

Subtype HP12L-M-BC

Certificate Holder	Heliotherm GmbH
Address	Sportplatzweg 18
ZIP	A-6336
City	Langkampfen
Country	AT
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	HP12L-M-BC
Registration number	011-1W0204
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	8.1 kg
Certification Date	14.12.2017
Testing basis	HP KEYMARK certification scheme rules rev. 8

Model HELIOTHERM - Luft-/Wasserwärmepumpe in Splittbauweise modulierend Baureihe Basic

Comfort

Model name	HELIOTHERM - Luft-/Wasserwärmepumpe in Splittbauweise modulierend Baureihe Basic Comfort
Application	Heating (low temp)
Units	Indoor, 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	Yes

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 indoor	41 dB(A)	
Sound power level outdoor	40 dB(A)	

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	189 %	
Prated	12.00 kW	
SCOP	4.79	
Tbiv	-10 °C	
TOL	-10 °C	
Pdh Tj = -7°C	10.83 kW	
COP Tj = -7°C	2.86	
Cdh Tj = -7 °C	0.998	
Pdh Tj = +2°C	6.70 kW	
COP Tj = +2°C	4.92	
Cdh Tj = +2 °C	0.998	
Pdh Tj = +7°C	7.63 kW	
COP Tj = +7°C	5.92	
Cdh Tj = +7 °C	0.998	
Pdh Tj = 12°C	8.52 kW	
COP Tj = 12°C	7.26	
Cdh Tj = +12 °C	0.998	
Pdh Tj = Tbiv	12.23 kW	

COP Tj = Tbiv	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.31
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	0.00 kW
Annual energy consumption Qhe	5200 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	
Sound power level outdoor	40 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	157 %	
Prated	12.00 kW	
SCOP	3.99	
Tbiv	-19 °C	
TOL	-22 °C	
Pdh Tj = -7°C	7.24 kW	
COP Tj = -7°C	3.59	
Cdh Tj = -7 °C	0.990	
Pdh Tj = +2°C	4.64 kW	
COP Tj = +2°C	4.67	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	4.66 kW	
COP Tj = +7°C	5.05	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	5.48 kW	
COP Tj = 12°C	5.93	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	11.33 kW	
COP Tj = Tbiv	1.97	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.49 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.68	

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	2.51 kW
Annual energy consumption Qhe	6316 kWh
Pdh Tj = -15°C (if TOL	9.57
COP Tj = -15°C (if TOL	2.50
Cdh Tj = -15 °C	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	
Sound power level outdoor	40 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	224 %	
Prated	12.00 kW	
SCOP	5.68	
Tbiv	2 °C	
TOL	2 °C	
Pdh Tj = +2°C	12.03 kW	
COP Tj = +2°C	4.48	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	7.73 kW	
COP Tj = +7°C	5.62	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	5.47 kW	
COP Tj = 12°C	5.97	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	12.03 kW	
COP Tj = Tbiv	4.48	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.03 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.48	
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	0.00 kW
Annual energy consumption Q _{he}	2958 kWh