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**

BMS SiOS

Compact technology

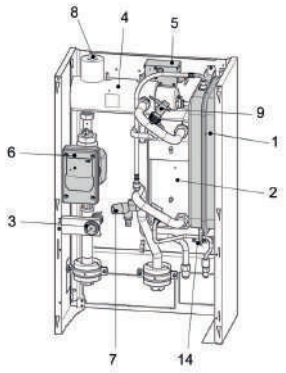
The wall-mounted internal unit can be installed inside a kitchen cabinet, thanks to component engineering and compact dimensions. It can thus be easily integrated into the home interior, even in the case of retrofit installations.

Photovoltaic integration

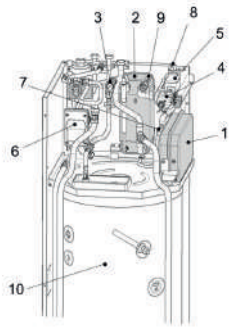
Thanks to the appropriate contact, it is possible to activate an increase in the heating/DHW temperature and a decrease in the cooling temperature, thereby accumulating thermal energy in the event of overproduction of the photovoltaic system.

LAYOUT

INDOOR WALL-MOUNTED



TOWER INDOOR UNIT



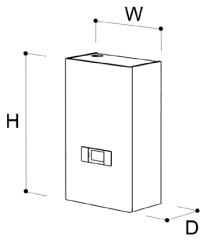
1. Air conditioner circuit expansion tank
2. Air conditioner circuit heat exchanger
3. Air conditioning circuit pressure gauge
4. Standard dual-stage electric heating elements (factory disabled) which activate to support the heat pump by configuring the electronic control. Each stage is activated according 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

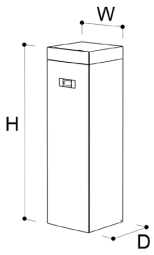
INDOOR WALL-MOUNTED

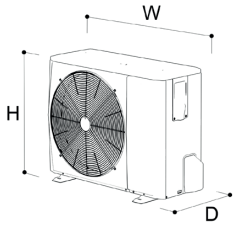
		4	6	8	10	12	14	16	12T	14T	16T
W	mm	500	500	500	500	500	500	500	500	500	500
H	mm	810	810	810	810	810	810	810	810	810	810
D	mm	296	296	296	296	296	296	296	296	296	296
WEIGHT	kg	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**



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	○	○
	01200	Thermal accumulation 100 L	○	○
RESISTANCES	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;

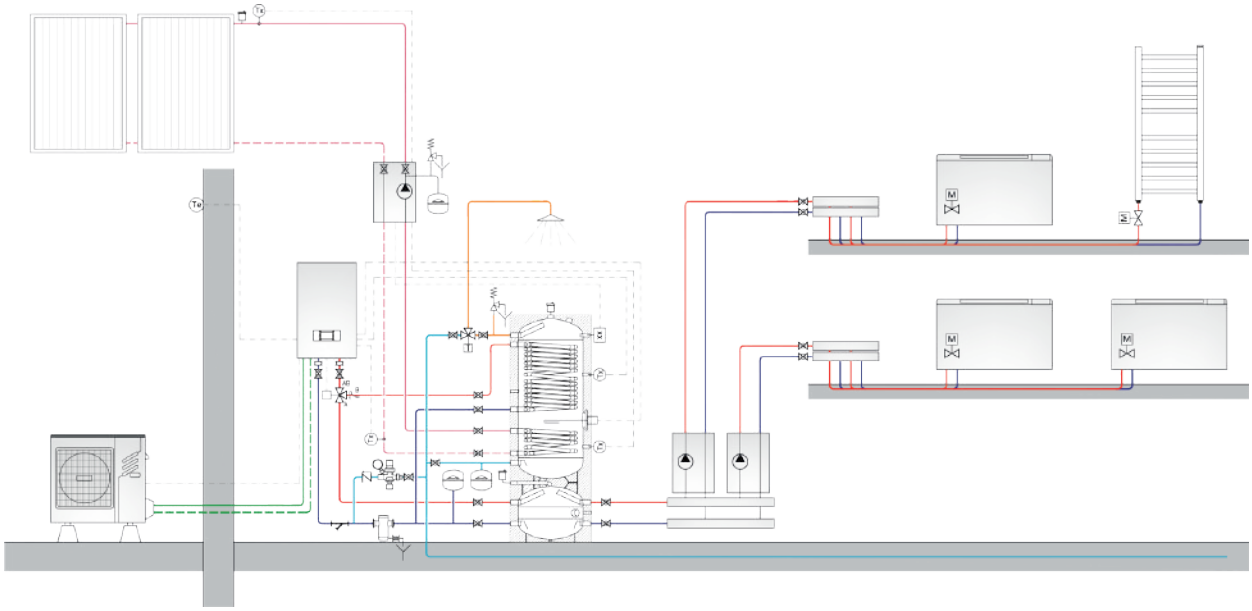
▼ Necessary Accessory;

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

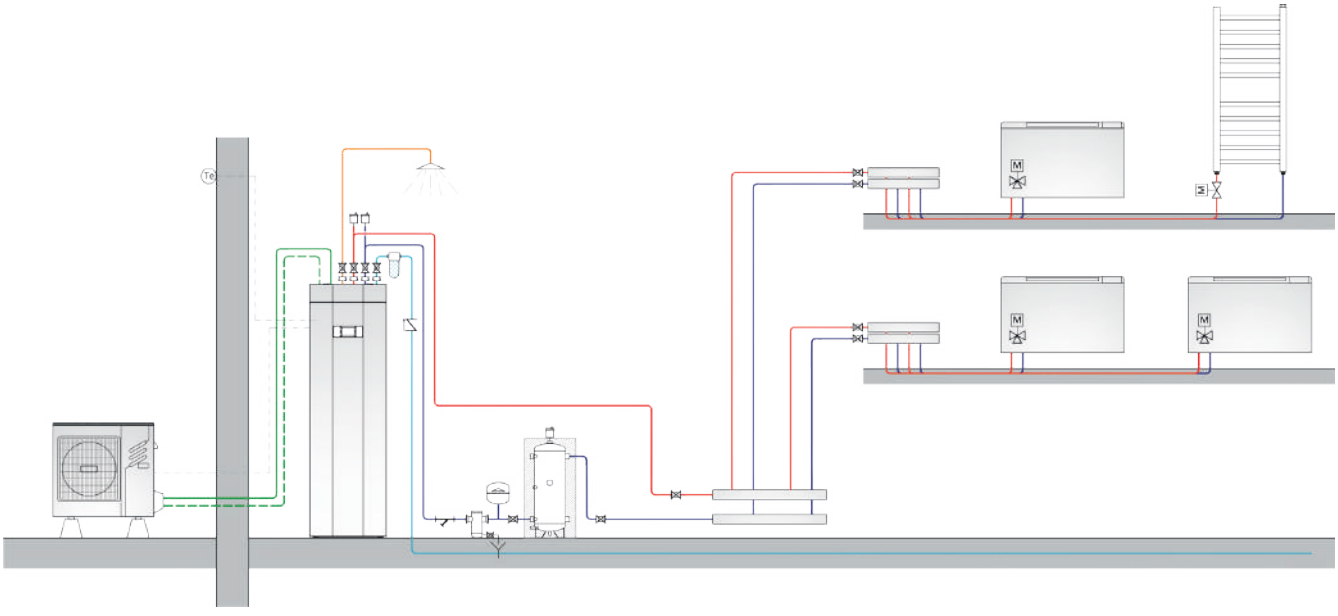
Sherpa S3E heat pump (heating and air conditioning; DHW production) Bi2 SLR fan coil radiator terminals; DHW integration with solar thermal system and integrated inertial buffer tank (used as a hydraulic separator) for the air conditioning system.



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 **Indoor unit wall-mounted** **Indoor unit tower**				02284 02294 02300			02285 02294 02300			02286 02294 02300			02287 02294 02300		
	Compressor frequency				Minimum	Nominal	Maximum	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	
	ηs (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	
	ηs (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	
	ηs (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	
	ηs (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	
	ηs (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	
	ηs (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	
	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	
H/I DRAULIC DATA	**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

(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				12			14			16		
	Outdoor unit wall-mounted **Indoor unit wall-mounted** **Indoor unit tower**				02288 02295 02301			02289 02295 02301			02290 02295 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		
	ηs (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		
	ηs (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		
	ηs (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		
	ηs (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		
	ηs (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		
	ηs (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 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	(e)	m	15			15			15		
H/H DRAULIC 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 **Indoor unit wall-mounted** **Indoor unit tower**					02291 02295 02301			02292 02295 02301			02293 02295 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	
	ηs (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	
	ηs (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	
	ηs (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	
	ηs (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	
	ηs (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	
	ηs (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 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	(e)	m		15			15			15	
H/H DRAULIC 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.