

UNITHERM 4 SPLIT R32

SERIES

INVERTER

R32



+10°C ... +48°C



-25°C ... +35°C



-30°C... +48°C



Max. water temperature



Energy Efficiency



Self-diagnosics



Auto-protection



Anti-corrosive Coating



2-Stage Compressor



Timer



Wired Controller



BMS Control Systems



Intelligent Defrosting



Intelligent Control



Wi-Fi

COMPACT AND FLEXIBLE DESIGN OF INDOOR UNIT



Compact design, easy to install.
Dimensions (W×D×H) (mm)

460×318×860mm

Safety valve, plate heat exchanger, expansion tank, circulation pump and control unit, all in one device.

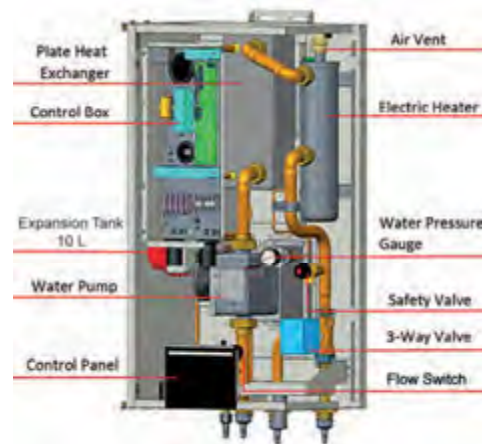
See the table below regarding the configuration of E-heater for heating and connecting E-heater for domestic hot water.

	E-heater for heating (built-in)	E-heater for DHW (external)
CH-HP6.0SIRK4(I)	1.5 + 1.5 kW	3 kW
CH-HP8.0SIRK4(I) CH-HP10SIRK4(I)	3 + 3 kW	3 kW
CH-HP12SIRK(M)4(I) CH-HP14SIRK(M)4(I) CH-HP16SIRK(M)4(I)	3 + 3 kW	3 kW

INDOOR UNIT (HYDROMODULE): HEATING/COOLING AND DHW

The indoor unit (hydromodule) regulates the supply of heat/cold/DHW to heating floor/convectors/fancoils, etc.

You can manage your comfort: changing the temperature and water supply, adjust the modes through the central controller installed on the indoor unit (hydromodule).



OUTDOOR UNIT IS UNIVERSAL FOR SPLIT AND ALL-IN-ONE SERIES



Two-Stage technology enables efficient heating of water at extremely low temperatures without additional losses of electricity.

TECHNICAL PARAMETERS OF UNIT SPLIT SERIES 1 PHASE

CH-HP6.0SIRK4CH-HP8.0SIRK4CH-HP10SIRK4CH-HP12SIRK4CH-HP14SIRK4CH-HP16SIRK4								
Capacity *	Cooling	kW	5,80	7,00	8,50	11,00	12,60	13,00
	Heating	kW	6,00	8,00	9,50	12,00	14,00	15,50
Power input*	Cooling	kW	1,32	1,75	2,24	2,50	3,41	3,60
	Heating	kW	1,20	1,70	2,07	2,40	2,98	3,44
EER* ¹			4,40	4,00	3,80	4,40	3,70	3,60
COP* ¹			5,00	4,70	4,60	5,00	4,70	4,50
Capacity **	Cooling	kW	4,09	5,30	6,50	10,59	11,07	11,51
	Heating	kW	5,90	8,00	9,50	12,40	14,48	16,09
Power input**	Cooling	kW	1,28	1,73	2,27	3,79	4,18	4,49
	Heating	kW	1,51	2,14	2,64	3,29	3,93	4,44
EER**			3,20	3,00	2,90	2,79	2,65	2,57
COP **			3,90	3,70	3,60	3,77	3,68	3,62
Refrigerant charge volume		kg	1,00	1,60	1,60	1,84	1,84	1,84
Power supply			~220-240V/50 Hz/1 Ph					
Sound pres- sure level	Colling	dB (A)	52	55			68	
	Heating	dB (A)	52	55			68	
Dimensions (W×D×H)	Indoor unit	mm	460×318×860					
	Outdoor unit	mm	975×396×702	982×427×787			940×460×820	
Net weight	Indoor unit	kg	62					
	Outdoor unit	kg	55	82			110	
Water circulating pipe inlet/outlet, DHW			1" Male BSP					
Diameter of pipe	Liquid	inch (mm)	1/4" (6,35)					
	Gas	inch (mm)	1/2" (12,7)			5/8" (15,6)		

NOTE

«*» capacity and power input are specified under the following conditions:

Cooling Water temperature: +23°C/+18°C; Outdoor temperature: +35°C DB; +24°C WB

Heating Water temperature: +30°C/+35°C; Outdoor temperature: +7°C DB; +6°C WB

«**» capacity and power input are specified under the following conditions:

Cooling Water temperature: +12°C/+7°C; Outdoor temperature: +35°C DB; +24°C WB

Heating Water temperature: +40°C/+45°C; Outdoor temperature: +7°C DB; +6°C WB

TECHNICAL PARAMETERS OF UNIT SPLIT SERIES 3 PHASE

			CH-HP12SIRM4	CH-HP14SIRM4	CH-HP16SIRM4
Capacity *	Cooling	kW	11,00	12,60	13,00
	Heating	kW	12,00	14,00	15,50
Power input*	Cooling	kW	2,50	3,41	3,60
	Heating	kW	2,40	2,98	3,44
EER*1			4,40	3,70	3,60
COP*1			5,00	4,70	4,51
Capacity **	Cooling	kW	10,65	11,24	11,52
	Heating	kW	12,29	14,44	16,13
Power input**	Cooling	kW	3,74	4,13	4,38
	Heating	kW	3,09	3,63	4,16
EER **			2,85	2,72	2,63
COP **			3,98	3,98	3,88
Refrigerant charge volume		kg	1,84	1,84	1,84
Power supply			~380-415V/50 Hz/3 Ph		
Sound pressure level	Cooling	dB (A)	68	68	68
	Heating	dB (A)	68	68	68
Dimensions (W×D×H)	Indoor unit	mm	460×318×860	460×318×860	460×318×860
	OUTDOOR UNIT	mm	940×460×820	940×460×820	940×460×820
Net weight	Indoor unit	kg	62	62	62
	Outdoor unit	kg	110	110	110
Water circulating pipe inlet/outlet, DHW			1" Male BSP	1" Male BSP	1" Male BSP
Diameter of pipe	Liquid	inch (mm)	1/4" (6,35)	1/4" (6,35)	1/4" (6,35)
	Gas	inch (mm)	5/8" (15,9)	5/8" (15,9)	5/8" (15,9)

NOTE

«*» capacity and power input are specified under the following conditions:

Cooling Water temperature: +23°C/+18°C; Outdoor temperature: +35°C DB; +24°C WB

Heating Water temperature: +30°C/+35°C; Outdoor temperature: +7°C DB; +6°C WB

«**» capacity and power input are specified under the following conditions:

Cooling Water temperature: +12°C/+7°C; Outdoor temperature: +35°C DB; +24°C WB

Heating Water temperature: +40°C/+45°C; Outdoor temperature: +7°C DB; +6°C WB

ELECTRICAL PARAMETERS OF UNUTHERM 4 SPLIT

	Power supply	Automatic switch (A)	The minimum cross-sectional area of the grounding wire (mm ²)	The minimum cross-sectional area of the power cable (mm ²)
CH-HP6.0SIRK4(O)	~220-240V/50 Hz/1 Ph	16	1,5	1,5
CH-HP6.0SIRK4(I)		20	6	6
CH-HP8.0SIRK4(O)		25	4	4
CH-HP8.0SIRK4(I)		40	6	6
CH-HP10SIRK4(O)		25	4	4
CH-HP10SIRK4(I)		40	6	6
CH-HP12SIRK4(O)		32	6	6
CH-HP12SIRK4(I)		40	6	6
CH-HP14SIRK4(O)		40	6	6
CH-HP14SIRK4(I)		40	6	6
CH-HP16SIRK4(O)		40	6	6
CH-HP16SIRK4(I)		40	6	6
CH-HP12SIRM4(O)	~380-415V/50 Hz/3 Ph	16	2,5	2,5
CH-HP12SIRM4(I)		20	4	4
CH-HP14SIRM4(O)		16	2,5	2,5
CH-HP14SIRM4(I)		20	4	4
CH-HP16SIRM4(O)		16	2,5	2,5
CH-HP16SIRM4(I)		20	4	4

NOTES:

- If circuit breakers with leakage protection are used, the trip time should be less than 0.1 second and the leakage current should be 30 mA.
- The diameter of the power cables selected above is determined based on the assumption that the distance from the distribution box to the device is less than 75 m. If the cables are laid at a distance of 75 to 150 m, then the diameter of the power cable must be increased.
- The power source must meet the rated voltage of the device and must be connected to a separate electrical line.
- All electrical work must be performed by professional technicians in accordance with local codes and ordinances.
- Implement safety grounding. The grounding wire must be connected to a special grounding line in the building, the connection must be made by professional technicians.
- The switch and power cord specifications in the table above are based on the maximum power (maximum current) of the device.
- The power cable specifications in the table above refer to a stranded copper cable in a protective sheath (e.g. YJV cross-linked polyethylene insulated power cable) used at +40 °C and resistant to +90 °C (see IEC 60364-5-52). If the requirements are changed, the cables must be replaced according to the relevant standard.
- The switch specifications in the table above refer to the switch with an operating temperature of +40 °C. In the event of a change in conditions, they must be changed in accordance with the current national standard.
- An automatic switch must be installed in the power supply line. Automatic switch with disconnection of all poles. The opening distance between the contacts should be at least 3 mm.

PIPE CONNECTION OF UNITHERM 4 SPLIT

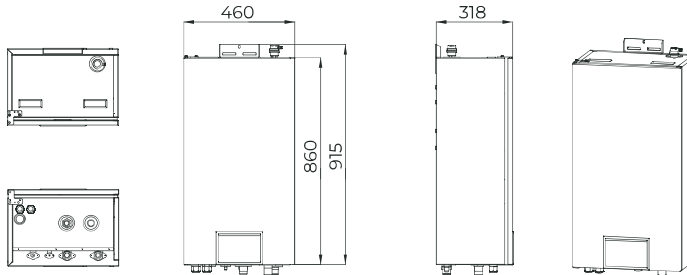
	Diameter tube		Length B		Height A		Additional
	GAS	Liquid	Std	Max	Std	Max	
CH-HP6.0SIRK4	1/2"	1/4"	5 m	20 m	0 m	15 m	16 g/m
CH-HP8.0SIRK4	1/2"	1/4"	5 m	25 m	0 m	15 m	16 g/m
CH-HP10SIRK4	1/2"	1/4"	5 m	25 m	0 m	15 m	16 g/m
CH-HP12SIRM4	5/8"	1/4"	5 m	15 m *	0 m	15 m	0 g/m
CH-HP14SIRM4	5/8"	1/4"	5 m	15 m *	0 m	15 m	0 g/m
CH-HP16SIRM4	5/8"	1/4"	5 m	15 m *	0 m	15 m	0 g/m
CH-HP12SIRK4	5/8"	1/4"	5 m	15 m *	0 m	15 m	0 g/m
CH-HP14SIRK4	5/8"	1/4"	5 m	15 m *	0 m	15 m	0 g/m
CH-HP16SIRK4	5/8"	1/4"	5 m	15 m *	0 m	15 m	0 g/m

NOTES:

* Under certain conditions, the length can be increased to 25 m.

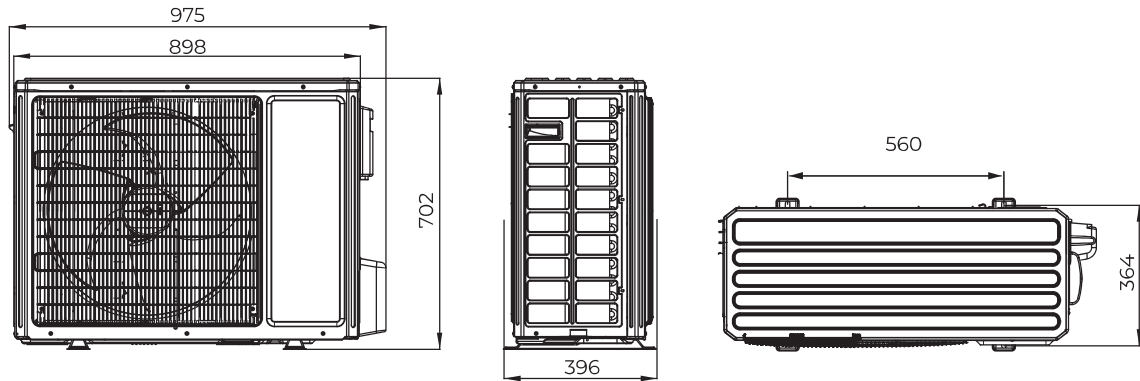
- Additional refrigerant charging is not required if the pipe length is less than 10m, if the pipe length is more than 10m, additional refrigerant charging is required according to the table. For example: if a 10 kW model is installed at a distance of 25 m, you should add $(25-10) \times 16 = 240$ g of refrigerant.
- Rated capacity is based on standard pipe length and maximum allowable length is based on working length. The grease intake loop should be installed every 5–7 meters if the external unit is located above the internal unit (hydro module).
- Each 90° bend is approximately equal to 0.5 meters of pipe length.

OVERALL DIMENSIONS OF THE INDOOR UNIT (HYDROMODULE)

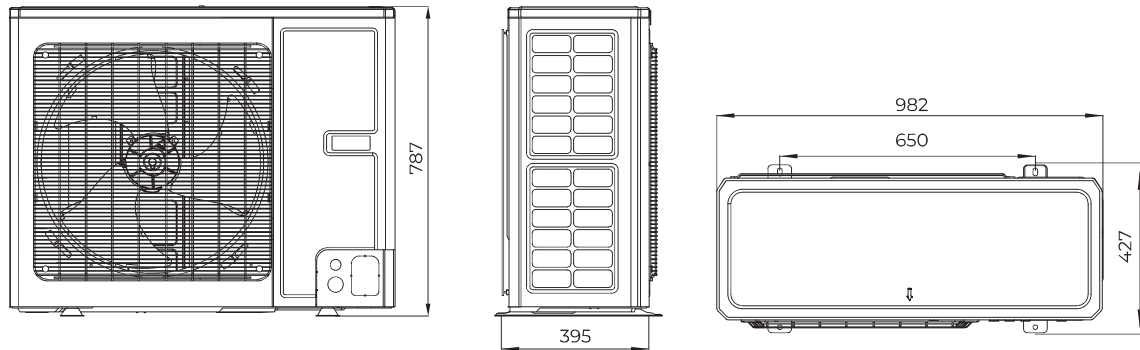
				
No.	Description	Connection thread		
1	Diameter of outlet pipe (water)	1" Male BSP		
2	Diameter of return water flow pipe	1" Male BSP		
3	Liquid pipe	1/4"	CH-HP8.0SIRK4(I), CH-HP10SIRK4(I), CH-HP12SIRM4(I), CH-HP14SIRM4(I), CH-HP16SIRM4(I), CH-HP12SIRK4(I), CH-HP14SIRK4(I), CH-HP16SIRK4(I)	
4	Gas pipe	1/2"	CH-HP8.0SIRK4(I), CH-HP10SIRK4(I)	
5	Gas pipe	5/8"	CH-HP12SIRM4(I), CH-HP14SIRM4(I), CH-HP16SIRM4(I), CH-HP12SIRK4(I), CH-HP14SIRK4(I), CH-HP16SIRK4(I)	

OVERALL DIMENSIONS OF THE OUTDOOR UNIT

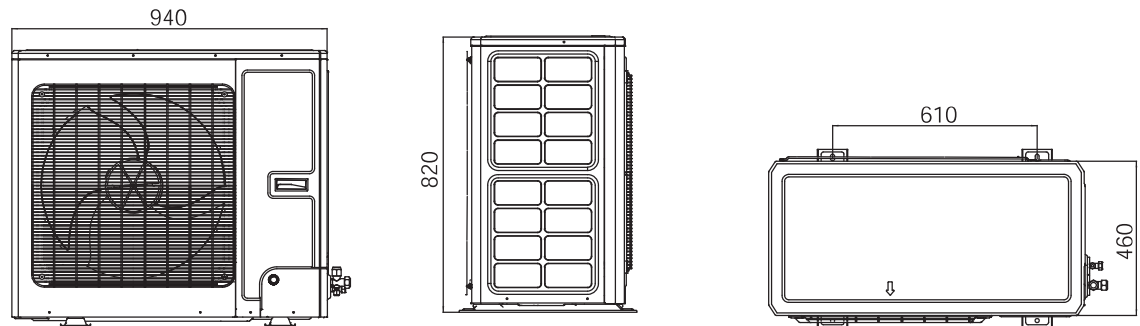
CH-HP6.0SIRK4 (O)



CH-HP8.0SIRK4 (O), CH-HP10SIRK4 (O)



**CH-HP12SIRM4(O) , CH-HP14SIRM4(O), CH-HP16SIRM4(O),
CH-HP12SIRK4(O) ,CH-HP14SIRK4(O), CH-HP16SIRK4(O)**



UNITHERM 3 ALL-IN-ONE R32

SERIES

INVERTER

R32



+10°C ... +48°C



-25°C ... +35°C



-30°C... +48°C



Max. water temperature



Energy Efficiency



Self-diagnosics



Auto-protection



Anti-corrosive Coating



2-Stage Compressor



Timer



Wired Controller



BMS Control Systems



Intelligent Defrosting



Intelligent Control



Wi-Fi