

Subtype AEROTOP S05.2

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AEROTOP S05.2
Registration number	011-1W0390
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	4 kg
Certification Date	28.07.2020

Model AEROTOP S05.2

Model name	AEROTOP S05.2
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	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	4.91 kW	4.19 kW
El input	1.14 kW	1.55 kW
COP	4.31	2.77

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	129 %
Prated	5.97 kW	4.75 kW
SCOP	4.58	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.28 kW	4.20 kW
COP Tj = -7°C	3.57	2.21
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	3.11 kW	2.67 kW
COP Tj = +2°C	4.64	3.46
Cdh Tj = +2 °C	0.96	0.96
Pdh Tj = +7°C	2.60 kW	2.51 kW

COP Tj = +7°C	5.65	4.18
Cdh Tj = +7 °C	0.94	0.94
Pdh Tj = 12°C	3.07 kW	3.00 kW
COP Tj = 12°C	3.57	5.66
Cdh Tj = +12 °C	0.93	0.93
Pdh Tj = Tbiv	5.28 kW	4.20 kW
COP Tj = Tbiv	3.57	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.95	1.96
WTOL	63 °C	63 °C
Poff	35 W	35 W
PTO	36 W	36 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.13 kW	0.00 kW
Annual energy consumption Qhe	2691 kWh	2977 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	156 %	122 %
Prated	7.39 kW	6.13 kW
SCOP	3.98	3.13
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.47 kW	3.71 kW
COP Tj = -7°C	3.92	2.56
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.64 kW	2.33 kW
COP Tj = +2°C	5.28	4.24
Cdh Tj = +2 °C	0.960	0.960
Pdh Tj = +7°C	2.63 kW	2.59 kW
COP Tj = +7°C	6.12	4.71
Cdh Tj = +7 °C	0.940	0.940
Pdh Tj = 12°C	3.07 kW	3.05 kW
COP Tj = 12°C	7.49	6.09
Cdh Tj = +12 °C	0.930	0.930
Pdh Tj = Tbiv	4.47 kW	3.71 kW
COP Tj = Tbiv	3.92	2.56

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.32 kW	4.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.32	1.55
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	63 °C	63 °C
Poff	35 W	35 W
PTO	36 W	36 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.39 kW	6.13 kW
Annual energy consumption Qhe	4575 kWh	4824 kWh
Pdh Tj = -15°C (if TOL		
COP Tj = -15°C (if TOL		
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	226 %	163 %
Prated	5.83 kW	5.75 kW
SCOP	5.74	4.14
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	5.83 kW	5.75 kW
COP Tj = +2°C	3.20	2.86
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	3.70 kW	3.74 kW
COP Tj = +7°C	5.61	3.70
Cdh Tj = +7 °C	0.96	0.96
Pdh Tj = 12°C	3.04 kW	2.97 kW
COP Tj = 12°C	7.24	5.21
Cdh Tj = +12 °C	0.94	0.94
Pdh Tj = Tbiv	5.83 kW	5.75 kW
COP Tj = Tbiv	3.20	2.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.20	2.86
WTOL	63 °C	63 °C
Poff	35 W	35 W

PTO	36 W	36 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}	1358 kWh	1854 kWh

Model AEROTOP S05.2_2-parts

Model name	AEROTOP S05.2_2-parts
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	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

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Complete power supply failure	passed
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EN 14511-2 | Heating

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El input	1.14 kW	1.55 kW
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	Low temperature	Medium temperature
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.75 kW
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WTOL	63 °C	63 °C
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PTO	36 W	36 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}	1358 kWh	1854 kWh