

Subtype Ultimate series R290 15kW

Certificate Holder	Guangdong Luckingstar New Energy CO., LTD.
Address	No.255 Hexiang East Rd, C area, Heshan Industrial Zone, Heshan City
ZIP	
City	Guangdong
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Ultimate series R290 15kW
Registration number	011-1W0853
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.7 kg
Certification Date	06.08.2024
Testing basis	HP KEYMARK certification scheme rules V14

Model LWH-F15HVLZPN9

Model name	LWH-F15HVLZPN9
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	15.00 kW	15.00 kW
El input	3.33 kW	5.00 kW
COP	4.50	3.00

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	143 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.46 kW	13.37 kW
COP Tj = -7°C	3.21	2.55
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	8.23 kW	8.39 kW
COP Tj = +2°C	4.76	3.39
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	7.22 kW	7.22 kW

COP Tj = +7°C	6.51	5.02
Cdh Tj = +7 °C	0.989	0.992
Pdh Tj = 12°C	8.79 kW	7.92 kW
COP Tj = 12°C	8.85	6.32
Cdh Tj = +12 °C	0.988	0.990
Pdh Tj = Tbiv	13.46 kW	13.37 kW
COP Tj = Tbiv	3.21	2.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.58 kW	9.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	12 W	12 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.40 kW	5.60 kW
Annual energy consumption Qhe	6258 kWh	8479 kWh

Model LWH-F15HVZPN9

Model name	LWH-F15HVZPN9
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	15.00 kW	15.00 kW
El input	3.33 kW	5.00 kW
COP	4.50	3.00

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	142 %
Prated	15.00 kW	15.00 kW
SCOP	4.96	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.90 kW	13.87 kW
COP Tj = -7°C	3.23	2.41
Cdh Tj = -7 °C	0.997	0.997
Pdh Tj = +2°C	8.53 kW	8.11 kW
COP Tj = +2°C	4.76	3.40
Cdh Tj = +2 °C	0.992	0.994
Pdh Tj = +7°C	7.84 kW	7.96 kW

COP Tj = +7°C	6.55	4.97
Cdh Tj = +7 °C	0.987	0.991
Pdh Tj = 12°C	9.31 kW	8.22 kW
COP Tj = 12°C	9.05	6.27
Cdh Tj = +12 °C	0.985	0.989
Pdh Tj = Tbiv	13.90 kW	13.87 kW
COP Tj = Tbiv	3.23	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.09 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.998
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.90 kW	4.50 kW
Annual energy consumption Qhe	6247 kWh	8565 kWh