

## Submittal Data Sheet

# R290 Heat Pump 20KW

Exinda R290 Heat Pump – Efficient, Quiet, and Built for All Seasons

The Exinda R290 air-to-water heat pump provides heating, cooling, and domestic hot water in one compact system.

Using natural R290 refrigerant, it achieves ERP A+++ efficiency and delivers reliable performance even in -25°C conditions.

Designed for low noise, space-saving installation, and year-round comfort, it's an ideal solution for homes focused on energy savings and environmental responsibility.



ErP



Model:XDASH20D3

## FEATURES

- **Eco-Friendly R290 Refrigerant:** Uses new-generation R290 refrigerant, which is energy-efficient, green, ozone-friendly, and low in carbon emissions.
- **Smart Anti-Freeze Control:** Equipped with microcomputer control and forced anti-freeze technology that automatically activates during shutdown or standby based on ambient and water temperatures.
- **Intelligent Defrosting:** Precisely detects frost and defrosts only when needed. With inverter technology, it enables powerful and fast defrosting under special conditions, minimizing temperature fluctuations and improving comfort and performance by up to 30%.
- **Cascade Function:** Supports cascading of up to 8 units to enhance system reliability and extend service life.
- **Standard Limited Warranty:** 10-year warranty on the compressor and all components.

Performance			
Nominal heating capacity (Kw)	20	Nominal cooling capacity (Kw)	14
Refrigerant Type	R290	GWP (Global Warming Potential)	3
Refrigerant Charge (kg)	1.5	Workable ambient temperature range (°C)	-25~43
EL. Heating Power input Min/Max (W)	1603~5818	EL. Cooling Power input Min/Max (W)	2149~4943
COP(W/W)	3.83-4.87	EER(W/W)	2.77-3.03
Rated Heating Conditions (°C)	Leaving Water Temp. : 35 Ambient (DB/WB) : 7/6	Rated Cooling Conditions (°C)	Leaving Water Temp. : 7 Ambient (DB/WB) : 35/24

Performance values indicated above are in accordance with EN14511

### Product Details

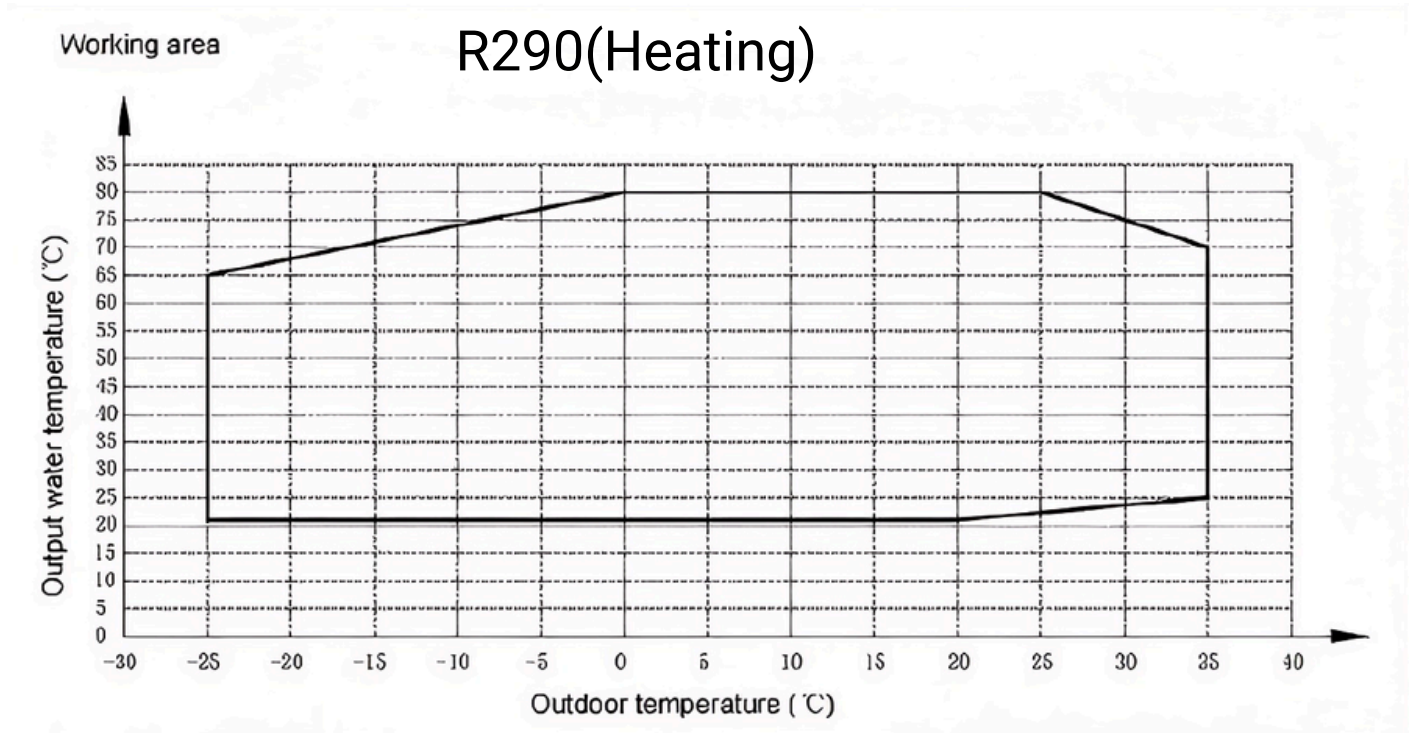
Power Supply (V/Hz/Ph)	380-415V/50Hz/3Ph	Compressor Type	DC inverter
Power Supply Connections	R,S,T ,N ,Ground	Sound Pressure dB(A) (Daytime Max/Rated/Low Noise)	61/59/38
Min. Circuit Amps MCA (A):	20	Max Overcurrent Protection (MOP) (A)	25
Cooling Mode Leaving Water Temp (°C)	7 ~ 27	Heating Mode Leaving Water Temp (°C)	35 ~ 60
Piping Connections Inlet/Outlet	G1-1/4"	Water flow(m³/h)	3.4
Net Dimensions (LxWxH) (mm)	1252*550*1420	Shipping Dimensions (LxWxH) (mm)	1300*575*1550
Net (kg)	120	Shipping Weight (kg)	135

#### Notes:

\*Must follow installation instructions in the applicable installation manual.

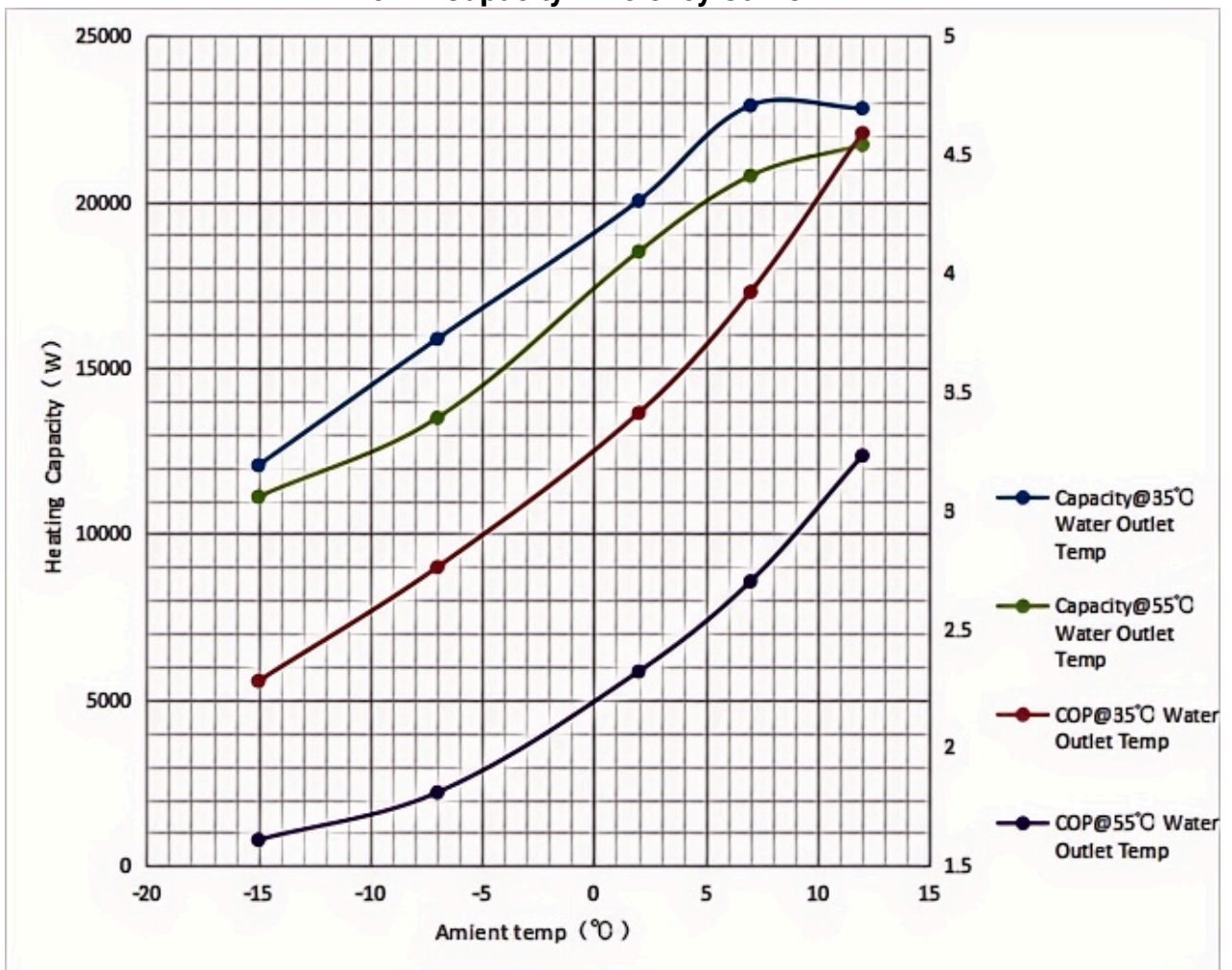
1. Power wiring size must comply with the applicable local and national code.
2. Sound power level is measured in accordance with EN12102.
3. Sound power level is converted value at 1m distance .
- 4.All installation sites must be equipped with an Earth Leakage Circuit Breaker (ELCB).

## Operating Envelop



## Heating Curve

### 20KW Capacity Efficiency Curve



## Heating Capacity Table

Amient temp (°C)	Water Outlet Temp (°C)	Heating Capacity (W)	Input Power (W)	COP (W/W)	
DB12/WB11	55	21717	6723	3.23	
		18345	5550	3.32	
		15071	4409	3.42	
		11523	3346	3.44	
	45	22287	5812	3.83	
		19020	4665	4.08	
		15516	3652	4.25	
		12024	2714	4.43	
	35	22816	4973	4.59	
		19409	3978	4.88	
		16036	2950	5.44	
		12557	2160	5.81	
	24	9266	1092	8.49	
	DB7/WB6	55	20785	7689	2.7
			17840	6492	2.75
			15586	5494	2.84
12794			4341	2.95	
9919			3300	3.01	
45		21977	6795	3.23	
		19428	5712	3.4	
		16451	4609	3.57	
		13306	3584	3.71	
		10444	2748	3.8	
35		22902	5844	3.92	

<b>DB7/WB6</b>	<b>35</b>	20085	4830	4.16	
		17107	3860	4.43	
		14038	3054	4.6	
		11015	2253	4.89	
		7700	1536	5.01	
	<b>27</b>	8085	1240	6.52	
<b>DB2/WB1</b>	<b>55</b>	18504	7986	2.32	
		16078	6549	2.46	
		13658	5403	2.53	
		11305	4419	2.56	
		8524	3336	2.56	
	<b>45</b>	19925	6911	2.88	
		16752	5751	2.91	
		14655	4676	3.13	
		11614	3657	3.18	
		8970	2772	3.24	
	<b>35</b>	20033	5876	3.41	
		17867	5004	3.57	
		15029	4101	3.66	
		11868	3154	3.76	
		9534	2337	4.08	
	<b>30</b>	9346	1990	4.7	
	<b>DB-7/WB-8</b>	<b>55</b>	13498	7471	1.81
			12798	6287	2.04
			10937	5281	2.07
			8252	4037	2.04
6250			3257	1.92	
<b>45</b>		15820	6706	2.36	

<b>DB-7/WB-8</b>	<b>45</b>	13482	5524	2.44
		11414	4589	2.49
		9141	3542	2.58
		7264	2776	2.62
	<b>35</b>	15875	5757	2.76
		13684	4733	2.89
		11976	4010	2.99
		9384	3053	3.07
		7283	2383	3.06
	<b>34</b>	16072	5698	2.82
<b>DB-10/WB-11</b>	<b>35.3</b>	14778	5751	2.57
<b>DB-15/WB-16</b>	<b>55</b>	11122	6923	1.61
		9383	5897	1.59
		7919	4923	1.61
		6210	3983	1.56
		4787	3151	1.52
	<b>45</b>	11231	6019	1.87
		10365	5089	2.04
		8397	4225	1.99
		6750	3465	1.95
		5062	2705	1.87
		12067	5293	2.28
	<b>35</b>	10885	4575	2.38
		9212	3701	2.49
		7225	2946	2.45
		5772	2288	2.52

# DIMENSIONAL DRAWING

