

Subtype Ultimate series R290 18kW

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 18kW
Registration number	011-1W0854
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	2 kg
Certification Date	06.08.2024
Testing basis	HP KEYMARK certification scheme rules V14

**Model LWH-F18HVZPN9**

Model name	LWH-F18HVZPN9
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	17.80 kW	17.80 kW
El input	3.95 kW	5.93 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
$\eta_s$	197 %	146 %
Prated	17.80 kW	17.80 kW
SCOP	5.00	3.73
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	15.81 kW	16.11 kW
COP Tj = -7°C	3.21	2.40
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	9.88 kW	10.14 kW
COP Tj = +2°C	4.77	3.59
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	7.90 kW	7.88 kW

COP Tj = +7°C	6.60	4.98
Cdh Tj = +7 °C	0.988	0.991
Pdh Tj = 12°C	9.94 kW	8.81 kW
COP Tj = 12°C	9.66	6.68
Cdh Tj = +12 °C	0.986	0.989
Pdh Tj = Tbiv	15.81 kW	16.11 kW
COP Tj = Tbiv	3.21	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.79 kW	11.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	1.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	75 °C	75 °C
Poff	12 W	12 W
PTO	14 W	14 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	6.00 kW
Annual energy consumption Qhe	7348 kWh	9848 kWh