Subtype ETERA S

Certificate Holder	KRONOTERM d.o.o.
Address	Trnava 5e
ZIP	3303
City	Gomilsko
Country	SI
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	ETERA S
Registration number	011-1W0885
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R452B
Mass of Refrigerant	1.1 kg
Certification Date	26.09.2024
Testing basis	HP KEYMARK certification scheme rules V14

Model ETERA S-1 HT / HK UF E	
Model name	ETERA S-1 HT / HK UF E
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x230V 50Hz
Off-peak product	Yes

Brine/Water	

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	4.54 kW	5.96 kW
El input	0.96 kW	2.04 kW
COP	4.71	2.92

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	35 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	210 %	154 %
Prated	9.10 kW	9.00 kW
SCOP	5.45	4.04
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.97 kW	8.09 kW
COP Tj = -7°C	4.71	3.14
Cdh Tj = -7 °C	0.996	0.998
Pdh Tj = +2°C	4.93 kW	4.97 kW
COP Tj = +2°C	5.43	4.00
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	3.43 kW	3.39 kW
COP Tj = +7°C	5.88	4.55

Cdh Tj = +7 °C	0.990	0.992
Pdh Tj = 12°C	3.00 kW	3.09 kW
COP Tj = 12°C	6.07	5.07
Cdh Tj = +12 °C	0.988	0.990
Pdh Tj = Tbiv	9.08 kW	9.02 kW
COP Tj = Tbiv	4.50	2.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.08 kW	9.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.50	2.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	67 °C	67 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	kW	kW
Annual energy consumption Qhe	3448 kWh	4605 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	35 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	218 %	158 %
Prated	9.10 kW	9.00 kW
SCOP	5.64	4.15
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.51 kW	5.65 kW
COP Tj = -7°C	5.43	3.78
Cdh Tj = -7 °C	0.994	0.996
Pdh Tj = +2°C	3.52 kW	3.61 kW
COP Tj = +2°C	5.90	4.49
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	3.00 kW	3.06 kW
COP Tj = +7°C	6.06	4.82
Cdh Tj = +7 °C	0.988	0.990
Pdh Tj = 12°C	3.04 kW	3.09 kW
COP Tj = 12°C	6.05	5.20
Cdh Tj = +12 °C	0.988	0.990
Pdh Tj = Tbiv	9.08 kW	9.02 kW
COP Tj = Tbiv	4.50	2.95

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.08 kW	9.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.50	2.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	67 °C	67 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	kW	kW
Annual energy consumption Qhe	3979 kWh	5346 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	35 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	208 %	151 %
Prated	9.10 kW	9.00 kW
SCOP	5.39	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.08 kW	9.02 kW
COP Tj = +2°C	4.50	2.95
Cdh Tj = +2 °C	0.997	0.998
Pdh Tj = +7°C	5.96 kW	6.02 kW
COP Tj = +7°C	5.27	3.60
Cdh Tj = +7 °C	0.995	0.996
Pdh Tj = 12°C	2.99 kW	3.01 kW
COP Tj = 12°C	5.69	4.53
Cdh Tj = +12 °C	0.989	0.991
Pdh Tj = Tbiv	9.08 kW	9.02 kW
COP Tj = Tbiv	4.50	2.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.08 kW	9.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.50	2.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	67 °C	67 °C
Poff	6 W	6 W
PTO	6 W	6 W

PSB	6 W	6 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	kW	kW
Annual energy consumption Qhe	2254 kWh	3030 kWh

Water/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.52 kW	6.07 kW
El input	0.71 kW	1.61 kW
COP	6.40	3.77

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	299 %	207 %
Prated	9.10 kW	9.10 kW
SCOP	7.68	5.37
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.11 kW	8.08 kW
COP Tj = -7°C	6.81	4.12
Cdh Tj = -7 °C	0.995	0.997
Pdh Tj = +2°C	5.05 kW	4.99 kW
COP Tj = +2°C	7.65	5.35
Cdh Tj = +2 °C	0.991	0.993
Pdh Tj = +7°C	3.28 kW	3.24 kW
COP Tj = +7°C	8.19	6.01
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	2.98 kW	3.01 kW
COP Tj = 12°C	8.43	7.00
Cdh Tj = +12 °C	0.983	0.986
Pdh Tj = Tbiv	9.09 kW	9.07 kW
COP Tj = Tbiv	6.43	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.09 kW	9.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.43	3.80

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	67 °C	67 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	kW	kW
Annual energy consumption Qhe	2449 kWh	3498 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	309 %	215 %
Prated	9.10 kW	9.10 kW
SCOP	7.93	5.57
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.62 kW	5.59 kW
COP Tj = -7°C	7.81	5.13
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	3.44 kW	3.48 kW
COP Tj = +2°C	8.20	5.95
Cdh Tj = +2 °C	0.986	0.990
Pdh Tj = +7°C	2.98 kW	2.99 kW
COP Tj = +7°C	8.43	6.66
Cdh Tj = +7 °C	0.983	0.987
Pdh Tj = 12°C	3.00 kW	2.98 kW
COP Tj = 12°C	8.13	7.34
Cdh Tj = +12 °C	0.984	0.985
Pdh Tj = Tbiv	9.09 kW	9.07 kW
COP Tj = Tbiv	6.43	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.09 kW	9.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.43	3.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	67 °C	67 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	kW	kW

Annual energy consumption Qhe	2827 kWh	4026 kWh

EN 14825 | Warmer Climate		
	Low temperature	Medium temperature
ηs	299 %	206 %
Prated	9.10 kW	9.10 kW
SCOP	7.68	5.34
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.09 kW	9.07 kW
COP Tj = +2°C	6.43	3.80
Cdh Tj = +2 °C	0.996	0.997
Pdh Tj = +7°C	5.95 kW	5.94 kW
COP Tj = +7°C	7.52	4.85
Cdh Tj = +7 °C	0.992	0.995
Pdh Tj = 12°C	3.00 kW	2.91 kW
COP Tj = 12°C	8.13	6.14
Cdh Tj = +12 °C	0.984	0.987
Pdh Tj = Tbiv	9.09 kW	9.07 kW
COP Tj = Tbiv	6.43	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.09 kW	9.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.43	3.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	67 °C	67 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	kW	kW
Annual energy consumption Qhe	1582 kWh	2278 kWh