

Subtype AEROTOP SPK7

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AEROTOP SPK7
Registration number	011-1W0772
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	3.1 kg
Certification Date	07.02.2024
Testing basis	HP KEYMARK certification scheme rules V12

Model AEROTOP SPK7

Model name	AEROTOP SPK7
Application	Heating (medium temp)
Units	Indoor, Outdoor
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	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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.50 kW	4.45 kW
El input	0.82 kW	1.39 kW
COP	5.47	3.10

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	148 %
Prated	5.59 kW	5.93 kW
SCOP	4.92	3.77
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.29 kW	5.62 kW
COP Tj = -7°C	2.95	2.22
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.20 kW	3.46 kW
COP Tj = +2°C	5.08	3.68
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.29 kW	2.25 kW

COP Tj = +7°C	6.27	5.11
Cdh Tj = +7 °C	0.96	0.90
Pdh Tj = 12°C	2.33 kW	2.60 kW
COP Tj = 12°C	6.85	6.43
Cdh Tj = +12 °C	0.96	0.96
Pdh Tj = Tbiv	5.59 kW	5.93 kW
COP Tj = Tbiv	2.55	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.59 kW	5.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.86
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2346 kWh	3249 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	174 %	127 %
Prated	6.16 kW	5.57 kW
SCOP	4.43	3.26
Tbiv	-17 °C	-17 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.71 kW	3.70 kW
COP Tj = -7°C	3.85	2.69
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.25 kW	2.25 kW
COP Tj = +2°C	5.28	3.95
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.33 kW	2.29 kW
COP Tj = +7°C	6.52	5.27
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.27 kW	2.41 kW
COP Tj = 12°C	6.83	6.27
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.35 kW	4.84 kW
COP Tj = Tbiv	2.45	1.63

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.55 kW	4.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.28
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.61 kW	1.48 kW
Annual energy consumption Qhe	3428 kWh	4215 kWh
Pdh Tj = -15°C (if TOL	4.78	4.99
COP Tj = -15°C (if TOL	2.74	1.99
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	249 %	179 %
Prated	5.70 kW	5.89 kW
SCOP	6.30	4.54
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	5.70 kW	5.89 kW
COP Tj = +2°C	3.85	2.43
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.84 kW	4.02 kW
COP Tj = +7°C	6.16	3.98
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.32 kW	2.29 kW
COP Tj = 12°C	7.17	5.77
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.70 kW	5.89 kW
COP Tj = Tbiv	3.85	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.70 kW	5.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.43
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1208 kWh	4215 kWh