

Subtype Ultraheat series R290 50kW

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	Ultraheat series R290 50kW
Registration number	
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	4 kg
Certification Date	03.07.2025

Model LWH-F50VSN9H

Model name	LWH-F50VSN9H
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	50.00 kW	50.00 kW
El input	11.56 kW	16.56 kW
COP	4.31	3.03

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	185 %	141 %
Prated	50.00 kW	50.00 kW
SCOP	4.69	3.59
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	44.57 kW	44.42 kW
COP Tj = -7°C	2.93	2.12
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	27.69 kW	27.55 kW
COP Tj = +2°C	4.64	3.48
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	18.08 kW	17.92 kW

COP Tj = +7°C	5.86	4.88
Cdh Tj = +7 °C	0.987	0.989
Pdh Tj = 12°C	21.31 kW	19.56 kW
COP Tj = 12°C	8.62	6.56
Cdh Tj = +12 °C	0.984	0.987
Pdh Tj = Tbiv	44.57 kW	44.42 kW
COP Tj = Tbiv	2.93	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	38.45 kW	36.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.92
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	75 °C	75 °C
Poff	25 W	25 W
PTO	39 W	39 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	11.60 kW	13.50 kW
Annual energy consumption Qhe	22028 kWh	28753 kWh