

Subtype Air to Water Heat Pump- R32- 160

Certificate Holder	Guangdong New Energy Technology Development Co., Ltd.
Address	NO.125, Chuangyou Road
ZIP	511340
City	Guangdong
Country	CN
Certification Body	BRE Global Limited
Subtype title	Air to Water Heat Pump- R32- 160
Registration number	041-K054-10
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.3 kg
Certification Date	13.09.2023
Testing basis	Heat Pump KEYMARK certification Scheme rules v12

Model NE-F160HCR4INVM

Model name	NE-F160HCR4INVM
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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	67 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	129 %
Prated	11.33 kW	10.75 kW
SCOP	4.52	3.30
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.02 kW	9.51 kW
COP Tj = -7°C	2.97	2.04
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.35 kW	5.80 kW
COP Tj = +2°C	4.58	3.32
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.24 kW	6.82 kW
COP Tj = +7°C	6.00	4.54
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	8.54 kW	8.08 kW
COP Tj = 12°C	8.15	6.23
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.02 kW	9.51 kW
COP Tj = Tbiv	2.97	2.04

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.86 kW	10.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.66	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	54 °C	54 °C
Poff	13 W	13 W
PTO	22 W	22 W
PSB	13 W	13 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.47 kW	0.09 kW
Annual energy consumption Qhe	5181 kWh	6736 kWh

Model NE-F160HCR4TINEM

Model name	NE-F160HCR4TINEM
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	3x400V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	67 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	129 %
Prated	11.19 kW	10.10 kW
SCOP	4.53	3.29
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	9.89 kW	8.94 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.26 kW	5.56 kW
COP Tj = +2°C	4.52	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.18 kW	6.74 kW
COP Tj = +7°C	6.27	4.60
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	8.40 kW	7.99 kW
COP Tj = 12°C	8.31	6.41
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.89 kW	8.94 kW
COP Tj = Tbiv	2.90	1.93

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.12 kW	10.14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	54 °C	54 °C
Poff	13 W	13 W
PTO	21 W	21 W
PSB	13 W	13 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.07 kW	0.00 kW
Annual energy consumption Qhe	5103 kWh	6351 kWh