Subtype HP20L-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	HP20L-M-BC
Registration number	011-1W0205
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	9.3 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	No

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	43 dB(A)	
Sound power level outdoor	46 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	205 %	
Prated	18.00 kW	
SCOP	5.21	
Tbiv	-10 °C	
TOL	-10 °C	
Pdh Tj = -7°C	16.18 kW	
COP Tj = -7°C	3.19	
Cdh Tj = -7 °C	0.990	
Pdh Tj = +2°C	9.20 kW	
COP Tj = +2°C	5.22	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	6.94 kW	
COP Tj = +7°C	6.64	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	8.13 kW	
COP Tj = 12°C	7.64	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	18.47 kW	

COP Tj = Tbiv	2.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67
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 Qhe	7100 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	
Sound power level outdoor	46 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	
Prated	18.00 kW	
SCOP	4.38	
Tbiv	-18 °C	
TOL	-22 °C	
Pdh Tj = -7°C	11.20 kW	
COP Tj = -7°C	3.70	
Cdh Tj = -7 °C	0.990	
Pdh Tj = +2°C	6.97 kW	
COP Tj = +2°C	5.51	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	6.39 kW	
COP Tj = +7°C	6.13	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	7.67 kW	
COP Tj = 12°C	7.62	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	16.85 kW	
COP Tj = Tbiv	2.27	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.05 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.90	

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	3.95 kW
Annual energy consumption Qhe	8791 kWh
Pdh Tj = -15°C (if TOL	14.77
COP Tj = -15°C (if TOL	2.54
Cdh Tj = -15 °C	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	
Sound power level outdoor	46 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	262 %	
Prated	18.00 kW	
SCOP	6.56	
Tbiv	2 °C	
TOL	2 °C	
Pdh Tj = +2°C	18.40 kW	
COP Tj = +2°C	4.39	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	11.35 kW	
COP Tj = +7°C	6.16	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	7.48 kW	
COP Tj = 12°C	7.38	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	18.40 kW	
COP Tj = Tbiv	4.39	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.40 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.39	
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 Qhe	4568 kWh