

Subtype AEROTOP SX7

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AEROTOP SX7
Registration number	011-1W0542
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.1 kg
Certification Date	04.08.2022
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 9

Model AEROTOP SX7

Model name	AEROTOP SX7
Application	Heating (medium temp)
Units	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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	200 %	152 %
Prated	7.82 kW	7.30 kW
SCOP	5.06	3.88
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	6.92 kW	6.46 kW
COP Tj = -7°C	3.40	2.36
Cdh Tj = -7 °C	0.992	0.992
Pdh Tj = +2°C	4.62 kW	4.02 kW
COP Tj = +2°C	5.06	3.70
Cdh Tj = +2 °C	0.981	0.981
Pdh Tj = +7°C	3.15 kW	2.81 kW
COP Tj = +7°C	6.20	5.60
Cdh Tj = +7 °C	0.958	0.958
Pdh Tj = 12°C	3.32 kW	3.24 kW
COP Tj = 12°C	8.25	6.14
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	6.92 kW	6.46 kW
COP Tj = Tbiv	3.40	2.36

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.40 kW	6.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.11	2.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	21 W	21 W
PTO	15 W	15 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.42 kW	1.23 kW
Annual energy consumption Qhe	3192 kWh	3890 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	156 %	125 %
Prated	11.40 kW	11.10 kW
SCOP	3.97	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	6.90 kW	6.72 kW
COP Tj = -7°C	3.71	2.87
Cdh Tj = -7 °C	0.992	0.992
Pdh Tj = +2°C	4.20 kW	4.06 kW
COP Tj = +2°C	5.45	4.25
Cdh Tj = +2 °C	0.981	0.981
Pdh Tj = +7°C	3.10 kW	3.00 kW
COP Tj = +7°C	6.42	5.85
Cdh Tj = +7 °C	0.958	0.958
Pdh Tj = 12°C	3.32 kW	3.35 kW
COP Tj = 12°C	8.25	6.40
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	6.90 kW	6.72 kW
COP Tj = Tbiv	3.71	2.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.60 kW	4.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.989	0.992

WTOL	60 °C	60 °C
Poff	21 W	21 W
PTO	15 W	15 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	11.40 kW	11.20 kW
Annual energy consumption Q _{he}	7086 kWh	8546 kWh
P _{dh} T _j = -15°C (if TOL	5.60	5.10
COP T _j = -15°C (if TOL	2.90	1.79
C _{dh} T _j = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	238 %	180 %
Prated	4.97 kW	4.05 kW
SCOP	6.03	4.58
T _{biv}	2 °C	2 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = +2°C	4.97 kW	4.05 kW
COP T _j = +2°C	4.41	2.55
C _{dh} T _j = +2 °C	0.981	0.981
P _{dh} T _j = +7°C	3.21 kW	2.75 kW
COP T _j = +7°C	5.84	4.00
C _{dh} T _j = +7 °C	0.958	0.958
P _{dh} T _j = 12°C	3.25 kW	3.25 kW
COP T _j = 12°C	7.00	6.20
C _{dh} T _j = +12 °C	0.960	0.960
P _{dh} T _j = T _{biv}	4.97 kW	4.04 kW
COP T _j = T _{biv}	4.41	2.55
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	4.97 kW	4.05 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.41	2.55
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.900	0.900
WTOL	60 °C	60 °C
Poff	21 W	21 W
PTO	15 W	15 W
PSB	21 W	21 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}	1100 kWh	1180 kWh