

# UNITHERM MONOTYPE SERIES

*INVERTER*

R32



+10°C ... +48°C



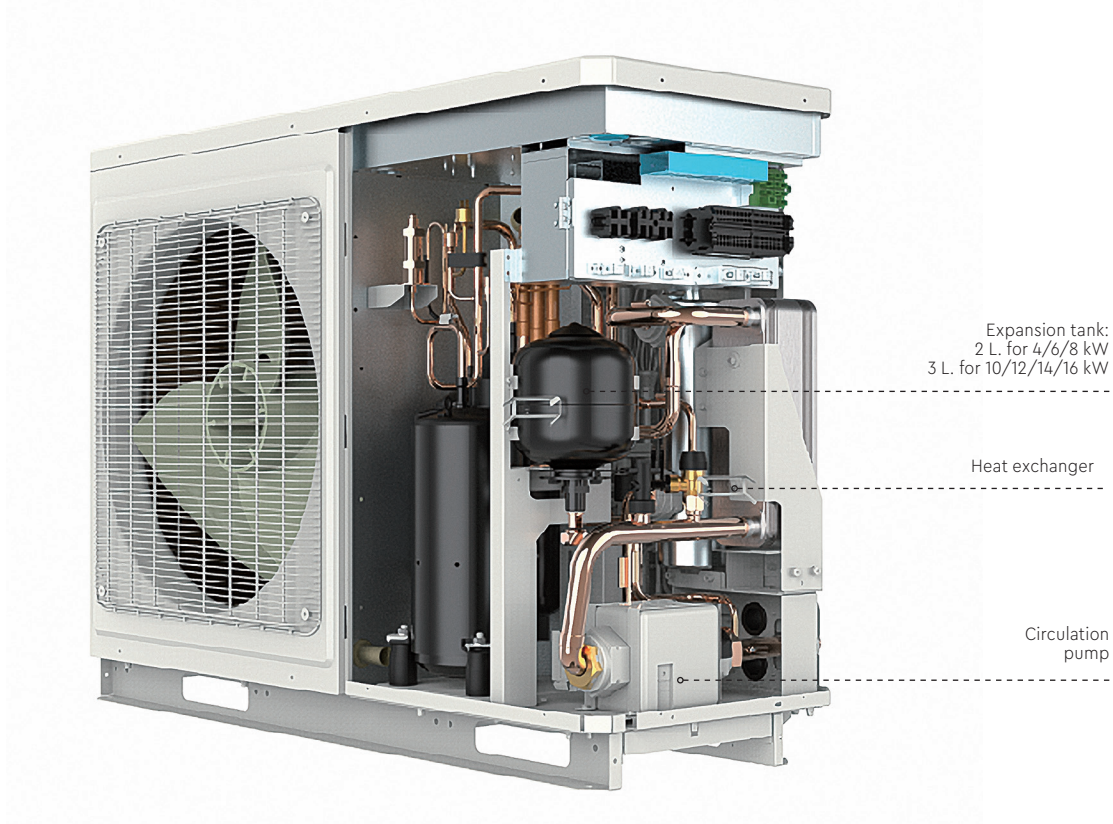
-25°C ... +35°C



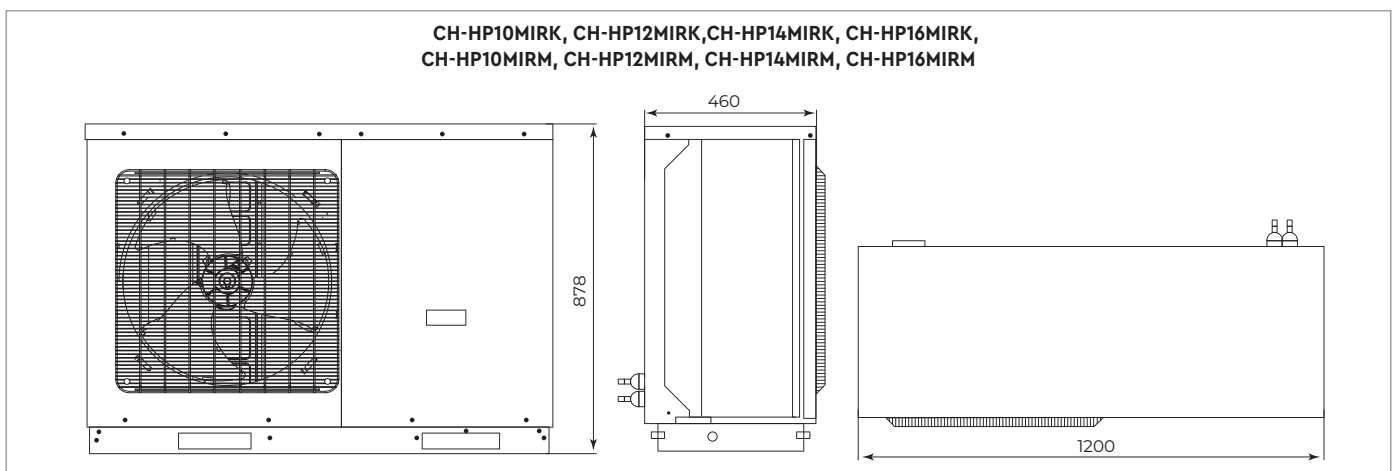
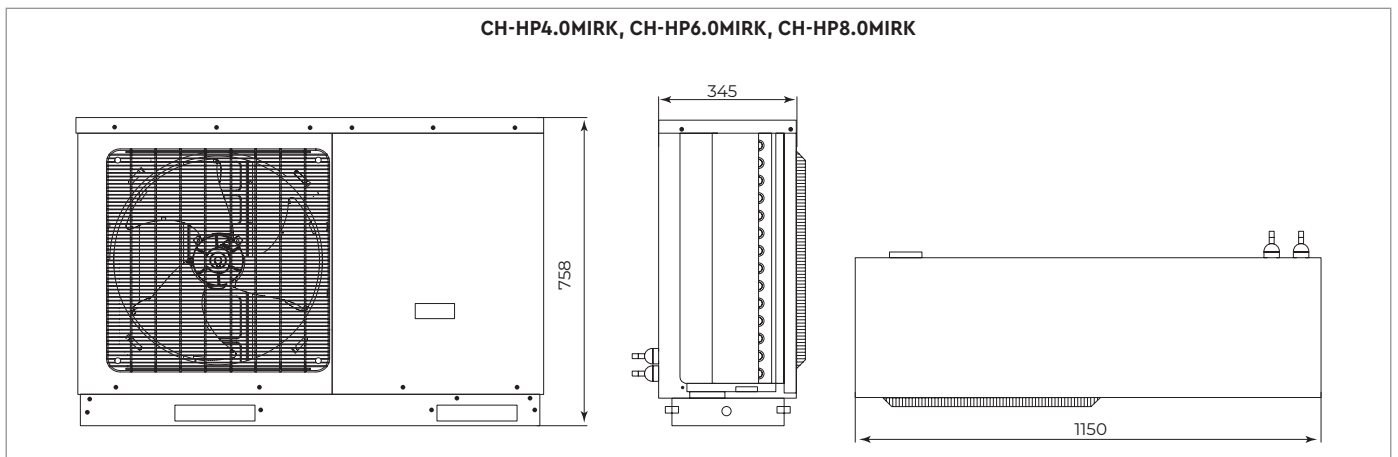
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|----------------|------------------------|-------------------|------------------|-----------------|------------------------|--------------------|-------|------------------|---------------------|------------------------|---------------------|-------|
|                |                        |                   |                  |                 |                        |                    |       |                  |                     |                        |                     |       |
| -25°C... +48°C | Max. water temperature | Energy Efficiency | Self-diagnostics | Auto-protection | Anti-corrosive Coating | 2-Stage Compressor | Timer | Wired Controller | BMS Control Systems | Intelligent Defrosting | Intelligent Control | Wi-Fi |

Monoblock unit uses built-in DC-inverter 2-stage compressor and circulation pump. It performs cooling, heating and DHW with an energy efficiency level of up to 5.0. The heating is possible at the ambient temperature range -25~35 °C while the inlet water range is 20~60 °C.

## UNITHERM MONOTYPE: REVIEW



## UNITHERM MONOTYPE: OVERALL DIMENSIONS



TECHNICAL PARAMETERS UNITHERM MONOTYPE

			CH-HP4.0MIRK	CH-HP6.0MIRK	CH-HP8.0MIRK	CH-HP10MIRK	CH-HP12MIRK
Capacity*	Cooling	kW	3,8	5,8	6,8	8,8	11
	Heating	kW	4	6	7,5	10	12
Power input*	Cooling	kW	0,82	1,32	1,55	1,96	2,56
	Heating	kW	0,78	1,2	1,63	2,15	2,64
EER			4,65	4,4	4,4	4,5	4,2
COP			5,1	5	4,6	4,65	4,55
Power supply			~220-240V/50 Hz/1 Ph				
Capacity**	Cooling	kW	3	4	5	7,8	9,5
	Heating	kW	4	6	7,5	10	12
Power input**	Cooling	kW	0,94	1,27	1,56	2,48	3,11
	Heating	kW	0,98	1,56	2	2,67	3,48
EER*2			3,2	3,15	3,2	3,15	3,05
COP*2			4,1	3,85	3,75	3,75	3,6
Refrigerant charge volume	kg		0,87			2,2	
Sound pressure level	Cooling	dB (A)	56			59	
	Heating	dB (A)	58			61	
Dimensions (W×D×H)	mm		1150×345×758			1200×460×878	
Weight	kg		96			151	
Water circulating pipe inlet/outlet			1" Male BSP				

			CH-HP12MIRM	CH-HP14MIRK	CH-HP14MIRM	CH-HP16MIRK	CH-HP16MIRM
Capacity*	Cooling	kW	11	12,5	12,5	14,5	14,5
	Heating	kW	12	14	14	15,5	15,5
Power input*	Cooling	kW	2,56	3,05	3,05	3,82	3,82
	Heating	kW	2,64	3,22	3,22	3,6	3,6
EER			4,2	4	4,2	3,7	4
COP			4,5	4,35	4,55	4,3	4,35
Power supply			~380-415V/50 Hz/3 Ph	~220-240V/50 Hz/1 Ph	~380-415V/50 Hz/3 Ph	~220-240V/50 Hz/1 Ph	~380-415V/50 Hz/3 Ph
Capacity**	Cooling	kW	9,5	12	12	13	13
	Heating	kW	12	14	14	15,5	15,5
Power input**	Cooling	kW	3,11	4,14	4,14	4,73	4,73
	Heating	kW	3,48	4,18	4,18	4,7	4,7
EER*2			3	2,9	3,05	2,75	2,9
COP*2			3,5	3,55	3,6	3,4	3,55
Refrigerant charge volume	kg		2,2				
Sound pressure level	Cooling	dB (A)	59				
	Heating	dB (A)	61				
Dimensions (W×D×H)	mm		1200×460×878				
Weight	kg		151				
Water circulating pipe inlet/outlet			1" Male BSP				

\*Efficiency and performance measured under the following conditions: cooling – water inlet/outlet 23°C/18°C, outdoor temperature 23°C DB/24°C WB heating – water inlet/outlet 30°C/35°C, outdoor temperature 7 °C DB/6 °C WB

\*\*Efficiency and performance measured under the following conditions: cooling – inlet/outlet water 12°C/7°C, outdoor air temperature 35°C DB/24°C WB heating – inlet/outlet water 40°C/45°C, outdoor air temperature 7°C DB/6°C WB

## ELECTRICAL PARAMETERS OF MONOTYPE SERIES

	Power supply	Automatic switch (A)	The minimum cross-sectional area of the grounding wire (mm <sup>2</sup> )	The minimum cross-sectional area of the power cable (mm <sup>2</sup> )
CH-HP4.0MIRK	~220-240V/50 Hz/1 Ph	16	1,5	2*1.5
CH-HP6.0MIRK		16	1,5	2*1.5
CH-HP8.0MIRK		16	1,5	2*1.5
CH-HP10MIRK		32	4.0	2*4.0
CH-HP12MIRK		32	4.0	2*4.0
CH-HP14MIRK		40	4.0	2*4.0
CH-HP16MIRK		40	4.0	2*4.0
CH-HP12MIRM	~380-415V/50 Hz/3 Ph	16	1,5	4*1.5
CH-HP14MIRM		16	1,5	4*1.5
CH-HP16MIRM		16	1,5	4*1.5

### NOTES:

- A. 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.
- B. 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.
- C. The power source must meet the rated voltage of the device and must be connected to a separate electrical line.
- D. All electrical work must be performed by professional technicians in accordance with local codes and ordinances.
- E. 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.
- F. The switch and power cord specifications in the table above are based on the maximum power (maximum current) of the device.
- G. 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.
- H. 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.
- I. 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.