

Subtype Air to Water Heat Pump- R290- 160/200

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- R290- 160/200
Registration number	041-K054-07
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.65 kg
Certification Date	12.09.2023
Testing basis	Heat Pump KEYMARK certification Scheme rules v12

Model NE-F160HCR5TINVM

Model name	NE-F160HCR5TINVM
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	69 dB(A)	69 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	182 %	135 %
Prated	12.74 kW	12.10 kW
SCOP	4.64	3.46
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	11.27 kW	10.70 kW
COP Tj = -7°C	3.03	2.23
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.89 kW	6.54 kW
COP Tj = +2°C	4.57	3.32
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.57 kW	5.13 kW
COP Tj = +7°C	5.92	4.60
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.26 kW	5.37 kW
COP Tj = 12°C	8.53	6.86
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.27 kW	10.70 kW
COP Tj = Tbiv	3.03	2.23

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.64 kW	11.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	14 W	14 W
PTO	17 W	17 W
PSB	14 W	14 W
PCK	41 W	41 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.10 kW	0.91 kW
Annual energy consumption Qhe	5677 kWh	7226 kWh

Model NE-F200HCR5TINVM

Model name	NE-F200HCR5TINVM
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	70 dB(A)	72 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	182 %	137 %
Prated	14.68 kW	13.94 kW
SCOP	4.63	3.49
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	12.99 kW	12.33 kW
COP Tj = -7°C	2.96	2.17
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.10 kW	7.74 kW
COP Tj = +2°C	4.39	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.90 kW	5.59 kW
COP Tj = +7°C	6.35	4.65
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.77 kW	5.62 kW
COP Tj = 12°C	8.97	7.10
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.99 kW	12.33 kW
COP Tj = Tbiv	2.96	2.17

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.51 kW	13.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	14 W	14 W
PTO	17 W	17 W
PSB	14 W	14 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.18 kW	0.94 kW
Annual energy consumption Qhe	6548 kWh	8254 kWh

Model NE-F185HCR5TINVM

Model name	NE-F185HCR5TINVM
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	70 dB(A)	70 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	185 %	137 %
Prated	13.86 kW	12.94 kW
SCOP	4.70	3.51
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	12.26 kW	11.44 kW
COP Tj = -7°C	2.99	2.16
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.62 kW	6.97 kW
COP Tj = +2°C	4.68	3.52
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.52 kW	4.89 kW
COP Tj = +7°C	6.18	4.39
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.82 kW	5.45 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.26 kW	11.44 kW
COP Tj = Tbiv	2.99	2.16

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.34 kW	11.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	14 W	14 W
PTO	18 W	18 W
PSB	14 W	14 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.52 kW	1.01 kW
Annual energy consumption Qhe	6088 kWh	7612 kWh