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

Certificate Holder	Guangdong New Energy Technology 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	28.11.2024
Testing basis	Heat Pump KEYMARK certification Scheme rules v12
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.87 kW	14.86 kW
El input	3.45 kW	4.98 kW
COP	4.60	2.98

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
ηs	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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	19.12 kW	18.31 kW
El input	4.50 kW	6.39 kW
COP	4.25	2.87

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
ηs	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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	17.75 kW	16.81 kW
El input	4.03 kW	5.70 kW
COP	4.40	2.95

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
ηs	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