

Submittal Data Sheet

R290 Heat Pump 12KW

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:XDASH12C3

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)	12	Nominal cooling capacity (Kw)	7
Refrigerant Type	R290	GWP (Global Warming Potential)	3
Refrigerant Charge (kg)	0.8	Workable ambient temperature range (°C)	-25~43
EL. Heating Power input Min/Max (W)	900~2935	EL. Cooling Power input Min/Max (W)	714~2791
COP(W/W)	4.03-5.08	EER(W/W)	2.52-3.03
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

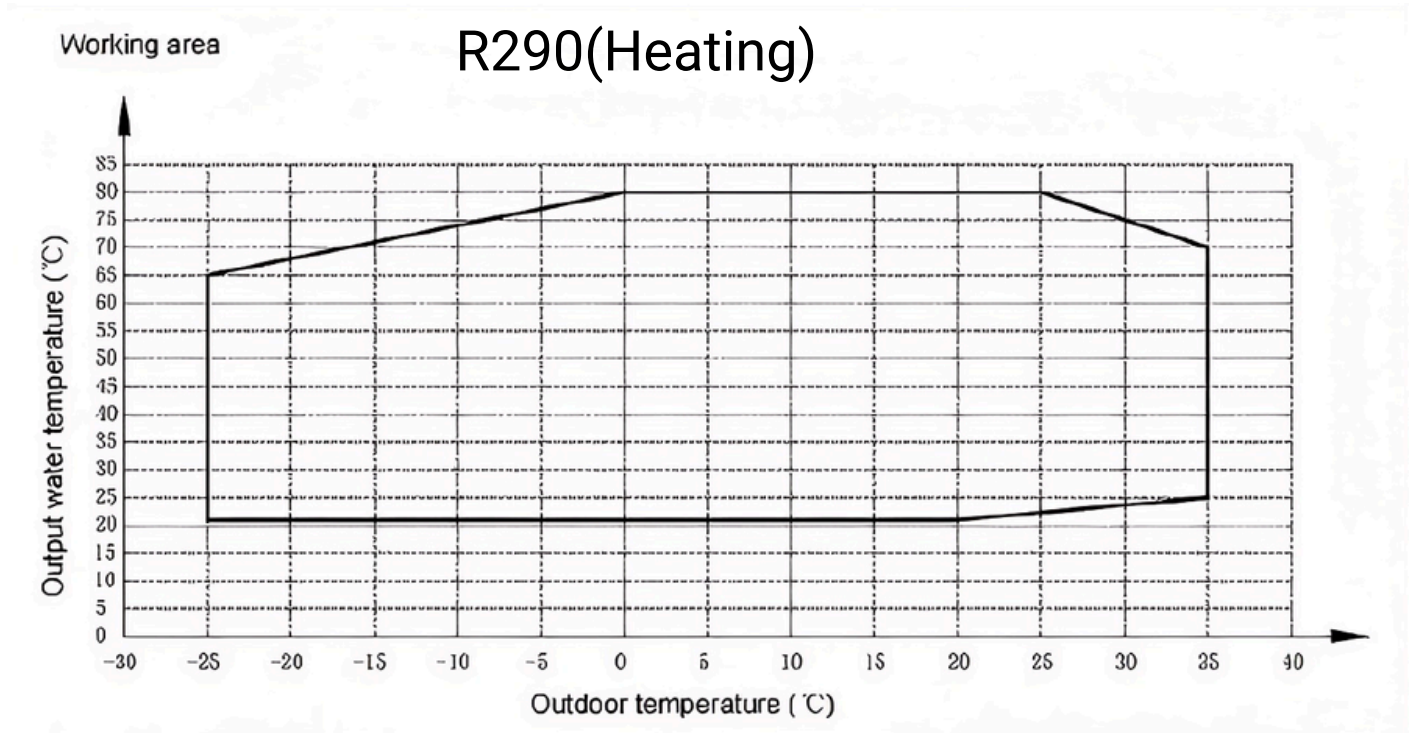
Power Supply (V/Hz/Ph)	220-240V/50Hz/1Ph	Compressor Type	DC inverter
Power Supply Connections	L ,N ,Ground	Sound Pressure dB(A) (Daytime Max/Rated/Low Noise)	61/57/38
Min. Circuit Amps MCA (A):	28	Max Overcurrent Protection (MOP) (A)	35
Cooling Mode Leaving Water Temp (°C)	7 ~ 27	Heating Mode Leaving Water Temp (°C)	35 ~ 60
Piping Connections Inlet/Outlet	G1"	Water flow(m³/h)	2.0
Net Dimensions (LxWxH) (mm)	1200*550*855	Shipping Dimensions (LxWxH) (mm)	1250*575*985
Net (kg)	105	Shipping Weight (kg)	115

Notes:

*Must follow installation instructions in the applicable installation manual.

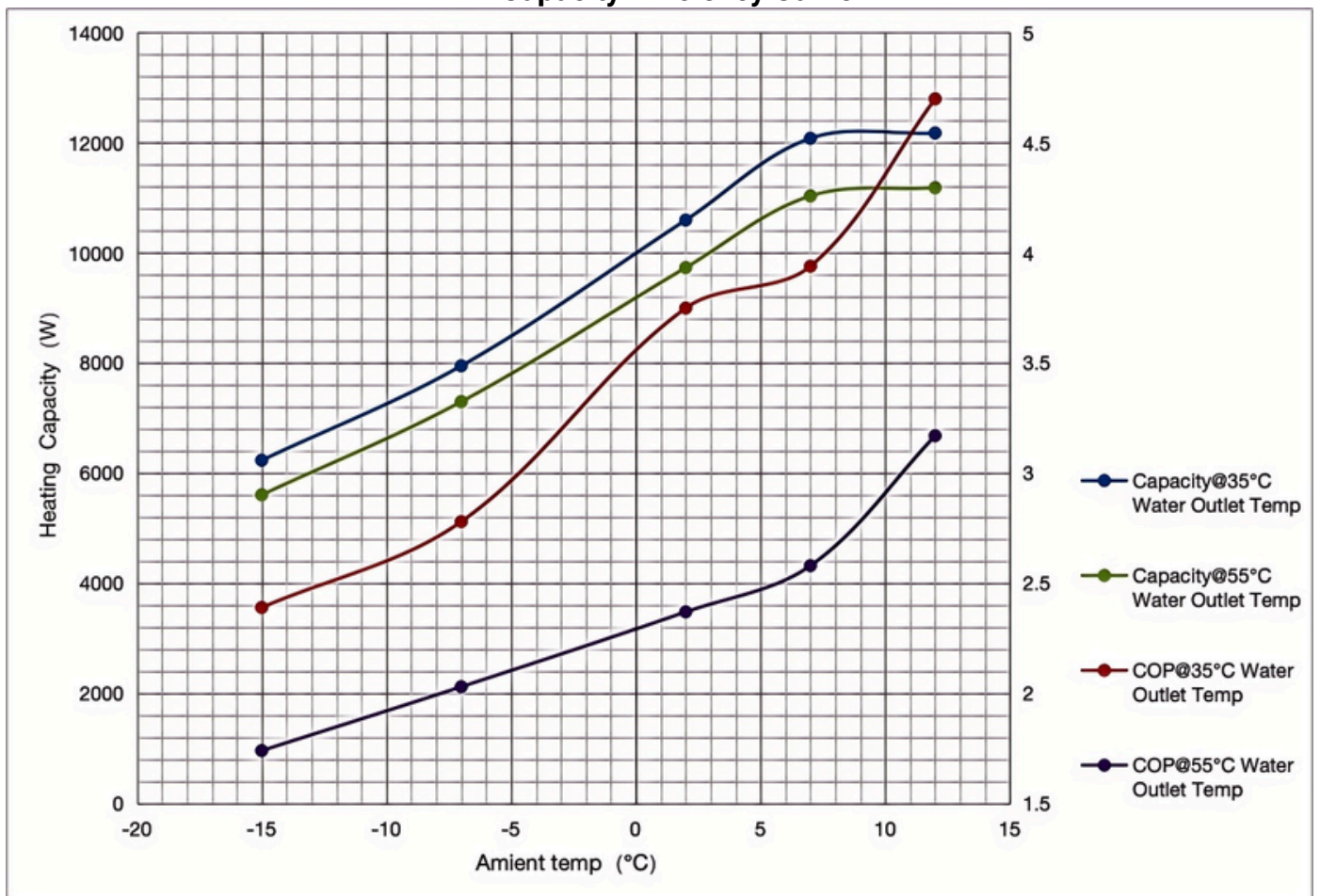
1. Power wiring size must comply with the applicable local and national code.
2. Sound power level is measured in accordance with EN12102.
3. Sound power level is converted value at 1m distance .
- 4.All installation sites must be equipped with an Earth Leakage Circuit Breaker (ELCB).

Operating Envelop



Heating Curve

12KW 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	11186	3533	3.17	
		9485	2916	3.25	
		7811	2361	3.31	
		6025	1829	3.29	
	45	11413	3021	3.78	
		9653	2460	3.92	
		8004	1953	4.1	
		6532	1535	4.26	
	35	12180	2592	4.7	
		10421	2101	4.96	
		8598	1622	5.3	
		6764	1303	5.19	
	24	5195	625	8.32	
	DB7/WB6	55	11037	4284	2.58
			10600	3833	2.77
			8842	3120	2.83
7507			2591	2.9	
5745			1967	2.92	
45		11713	3550	3.3	
		11053	3289	3.36	
		9354	2676	3.5	
		7954	2200	3.62	
		6247	1677	3.73	
35		12084	3064	3.94	

DB7/WB6	35	11829	2935	4.03
		11097	2662	4.17
		10372	2344	4.42
		9027	1997	4.52
		8853	1883	4.7
		7118	1450	4.91
	27	4313	681	6.33
DB2/WB1	55	9735	4105	2.37
		9119	3729	2.45
		7714	3185	2.42
		6418	2624	2.45
		4944	2063	2.4
	45	10139	3681	2.75
		9578	3378	2.84
		7988	2780	2.87
		6761	2323	2.91
		5217	1793	2.91
	35	10599	2829	3.75
		9990	2628	3.8
		8443	2144	3.94
		7148	1746	4.09
		5693	1399	4.07
	30	5360	1151	4.66
	DB-7/WB-8	55	7300	3600
6808			3353	2.03
5639			2725	2.07
4672			2271	2.06
45		3323	1842	1.8

DB-7/WB-8	45	7627	3217	2.37
		7140	2959	2.41
		5966	2400	2.49
		4993	1975	2.53
		3895	1584	2.46
	35	7951	2865	2.78
		7491	2635	2.84
		6331	2155	2.94
		5340	1740	3.07
		4172	1334	3.13
34	8020	2803	2.86	
DB-10/WB-11	35	7314	2788	2.62
DB-15/WB-16	55	5607	3218	1.74
		5249	3008	1.75
		4271	2519	1.7
		3530	2104	1.68
		2642	1690	1.56
	45	5872	2895	2.03
		5542	2687	2.06
		4593	2226	2.06
		3806	1847	2.06
		2829	1489	1.9
		35	6235	2608
	5864		2395	2.45
	4934		2004	2.46
	4105		1639	2.5
	3094		1287	2.4

DIMENSIONAL DRAWING

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