

Subtype S18L-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	S18L-M-CC
Registration number	011-1W0479
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	8 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	51 dB(A)	

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	
Prated	18.00 kW	
SCOP	4.96	
Tbiv	-10 °C	
TOL	-10 °C	
Pdh Tj = -7°C	15.86 kW	
COP Tj = -7°C	3.04	
Cdh Tj = -7 °C	0.990	
Pdh Tj = +2°C	9.02 kW	
COP Tj = +2°C	4.97	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	6.80 kW	
COP Tj = +7°C	6.32	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	7.97 kW	
COP Tj = 12°C	7.28	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	18.11 kW	
COP Tj = Tbiv	2.54	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54
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	7500 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	166 %	
Prated	18.00 kW	
SCOP	4.64	
Tbiv	-18 °C	
TOL	-22 °C	
Pdh Tj = -7°C	10.98 kW	
COP Tj = -7°C	3.52	
Cdh Tj = -7 °C	0.990	
Pdh Tj = +2°C	6.83 kW	
COP Tj = +2°C	5.25	
Cdh Tj = +2 °C	0.990	
Pdh Tj = +7°C	6.26 kW	
COP Tj = +7°C	5.84	
Cdh Tj = +7 °C	0.990	
Pdh Tj = 12°C	7.52 kW	
COP Tj = 12°C	7.26	
Cdh Tj = +12 °C	0.990	
Pdh Tj = Tbiv	16.52 kW	
COP Tj = Tbiv	2.16	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.77 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	
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	4.23 kW
Annual energy consumption Q _{he}	8147 kWh
P _{dh} T _j = -15°C (if TOL	14.48
COP T _j = -15°C (if TOL	2.42
C _{dh} T _j = -15 °C	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	247 %	
Prated	18.00 kW	
SCOP	6.25	
T _{biv}	2 °C	
TOL	2 °C	
P _{dh} T _j = +2°C	18.04 kW	
COP T _j = +2°C	4.18	
C _{dh} T _j = +2 °C	0.990	
P _{dh} T _j = +7°C	11.30 kW	
COP T _j = +7°C	5.87	
C _{dh} T _j = +7 °C	0.990	
P _{dh} T _j = 12°C	7.33 kW	
COP T _j = 12°C	7.03	
C _{dh} T _j = +12 °C	0.990	
P _{dh} T _j = T _{biv}	18.04 kW	
COP T _j = T _{biv}	4.18	
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	18.04 kW	
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.18	
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	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}	4032 kWh