## **HEAT PUMPS**

### THERMAL Plus CO + CWU

# Monoblock with a hydraulic module and integrated DHW storage tank

THERMAL Plus monoblock heat pumps are energy efficient devices which draw energy from the air and use it to heat or cool the building and prepare heat utility water. They can be used in single-family houses. Heiko's heat pumps are advanced devices, which guarantee efficient and safe operation.



#### Hydraulic module - MONOBLOCK ALL IN ONE

The compact design of the hydraulic module with the integrated 250-litre DHW storage tank is ready to use out of the box. No additional system components need to be purchased, and no extra installation space is required for the DHW tank. The module enables easy and safe hydraulic connections.



#### Two heating circuits

A THERMAL Plus heat pump can be configured to supply different heat loads at the same time, like a radiator space heating system and an underfloor heating system. The two heating circuits ensure separate management of the temperature in different heat loads; in practical terms, different temperature settings can be made for the radiators and the underfloor heating.



#### Wide temperature range - reliable operation in all conditions

The Heiko heat pumps are reliable units which operate from -25°C outdoors and can heat DHW to 55°C.



#### Wi-Fi control

The Wi-Fi control is available in standard, which makes operating the Heiko heat pumps more comfortable. The device can be easily controlled with a dedicated app. Thanks to the Wi-Fi control, Heiko service centre can remotely help the user.



#### Modern control panel

The integrated control panel enables easy and quick changing of operating parameters. The controller menu is available in several language versions.



#### Quiet operation

The Heiko THERMAL Plus heat pumps have DC motor fans, a well sound-insulated refrigerant compressor, and an optimised air fan design to ensure very quiet operation already at 52 dB(A). The units can also run in a quiet mode for improved comfort at work or while resting.



#### Automatic weather control

The Heiko THERMAL Plus heat pumps operate in an automatic process controlled by weather temperature curves. In practice, this means that the heat pump operation is adapted automatically to actual weather conditions without any human intervention.



#### Frequency converter technology

The frequency converter technology ensures economical operation of the heat pump without sudden voltage spikes in the compressor frequency. As a result, the pump's operation is energy efficient and quiet. The appliances have A+++ energy rating.













Outdoor unit

Model			HEIKO THERMAL PLUS 6	HEIKO THERMAL PLUS 9	HEIKO THERMAL PLUS 12	HEIKO THERMAL Plus 15	HEIKO THERMAL Plus 19
Seasonal energy efficiency rating, space heating, temperate	LWT =35°C		A+++	A+++	A+++	A+++	A+++
climate	LWT =55°C		A++	A++	A++	A++	A++
Rated heat capacity, including all auxiliary heating units,	LWT =35°C	kW	4	6	8	12	16
temperate climate (-10°C) ** Seasonal energy efficiency, space heating, temperate	LWT =55°C LWT =35°C		4 186,7	6 186	7 185,5	11 196,8	15 190,5
climate	LWT =55°C	%	133,2	130,4	129,3	130,2	130,11
Annual energy consumption, temperate climate	LWT =35°C LWT =55°C	kWh	1827 2809	2826 3728	3225 3997	4829 7602	6953 7750
Indoor sound power level	2111 00 0	dB(A)	44	44	44	44	44
Outdoor sound power level		dB(A)	52	53	52	59	61
Special precautions			See the	Installation and Ser	vice Manuals before	attempting the insta	llation.
Electrical power efficiency					N/A		
Rated heat capacity, including all auxiliary heating units, cold climate	LWT =35°C	kW	3	5	7	10,8	15,1
	LWT =55°C	kW	3	5	6	10,6	14,3
Rated heat capacity, including all auxiliary heating units, warm climate	LWT =35°C	kW	6	8	10	13,8	18,2
	LWT =55°C	kW	6	7	8	13,1	16,1
Seasonal energy efficiency, space heating, cold climate	LWT =35°C	%	155	153	156	160	156
	LWT =55°C	%	117	105	110	115	110
Seasonal energy efficiency, space heating, warm climate	LWT =35°C	%	189	192	194	196	194
7, 7, 7	LWT =55°C LWT =35°C		147	143 3149	142 4020	143 7020	140 8825
Annual energy consumption with regard to final energy amount – cold climate  Annual energy consumption with regard to final energy amount – warm climate		kWh	2071 3089				
	LWT =55°C		1710	4100	4112	7910	9930
	LWT =35°C LWT =55°C	kWh	2550	3094 3510	3480 3560	6243 6913	8105 8590
Heat pump unit power supply		V/Ph/ Hz	220-240/1/50	220-240/1/50	220-240/1/50	380- 420 /3/50	380 - 420 /3/50
Electrical heater power supply		V	230	400	400	400	400
Heating (LWT = 35°C) (Outdoor temperature 2°C, 85% RH, EWT 30°C, LWT 35°C)	Capacity	kw	6,1	7,8	10,1	13,8	18,5
	COP	-	3,8	3,87	3,9	4	4,47
Heating (LWT = 35°C) (Outdoor temperature 7°C, 85% RH, EWT 47°C, LWT 55°C)	Capacity	kw	6,5	9,2	11,6	15,5	18,5
	COP	-	4,61	4,38	4,3	5	4,47
Cooling (LWT = 18°C) (Outdoor temperature 35°C, EWT 23°C, LWT 18°C)	Capacity	kw	7,45	9,5	9,8	18,6	22,5
	EER	-	4,05	4,23	3,9	4	7,35
Cooling (LWT = 7°C)	Capacity	kw	7.45	9.5	9.8	13,1	15,8
Outdoor temperature 35°C, EWT 12°C, LWT 7°C)	EER	-	4.05	4.23	3.9	3	2,94
Current protection control		В	25 (3F)	25 (3F)	25 (3F)	25 (3F)	25 (3F)
Power supply (number of conductors x cross section)		mm²	5 x 2,5	5 x 2,5	5 x 4	5 x 4	5 x 4
Current protection control		В		from indoor unit		25 (3F)	25 (3F)
Power supply (number of conductors x cross section)		mm²	3 x 2,5	3 x 2,5	3 x 2,5	5 x 4	5 x 4
Dimensions of the indoor unit (W x H x D)	Net/gross	mm	600x680x1780/	600x680x1780/	600x680x1780/	600x680x1780/	600x680x1780/
· , ,	3		650x750x1960 1010x370x700/	650x750x1960 1165x370x845/	650x750x1960 1165x370x845/	650x750x1960 1085x390x1400/	650x750x1960 1085x390x1400/
Dimensions of the outdoor unit (W x H x D)	Net/gross	mm	1040x455x730	1210x455x875	1210x455x875	1100x400x1450	1100x400x1450
Indoor unit weight		kg	125 / 135	125 / 135	125 / 135		
Outdoor unit weight		kg	67 / 78	80 / 95	85 / 105	125 / 135	125 / 135
Compressor	Туре		Twin Rotary – 1 TC (system temp.), TW (DHW temp.), TV1 (1st circuit temp.),TV2 (2nd circuit temp.),				
Sensors			TC (system temp.), TW (DHW temp.), TVT (1st circuit temp.), TV2 (2nd circuit temp.),				
Integrated electrical heater		kW	3	6	6	6	6
Refrigerant	Type / amount of gas	kg	R32 / 0,9	R32 / 1,4	R32 / 1,8	R32 / 2,55	R32 / 2,6
	Cooling	°C	0 ~50	0 ~50	0 ~50	0 ~50	0 ~50
Recommended operating range	Heating	°C	-25 - 45	-25 - 45	-25 - 45	-25 - 45	-25 - 45
	DHW	°C	-25 - 55	-25 - 55	-25 - 55	-25 - 55	-25 - 55
Water side heat exchanger	Туре				Plate heat exchanger		
Water-side connection	Туре	cal	1	1	1	G1 - 1/4	G1 - 1/4
Water Pump	Max lifting	m	7,5	7,5	7,5	7,5	7,5
mater i unip	height						
Outlist was to see a section of the	Cooling	°C	7 - 25	7 - 25	7 - 25	7 - 25	7 - 25
Outlet water temperature range	Heating	°C	20 - 55	20 - 55	20 - 55	20 - 55	20 - 55
	DHW (tank)	°C	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55

 $<sup>^{\</sup>star}$  When installed and started by the Authorised Service.  $^{\star\star}$  Heating power for outdoor temperature of -10  $^{\circ}$  C