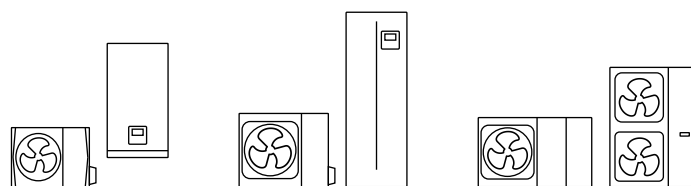


**KAISAI**

# HEAT PUMPS

ENERGY-EFFICIENT SOLUTION FOR YOUR HOME AND OFFICE

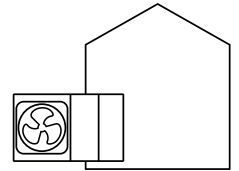


PRODUCT CATALOGUE

2022

# Monoblok

**MONOBLOCK CONSIST ONLY  
OF ONE OUTDOOR UNIT**



It is a compact, easy to install solution, which saves space inside the building. The user receives a complete, hermetic, ready-to-operate device, which does not require installation of a cooling system and specialist inspections. This solution is related to the necessity of securing the heating medium (water) against freezing in case of power failure.



## Prevalence of Monoblock

**NO SPECIFIC F-GAS AUTHORISATIONS REQUIRED**

**SAVING OF SPACE INSIDE THE BUILDING  
DUE TO LACK OF HYDRAULIC MODULE**

**SIMPLE INSTALLATION**

**HYDRAULIC READINESS FOR INTEROPERATION  
WITH CENTRAL HEATING**





# Advantage of our heat pumps

## Large selection of units **and heating capacities**

Kaisai's latest product range includes 14 heat pump models, including eight monoblock units (from 6 kW to 30 kW) and six split models (from 6 kW to 16 kW), for which six indoor units are provided with or without domestic water tank (190 l or 240 l).

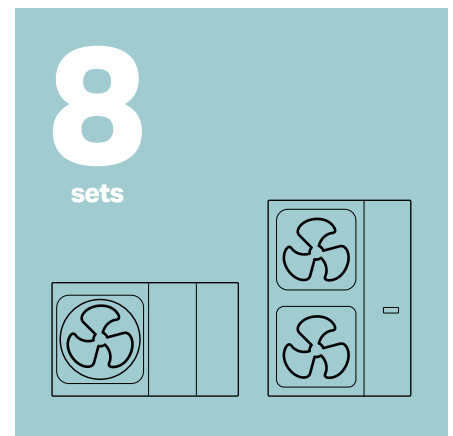
- 23 different sets of devices, customisable to individual needs.
- When the required heating capacity exceeds 30 kW, the heat pumps can be combined into cascades (up to 6 units) for a total capacity of up to 180 kW.
- The use of Modbus communication makes it possible to connect up to 16 devices.
- Cascade connection and Modbus function come as standard, that is why no additional accessories are required for installation.



**Split**  
from 6 to 16 kW



**Split + CWU**  
190 or 240 l

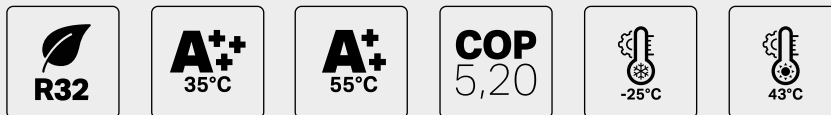


**Monoblok**  
from 6 to 30 kW

## Additional equipment for heat pumps **- more functions in the standard version**

- The hydraulic system is equipped with a circulating pump, peak heat source, safety group, flow sensor, air vent and pressure gauge as standard.
- The split indoor unit with an integrated domestic hot water tank is a complete solution for heating, cooling and preparing DHW in one compact device.
- All outdoor units have a heated drip tray as standard and monoblock models have an additional structural frame.

## Economical solutions **with high parameters**



The basic criteria for selecting a heat pump, both for retrofitted and newly erected facilities, are the functionality of the devices and their high operating parameters.

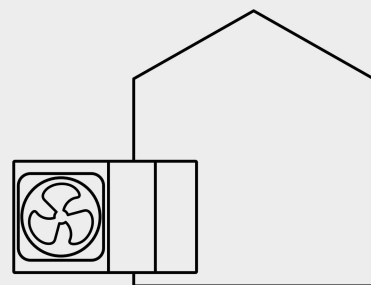
By using environmentally friendly R32 refrigerant and the highest quality components, Kaisai heat pumps have a very wide operating range: outside air temperature range from -25°C to 43°C and heating medium temperature of up to 65°C.

- Possibility of heating a house equipped with traditional radiators even at very low outside temperature (at -20°C outside, the heat pump reaches a temperature of 57°C of heating system water temperature)
- The highest energy class A+++
- Extremely high efficiency: COP of 5.20 (A7W35) and SCOP of 5.22 (LWT 35°C)
- Reduced noise level: from 45 dB (A) at a distance of 1 m



# MONOBLOCK

heat pumps



**KHC**-06RY1-B

**KHC**-08 | 10 | 12 | 14 | 16RY3-B

**KHC**-22 | 30RX3



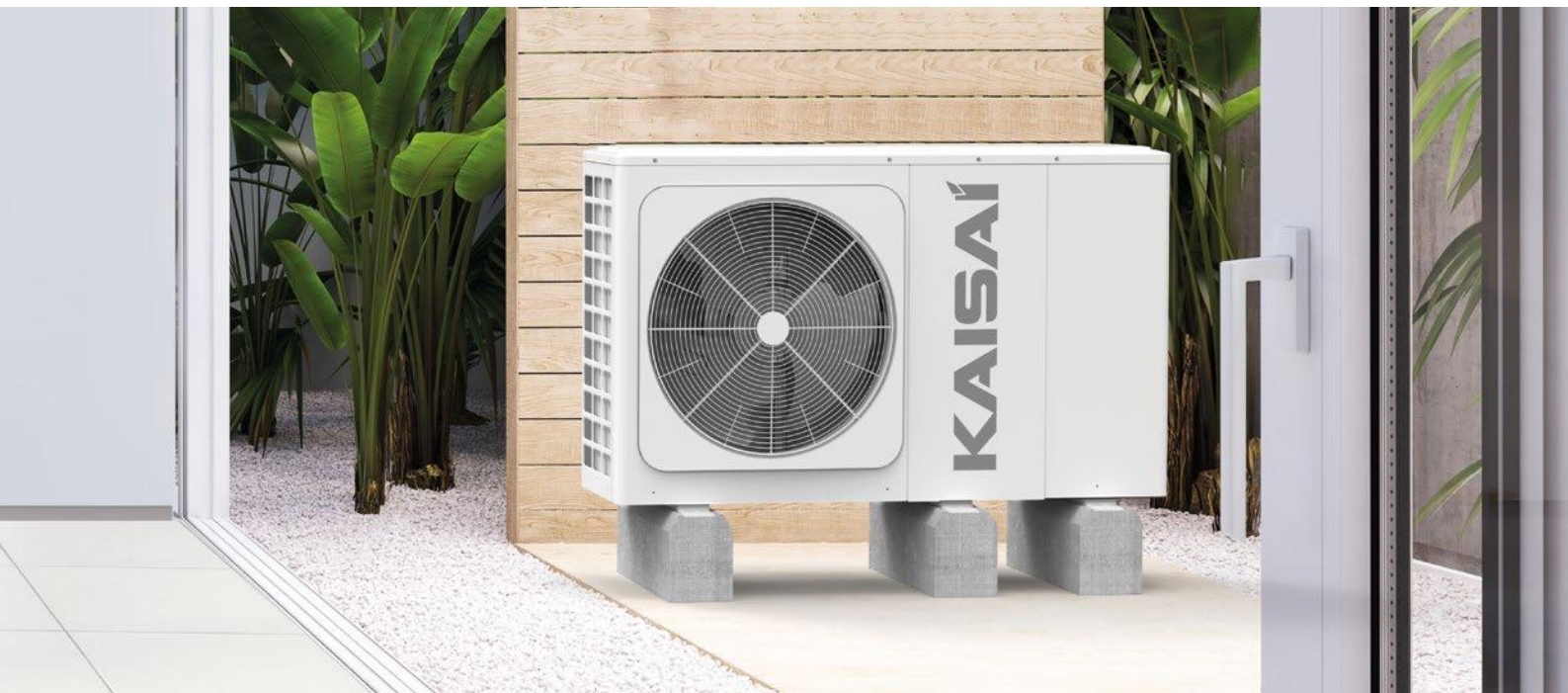


In the monoblock heat pumps, the refrigerant system is completely integrated within the outdoor unit. First and foremost, such a solution ensures no need to hold special authorisations in terms of cooling systems, space-saving and quiet unit operation.

The special design allows easy access to the internal components, while the length of the communication cable of up to 50 m provides great freedom, in terms of installing the controller.



# Outdoor units



- Easy installation and simple maintenance
- All hydraulic components in the outdoor unit: i.a.: circulating pump, expansion vessel, safety and air vent valve, flow sensor, pressure gauge and water flow heater, are fitted as standard.
- The cooling system is fully integrated in the outdoor unit, which means that no additional freon lines are required.
- Compact design, easy to transport and install



# KHC-06RY1-B

## TECHNICAL SPECIFICATION

Model		KHC-06RY1-B	
Heating A7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	6,35 (2,73÷7,41)
	electric energy consumption (range)	kW	1,28 (0,53÷1,56)
	COP (range)	W/W	4,95 (5,32÷4,76)
Heating A2W35 ΔT=5, R.H. 85%	nominal heat capacity	kW	5,50
	electric power consumption	kW	1,41
	COP	W/W	3,90
Heating A-7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	6,00 (1,48÷6,21)
	electric energy consumption (range)	kW	2,00 (0,48÷2,17)
	COP (range)	W/W	3,00 (3,06÷2,86)
Cooling A35W18 ΔT=5	nominal cooling capacity	kW	6,50
	electric power consumption	kW	1,35
	EER	W/W	4,80
Cooling A35W7 ΔT=5	nominal cooling capacity	kW	7,00
	electric power consumption	kW	2,33
	EER	W/W	3,00
Seasonal energy efficiency rating for room heating	LWT at 35°C class (temperate climate zone)	class	A+++
	LWT at 55°C class (temperate climate zone)	class	A++
SCOP	LWT at 35°C	W/W	4,95
	LWT at 55°C	W/W	3,52
Power supply	voltage / number of phases / frequency	V/Ph/Hz	220÷240/1/50
	maximum operating current (MCA)	A	27
Auxiliary electric heater	electric power	kW	3
	capacity levels		1
Sound level	sound power level	dB(A)	58
	acoustic pressure (1 m)	dB(A)	45
Outside air temperature range	cooling	°C	-5÷43
	heating	°C	-25÷35
	DHW	°C	-25÷43
Leaving water temperature range	cooling	°C	5÷25
	heating	°C	25÷65
	DHW	°C	20÷60
Water connection	diameter	cal	external thread G1
Refrigerant	symbol (GWP) / refrigerant amount	--- / kg	R32 (675) / 1,4
Dimensions	of the unit (W×H×L)	mm	1295×718×429
	of the packaging (W×H×L)	mm	1375×885×475
Weight	net / in packaging	kg	86/107

The technical data above is compliant with the guidelines specified in the following standards: EN14511; EN14825; EN50564; EN12102; (EU) No. 811:2013; (EU) No. 813:2013; OJ 2014/C 207/02:2014. The SCOP seasonal heating efficiency was determined for temperate climate conditions.

The sound power level in the heating mode was determined in accordance with EN 12102, under the conditions consistent with EN 14825;





# KHC-08 | 10 | 12 | 14 | 16RY3

## TECHNICAL SPECIFICATION

Model			KHC-08RY3-B	KHC-10RY3-B	KHC-12RY3-B	KHC-14RY3-B	KHC-16RY3-B
Heating A7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	8,40 (3,36÷9,11)	10,00 (3,81÷10,3)	12,10 (5,58÷14,6)	14,50 (5,92÷15,50)	15,90 (6,43÷16,80)
	electric energy consumption (range)	kW	1,63 (0,61÷1,80)	2,02 (0,71÷2,09)	2,44 (1,04÷3,11)	3,15 (1,12÷3,37)	3,53 (1,27÷3,79)
	COP (range)	W/W	5,15 (5,54÷5,07)	4,95 (5,39÷4,93)	4,95 (5,38÷4,69)	4,60 (5,27÷4,59)	4,50 (5,08÷4,43)
Heating A2W35 ΔT=5, R.H. 85%	nominal heat capacity	kW	7,10	8,20	9,20	11,00	13,00
	electric power consumption	kW	1,73	2,05	2,36	3,06	3,77
	COP	W/W	4,10	4,00	3,90	3,60	3,45
Heating A-7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	7,00 (1,82÷7,27)	8,00 (2,05÷8,31)	10,00 (3,97÷11,00)	12,00 (4,57÷12,70)	13,10 (4,99÷13,90)
	electric energy consumption (range)	kW	2,19 (0,53÷2,26)	2,62 (0,61÷2,61)	3,33 (1,26÷3,89)	4,21 (1,48÷4,55)	4,85 (1,68÷5,19)
	COP (range)	W/W	3,26 (3,44÷3,21)	3,05 (3,37÷3,11)	3,00 (3,14÷2,83)	2,85 (3,10÷2,79)	2,70 (2,97÷2,67)
Cooling A35W18 ΔT=5	nominal cooling capacity	kW	8,30	9,90	12,00	13,50	14,90
	electric power consumption	kW	1,64	2,18	3,04	3,75	4,38
	EER	W/W	5,05	4,55	3,95	3,60	3,40
Cooling A35W7 ΔT=5	nominal cooling capacity	kW	7,45	8,20	11,50	12,40	14,00
	electric power consumption	kW	2,22	2,52	4,18	4,96	5,60
	EER	W/W	3,35	3,25	2,75	2,50	2,50
Seasonal energy efficiency rating for room heating	LWT at 35°C class (temperate climate zone)	klasa	A+++	A+++	A+++	A+++	A+++
	LWT at 55°C class (temperate climate zone)	klasa	A++	A++	A++	A++	A++
SCOP	LWT at 35°C	W/W	5,22	5,20	4,81	4,72	4,62
	LWT at 55°C	W/W	3,37	3,47	3,45	3,47	3,41
Power supply	voltage / number of phases / frequency	V/Ph/Hz	380÷415/3/50	380÷415/3/50	380÷415/3/50	380÷415/3/50	380÷415/3/50
	maximum operating current (MCA)	A	29	30	23	24	25
Auxiliary electric heater	electric power	kW	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9
	capacity levels		3	3	3	3	3
Sound level	sound power level	dB(A)	59	60	65	65	68
	acoustic pressure (1 m)	dB(A)	46	49	50	51	55
Outside air temperature range	cooling	°C	-5÷43	-5÷43	-5÷43	-5÷43	-5÷43
	heating	°C	-25÷35	-25÷35	-25÷35	-25÷35	-25÷35
	DHW	°C	-25÷43	-25÷43	-25÷43	-25÷43	-25÷43
Leaving water temperature range	cooling	°C	5÷25	5÷25	5÷25	5÷25	5÷25
	heating	°C	25÷65	25÷65	25÷65	25÷65	25÷65
	DHW	°C	20÷60	20÷60	20÷60	20÷60	20÷60
Water connection	diameter	cal	external thread G5/4				
Refrigerant	symbol (GWP) / refrigerant amount	--- / kg	R32 (675) / 1,4	R32 (675) / 1,4	R32 (675) / 1,75	R32 (675) / 1,75	R32 (675) / 1,75
	of the unit (W×H×L)	mm	1385×865×526				
Dimensions	of the packaging (W×H×L)	mm	1465×1035×560				
	Weight	net / in packaging	kg	105 / 132	105 / 132	144 / 172	144 / 172

The technical data above is compliant with the guidelines specified in the following standards: EN14511; EN14825; EN50564; EN12102; (EU) No. 811:2013; (EU) No. 813:2013; OJ 2014/C 207/02:2014. The SCOP seasonal heating efficiency was determined for temperate climate conditions.

The sound power level in the heating mode was determined in accordance with EN 12102, under the conditions consistent with EN 14825;



# KHC-22 | 30 RX3

## TECHNICAL SPECIFICATION

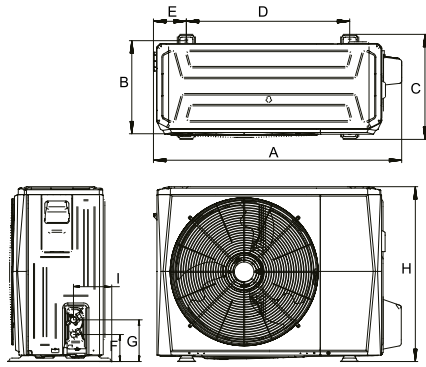
Model			KHC-22RX3	KHC-30RX3
Heating A7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	22,00 (9,92÷24,93)	30,10 (13,85÷31,75)
	electric energy consumption (range)	kW	5,00 (1,90÷6,47)	7,70 (2,93÷9,51)
	COP (range)	W/W	4,40 (5,33÷3,85)	3,91 (4,73÷3,34)
Heating A2W35 ΔT=5, R.H. 85%	nominal heat capacity	kW	22,00	26,00
	electric power consumption	kW	7,09	9,38
	COP	W/W	3,10	2,80
Heating A-7W35 ΔT=5, R.H. 85%	nominal heat capacity (range)	kW	21,00 (8,10÷23,73)	23,00 (10,35÷24,89)
	electric energy consumption (range)	kW	8,07 (2,91÷9,25)	9,38 (3,66÷9,93)
	COP (range)	W/W	2,60 (2,75÷2,56)	2,45 (2,83÷2,51)
Cooling A35W18 ΔT=5	nominal cooling capacity	kW	23,00	31,00
	electric power consumption	kW	5,00	7,75
	EER	W/W	4,60	4,00
Cooling A35W7 ΔT=5	nominal cooling capacity	kW	21,00	29,50
	electric power consumption	kW	7,12	11,57
	EER	W/W	2,95	2,55
Seasonal energy efficiency rating for room heating	LWT at 35°C class (temperate climate zone)	klasa	A+++	A++
	LWT at 55°C class (temperate climate zone)	klasa	A++	A+
SCOP	LWT at 35°C	W/W	4,53	4,19
	LWT at 55°C	W/W	3,22	3,14
Power supply	voltage / number of phases / frequency	V/Ph/Hz	380÷415/3/50	380÷415/3/50
	maximum operating current (MCA)	A	24,5	28,5
Sound level	sound power level	dB(A)	73	77
	acoustic pressure (1 m)	dB(A)	59	63
Outside air temperature range	cooling	°C	-5÷46	-5÷46
	heating	°C	-25÷35	-25÷35
	DHW	°C	-25÷43	-25÷43
Leaving water temperature range	cooling	°C	5÷25	5÷25
	heating	°C	25÷60	25÷60
	DHW	°C	30÷60	30÷60
Water connection	diameter	cal	external thread G5/4	
Refrigerant	symbol (GWP) / refrigerant amount	--- / kg	R32 (675) / 5,0	R32 (675) / 5,0
Dimensions	of the unit (W×H×L)	mm	1129×1558×440	
	of the packaging (W×H×L)	mm	1220×1735×565	
Weight	net / in packaging	kg	177 / 206	177 / 206

The technical data above is compliant with the guidelines specified in the following standards: EN14511; EN14825; EN50564; EN12102; (EU) No. 811:2013; (EU) No. 813:2013; OJ 2014/C 207/02:2014. The SCOP seasonal heating efficiency was determined for temperate climate conditions.

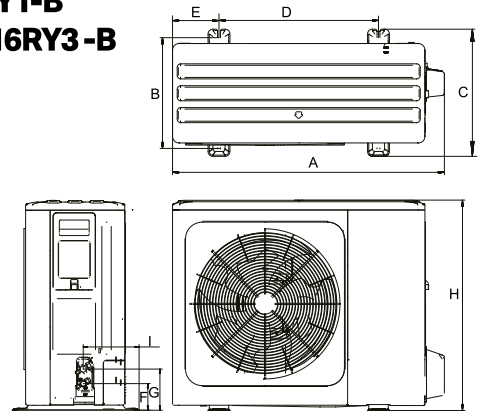
The sound power level in the heating mode was determined in accordance with EN 12102, under the conditions consistent with EN 14825;



### KHA-06RY1-B

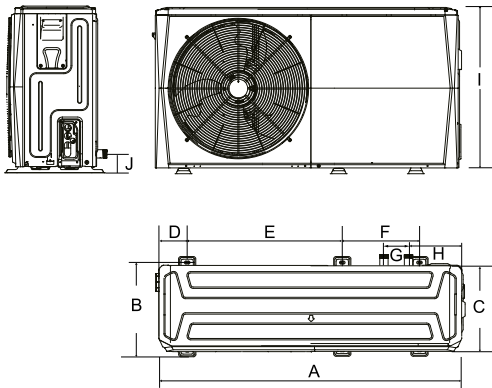


### KHA-08 | 10RY1-B KHA-12 | 14 | 16RY3-B

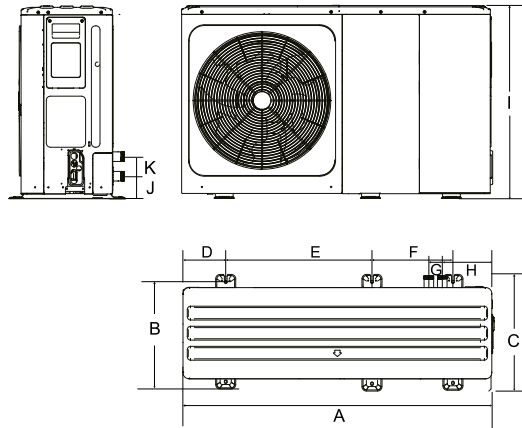


MODEL	A	B	C	D	E	F	G	H	I
KHA-06RY1	1008	375	426	663	134	110	170	712	160
KHA-08/10RY1	1118	456	523	656	191	110	170	865	230
KHA-12/14/16RY3	1118	456	523	656	191	110	170	865	230

### KHC-06RY1-B



### KHC-08 | 10 | 12 | 14 | 16RY3-B



MODEL	A	B	C	D	E	F	G	H	I	J	K
KHC-06RY1	1295	401	429	115	638	379	105	225	718	161	/
KHC-08/10/12/14/16RY3	1385	488	526	192	656	363	60	221	865	182	81

### KHC-22 | 30 RX3

A	B	C	D	E	F	G	H	I	J	K	L
1129	494	528	668	192	98	206	1558	558	143	400	440

