

PRODUCT CARD							
Product information in accordance with (in accordance with EU Regulation No. 813/2013)							
Model: ZHHS-01-15K-R290-V5-M							
Air-to-water heat pump: YES							
Brine-to-water heat pump: NO							
Low-temperature heat pump: NO							
Equipped with a supplementary heater: YES							
Heat pump combination heater: NO							
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application							
Parameters shall be declared for average climate conditions.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	P_{rated}	10	kW	Seasonal space heating energy efficiency	η_s	175	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	8,8	kW	$T_j = -7\text{ °C}$	COPd or PERd	3,11	-
$T_j = +2\text{ °C}$	P_{dh}	5,5	kW	$T_j = +2\text{ °C}$	COPd or PERd	4,79	-
$T_j = +7\text{ °C}$	P_{dh}	3,9	kW	$T_j = +7\text{ °C}$	COPd or PERd	5,66	-
$T_j = +12\text{ °C}$	P_{dh}	4,7	kW	$T_j = +12\text{ °C}$	COPd or PERd	6,58	-
$T_j = \text{bivalent temperature}$	P_{dh}	8,8	kW	$T_j = \text{bivalent temperature}$	COPd or PERd	3,11	-
$T_j = \text{operation limit temperature}$	P_{dh}	9,6	kW	$T_j = \text{operation limit temperature}$	COPd or PERd	2,42	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if TOL < -20 °C)	P_{dh}	-	kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if TOL < -20 °C)	COPd or PERd	-	-
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P_{cyc}	-	kW	Cycling interval efficiency	COPcyc or PERcyc	-	-
Degradation co-efficient (**)	C_{dh}	0,9	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,01	kW	Rated heat output	P_{sup}	9	kW
Thermostat-off mode	P_{TO}	0,007	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0,01	kW				
Crankcase heater mode	P_{CK}	0,04	kW				
Other items							
Capacity control	Variable			Rated air flow rate, outdoors		6000	m ³ /h
Sound power level outdoors	L_{WA}	57	dB	Rated brine or water flow rate, outdoor heat exchanger		1.68	m ³ /h
Annual electricity consumption	Q_{HE}	4606/17	kWh/GJ				

Product information (in accordance with EU Regulation No. 811/2013)			
Supplier Name:		JBG-2 Sp. z o.o.	
Contact details:		ul. Gajowa 5, 43-254 Warszowice, Poland	
Supplier's model identifier:		ZHHS-01-15K-R290-V5-M	
Average climate	Seasonal space heating energy efficiency class	W35	A+++
		W55	A++
	Seasonal space heating energy efficiency	W35	177%
		W55	133%
	Rated heat output	W35	10 kW
		W55	10 kW
	Annual electricity consumption	W35	4606 kWh/year
		W55	6133 kWh/year
SCOP	W35	4,44	
	W55	3,34	
Cold climate	Rated heat output	W35	9 kW
Warm climate		W55	8 kW
	Outdoors	Sound power level L_{wa}	W35
W55			12 kW
		W35	57 dB
		W55	61 dB
Special precautions for assembly, installation and maintenance are included in the separate file named: „Precautions Heat Pump JBG2.pdf”			

W35- low temperature heating; W- water temperature at the outlet from the heat pump

W55- medium temperature heating; W- water temperature at the outlet from the heat pump

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Supplier Name:	JBG-2 Sp. z o.o.
Supplier's model identifier:	ZHHS-01-15K-R290-V5-M
Temperature controller class:	II
The share of the temperature controller in the seasonal energy efficiency of rooms	2%

The temperature controller is an integrated component of the heat pump.