

Subtype S12L-M-CC

Certificate Holder	Heliotherm GmbH
Address	Sportplatzweg 18
ZIP	A-6336
City	Langkampfen
Country	AT
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	S12L-M-CC
Registration number	011-1W0478
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	6.6 kg
Certification Date	14.12.2017
Testing basis	HP KEYMARK certification scheme rules rev. 8

Model HELIOTHERM - Luft/Wasserwärmepumpe modulierend Baureihe Sensor Comfort Compact

Model name	HELIOTHERM - Luft/Wasserwärmepumpe modulierend Baureihe Sensor Comfort Compact
Application	Heating (low temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
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	50 dB(A)	

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	
Prated	12.00 kW	
SCOP	4.57	
Tbiv	-10 °C	
TOL	-10 °C	
Pdh Tj = -7°C	10.62 kW	
COP Tj = -7°C	2.72	
Cdh Tj = -7 °C	0.997	
Pdh Tj = +2°C	6.57 kW	
COP Tj = +2°C	4.69	
Cdh Tj = +2 °C	0.993	
Pdh Tj = +7°C	7.48 kW	
COP Tj = +7°C	5.64	
Cdh Tj = +7 °C	0.987	
Pdh Tj = 12°C	8.35 kW	
COP Tj = 12°C	6.91	
Cdh Tj = +12 °C	0.982	
Pdh Tj = Tbiv	11.99 kW	
COP Tj = Tbiv	2.20	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.998
WTOL	62 °C
Poff	1 W
PTO	7 W
PSB	7 W
PCK	6 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.01 kW
Annual energy consumption Qhe	5450 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	50 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	149 %	
Prated	12.00 kW	
SCOP	4.14	
Tbiv	-19 °C	
TOL	-22 °C	
Pdh Tj = -7°C	7.17 kW	
COP Tj = -7°C	3.45	
Cdh Tj = -7 °C	0.990	
Pdh Tj = +2°C	4.59 kW	
COP Tj = +2°C	4.48	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	4.61 kW	
COP Tj = +7°C	4.85	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	5.43 kW	
COP Tj = 12°C	5.69	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	11.22 kW	
COP Tj = Tbiv	1.89	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.40 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.61	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	

WTOL	62 °C
Poff	1 W
PTO	7 W
PSB	7 W
PCK	6 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	2.60 kW
Annual energy consumption Qhe	6087 kWh
Pdh Tj = -15°C (if TOL	9.47
COP Tj = -15°C (if TOL	2.40
Cdh Tj = -15 °C	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	50 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	215 %	
Prated	12.00 kW	
SCOP	5.45	
Tbiv	2 °C	
TOL	2 °C	
Pdh Tj = +2°C	11.91 kW	
COP Tj = +2°C	4.30	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	7.65 kW	
COP Tj = +7°C	5.40	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	5.42 kW	
COP Tj = 12°C	5.73	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	11.91 kW	
COP Tj = Tbiv	4.30	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.91 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.30	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	
WTOL	62 °C	
Poff	1 W	
PTO	7 W	
PSB	7 W	
PCK	6 W	

Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.09 kW
Annual energy consumption Q _{he}	3083 kWh