

# SHERPA MONOBLOC

## Monoblock heat pump

Compatible with:  
**SIOS**  
CONTROL



### COMPACT TECHNOLOGY

Compact unit and reduced dimensions. For all power sizes the machine is equipped with a single fan unit.



### DOMESTIC HOT WATER UP TO 60°C

Domestic hot water is available with temperatures up to 60°C.



### LOW GWP GAS

All power sizes use the R32 refrigerant, characterised by greater efficiency and a greenhouse effect reduced by almost 70% (compared to R410A).



## FEATURES

- **Inverter air-water heat pump**
- **Energy efficiency class** in average climate heating: A+++ (35°C) and A++ (55°C)
- **Powers available:** 4 Powers with single-phase R32 refrigerant (6-8-12-16 kW) and 2 Powers with three-phase R32 refrigerant (12-16 kW)
- **DHW production:** up to 60°C
- **Compressor:** airtight twin rotary DC Inverter with steam injection, complete with thermal protection
- **Expansion valve:** electronic
- **Refrigerant circuit** with economiser.
- **Water side exchange battery:** with stainless steel plates, complete with antifreeze heater.
- **Air side heat exchange battery:** with finned battery with copper pipes and aluminium-manganese fins with Golden Fin anti-corrosion treatment, in epoxy resin and hydrophilic treatment.
- **Helical fan** with brushless DC motors equipped with internal thermal protection,

safety protection grilles and proportional electronic device for continuous adjustment of the rotation speed of the fans.

- **Remote ambient air temperature probe**, for managing of the unit on the ambient set-point.
- **Structure:** in galvanised steel sheet, complete with condensate tray and unit base antifreeze resistance.
- **Standard touch screen remote control panel**, with 8 m connection cable. Integrated Wi-Fi module for machine management via smartphone and tablet, with a dedicated app (Ewpe).
- **Refrigerant gas:** R32\*
- **Operating limits:** -25°C +48°C.
- **External air probe** integrated in the machine.

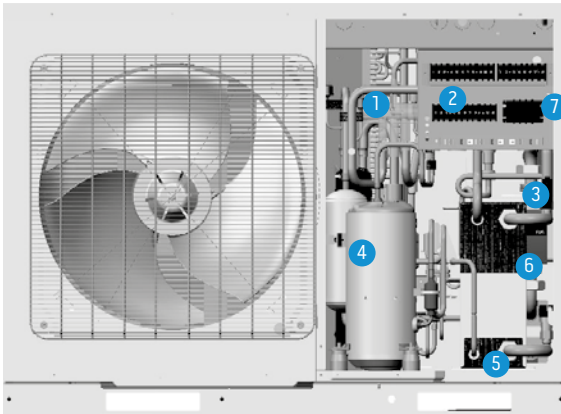
### REMOTE CONTROL VIA APP Ewpe

The heat pump can be controlled remotely with Tablet and Smartphone thanks to the standard Wi-Fi module (to be interfaced with a wireless router connected to the Internet). The "Ewpe" App can be downloaded free of charge from the Google and Apple Stores, which allows control of the machine via the Cloud.



\* Equipment hermetically sealed containing fluorinated gases with an equivalent GWP of 675 (R32)

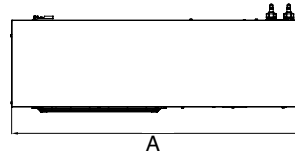
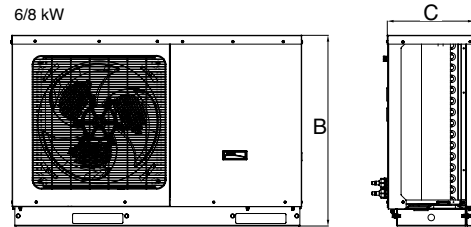
**LAYOUT, DIMENSIONS, WEIGHT**



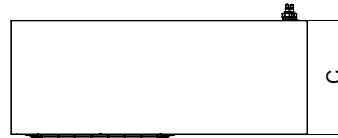
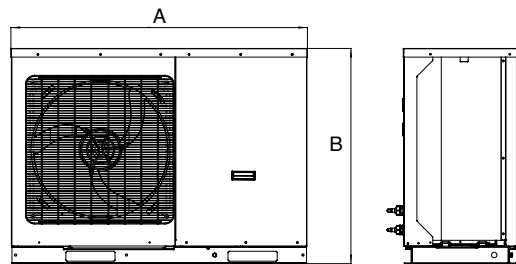
- 1. Reversible gas circuit
- 2. Electrical panel
- 3. Flow switch
- 4. DC inverter rotary compressor
- 5. Plate heat exchanger
- 6. Variable range circulator
- 7. Expansion vessel (2 or 3 litres)

		6	8	12	16	12T	16T
A	mm	1150	1150	1200	1200	1200	1200
B	mm	758	758	878	878	878	878
C	mm	345	345	460	460	460	460
Weight	kg	96	96	151	151	151	151

6/8 kW



12/12T/16/16T



TECHNICAL DATA				6			8			12			16				
				02021			02022			02023			02025				
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum		
PRECISE PERFORMANCE	Heating output	a7/6 - w30/35	(a)	kW	2.40	6.00	-	2.40	7.50	-	4.80	12.00	-	6.20	15.50	-	
	COP	a7/6 - w30/35	(a)	W/W	-	5.00	-	-	4.60	-	-	4.55	-	-	4.31	-	
	Heating output	a2/1 - w30/35	(b)	kW	2.04	5.50	-	2.55	6.38	-	4.08	11.90	-	5.27	13.00	-	
	COP	a2/1 - w30/35	(b)	W/W	-	4.10	-	-	3.93	-	-	4.14	-	-	4.05	-	
	Heating output	a-7/-8 - w30/35	(c)	kW	1.68	4.92	-	2.10	5.39	-	3.36	9.60	-	4.34	10.65	-	
	COP	a-7/-8 - w30/35	(c)	W/W	-	3.16	-	-	3.00	-	-	2.80	-	-	3.08	-	
	Heating output	a-15/-16 - w30/35	(d)	kW	1.34	3.90	-	1.68	4.50	-	2.69	8.76	-	3.47	10.54	-	
	COP	a-15/-16 - w30/35	(d)	W/W	-	2.39	-	-	2.29	-	-	1.79	-	-	1.62	-	
	Heating output (fancoils)	a7/6 - w40/45	(f)	kW	2.40	6.00	-	3.00	7.50	-	4.80	12.00	-	6.20	15.50	-	
	COP (fancoils)	a7/6 - w40/45	(f)	W/W	-	3.80	-	-	3.75	-	-	3.45	-	-	3.30	-	
	Heating output (fancoils)	a2/1 - w40/45	(g)	kW	2.04	5.50	-	2.55	6.30	-	4.08	11.50	-	5.27	13.00	-	
	COP (fancoils)	a2/1 - w40/45	(g)	W/W	-	3.27	-	-	3.04	-	-	3.20	-	-	3.08	-	
	Heating output (fancoils)	a-7/-8 - w40/45	(h)	kW	1.68	4.02	-	2.10	4.90	-	3.36	8.60	-	4.34	10.78	-	
	COP (fancoils)	a-7/-8 - w40/45	(h)	W/W	-	2.04	-	-	2.02	-	-	2.60	-	-	2.24	-	
	Heating output (fancoils)	a-15/-16 - w40/45	(i)	kW	1.34	2.82	-	1.68	3.60	-	2.69	8.04	-	3.47	9.92	-	
	COP (fancoils)	a-15/-16 - w40/45	(i)	W/W	-	1.36	-	-	1.23	-	-	1.76	-	-	1.58	-	
	Cooling power	a35 - w23/18	(l)	kW	2.32	5.80	-	2.72	6.80	-	4.40	11.00	-	5.80	14.50	-	
	EER	a35 - w23/18	(l)	W/W	-	4.30	-	-	4.30	-	-	4.30	-	-	3.77	-	
	Cooling output (fancoils)	a35 - w12/7	(m)	kW	1.60	4.00	-	2.00	5.00	-	3.62	9.50	-	5.20	13.00	-	
	EER (fancoils)	a35 - w12/7	(m)	W/W	-	3.10	-	-	3.10	-	-	3.05	-	-	2.65	-	
	EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++			A+++			A+++		
		SCOP	Warmer Climate			5.85			5.93			5.68			5.68		
		s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		231			234			224			224		
		Energy efficiency class in water heating 35°C	Average Climate			A+++			A+++			A+++			A++		
		SCOP	Average Climate			4.7			4.65			4.45			4.18		
		s (Seasonal efficiency for space heating)	Average Climate	ηs %		185			183			175			164		
		Energy efficiency class in water heating 35°C	Cold Climate			A+			A+			A+			A+		
SCOP		Cold Climate			3.68			3.69			3.6			3.43			
s (Seasonal efficiency for space heating)		Cold Climate	ηs %		144			144			141			134			
Energy efficiency class in water heating 55°C		Warmer Climate			A+++			A+++			A+++			A+++			
SCOP		Warmer Climate			3.98			3.98			3.8			3.8			
s (Seasonal efficiency for space heating)		Warmer Climate	ηs %		156			156			149			149			
Energy efficiency class in water heating 55°C		Average Climate			A++			A++			A++			A++			
SCOP		Average Climate			3.23			3.25			3.23			3.2			
s (Seasonal efficiency for space heating)		Average Climate	ηs %		126			127			126			125			
Energy efficiency class in water heating 55°C		Cold Climate			A+			A+			A+			A			
SCOP		Cold Climate			2.7			2.78			2.75			2.5			
s (Seasonal efficiency for space heating)		Cold Climate	ηs %		105			108			107			97			
NOISE LEVEL		Indoor unit sound power			dB(A)	-			-			-			-		
		Indoor unit sound pressure	(n)		dB(A)	-			-			-			-		
		Outdoor unit sound power (nominal)			dB(A)	64			65			69			72		
		Outdoor unit sound pressure (nominal)	(o)		dB(A)	56			56			57			57		
ELECTRICAL DATA		System circulator absorption			W	4-75			4-75			4-75			4-75		
		Supply voltage indoor unit			V/ph/Hz	-			-			-			-		
		Maximum absorbed current of the internal unit with active heating elements			A	-			-			-			-		
		Internal unit maximum power consumption with active heating elements			kW	-			-			-			-		
		Additional electric heating elements			kW	-			-			-			-		
	Supply voltage outdoor unit			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	10.4			10.4			25			29			
Outdoor unit maximum absorbed power			kW	2.3			2.3			5.75			6.67				
COOLING CIRCUIT	Compressor type				Inverter rotary			Inverter rotary			Inverter rotary			Inverter rotary			
	Refrigerant inlet connection diameter			"	-			-			-			-			
	Coolant gas	(p)			R32			R32			R32			R32			
	Global warming potential			GWP	675			675			675			675			
	Refrigerant gas charge			kg	0.87			0.87			2.2			2.2			
	Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	(q)			-			-			-			-			
	Hydraulic connections			"	1			1			1			1			
HYDRAULIC DATA	Capacity of expansion vessel			l	2			2			3			3			

(a) Heating mode, external air temperature 7°C b.s./6°C b.u., inlet/outlet water temperature 30°C/35°C  
(b) Heating mode, external air temperature 2°C b.s./1°C b.u., inlet/outlet water temperature 30°C/35°C  
(c) Heating mode, external air temperature -7°C b.s./-8°C b.u., inlet/outlet water temperature 30°C/35°C  
(d) Heating mode, external air temperature -15°C b.s./-16°C b.u., inlet/outlet water temperature 30°C/35°C  
(f) Heating mode, external air temperature 7°C b.s./6°C b.u., inlet/outlet water temperature 40°C/45°C  
(g) Heating mode, external air temperature 2°C b.s./1°C b.u., inlet/outlet water temperature 40°C/45°C  
(h) Heating mode, external air temperature -7°C b.s./-8°C b.u., inlet/outlet water temperature 40°C/45°C  
(i) Heating mode, external air temperature -15°C b.s./-16°C b.u., inlet/outlet water temperature 40°C/45°C

(l) Cooling mode, external air temperature 35°C, inlet/outlet water temperature 23°C/18°C  
(m) Cooling mode, external air temperature 35°C, inlet/outlet water temperature 12°C/7°C  
(n) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber  
(o) Sound pressure values measured at a distance of 1 m in a semi-anechoic chamber  
(p) Airtightlly 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

TECHNICAL DATA				12T			16T				
				02024			02026				
Compressor frequency				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum		
PRECISE PERFORMANCE	Heating output	a7/6 - w30/35	(a)	kW	4.80	12.00	-	6.20	15.50	-	
	COP	a7/6 - w30/35	(a)	W/W	-	4.55	-	-	4.30	-	
	Heating output	a2/1 - w30/35	(b)	kW	4.08	11.90	-	5.27	13.00	-	
	COP	a2/1 - w30/35	(b)	W/W	-	4.14	-	-	4.05	-	
	Heating output	a-7/-8 - w30/35	(c)	kW	3.36	9.60	-	4.34	10.65	-	
	COP	a-7/-8 - w30/35	(c)	W/W	-	2.80	-	-	3.08	-	
	Heating output	a-15/-16 - w30/35	(d)	kW	2.69	8.76	-	3.47	10.54	-	
	COP	a-15/-16 - w30/35	(d)	W/W	-	1.79	-	-	1.62	-	
	Heating output (fancoils)	a7/6 - w40/45	(f)	kW	4.80	11.00	-	6.20	15.50	-	
	COP (fancoils)	a7/6 - w40/45	(f)	W/W	-	3.16	-	-	3.30	-	
	Heating output (fancoils)	a2/1 - w40/45	(g)	kW	4.08	11.50	-	5.27	13.00	-	
	COP (fancoils)	a2/1 - w40/45	(g)	W/W	-	3.20	-	-	3.08	-	
	Heating output (fancoils)	a-7/-8 - w40/45	(h)	kW	3.36	8.60	-	4.34	10.78	-	
	COP (fancoils)	a-7/-8 - w40/45	(h)	W/W	-	2.60	-	-	2.24	-	
	Heating output (fancoils)	a-15/-16 - w40/45	(i)	kW	2.69	8.04	-	3.47	9.92	-	
	COP (fancoils)	a-15/-16 - w40/45	(i)	W/W	-	1.70	-	-	1.58	-	
	Cooling power	a35 - w23/18	(l)	kW	4.40	11.00	-	5.80	14.50	-	
	EER	a35 - w23/18	(l)	W/W	-	4.30	-	-	3.80	-	
	Cooling output (fancoils)	a35 - w12/7	(m)	kW	3.62	9.50	-	5.20	13.00	-	
	EER (fancoils)	a35 - w12/7	(m)	W/W	-	2.97	-	-	2.75	-	
	EFFICIENCIES	Energy efficiency class in water heating 35°C	Warmer Climate			A+++			A+++		
		SCOP	Warmer Climate			5.68			5.68		
		s (Seasonal efficiency for space heating)	Warmer Climate	ηs %		224			224		
		Energy efficiency class in water heating 35°C	Average Climate			A+++			A++		
SCOP		Average Climate			4.45			4.18			
s (Seasonal efficiency for space heating)		Average Climate	ηs %		175			164			
Energy efficiency class in water heating 35°C		Cold Climate			A+			A+			
SCOP		Cold Climate			3.6			3.43			
s (Seasonal efficiency for space heating)		Cold Climate	ηs %		141			134			
Energy efficiency class in water heating 55°C		Warmer Climate			A++			A++			
SCOP		Warmer Climate			3.8			3.8			
s (Seasonal efficiency for space heating)		Warmer Climate	ηs %		149			149			
Energy efficiency class in water heating 55°C		Average Climate			A+++			A+++			
SCOP		Average Climate			3.23			3.2			
s (Seasonal efficiency for space heating)		Average Climate	ηs %		126			125			
Energy efficiency class in water heating 55°C		Cold Climate			A+			A			
SCOP	Cold Climate			2.75			2.5				
s (Seasonal efficiency for space heating)	Cold Climate	ηs %		107			97				
NOISE LEVEL	Indoor unit sound power			dB(A)	-			-			
	Indoor unit sound pressure	(n)		dB(A)	-			-			
	Outdoor unit sound power (nominal)			dB(A)	69			72			
	Outdoor unit sound pressure (nominal)	(o)		dB(A)	57			57			
ELECTRICAL DATA	System circulator absorption			W	4.75			4.75			
	Supply voltage indoor unit			V/ph/Hz	-			-			
	Maximum absorbed current of the internal unit with active heating elements			A	-			-			
	Internal unit maximum power consumption with active heating elements			kW	-			-			
	Additional electric heating elements			kW	-			-			
	Supply voltage outdoor unit			V/ph/Hz	380-415/3/50			380-415/3/50			
	Outdoor unit maximum absorbed current			A	12			12			
	Outdoor unit maximum absorbed power			kW	7.8			7.8			
COOLING CIRCUIT	Compressor type				Inverter rotary			Inverter rotary			
	Refrigerant inlet connection diameter			"	-			-			
	Coolant gas	(p)			R32			R32			
	Global warming potential			GWP	675			675			
	Refrigerant gas charge			kg	2.2			2.2			
	Refrigerant piping length limit without minimum surface check according to IEC 60335-2-40:2018	(q)				-			-		
HYDRAULIC DATA	Hydraulic connections			"	1			1			
	Capacity of expansion vessel			l	3			3			

## ACCESSORIES

COMMANDS	Accessories	Compatibility	
B0916	Kit 3-way valve for DHW	○	
B0866	Extension cord remote control panel kit 15m	○	
STORAGE TANKS / BUFFER	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	○
	B0618	Resistance for boiler 2 kW	○
	B0666	Resistance for boiler 3 kW	○
	B0617	Set flens voor weerstand	○
	01199	Thermal accumulation 50 L	○
	01200	Thermal accumulation 100 L	○

○ Optional accessory | ● Standard accessory | — Accessory not compatible

Accessory description on page 50

Please note that optional accessories are available for purchase with all models of the heat pump. When compatibility is only possible with certain sizes, the information is shown in the table. Standard accessories are already included in the heat pump code.