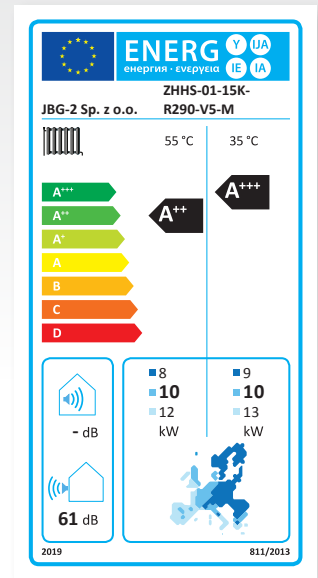
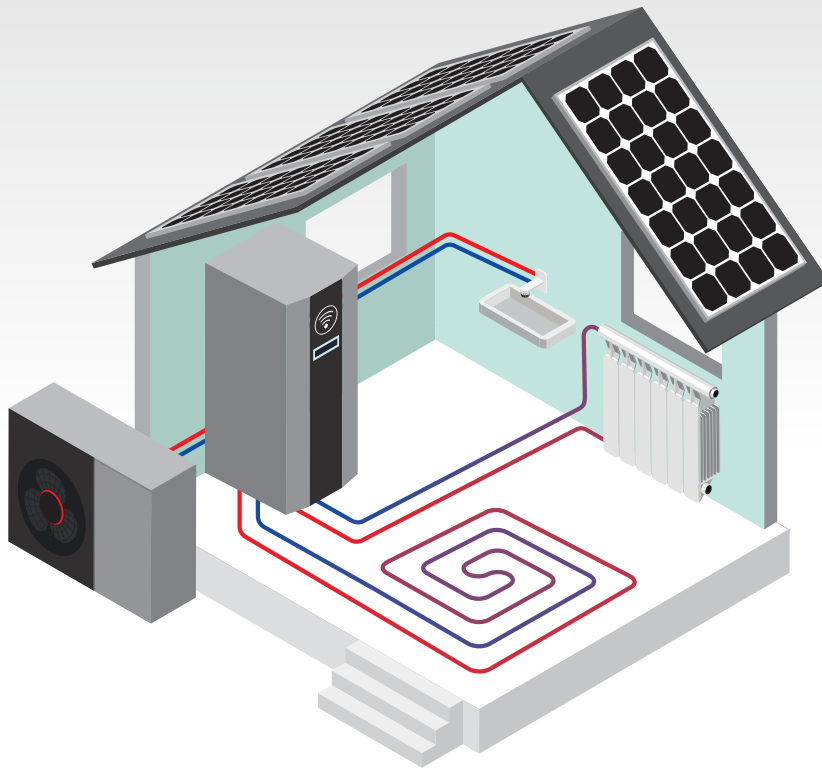




## Heat pump 10K / 15K

ZHHS-01-10K-R290-V5-M / ZHHS-01-15K-R290-V5-M



Heat pump is a heating device which allows to heat buildings through under-floor heating systems, as well as traditional heaters. It is also suitable for heating up domestic hot water. Certain pumps also have an option to cool down rooms, which is why they can replace air conditioning. The pump's general operation principle is based

on collecting heat energy from the area surrounding the building and transporting it inside through the heating system. Heat pump is a modern, economic and eco-friendly home heating system. It uses completely free and natural resources, and power consumption is reduced to process drive and operation of the circulation pump.

This reduces the heating costs. This type of device is an alternative solution to traditional heating systems, which are based on fossil fuels. Eliminating of the combustion process, limited emission of carbon monoxide to the atmosphere and positively affects air quality.



Natural ecological refrigerant  
R290 (propane)



Energy Class  
A+++ / A++  
35°C / 55°C



Operation parameters in real time



Low energy consumption due to the inverter compressor



Elastic and modern design



Reduced thawing time and condensate tray heating system



Variable adjustment of efficiency due to the adjustable fan speed and water pump



Very low noise level



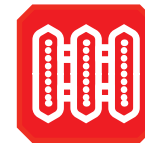
Water flow transducer with water flow measurement



High heating output at low ambient air temperature



Wireless remote control



The possibility to modernise older installations due to the cooperation with traditional heaters.



Compact, monoblock type housing



Easy installation of the entire unit outside of the building (installation without F-Gas certificate)

# MONOBLOCK HEAT PUMP

## ZHHS-01-10K-R290-V5-M / ZHHS-01-15K-R290-V5-M

Performance data – heating (EN 14511)

			ZHHS-01-10K-R290-V5-M	ZHHS-01-15K-R290-V5-M	
①	A7/W35	Power range (min-max) <sup>1</sup>	kW	3,38 ÷ 9,86	5,35 ÷ 14,7
		Partial load <sup>1</sup>	kW	6,60	8,70
		Power consumption <sup>1</sup>	kW	1,45	1,64
		COP <sup>1</sup>		4,56	5,29
②	A7/W45	Power range (min-max) <sup>2</sup>	kW	3,00 ÷ 8,89	5,22 ÷ 14,81
		Partial load <sup>2</sup>	kW	5,29	8,58
		Power consumption <sup>2</sup>	kW	1,44	2,15
		COP <sup>2</sup>		3,67	3,99
③	A7/W55	Power range (min-max) <sup>3</sup>	kW	2,88 ÷ 8,51	4,92 ÷ 13,76
		Partial load <sup>3</sup>	kW	5,50	9,20
		Power consumption <sup>3</sup>	kW	2,00	2,89
		COP <sup>3</sup>		2,75	3,19
④	A2/W35	Power range (min-max) <sup>4</sup>	kW	3,00 ÷ 9,01	4,67 ÷ 13,65
		Partial load <sup>4</sup>	kW	3,00	4,67
		Power consumption <sup>4</sup>	kW	0,67	0,98
		COP <sup>4</sup>		4,48	4,75
⑤	A-7/W35	Maximum power <sup>5</sup>	kW	6,80	11,17
		Power consumption <sup>5</sup>	kW	2,47	4,08
		COP <sup>5</sup>		2,75	2,73

### Cooling data

Pump type		air / water
Refrigerant type		R290
Refrigerant amount	kg	0,55      0,8
Maximum working pressure	bar	26
Compressor type		inverter scroll
Oil		PAG PZ46M
Adjustment type		electronic

### Heating + DHW

Minimum working pressure	bar	1,0
Maximum working pressure	bar	3,0
Rated flow	m <sup>3</sup> /h	1,17      1,48
External operating temperature range	°C	from -20 to +35
Feed water temperature	°C	from +20 to +65

### Physical dimensions

Depth x width x height	mm	535 x 1155 x 935      535 x 1155 x 1530
Weight	kg	132      166
Water connections		G 5/4 "
Sound power level	dB	59      61
Air flow	m <sup>3</sup> /h	3500      6000

### Electrical data

Electrical connection	V/Ph/Hz	400 / 3~ / 50
Protection rating		IP24
Electric heater power	kW	3 / 6 / 9
Maximum starting current	A	10      13
Fan power consumption	W	50      100
Number of fans		1      2
Fan rotor speed	RPM	700

### SCOP

W35 4,46 / W55 3,31    W35 4,45 / W55 3,34

### Energy efficiency class

Device with a regulator – feed temperature 35°C / 55°C

W35 A+++ / W55 A++

- ① Heating temperature:
- ② Heating temperature:
- ③ Heating temperature:
- ④ Heating temperature:
- ⑤ Heating temperature:

water I/O temperature: 30°C / 35°C,  
water I/O temperature: 40°C / 45°C,  
water I/O temperature: 50°C / 55°C,  
water I/O temperature: 30°C / 35°C,  
water I/O temperature: 30°C / 35°C,

Ambient temperature: DB 7°C / WB 6°C;  
Ambient temperature: DB 7°C / WB 6°C;  
Ambient temperature: DB 7°C / WB 6°C;  
Ambient temperature: DB 2°C / WB 1°C;  
Ambient temperature: DB -7°C / WB -8°C;



## HYDRAULIC BOX

- Fully integrated, necessary elements of hydraulic system, including a 10-litre expansion vessel, allowing to heat up to 160 m<sup>2</sup> of usable area.
- Auxiliary heater operating within the ranges of 3/6/9 kW
- 3-way valve switching over to domestic hot water.
- Compact construction that takes up minimal space.



Dimensions:  
835 x 575 x 325 mm

## CONTROLLER



Dimensions:  
305 x 405 x 160 mm



## HYDRAULIC TOWER

- Tank with a capacity of 200 litres allows to use approximately 400 litres of running water at a temperature of approx. 40°C.
- Fully integrated, necessary elements of hydraulic system, including a 10-litre expansion vessel, allowing to heat up to 160 m<sup>2</sup> of usable area.
- Auxiliary heater operating within the ranges of 3/6/9 kW
- 3-way valve switching over to domestic hot water.
- Compact construction that takes up minimal space.



Dimensions:  
1700 x 595 x 760 mm



Polyurethane  
insulation / 6 50 mm



Capacity:  
200 l



Inner tank: stainless steel

