

Subtype Inverter Air to Water Heat Pump- R290- 04+06

Certificate Holder	Kyung Dong Navien Co., Ltd.
Address	95, Suworam-gil, Seotan-myeon, Pyeongtack-si
ZIP	11704
City	Gyeonggi-do
Country	KR
Certification Body	BRE Global Limited
Subtype title	Inverter Air to Water Heat Pump- R290- 04+06
Registration number	041-K108-01
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.75 kg
Certification Date	05.12.2024
Testing basis	Heat Pump Keymark Scheme Rules Rev 14

Model PEM750V004PGKC

Model name	PEM750V004PGKC
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.00 kW	4.42 kW
El input	0.82 kW	1.53 kW
COP	4.90	2.89

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	57 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	141 %
Prated	4.48 kW	4.75 kW
SCOP	4.96	3.59
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	3.96 kW	4.20 kW
COP Tj = -7°C	3.14	2.22
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.63 kW	2.63 kW
COP Tj = +2°C	4.91	3.52
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.96 kW	1.79 kW

COP Tj = +7°C	6.63	4.77
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.33 kW	2.04 kW
COP Tj = 12°C	8.81	6.26
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	3.96 kW	4.20 kW
COP Tj = Tbiv	3.14	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.24 kW	4.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.81	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	11 W	11 W
PSB	10 W	10 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.23 kW	0.28 kW
Annual energy consumption Qhe	1864 kWh	2735 kWh

Model PEM750V006PGKC

Model name	PEM750V006PGKC
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	6.10 kW	5.47 kW
El input	1.26 kW	1.84 kW
COP	4.83	2.98

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	192 %	135 %
Prated	5.63 kW	5.58 kW
SCOP	4.87	3.46
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	4.98 kW	4.93 kW
COP Tj = -7°C	3.14	2.20
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.06 kW	3.03 kW
COP Tj = +2°C	4.60	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.07 kW	1.99 kW

COP Tj = +7°C	6.74	4.54
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.49 kW	2.18 kW
COP Tj = 12°C	8.96	6.35
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.98 kW	4.93 kW
COP Tj = Tbiv	3.14	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.49 kW	5.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.93
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	11 W	11 W
PTO	12 W	12 W
PSB	11 W	11 W
PCK	44 W	44 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.14 kW	0.44 kW
Annual energy consumption Qhe	2387 kWh	3333 kWh