; DHW production) Bi2 SLR fan coil radiator terminals; DHW integration with solar thermal system and integrated inertial buffer tank (used as a hydraulic separator) for the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

TECHNICAL DATA				6			8			10		
				02303			02304			02305		
Product code				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a) kW	-	6,5	8,47	-	8,4	9,56	-	10	11,16
	COP	a7/6 - w30/35	(a) W/W	-	5,3	-	-	5,05	-	-	4,7	-
	Heating power	a2/1 - w30/35	(a) kW	-	5,6	7,64	-	7,1	8,52	-	8,2	9,94
	COP	a2/1 - w30/35	(a) W/W	-	4,2	-	-	3,95	-	-	3,8	-
	Heating power	a-7/-8 - w30/35	(a) kW	-	6,2	6,67	-	7,1	7,65	-	8	8,4
	COP	a-7/-8 - w30/35	(a) W/W	-	3,2	-	-	3,15	-	-	3	-
	Heating power	a-15/-16 - w30/35	(a) kW	-	5,59	5,59	-	6,07	6,07	-	6,48	6,48
	COP	a-15/-16 - w30/35	(a) W/W	-	2,58	-	-	2,54	-	-	2,5	-
	Heating power (fancoils)	a7/6 - w40/45	(a) kW	-	6,6	8,14	-	8,5	9,28	-	10,2	10,87
	COP (fancoils)	a7/6 - w40/45	(a) W/W	-	4	-	-	3,8	-	-	3,65	-
	Heating power (fancoils)	a2/1 - w40/45	(a) kW	-	6,5	7,03	-	7,5	8,22	-	8,5	9,42
	COP (fancoils)	a2/1 - w40/45	(a) W/W	-	3,15	-	-	3,05	-	-	2,95	-
	Heating power (fancoils)	a-7/-8 - w40/45	(a) kW	-	6,1	6,47	-	6,8	7,43	-	7,4	8,16
	COP (fancoils)	a-7/-8 - w40/45	(a) W/W	-	2,6	-	-	2,5	-	-	2,4	-
	Heating power (fancoils)	a-15/-16 - w40/45	(a) kW	-	5,45	5,45	-	5,92	5,92	-	6,33	6,33
	COP (fancoils)	a-15/-16 - w40/45	(a) W/W	-	2,23	-	-	2,2	-	-	2,14	-
	Cooling power	a35 - w23/18	(a) kW	-	6,5	9,27	-	8,3	10,31	-	10	10,31
	EER	a35 - w23/18	(a) W/W	-	5,1	-	-	4,85	-	-	4,3	-
Cooling power (fancoils)	a35 - w12/7	(a) kW	-	5,5	6,84	-	7,4	8,66	-	9	9	
EER (fancoils)	a35 - w12/7	(a) W/W	-	3,25	-	-	3,15	-	-	2,9	-	
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate		A+++			A+++			A+++		
	SCOP	Warmer Climate		6,78			6,94			7,05		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %	268,2			274,7			279,1		
	Energy efficiency class in water heating 35°C	Average Climate		A+++			A+++			A+++		
	SCOP	Average Climate		5,12			5,17			5,12		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %	201,8			204			201,9		
	Energy efficiency class in water heating 35°C	Cold Climate		A+++			A+++			A+++		
	SCOP	Cold Climate		4,41			4,44			4,44		
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %	173,4			174,6			174,6		
	Energy efficiency class in water heating 55°C	Warmer Climate		A++			A++			A++		
	SCOP	Warmer Climate		4,35			4,71			4,91		
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %	170,9			185,3			193,4		
	Energy efficiency class in water heating 55°C	Average Climate		A++			A++			A++		
	SCOP	Average Climate		3,59			3,67			3,71		
	s (Seasonal efficiency for space heating)	Average Climate	ηs %	140,7			143,6			145,5		
	Energy efficiency class in water heating 55°C	Cold Climate		A++			A++			A++		
	SCOP	Cold Climate		2,9			3,02			3,14		
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %	113,1			117,7			122,4		
NOISE LEVEL	Outdoor unit sound power (nominal)		dB(A)	60			63			65		
	Outdoor unit sound pressure (nominal)	(b)	dB(A)	48			51			53		
ELECTRICAL DATA	System circulator absorption		W	4-95			4-95			4-95		
	Outdoor unit power supply		V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
	Outdoor unit maximum absorbed current		A	13			14,5			16		
	Outdoor unit maximum absorbed power		kW	3,2			3,5			3,8		
COOLING CIRCUIT	Compressor type			Twin Rotary			Twin Rotary			Twin Rotary		
	Refrigerant gas	(c)		R32			R32			R32		
	Global warming potential		GWP	675			675			675		
HYDRAULIC DATA	Refrigerant gas charge		kg	1,25			1,25			1,25		
	Hydraulic connections		"	G1 BSP			G1 BSP			G1 BSP		
	Capacity of expansion vessel		l	5			5			5		

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).

(b) Sound pressure values measured at a distance of 4 m in free field

(c) Airtightly sealed equipment containing fluorinated GAS
Energy efficiency classes refer to a range between A+++ and D.

TECHNICAL DATA					12			14			16							
					Product code					02306			02307			02308		
					Compressor frequency					Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	kW	-	12,2	13,42	-	14,1	15,27	-	16	18,23					
	COP	a7/6 - w30/35	(a)	W/W	-	4,9	-	-	4,7	-	-	4,5	-					
	Heating power	a2/1 - w30/35	(a)	kW	-	12,3	12,3	-	13	13,56	-	14,5	14,76					
	COP	a2/1 - w30/35	(a)	W/W	-	3,6	-	-	3,5	-	-	3,25	-					
	Heating power	a-7/-8 - w30/35	(a)	kW	-	11,6	12,1	-	12,5	13,2	-	13,5	14,1					
	COP	a-7/-8 - w30/35	(a)	W/W	-	2,85	-	-	2,8	-	-	2,7	-					
	Heating power	a-15/-16 - w30/35	(a)	kW	-	10,35	10,35	-	11,22	11,22	-	11,82	11,82					
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,39	-	-	2,35	-	-	2,22	-					
	Heating power (fancoils)	a7/6 - w40/45	(a)	kW	-	12,5	13,14	-	14,5	14,87	-	16,2	18,07					
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,7	-	-	3,55	-	-	3,45	-					
	Heating power (fancoils)	a2/1 - w40/45	(a)	kW	-	12	12	-	13	13,28	-	14,3	14,74					
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	2,9	-	-	2,8	-	-	2,7	-					
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	kW	-	11,5	11,5	-	12,5	12,5	-	13,5	13,5					
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,4	-	-	2,3	-	-	2,25	-					
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	kW	-	9,62	9,62	-	10,3	10,3	-	10,96	10,96					
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,11	-	-	2,07	-	-	1,98	-					
	Cooling power	a35 - w23/18	(a)	kW	-	12,2	16,11	-	13,9	17,13	-	15,4	17,13					
	EER	a35 - w23/18	(a)	W/W	-	4,6	-	-	4,4	-	-	4,2	-					
Cooling power (fancoils)	a35 - w12/7	(a)	kW	-	11,6	13,44	-	13,4	15,48	-	14	16,01						
EER (fancoils)	a35 - w12/7	(a)	W/W	-	3,1	-	-	2,93	-	-	2,9	-						
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++							
	SCOP	Warmer Climate			6,63			6,59			6,46							
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		262,3			260,5			255,4							
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++							
	SCOP	Average Climate			5,08			4,89			4,84							
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		200,1			192,5			190,5							
	Energy efficiency class in water heating 35°C	Cold Climate			A+++			A+++			A+++							
	SCOP	Cold Climate			4,3			4,36			4,35							
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %		168,8			171,3			170,9							
	Energy efficiency class in water heating 55°C	Warmer Climate			A++			A++			A++							
	SCOP	Warmer Climate			4,55			4,69			4,68							
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		179			184,6			184							
	Energy efficiency class in water heating 55°C	Average Climate			A++			A++			A++							
	SCOP	Average Climate			3,62			3,62			3,59							
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		141,6			141,8			140,6							
Energy efficiency class in water heating 55°C	Cold Climate			A++			A++			A++								
SCOP	Cold Climate			3,23			3,24			3,18								
s (Seasonal efficiency for space heating)	Cold Climate	ηs %		126			126,6			124,3								
NOISE LEVEL	Outdoor unit sound power (nominal)			dB(A)	70			72			72							
	Outdoor unit sound pressure (nominal)		(b)	dB(A)	56			58			58							
ELECTRICAL DATA	System circulator absorption			W	4-95			4-95			4-95							
	Outdoor unit power supply			V/ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50							
	Outdoor unit maximum absorbed current			A	25			26,5			28							
	Outdoor unit maximum absorbed power			kW	5,8			6,2			6,6							
COOLING CIRCUIT	Compressor type				Twin Rotary			Twin Rotary			Twin Rotary							
	Refrigerant gas		(c)		R32			R32			R32							
	Global warming potential			GWP	675			675			675							
HYDRAULIC DATA	Refrigerant gas charge			kg	1,8			1,8			1,8							
	Hydraulic connections			"	G5/4 BSP			G5/4 BSP			G5/4 BSP							
	Capacity of expansion vessel			l	5			5			5							

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).
 (b) Sound pressure values measured at a distance of 4 m in free field

(c) Airtightly sealed equipment containing fluorinated GAS
 Energy efficiency classes refer to a range between A+++ and D.

TECHNICAL DATA					12T			14T							
					Product code					02309			02310		
					Compressor frequency					Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a)	kW	-	12,2	13,42	-	14,1	15,27					
	COP	a7/6 - w30/35	(a)	W/W	-	4,9	-	-	4,7	-					
	Heating power	a2/1 - w30/35	(a)	kW	-	12,3	12,3	-	13	13,56					
	COP	a2/1 - w30/35	(a)	W/W	-	3,6	-	-	3,5	-					
	Heating power	a-7/-8 - w30/35	(a)	kW	-	11,6	12,1	-	12,5	13,2					
	COP	a-7/-8 - w30/35	(a)	W/W	-	2,85	-	-	2,8	-					
	Heating power	a-15/-16 - w30/35	(a)	kW	-	10,35	10,35	-	11,22	11,22					
	COP	a-15/-16 - w30/35	(a)	W/W	-	2,39	-	-	2,35	-					
	Heating power (fancoils)	a7/6 - w40/45	(a)	kW	-	12,5	13,14	-	14,5	14,87					
	COP (fancoils)	a7/6 - w40/45	(a)	W/W	-	3,7	-	-	3,55	-					
	Heating power (fancoils)	a2/1 - w40/45	(a)	kW	-	12	12	-	13	13,28					
	COP (fancoils)	a2/1 - w40/45	(a)	W/W	-	2,9	-	-	2,8	-					
	Heating power (fancoils)	a-7/-8 - w40/45	(a)	kW	-	11,5	11,5	-	12,5	12,5					
	COP (fancoils)	a-7/-8 - w40/45	(a)	W/W	-	2,4	-	-	2,3	-					
	Heating power (fancoils)	a-15/-16 - w40/45	(a)	kW	-	9,62	9,62	-	10,3	10,3					
	COP (fancoils)	a-15/-16 - w40/45	(a)	W/W	-	2,11	-	-	2,07	-					
	Cooling power	a35 - w23/18	(a)	kW	-	12,2	16,11	-	13,9	17,13					
	EER	a35 - w23/18	(a)	W/W	-	4,6	-	-	4,4	-					
Cooling power (fancoils)	a35 - w12/7	(a)	kW	-	11,6	13,44	-	13,4	15,48						
EER (fancoils)	a35 - w12/7	(a)	W/W	-	3,1	-	-	2,93	-						
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate				A+++			A+++						
	SCOP	Warmer Climate				6,64			6,59						
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %		262,5			260,6						
	Energy efficiency class in water heating 35°C	Average Climate				A+++			A+++						
	SCOP	Average Climate				5,08			4,89						
	s (Seasonal efficiency for space heating)	Average Climate		ηs %		200,2			192,5						
	Energy efficiency class in water heating 35°C	Cold Climate				A+++			A+++						
	SCOP	Cold Climate				4,3			4,36						
	s (Seasonal efficiency for space heating)	Cold Climate		ηs %		168,8			171,3						
	Energy efficiency class in water heating 55°C	Warmer Climate				A++			A++						
	SCOP	Warmer Climate				4,55			4,69						
	s (Seasonal efficiency for space heating)	Warmer Climate		ηs %		179			184,6						
	Energy efficiency class in water heating 55°C	Average Climate				A++			A++						
	SCOP	Average Climate				3,62			3,62						
	s (Seasonal efficiency for space heating)	Average Climate		ηs %		141,6			141,8						
Energy efficiency class in water heating 55°C	Cold Climate				A++			A++							
SCOP	Cold Climate				3,23			3,24							
s (Seasonal efficiency for space heating)	Cold Climate		ηs %		126			126,6							
NOISE LEVEL	Outdoor unit sound power (nominal)			dB(A)		70			72						
	Outdoor unit sound pressure (nominal)		(b)	dB(A)		57			59						
ELECTRICAL DATA	System circulator absorption			W		4-95			4-95						
	Outdoor unit power supply			V/ph/Hz		380-415/3/50			380-415/3/50						
	Outdoor unit maximum absorbed current			A		9,5			10,5						
	Outdoor unit maximum absorbed power			kW		5,8			6,2						
COOLING CIRCUIT	Compressor type					Twin Rotary			Twin Rotary						
	Refrigerant gas		(c)			R32			R32						
	Global warming potential			GWP		675			675						
HYDRAULIC DATA	Refrigerant gas charge			kg		1,8			1,8						
	Hydraulic connections			"		G5/4 BSP			G5/4 BSP						
	Capacity of expansion vessel			l		5			5						

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).

(b) Sound pressure values measured at a distance of 4 m in free field

(c) Airtightly sealed equipment containing fluorinated GAS
Energy efficiency classes refer to a range between A+++ and D.

AIR-TO-WATER HEAT PUMPS



SHERPA MONOBLOC

[S4P]

Size	6, 9, 12, 15, 12T, 15T
Energy class	A+++
Type	monobloc
Refrigerant	R290
DHW Temperature	70°C



Refrigeration circuit at R290

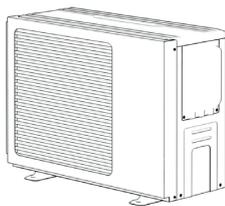
It enables the efficient delivery of climatic comfort with near-zero GWP and the production of DHW up to 70°C (boundary conditions -10/+25°C), without additional heating elements, optimizing energy consumption and avoiding anti-legionella cycles.

Cascade management

Up to 8 units (of the same size) can be connected to compose a system with a power output of up to 120 kW, with a small footprint due to the compact design of the individual single-fan units. The system consists of 1 master and 7 slaves, and only the master unit can produce domestic hot water.

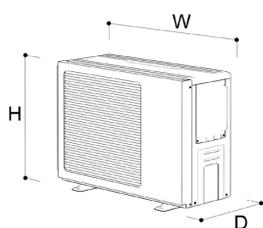


LAYOUT



- Twin Rotary DC Compressor
- Electronic expansion valve
- Fan with Brushless DC Motors
- External air probe integrated with the machine
- DHW boiler probe supplied as standard

DIMENSIONS AND WEIGHT



EXTERNAL

		6	9	12	15	12T	15T
W	mm	1000	1080	1080	1080	1080	1080
H	mm	725	857	857	857	857	857
D	mm	450	520	520	520	520	520
WEIGHT	kg	75	115	115	115	124	124

COMPATIBLE ACCESSORIES

CATEGORY	ACCESSORY CODE	DESCRIPTION	COMPATIBILITY
HYDRAULICS	B0916	Kit 3-way valve for DHW	○
STORAGE TANKS	01804	HE 200 L storage tank	○
	01805	HE 300 L storage tank	○
	01806	HES 300 L solar storage tank	○
	01807	Hybride boiler HY 300 L	○
	01808	HYS 300 L solar hybrid storage tank	○
RESISTANCES	B0618	Resistance for boiler 2 kW	○
	B0666	Resistance for boiler 3 kW	○
	B0617	Resistance flange kit	○
STORAGE TANKS	01199	Thermal accumulation 50 L	○
	01200	Thermal accumulation 100 L	○
SERVICES	AV001	Heat pump startup	○

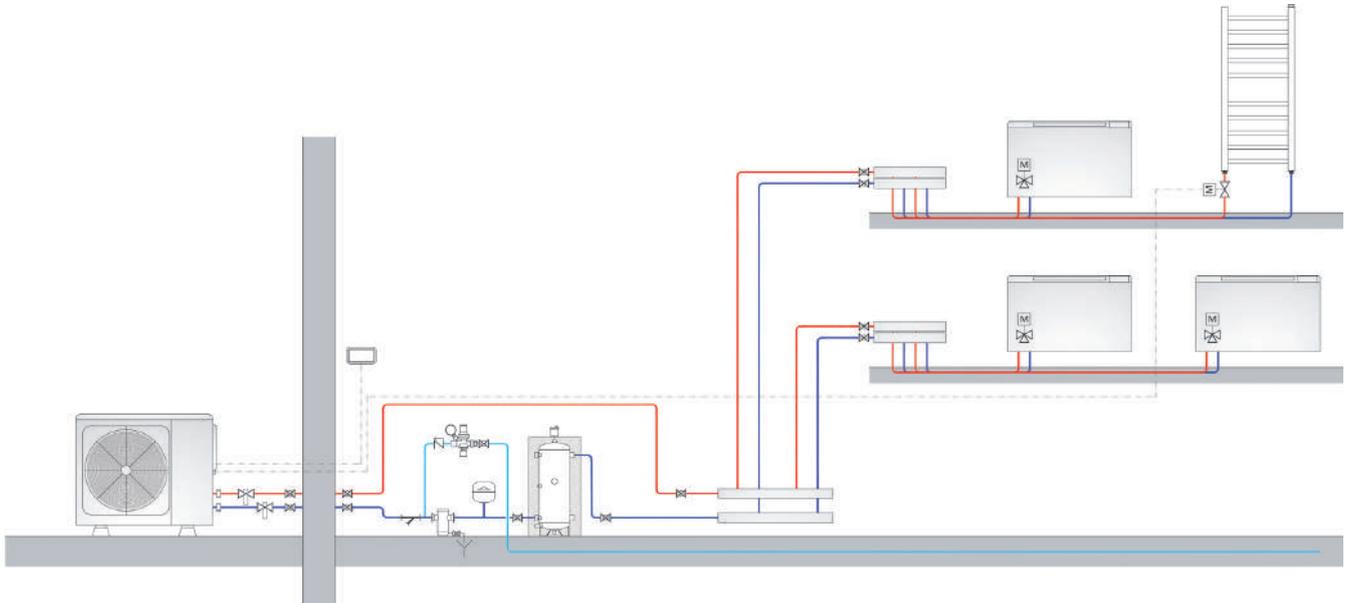
● Standard accessory; ○ Optional accessory; - Incompatible accessory

When compatibility is only possible with certain sizes or models, the information is given in the table. Accessory description available at end of chapter.

SYSTEM DIAGRAMS

WITHOUT SOLAR THERMAL SYSTEM AND INTEGRATED INERTIAL BUFFER TANK

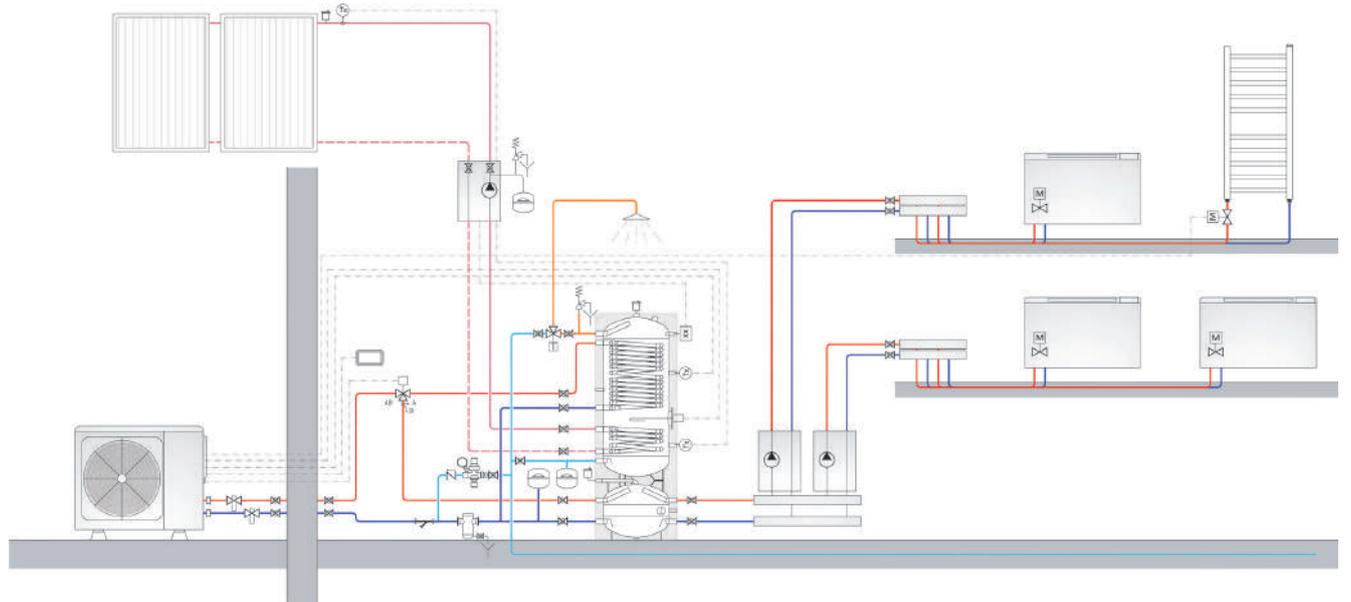
Monobloc heat pump (heating and air conditioning) and Bi2 SLR fan coil radiator terminals with 3-way valves and inertial buffer tank installed in series on the return line of the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

WITH SOLAR THERMAL AND INTEGRATED INERTIAL BUFFER TANK

Monobloc heat pump (heating and air conditioning; DHW production) Bi2 SLR fan coil radiator terminals; DHW integration with solar thermal system and integrated inertial buffer tank (used as a hydraulic separator) for the air conditioning system.



Schematic diagram, refer to the installation manual. In particular, the water filtration and treatment system is not shown.

NEW

NEW

TECHNICAL DATA				6			9		
Product code				02598			02599		
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a) kW	2,2	6,45	7,02	3,1	9	10,15
	COP	a7/6 - w30/35	(a) W/W	7	4,89	4,55	7,5	4,84	4,37
	Heating power	a2/1 - w30/35	(a) kW	1,94	5,7	6,68	2,84	8,25	9,69
	COP	a2/1 - w30/35	(a) W/W	6,15	4,3	3,96	6,32	4,08	3,76
	Heating power	a-7/-8 - w30/35	(a) kW	1,66	4,87	5,41	2,48	7,2	8
	COP	a-7/-8 - w30/35	(a) W/W	4,31	3,01	3,04	4,27	2,75	2,78
	Heating power	a-15/-16 - w30/35	(a) kW	1,48	4,34	4,35	2,3	6,69	6,69
	COP	a-15/-16 - w30/35	(a) W/W	3,59	2,51	2,5	3,62	2,34	2,33
	Heating power (fancoils)	a7/6 - w40/45	(a) kW	2,1	6,65	6,66	3,1	9	9,59
	COP (fancoils)	a7/6 - w40/45	(a) W/W	5,5	3,84	3,73	5,73	3,7	3,54
	Heating power (fancoils)	a2/1 - w40/45	(a) kW	1,84	5,41	6,29	2,74	7,97	9,27
	COP (fancoils)	a2/1 - w40/45	(a) W/W	4,86	3,39	3,23	5,06	3,27	3,11
	Heating power (fancoils)	a-7/-8 - w40/45	(a) kW	1,52	4,47	5,09	2,37	6,89	7,86
	COP (fancoils)	a-7/-8 - w40/45	(a) W/W	3,61	2,52	2,49	3,79	2,45	2,41
	Heating power (fancoils)	a-15/-16 - w40/45	(a) kW	1,38	4,05	4,06	2,18	6,33	6,33
	COP (fancoils)	a-15/-16 - w40/45	(a) W/W	3	2,1	2,08	3,16	2,04	2,04
	Cooling power	a35 - w23/18	(a) kW	2,21	6,5	7,87	3,1	9	11,67
	EER	a35 - w23/18	(a) W/W	7,09	4,95	4,5	7,28	4,7	4,25
Cooling power (fancoils)	a35 - w12/7	(a) kW	2,04	6	6,41	3,1	9	9,51	
EER (fancoils)	a35 - w12/7	(a) W/W	4,51	3,15	3,14	4,72	3,05	3,05	
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++	
	SCOP	Warmer Climate			7,27			7,69	
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		288			304	
	Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++	
	SCOP	Average Climate			5,16			5,15	
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		203,4			202,8	
	Energy efficiency class in water heating 35°C	Cold Climate			A++			A+++	
	SCOP	Cold Climate			4,35			4,55	
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %		171			179	
	Energy efficiency class in water heating 55°C	Warmer Climate			A+++			A+++	
	SCOP	Warmer Climate			5,14			5,26	
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		202			208	
	Energy efficiency class in water heating 55°C	Average Climate			A++			A++	
	SCOP	Average Climate			3,78			3,82	
	s (Seasonal efficiency for space heating)	Average Climate	ηs %		148,2			149,8	
	Energy efficiency class in water heating 55°C	Cold Climate			A++			A++	
	SCOP	Cold Climate			3,44			3,51	
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %		135			138	
NOISE LEVEL	Outdoor unit sound power (nominal)		dB(A)		64			67	
	Outdoor unit sound pressure (nominal)		dB(A)	(b)	52			53	
ELECTRICAL DATA	System circulator absorption		W		4-95			4-95	
	Outdoor unit power supply		V/ph/Hz		220-240/1/50			220-240-1-50	
	Outdoor unit maximum absorbed current		A		16			20,5	
	Outdoor unit maximum absorbed power		kW		3,5			4,1	
COOLING CIRCUIT	Compressor type				Twin Rotary			Twin Rotary	
	Refrigerant gas		(c)		R290			R290	
	Global warming potential		GWP		3			3	
	Refrigerant gas charge		kg		0,7			0,92	
HYDRAULIC DATA	Hydraulic connections		"		G1 BSP			G1 BSP	
	Capacity of expansion vessel		l		-			-	

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).

(b) Sound pressure values measured at a distance of 4 m in free field

(c) Airtightly sealed equipment containing fluorinated GAS
Energy efficiency classes refer to a range between A+++ and D.

NEW

NEW

TECHNICAL DATA				12			15		
Product code				02600			02601		
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a) kW	4,3	12	12,99	4,8	15	15,99
	COP	a7/6 - w30/35	(a) W/W	7,1	4,74	4,09	6,95	4,5	3,84
	Heating power	a2/1 - w30/35	(a) kW	3,69	10,32	12,11	4,12	12,87	15,11
	COP	a2/1 - w30/35	(a) W/W	5,93	3,96	3,65	5,69	3,69	3,4
	Heating power	a-7/-8 - w30/35	(a) kW	3,26	9,11	10,12	3,78	11,81	13,12
	COP	a-7/-8 - w30/35	(a) W/W	4,3	2,87	2,9	4,05	2,62	2,65
	Heating power	a-15/-16 - w30/35	(a) kW	2,86	8	8	3,52	11	11
	COP	a-15/-16 - w30/35	(a) W/W	3,76	2,51	2,51	3,49	2,26	2,26
	Heating power (fancoils)	a7/6 - w40/45	(a) kW	4,3	12	12,31	4,8	15	15,31
	COP (fancoils)	a7/6 - w40/45	(a) W/W	5,39	3,6	3,48	5,39	3,5	3,23
	Heating power (fancoils)	a2/1 - w40/45	(a) kW	3,53	9,87	11,48	3,98	12,44	14,48
	COP (fancoils)	a2/1 - w40/45	(a) W/W	4,93	3,29	3,14	4,68	3,03	2,89
	Heating power (fancoils)	a-7/-8 - w40/45	(a) kW	2,97	8,3	9,46	3,49	10,93	12,46
	COP (fancoils)	a-7/-8 - w40/45	(a) W/W	3,83	2,56	2,52	3,56	2,3	2,27
	Heating power (fancoils)	a-15/-16 - w40/45	(a) kW	2,69	7,51	7,51	3,36	10,51	10,51
	COP (fancoils)	a-15/-16 - w40/45	(a) W/W	3,29	2,2	2,2	3,03	1,97	1,95
	Cooling power	a35 - w23/18	(a) kW	4,3	12	13,98	4,8	15	15,98
	EER	a35 - w23/18	(a) W/W	6,88	4,6	4	6,48	4,2	3,87
Cooling power (fancoils)	a35 - w12/7	(a) kW	4,3	12	12,01	4,48	14	14,01	
EER (fancoils)	a35 - w12/7	(a) W/W	4,49	3	2,8	4,39	2,85	2,67	
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate				A+++			A+++
	SCOP	Warmer Climate				6,81			6,39
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %			270			253
	Energy efficiency class in water heating 35°C	Average Climate				A+++			A+++
	SCOP	Average Climate				4,88			4,73
	s (Seasonal efficiency for space heating)	Average Climate	ηs %			192,1			186,2
	Energy efficiency class in water heating 35°C	Cold Climate				A++			A++
	SCOP	Cold Climate				4,33			4,2
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %			170			165
	Energy efficiency class in water heating 55°C	Warmer Climate				A+++			A+++
	SCOP	Warmer Climate				5,01			4,83
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %			197			190
	Energy efficiency class in water heating 55°C	Average Climate				A++			A++
	SCOP	Average Climate				3,76			3,69
	s (Seasonal efficiency for space heating)	Average Climate	ηs %			147,4			144,6
	Energy efficiency class in water heating 55°C	Cold Climate				A++			A++
	SCOP	Cold Climate				3,43			3,4
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %			134			133
NOISE LEVEL	Outdoor unit sound power (nominal)		dB(A)			69			71
	Outdoor unit sound pressure (nominal)		(b) dB(A)			55			57
ELECTRICAL DATA	System circulator absorption		W			4-95			4-95
	Outdoor unit power supply		V/ph/Hz			220-240-1-50			220-240-1-50
	Outdoor unit maximum absorbed current		A			30			30
	Outdoor unit maximum absorbed power		kW			5,8			6,4
COOLING CIRCUIT	Compressor type					Twin Rotary			Twin Rotary
	Refrigerant gas		(c)			R290			R290
	Global warming potential		GWP			3			3
	Refrigerant gas charge		kg			1,4			1,4
HYDRAULIC DATA	Hydraulic connections		"			G1 BSP			G1 BSP
	Capacity of expansion vessel		l			-			-

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).
 (b) Sound pressure values measured at a distance of 4 m in free field

(c) Airtightlly sealed equipment containing fluorinated GAS
 Energy efficiency classes refer to a range between A+++ and D.

NEW

NEW

TECHNICAL DATA				12T			15T		
Product code				02602			02603		
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
PUNCTUAL PERFORMANCE	Heating power	a7/6 - w30/35	(a) kW	4,3	12	12,99	4,8	15	15,99
	COP	a7/6 - w30/35	(a) W/W	7,1	4,74	4,09	6,95	4,5	3,84
	Heating power	a2/1 - w30/35	(a) kW	3,69	10,32	12,11	4,12	12,87	15,11
	COP	a2/1 - w30/35	(a) W/W	5,93	3,96	3,65	5,69	3,69	3,4
	Heating power	a-7/-8 - w30/35	(a) kW	3,26	9,11	10,12	3,78	11,81	13,12
	COP	a-7/-8 - w30/35	(a) W/W	4,3	2,87	2,9	4,05	2,62	2,65
	Heating power	a-15/-16 - w30/35	(a) kW	2,86	8	8	3,52	11	11
	COP	a-15/-16 - w30/35	(a) W/W	3,76	2,51	2,51	3,49	2,26	2,26
	Heating power (fancoils)	a7/6 - w40/45	(a) kW	4,3	12	12,31	4,8	15	15,31
	COP (fancoils)	a7/6 - w40/45	(a) W/W	5,39	3,6	3,48	5,39	3,5	3,23
	Heating power (fancoils)	a2/1 - w40/45	(a) kW	3,53	9,87	11,48	3,98	12,44	14,48
	COP (fancoils)	a2/1 - w40/45	(a) W/W	4,93	3,29	3,14	4,68	3,03	2,89
	Heating power (fancoils)	a-7/-8 - w40/45	(a) kW	2,97	8,3	9,46	3,49	10,93	12,46
	COP (fancoils)	a-7/-8 - w40/45	(a) W/W	3,83	2,56	2,52	3,56	2,3	2,27
	Heating power (fancoils)	a-15/-16 - w40/45	(a) kW	2,69	7,51	7,51	3,36	10,51	10,51
	COP (fancoils)	a-15/-16 - w40/45	(a) W/W	3,29	2,2	2,2	3,03	1,97	1,95
	Cooling power	a35 - w23/18	(a) kW	4,3	12	13,98	4,8	15	15,98
	EER	a35 - w23/18	(a) W/W	6,88	4,6	4	6,48	4,2	3,87
Cooling power (fancoils)	a35 - w12/7	(a) kW	4,3	12	12,01	4,48	14	14,01	
EER (fancoils)	a35 - w12/7	(a) W/W	4,49	3	2,8	4,39	2,85	2,67	
EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate				A+++			A+++
	SCOP	Warmer Climate				6,71			6,33
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %			265			250
	Energy efficiency class in water heating 35°C	Average Climate				A+++			A+++
	SCOP	Average Climate				4,88			4,73
	s (Seasonal efficiency for space heating)	Average Climate	ηs %			192,1			186,2
	Energy efficiency class in water heating 35°C	Cold Climate				A++			A++
	SCOP	Cold Climate				4,33			4,15
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %			170			163
	Energy efficiency class in water heating 55°C	Warmer Climate				A+++			A+++
	SCOP	Warmer Climate				4,8			4,83
	s (Seasonal efficiency for space heating)	Warmer Climate	ηs %			189			190
	Energy efficiency class in water heating 55°C	Average Climate				A++			A++
	SCOP	Average Climate				3,76			3,69
	s (Seasonal efficiency for space heating)	Average Climate	ηs %			147,4			144,6
	Energy efficiency class in water heating 55°C	Cold Climate				A++			A++
	SCOP	Cold Climate				3,36			3,36
	s (Seasonal efficiency for space heating)	Cold Climate	ηs %			132			131
NOISE LEVEL	Outdoor unit sound power (nominal)		dB(A)			69			71
	Outdoor unit sound pressure (nominal)		dB(A)	(b)		55			57
ELECTRICAL DATA	System circulator absorption		W			4-95			4-95
	Outdoor unit power supply		V/ph/Hz			380-415-3-50			380-415-3-50
	Outdoor unit maximum absorbed current		A			14			14
	Outdoor unit maximum absorbed power		kW			5,8			6,4
COOLING CIRCUIT	Compressor type					Twin Rotary			Twin Rotary
	Refrigerant gas		(c)			R290			R290
	Global warming potential		GWP			3			3
	Refrigerant gas charge		kg			1,4			1,4
HYDRAULIC DATA	Hydraulic connections		"			G1 BSP			G1 BSP
	Capacity of expansion vessel		l			-			-

(a) aX/Y indicates air temperature (dry bulb X / wet bulb Y) - wA/B indicates water temperature (A inlet / B outlet).

(b) Sound pressure values measured at a distance of 4 m in free field

(c) Airtightedly sealed equipment containing fluorinated GAS
Energy efficiency classes refer to a range between A+++ and D.

AIR-TO-WATER HEAT PUMPS

SHERPA SHW

[S2]

Size	200, 260S
Energy class	A+
Type	water heater
Refrigerant	R134A, R513A
DHW Temperature	65°C



Photovoltaic integration

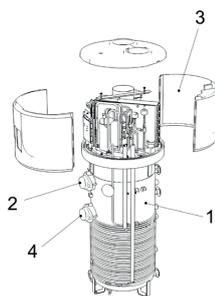
Thanks to the special contact, integration with the photovoltaic system is possible, which forces the ignition and raises the set point of the machine. Thus, the storage of the energy produced by the PV is realized to cut down the cost of DHW production and maximize energy saving.

Solar management

The 260S version is solar thermal compatible: the unit can work with a second energy source such as solar panels (solar circulator management).

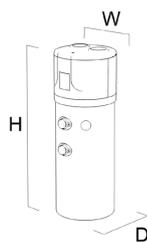


LAYOUT



- 1. Enamelled steel tank
- 2. Magnesium anti-corrosion anode to ensure tank durability
- 3. Acoustically insulated top cover
- 4. 1.5 kW electric heating element available as back-up
 - Electronic expansion valve

DIMENSIONS AND WEIGHT



		200	260S
W	mm	630	630
H	mm	1720	2010
D	mm	630	630
WEIGHT	kg	105	128

TECHNICAL DATA

TECHNICAL DATA	200			260S			
	Product code	02385			02386		
Compressor frequency		Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
Electrical power supply	V/Ph/Hz	220-240/1Ph+N/50			220-240/1Ph+N/50		
Actual tank capacity	L	202			251		
Prated nominal heating power (EN 16147: 2017 - A7/W55)	W	1050			1200		
Maximum heating power (summer conditions)	W	2305			2305		
COPDHW (EN 16147: 2017 - A7/W55)	W/W	2,7			3		
COPDHW (EN 16147: 2017 - A14/W55)	W/W	3,1			3,4		
Maximum electrical absorption with active electric heating element	W	663+1500			663+1500		
Heating time (EN 16147: 2017 - A7/W55)	h:min	08:59			10:15		
Heating time in BOOST mode (A7 - W10-55)	h:min	03:47			04:21		
Intake air temperature range	°C	-10 ÷ 43			-10 ÷ 43		
Refrigerant gas	(a)	R134a			R513a		
Global warming potential	GWP	1430			573		
Refrigerant loading	g	880			880		
Nominal air flow rate (98 Pa)	m3/h	315			315		
Storage tank maximum operating pressure	bar	8			8		
Auxiliary electric heating element	W	1500			1500		
Solar exchange coil surface	m²	-			1,2		
Protection class		IPX4			IPX4		
Transportation weight	Kg	105			128		
Sound pressure (EN 12102:2013)	dB(A)	53			53		
Load Profile (EN 16147: 2017)		L			XL		
Energy efficiency class (average climate conditions)		A+			A+		
ηWH (average climate conditions - EU Regulation 812/2013)	%	118			124		

(a) hermetically sealed equipment containing fluorinated gas

Energy efficiency classes refer to a range between A+ and F.

AIR-TO-WATER HEAT PUMPS

SHERPA SHW

[S3P]



Size	100, 200, 300S
Energy class	A+
Type	water heater
Refrigerant	R290
DHW Temperature	75°C



Refrigeration circuit at R290

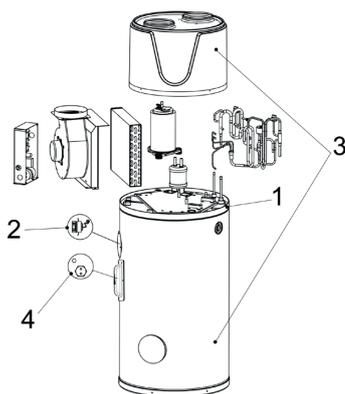
It allows DHW to be produced efficiently and with a GWP close to zero, reaching temperatures of up to 75°C, even without heating elements, where conditions permit (heating elements are integrated as standard, however, to ensure the same performance even under limiting operating conditions).

Photovoltaic integration

Thanks to the special contact, integration with the photovoltaic system is possible, which forces the ignition and raises the set point of the machine. Thus, the storage of the energy produced by the PV is realized to cut down the cost of DHW production and maximize energy saving.

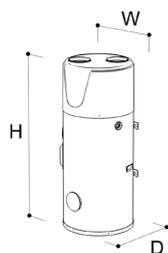


LAYOUT



1. Enamelled steel tank (size 100) and stainless steel tank (sizes 200 and 300S)
 2. Electronic anode to ensure tank durability
 3. Painted metal coating with acoustically insulated plastic top cover
 4. 1.6 kW electric heating element available as back-up
- Micro-channel condenser to avoid gas-water contamination
 - Auxiliary coil for solar thermal integration
 - Electronic expansion valve

DIMENSIONS AND WEIGHT



		100	200	300S
W	mm	510	565	647
H	mm	1230	1750	1850
D	mm	510	565	647
WEIGHT	kg	59	72	87

TECHNICAL DATA	100 NEW			200 NEW			300S NEW			
	Product code	02676			02677			02678		
Compressor frequency		Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
Electrical power supply	V/Ph/Hz	220-240/1/50			220-240/1/50			220-240/1/50		
Actual tank capacity	L	95			178			273		
Prated nominal heating power (EN 16147: 2017 - A7/W55)	W	286			358			365		
Maximum heating power (summer conditions)	W	500			700			700		
COP DHW (EN 16147: 2017 - A7/W55)	W/W	2,6			3,4			3,4		
COP DHW (EN 16147: 2017 - A14/W55)	W/W	3,0			3,8			3,9		
Maximum electrical absorption with active electric heating element	W	500+1600			700+1600			700+1600		
Heating time (EN 16147: 2017 - A7/W51)	h:min	4:18			6:20			9:52		
Heating time in BOOST mode (A7 - W10-51)	h:min	1:30			2:56			3:54		
Intake air temperature range	°C	-7°43			-7°43			-7°43		
Refrigerant gas	(a)	R290			R290			R290		
Global warming potential		3			3			3		
Refrigerant loading	g	145			150			150		
Nominal air flow rate (0/90/120 Pa)	m3/h	182/240/293			182/293/350			182/293/350		
Storage tank maximum operating pressure	bar	8			8			8		
Auxiliary electric heating element	W	1600			1600			1600		
Solar exchange coil surface	m²	-			-			1		
Protection class		IPX1			IPX1			IPX1		
Transportation weight	Kg	72			86			105		
Sound pressure (EN 12102:2013)	dB(A)	50			52			52		
Load Profile (EN 16147: 2017)		M			L			XL		
Energy efficiency class (average climate conditions)		A+			A+			A+		
ηWH (average climate conditions (EU Regulation 812/2013)	%	111			139			138		

(a) hermetically sealed equipment containing fluorinated gas

Energy efficiency classes refer to a range between A+ and F.

Accessories

Installation kit

B0918 **Sherpa Flex Box AS kit**
Technical cabinet in galvanised steel, allowing the creation of a compact heat pump system with high installation flexibility. Dimensions (WxHxD): 998x415x2280 mm. System connections from below or from the back.



B0961 **Sherpa Flex Box AS RAL 9016 kit**
Technical cabinet in galvanised steel, allowing the creation of a compact heat pump system with high installation flexibility. Painted in white RAL 9016 (front/back for upper, lower side and front panels, back panels not painted). Dimensions (WxHxD): 998x415x2280 mm. System connections from below or from the back.



B0931 **Remote control display kit 10 m**
In cases where it is possible or preferable to control the heat pump from a room other than the room where the internal unit is installed, the control can be easily remote-operated. With the special remote control panel kit, the touchscreen interface is thus accessible up to 10 metres away (cable length 10 metres).



B1120 **Sherpa Flex Box adapter kit**
Accessory necessary for combining the Sherpa Flex Box AS Kit with the Sherpa S2/S3 heat pump (not Aquadue).



Sherpa Flex Box

Self-supporting technical cabinet for a more flexible installation

Compatible with the wall-mounted internal units of the Sherpa and Sherpa Aquadue air-to-water heat pumps (sizes 4, 6, 8 and 10), allowing for the creation of a compact system with high installation flexibility:

- Indoors, wall-mounted;
- indoors, semi-recessed;
- outdoors, wall-mounted;
- outdoors, semi-recessed.

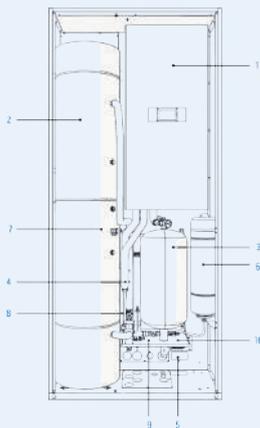
In outdoor installations, a weather-protected area is recommended.

The heat distribution and emission network downstream of the Sherpa Flex Box must guarantee the circulation with the minimum flow rate of the heat pump, in all operating conditions, by means of 3-way valves or by-pass systems. For sizes 8 and 10 of the heat pump, the water content of the distribution network and terminals must be at least 10 litres (see product installation manuals).

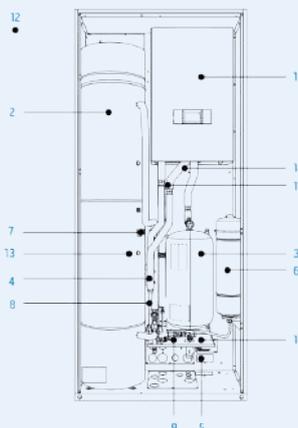


LAYOUT

SHERPA AQUADUE



SHERPA



2. AISI 316L stainless steel ACS 150L kettle with 50 mm EPS and graphite thermal insulation to minimize leakage (class C).
3. 28L technical storage tank made of AISI 316L stainless steel to ensure efficient and safe operation of the heat pump (class C).
4. Kettle return filter.
5. Plant return filter.
7. Sanitary safety valve 6 bar.
8. Sanitary thermostatic mixing valve.
9. Micrometric detent for by-pass.
10. Condensation drip pan to prevent any slightest drip on the bottom of the cabinet
11. 3-way valve kit for DHW (code B0916 to be ordered separately).
12. Outdoor air temperature probe kit (code B0623 to be ordered separately).
13. DHW cylinder sensor kit (code B0624 to be ordered separately).
14. Flex Box adapter kit (code no. B1120 to be ordered separately).
13. DHW cylinder sensor kit (code B0624 to be ordered separately).
14. Flex Box adapter kit (code no. B1120 to be ordered separately).

Accessories

Hydraulics kit

B0916 **Kit 3-way valve for DHW**
Compact size and two-point control.



B0971 **Thermostatic mixing valve kit for DHW**
Assembly in the machine must be carried out by the installer



B0972 **Expansion tank kit for DHW**
Assembly in the machine must be carried out by the installer



Electrical kits

B0623 **Outdoor air temperature probe kit**
Shielded probe to measure the outdoor air temperature. It is necessary to allow for the activation of electric heating elements, manage heating curves and control anti-legionella disinfection cycles.



B0624 **DHW storage tank sensor kit**
Probe to measure and directly control the water temperature in the DHW storage tank.



B0917 **Kit thermal solar probe**
Additional probe that detects the temperature of the solar thermal pipes and inhibits the heat pump, to produce DHW only via solar thermal under certain conditions.



B0900 **100m touch panel Modbus connection cable**
Length 100 m. Required accessory supplied separately.

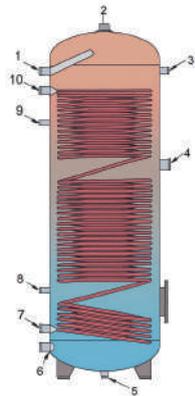


Storage tanks and puffer

01804	<p>HE 200 L storage tank</p> <p>200L storage tank for domestic hot water production with a single coil (double spiral) providing a high heat exchange surface in carbon steel, complete with anodic protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025. Rigid polyurethane insulation. Sky Blue RAL 5010 coating.</p>	
01805	<p>HE 300 L storage tank</p> <p>300L storage tank for domestic hot water production with a single coil (double spiral) providing a high heat exchange surface in carbon steel, complete with anodic protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025. Rigid polyurethane insulation. Sky Blue RAL 5010 coating.</p>	
01806	<p>HES 300 L solar storage tank</p> <p>300L storage tank for domestic hot water production with 2 coils (double spiral and solar) providing a high heat exchange surface in carbon steel, complete with anodic protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025. Rigid polyurethane insulation. Sky Blue RAL 5010 coating.</p>	
01807	<p>Hybride boiler HY 300 L</p> <p>300L upper storage tank for domestic hot water production with a single coil providing a high heat exchange surface in carbon steel, complete with anodic protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025. Lower inertia tanks for heating or chilled water, untreated interior. Rigid polyurethane insulation. Sky Blue RAL 5010 coating.</p>	
01808	<p>HYS 300 L solar hybrid storage tank</p> <p>300L upper storage tank for domestic hot water production with 2 coils (solar) providing a high heat exchange surface in carbon steel, complete with anodic protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025. Lower inertia tanks for heating or chilled water, untreated interior. Rigid polyurethane insulation. Sky Blue RAL 5010 coating.</p>	
01199	<p>Thermal accumulation 50 L</p> <p>50L inertial buffer tank for chilled water, untreated interior. Can also be used for heating water. Polyurethane insulation. Sky Blue RAL 5010 coating.</p>	
01200	<p>Thermal accumulation 100 L</p> <p>100L inertial buffer tank for chilled water, untreated interior. Can also be used for heating water. Polyurethane insulation. Sky Blue RAL 5010 coating.</p>	

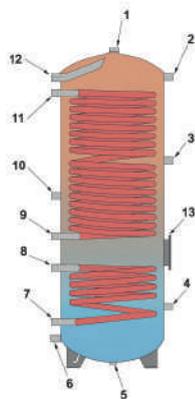
LAYOUT

HE STORAGE TANKS



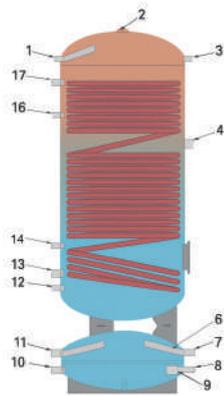
1. 1" hot water delivery
2. 1" 1/4 anode
3. Thermometer - 1/2" probe
4. 1" 1/2 electric heating element connection
5. 1/2" base attachment (blank)
6. 1" cold water inlet
7. 1" coil return
8. Thermostat - 1/2" probe
9. 1/2" recirculation
10. 1" coil delivery

HES STORAGE TANKS



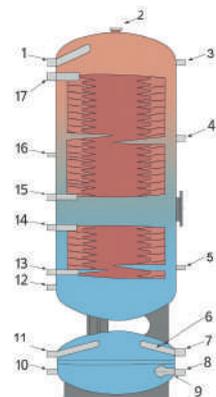
1. 1" 1/4 anode
2. Thermometer - 1/2" probe
3. Thermometer - 1/2" probe
4. Thermometer - 1/2" probe
5. 1/2" base attachment (blank)
6. 1" cold water inlet
7. 1" lower coil return
8. 1" lower coil delivery
9. 1" upper coil return
10. 1/2" recirculation
11. 1" upper coil delivery
12. 1" hot water delivery
13. Flange with 1" 1/2 electric heating element connection

HY STORAGE TANKS



1. 1" domestic hot water delivery
2. 1" 1/4 anode
3. 1/2" thermometer
4. 1" 1/2 electric heating element connection
6. 1/2" probe
7. 1" generator delivery
8. 1" generator return
9. 1" 1/2 electric heating element
10. 1" system return
11. 1" system delivery
12. 1" domestic cold water inlet
13. 1" 1/4 coil return
14. 1/2" probe
16. 1/2" recirculation
17. 1" upper coil delivery

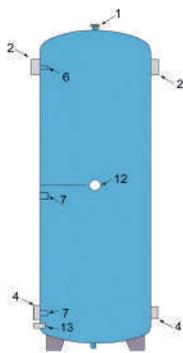
HYS STORAGE TANKS



1. 1" domestic hot water delivery
2. 1" 1/4 anode
3. 1/2" thermometer
4. 1/2" probe
5. 1/2" probe
6. 1/2" probe
7. 1" generator delivery
8. 1" generator return
9. 1" 1/2 electric heating element
10. 1" system return
11. 1" system delivery
12. 1" domestic cold water inlet
13. 1" lower coil return
14. 1" lower coil delivery
15. 1" upper coil return
16. 1/2" recirculation
17. 1" upper coil delivery

LAYOUT

STORAGE TANKS

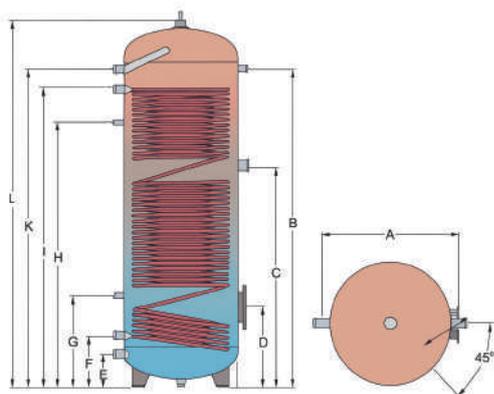


1. 1" vent
2. 1" 1/4 hydraulic connection
4. 1" 1/4 hydraulic connection
6. 1/2" probe
7. 1/2" probe
12. 1" 1/2 electric heating element
13. Drain 1/2"

DIMENSIONS AND WEIGHT

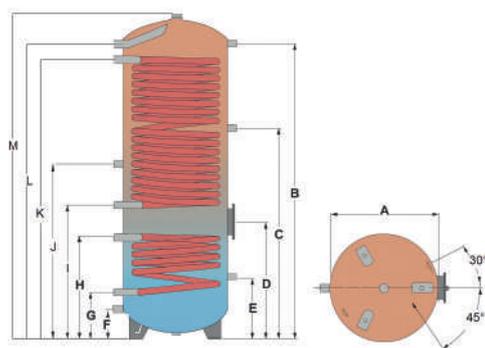
1-HE COIL STORAGE TANK

		01804	01805
A	mm	500	500
B	mm	995	1390
C	mm	735	945
D	mm	320	340
E	mm	140	140
F	mm	220	220
G	mm	370	395
H	mm	835	1165
I	mm	990	1310
K	mm	1070	1390
L	mm	1215	1615
WEIGHT	kg	90	124



2-HES COIL STORAGE TANK

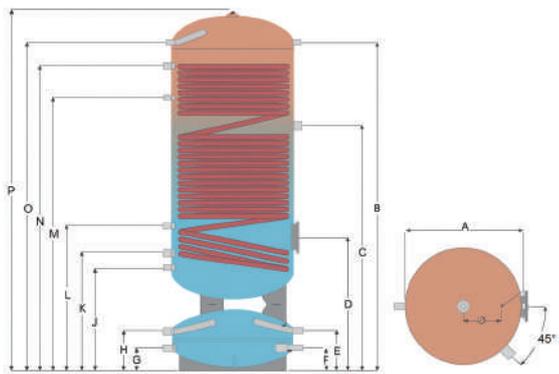
		01806
A	mm	500
B	mm	1470
C	mm	1035
D	mm	590
E	mm	315
F	mm	140
G	mm	220
H	mm	495
I	mm	650
J	mm	865
K	mm	1390
L	mm	1470
M	mm	1615
WEIGHT	kg	131



DIMENSIONS AND WEIGHT

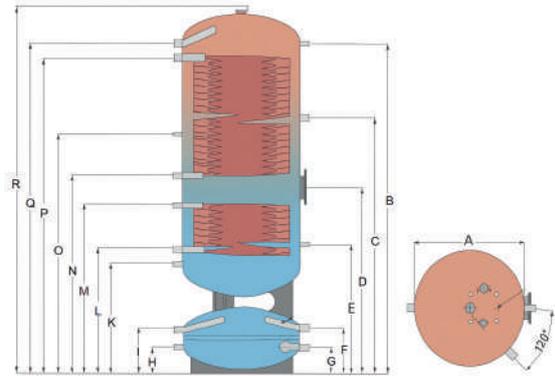
1-HY COIL STORAGE TANK

		01807
A	mm	550
B	mm	1755
C	mm	1300
D	mm	875
E	mm	340
F	mm	160
G	mm	160
H	mm	340
J	mm	675
K	mm	765
L	mm	940
M	mm	1425
N	mm	1675
O	mm	1755
P	mm	1925
Q	mm	150
WEIGHT	kg	150



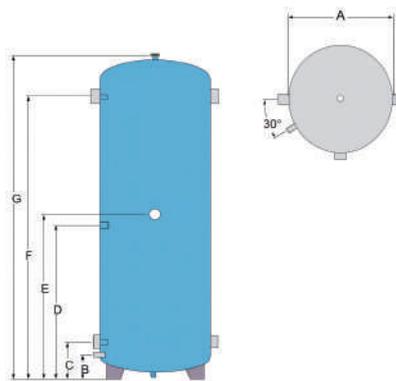
2-HYS COIL STORAGE TANK

		01808
A	mm	550
B	mm	1755
C	mm	1420
D	mm	1035
E	mm	810
F	mm	340
G	mm	160
H	mm	160
I	mm	340
K	mm	675
L	mm	755
M	mm	945
N	mm	1125
O	mm	1280
P	mm	1675
Q	mm	1755
R	mm	1925
S	mm	150
WEIGHT	kg	170



INERTIA TANKS

		01199	01200
A	mm	300	400
B	mm	100	100
C	mm	180	185
D	mm	485	560
E	mm	530	605
F	mm	785	935
G	mm	935	1095
WEIGHT	kg	25	35



TECHNICAL DATA

		HE 200 L storage tank	HE 300 L storage tank	HES 300 L solar storage tank
Product code		01804	01805	01806
Nominal DHW storage tank capacity	l	200	300	300
Usable DHW storage tank capacity	l	190	263	260
Technical buffer tank	l	-	-	-
Energy class		B	B	B
Total dispersion	W	51	63	63
Specific dispersion	W/°K	1,13	1,4	1,4
Heat pump upper coil heat exchangers	m2	3	4	3,7
Secondary circuit upper coil heat exchangers	m2	-	-	1,2
Diameter with insulation	mm	640	640	640
Insulation	mm	70	70	70

TECHNICAL DATA

		Hybride boiler HY 300 L	HYS 300 L solar hybrid storage tank	Thermal accumulation 50 L	Thermal accumulation 100 L
Product code		01807	01808	01199	01200
Nominal DHW storage tank capacity	l	300	300	-	-
Usable DHW storage tank capacity	l	270	270	-	-
Technical buffer tank	l	80	80	57	123
Energy class		B	B	B	B
Total dispersion	W	73	73	34	50
Specific dispersion	W/°K	1,62	1,62	0,76	1,11
Heat pump upper coil heat exchangers	m2	3,3	2,8	-	-
Secondary circuit upper coil heat exchangers	m2	-	0,9	-	-
Diameter with insulation	mm	690	690	400	500
Insulation	mm	70	70	50	50

Resistances

- B0618** **Resistance for boiler 2 kW**
Copper immersion electric heating element, with an internal adjustable thermostat and a temperature limiter. Supply voltage 230V. IP 65. Length: 390mm; Total weight: 1.5kg. Diameter of connections: 1.5 inches.



- B0666** **Resistance for boiler 3 kW**
Copper immersion electric heating element, with an internal adjustable thermostat and a temperature limiter. Supply voltage 230V. IP 65. Length: 390mm; Total weight: 1.5kg. Diameter of connections: 1.5 inches.



- B0617** **Resistance flange kit**
Required accessory for correct positioning of the electric heating elements when used for anti-Legionnaires disease cycles.

Services

- AV001** **Heat pump startup**
Optional service for packaged heat pumps that allows free activation of extended warranty to 3 years.

- AV002** **Heat pump startup**
Mandatory service for split heat pumps that allows free activation of extended warranty to 3 years. Includes first site visit.