## New Design —— R290 FULL-INVERTER HEAT PUMP for cooling, heating and DHW

Model		PW020 - DKZLRS -E/S	PW030 - DKZLRS -E/S	PW040 - DKZLRS -E/S	PW050 - DKZLRS -E/S	PW055 - DKZLRS -E/S	PW060 - DKZLRS -E/S	PW070 - DKZLRS -E/S	PW040 - DKZLRS -E	PW050 - DKZLRS -E	PW055 - DKZLRS -E	PW060 - DKZLRS -E	PW070 - DKZLRS -E
Heating Condition - Amb	ient Temp.(DI	•	•										
Heating Capacity Range (kW)		2.5~6.0	3.3~8.3	4.5~11.4	5.9~14.8	7.2~18.2	8.8~22.0	9.6~24.0	4.5~11.4	5.9~14.8	7.2~18.2	8.8~22.0	9.6~24.0
Heating Power Input Range (kW)		0.48~1.44	0.64~2.18	0.85~2.95	1.13~3.83	1.38~4.65	1.68~5.77	1.83~6.30	0.85~2.95	1.13~3.83	1.38~4.65	1.68~5.77	1.83~6.30
COP Range 4.16~:		4.16~5.21	3.81~5.17	3.86~5.29	3.86~5.22	3.91~5.22	3.81~5.24	3.81~5.24	3.86~5.29	3.86~5.22	3.91~5.22	3.81~5.24	3.81~5.24
DHW Condition - Ambier	nt Temp.(DB/V	WB): 7/6°C, Wa	ater Temp.(In/O	ut): 15/55 ℃									
Heating Capacity Range (kW)		2.6~5.3	3.7~7.4	5.2~10.2	6.6~13.2	7.2~16.2	7.8~17.6	8.8~19.6	5.2~10.2	6.6~13.2	7.2~16.2	7.8~17.6	8.8~19.6
Heating Power Input Range (kW)		0.56~1.50	0.79~2.10	1.10~2.87	1.41~3.73	1.54~4.58	1.67~5.01	1.89~5.60	1.10~2.87	1.41~3.73	1.54~4.58	1.67~5.01	1.89~5.60
COP Range 3.		3.53~4.64	3.52~4.69	3.55~4.71	3.54~4.67	3.54~4.67	3.51~4.66	3.50~4.66	3.55~4.71	3.54~4.67	3.54~4.67	3.51~4.66	3.50~4.66
Heated Water Output (L/H)		114	159	219	283	348	377	421	219	283	348	377	421
Cooling Condition - Amb	ient Temp.(DI	B/WB): 35/24°C	C, Water Temp.(	In/Out): 12/7°C					<u> </u>			1	<u> </u>
Cooling Capacity Range (kW)		1.7~4.2	2.4~5.8	3.3~8.2	4.3~10.8	5.6~14.1	6.2~15.3	6.9~17.0	3.3~8.2	4.3~10.8	5.6~14.1	6.2~15.3	6.9~17.0
Cooling Power Input Range (kW)		0.53~1.37	0.79~2.19	1.08~3.07	1.39~3.99	1.80~5.38	1.99~5.60	2.21~6.49	1.08~3.07	1.39~3.99	1.80~5.38	1.99~5.60	2.21~6.49
EER Range		3.06~3.20	2.65~3.04	2.67~3.06	2.71~3.10	2.62~3.11	2.73~3.12	2.62~3.12	2.67~3.06	2.71~3.10	2.62~3.11	2.73~3.12	2.62~3.12
Space Heating (According to EN14825:2022) Average Climate Water Outlet 35°C	Rated heat output (kW)	419	582	789	995	1,220	1,397	1,601	761	1,027	1,217	1,405	1,596
	Seasonal Space Heating	198,1%	182,7%	181,0%	182,9%	186,8%	185,7%	189,9%	181,6%	180,8%	184,1%	184,6%	186,0%
	Seasonal Space Heating	503	464	460	465	474	472	482	462	460	468	469	473
	ErP Level	A+++	A++++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	Sound pressure level	35	44	43	45	41	37	43	43	44	41	45	42
	Sound power level (dB(A))	49	58	57	59	57	53	58	58	59	56	60	58
Space Heating (According to EN14825:2022) Average Climate Water Outlet	Rated heat output (kW)	415	559	870	923	1,216	1,408	1,580	810	1,217	1,203	1,347	1,586
	Seasonal Space Heating	144,5%	136,0%	137,0%	131,9%	142,1%	139,5%	140,0%	135,8%	134,7%	141,0%	138,9%	135,4%
	Seasonal Space	369	348	350	337	363	356	357	347	344	360	355	346

Heating													
ErP Lev	el A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	
Sound pressur level	35	44	47	46	43	40	43	42	45	43	46	43	
Sound power I (dB(A))		58	61	60	59	56	58	57	59	58	62	58	
Power Supply	230V/1Ph/50Hz -60Hz							380V/3Ph/50 -60Hz					
Max. Power Input (kW)	25	31	41	52	71	76	78	41	52	71	76	78	
Max. Current (A)	115	142	188	238	325	348	357	78	98	135	143	148	
Fuse or Circuit Breaker (A)	16	20	25	32	40	40	40	16	16	20	20	20	
Wire Diameter (mm2)	2.5mm <sup>2</sup>	2	2 4mm	6mm2	6mm²	6mm²	6mm²	2.5mm <sup>2</sup>	2	4mm²	2	4mm²	
Diameter of Pipe (mm)	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	
Water Flow (m3/h)	103	143	196	255	313	378	413	196	255	313	378	413	
Water Pressure Drop (max) kPa	25	30	35	40	43	45	50	35	40	43	45	50	
Body Size (L/W/H) (mm)	1080×440×7 61	1080×460×82 0	1080×460×9 60	1080×480×1 060	1080×480×13 72	1080×480×137 2	1160×480×1 580	1080×460× 960	1080×480× 1060	1080×480×1 372	1080×480× 1372	1160×480×1 580	
Packaging Size (W*D*H) (carton	1105×470×9	1100×490×96	1100×490×11 10	1100×500×12 10	1100×500×15 10	1100×500×151 0	1200×510×1 720	1100×490× 1110	1100×500× 1210	1100×500×15 10	1100×500× 1510	1200×510×1 720	
Packaging Size (W*D*H) (plywo	od) 1135×500×9	1140×520×97 4	1140×520×11 20	1140×530×12 20	1140×530×15 20	1140 ×530×1520	1230×540×1 730	1140×520× 1120	1140×530× 1220	1140 ×530×1520	1140×530× 1520	1230×540×1 730	
Net Weight (kg)	95	112	120	138	165	170	220	120	138	165	170	220	
Loading Quantity (carton)	48/100	48/96	48/96	22/92	22/46	22/46	19/43	48/96	22/92	22/46	22/46	19/43	
Loading Quantity (plywood)	44/96	44/88	44/88	22/88	22/44	22/44	18/40	44/88	22/88	22/44	22/44	18/40	
IP Grade (Level of Protection)	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	
Anti-electric Shock Rate	I	I	I	I	I	I	I	I	I	I	I	I	
Refrigerant				R290			1			Y	1	,	
Compressor Brand	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	
Water Pump Brand	SHINHOO	SHIMGE	SHIMGE	SHIMGE	SHIMGE	SHIMGE							
Operation Ambient Temp. (°C)				-25~43	°C								
Operating Water Temperature (°C)				28~65 °C	C(DHW)								
Operating Water Temperature (°C)		15~70 °C(Heating)											
Operating Water Temperature (°C)				7~35°C(	Cooling)								