Subtype AEROTOP EVO / AEROTOP EVO PLUS

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	ICIM S.p.A.
Subtype title	AEROTOP EVO / AEROTOP EVO PLUS
Registration number	ICIM-PDC-000228
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	14 kg
Certification Date	22.11.2023
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

Model AEROTOP EVO PLUS 48

Model name	AEROTOP EVO PLUS 48
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	51.50 kW	46.50 kW
El input	11.30 kW	17.20 kW
COP	4.54	2.71

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	126 %
Prated	34.80 kW	33.20 kW
SCOP	4.46	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	30.79 kW	26.60 kW
COP Tj = -7°C	2.81	1.87
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	21.36 kW	18.78 kW
COP Tj = +2°C	4.52	3.26
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	25.20 kW	23.47 kW
COP Tj = +7°C	5.72	4.49
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	29.84 kW	28.35 kW
COP Tj = 12°C	7.63	6.23
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	30.79 kW	28.13 kW
COP Tj = Tbiv	2.81	2.00

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	28.65 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	35 °C	55 °C
Poff	90 W	90 W
PTO	150 W	150 W
PSB	90 W	90 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	6.16 kW	19.24 kW
Annual energy consumption Qhe	16118 kWh	21227 kWh

Model AEROTOP EVO PLUS 54	
Model name	AEROTOP EVO PLUS 54
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	55.50 kW	51.90 kW
El input	12.80 kW	19.40 kW
COP	4.33	2.68

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	76 dB(A)	76 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	125 %
Prated	38.60 kW	37.27 kW
SCOP	4.46	3.21
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.16 kW	30.48 kW
COP Tj = -7°C	2.79	1.87
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	22.74 kW	20.42 kW
COP Tj = +2°C	4.45	3.17
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	25.15 kW	23.63 kW
COP Tj = +7°C	5.75	4.53
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	29.80 kW	28.56 kW
COP Tj = 12°C	7.72	6.50
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	34.16 kW	31.53 kW
COP Tj = Tbiv	2.79	1.95

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	33.20 kW	15.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	35 °C	55 °C
Poff	90 W	90 W
PTO	150 W	150 W
PSB	90 W	90 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	5.40 kW	22.27 kW
Annual energy consumption Qhe	17891 kWh	24016 kWh

Model AEROTOP EVO PLUS 65

Model name	AEROTOP EVO PLUS 65
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	64.10 kW	56.70 kW
El input	15.50 kW	21.00 kW
COP	4.15	2.70

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	173 %	125 %
Prated	43.00 kW	40.32 kW
SCOP	4.41	3.19
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.01 kW	33.01 kW
COP Tj = -7°C	2.68	1.86
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	22.78 kW	21.39 kW
COP Tj = +2°C	4.44	3.12
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	25.19 kW	23.63 kW
COP Tj = +7°C	5.66	4.58
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	29.84 kW	28.56 kW
COP Tj = 12°C	7.60	6.63
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	38.01 kW	34.12 kW
COP Tj = Tbiv	2.68	1.93

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	35.92 kW	16.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.20
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	35 °C	55 °C
Poff	90 W	90 W
PTO	150 W	150 W
PSB	90 W	90 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	7.04 kW	24.32 kW
Annual energy consumption Qhe	20144 kWh	26137 kWh

Model AEROTOP EVO 48		
Model name	AEROTOP EVO 48	
Application	Heating (low temp)	
Units	Outdoor	
Climate zone (for heating)	n/a	
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	54.40 kW	
El input	12.70 kW	
COP	4.30	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	166 %	
Prated	36.30 kW	
SCOP	4.22	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	32.11 kW	
COP Tj = -7°C	2.69	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	20.72 kW	
COP Tj = +2°C	4.25	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	24.84 kW	
COP Tj = +7°C	5.55	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	29.72 kW	
COP Tj = 12°C	7.27	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	32.11 kW	
COP Tj = Tbiv	2.69	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	28.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
WTOL	35 °C
Poff	90 W
PTO	150 W
PSB	90 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	7.65 kW
Annual energy consumption Qhe	17769 kWh

Model AEROTOP EVO 54		
Model name	AEROTOP EVO 54	
Application	Heating (low temp)	
Units	Outdoor	
Climate zone (for heating)	n/a	
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	58.70 kW	
El input	14.40 kW	
COP	4.06	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	78 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	166 %	
Prated	40.40 kW	
SCOP	4.19	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	35.74 kW	
COP Tj = -7°C	2.68	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	22.06 kW	
COP Tj = +2°C	4.21	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	24.90 kW	
COP Tj = +7°C	5.43	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	29.54 kW	
COP Tj = 12°C	7.04	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	35.74 kW	
COP Tj = Tbiv	2.68	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	33.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
WTOL	35 °C
Poff	90 W
PTO	150 W
PSB	90 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	7.18 kW
Annual energy consumption Qhe	19931 kWh

Model AEROTOP EVO 65		
Model name	AEROTOP EVO 65	
Application	Heating (low temp)	
Units	Outdoor	
Climate zone (for heating)	n/a	
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	67.10 kW	
El input	16.90 kW	
COP	3.98	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	164 %	
Prated	45.00 kW	
SCOP	3.19	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	39.83 kW	
COP Tj = -7°C	2.62	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	23.48 kW	
COP Tj = +2°C	4.21	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	24.94 kW	
COP Tj = +7°C	5.39	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	29.51 kW	
COP Tj = 12°C	6.94	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	39.83 kW	
COP Tj = Tbiv	2.62	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	35.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
WTOL	35 °C
Poff	90 W
PTO	150 W
PSB	90 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	9.11 kW
Annual energy consumption Qhe	22286 kWh