

**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-000227
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	7.9 kg
Certification Date	22.11.2023
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

**Model AEROTOP EVO PLUS 24**

Model name	AEROTOP EVO PLUS 24
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 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	26.10 kW	23.00 kW
EI input	5.82 kW	9.06 kW
COP	4.48	2.54

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	73 dB(A)	73 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	127 %
Prated	19.24 kW	16.78 kW
SCOP	4.54	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.18 kW	13.04 kW
COP Tj = -7°C	2.65	1.93
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	11.38 kW	9.50 kW
COP Tj = +2°C	4.72	3.25
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.42 kW	11.10 kW
COP Tj = +7°C	5.65	4.40

Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.75 kW	13.45 kW
COP Tj = 12°C	7.42	6.15
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	17.18 kW	14.20 kW
COP Tj = Tbiv	2.65	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.67 kW	9.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.980
WTOL	35 °C	55 °C
Poff	50 W	50 W
PTO	100 W	100 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.76 kW	7.63 kW
Annual energy consumption Qhe	8838 kWh	10709 kWh

**Model AEROTOP EVO PLUS 27**

Model name	AEROTOP EVO PLUS 27
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	30.50 kW	27.70 kW
El input	7.04 kW	11.50 kW
COP	4.33	2.40

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	74 dB(A)	74 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	126 %
Prated	22.50 kW	19.53 kW
SCOP	4.49	3.22
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.90 kW	15.95 kW
COP Tj = -7°C	2.63	1.94
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	12.43 kW	10.80 kW
COP Tj = +2°C	4.61	3.20
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	12.42 kW	11.47 kW
COP Tj = +7°C	5.68	4.41
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	14.76 kW	13.80 kW
COP Tj = 12°C	7.54	6.14
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	19.90 kW	16.52 kW
COP Tj = Tbiv	2.63	2.02

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.28 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.30
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.980
WTOL	35 °C	55 °C
Poff	50 W	50 W
PTO	100 W	100 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	5.21 kW	9.53 kW
Annual energy consumption Qhe	10358 kWh	12516 kWh

**Model AEROTOP EVO PLUS 32**

Model name	AEROTOP EVO PLUS 32
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	37.00 kW	32.60 kW
EI input	8.86 kW	14.00 kW
COP	4.22	2.33

**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
$\eta_s$	175 %	124 %
Prated	25.50 kW	22.97 kW
SCOP	4.44	3.19
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	22.60 kW	18.82 kW
COP Tj = -7°C	2.63	1.89
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	13.25 kW	12.44 kW
COP Tj = +2°C	4.50	3.15
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	12.44 kW	11.48 kW
COP Tj = +7°C	5.71	4.40
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	14.77 kW	13.82 kW
COP Tj = 12°C	7.51	6.36
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	22.60 kW	19.44 kW
COP Tj = Tbiv	2.63	1.96

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.38 kW	11.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.980
WTOL	35 °C	55 °C
Poff	50 W	50 W
PTO	100 W	100 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	7.17 kW	11.97 kW
Annual energy consumption Qhe	11895 kWh	14903 kWh

**Model AEROTOP EVO 24**

Model name	AEROTOP EVO 24
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	27.90 kW	kW
EI input	6.39 kW	kW
COP	4.36	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	169 %	
Prated	20.48 kW	
SCOP	4.29	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	18.12 kW	
COP Tj = -7°C	2.40	
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	11.61 kW	
COP Tj = +2°C	4.48	
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.42 kW	
COP Tj = +7°C	5.37	
Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.75 kW	
COP Tj = 12°C	7.12	
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	18.12 kW	
COP Tj = Tbiv	2.40	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.47
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980
WTOL	35 °C
Poff	50 W
PTO	100 W
PSB	50 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	2.90 kW
Annual energy consumption Qhe	9865 kWh

**Model AEROTOP EVO 27**

Model name	AEROTOP EVO 27
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	32.20 kW	
EI input	8.05 kW	
COP	4.01	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	166 %	
Prated	23.40 kW	
SCOP	4.23	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	20.70 kW	
COP Tj = -7°C	2.50	
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	12.11 kW	
COP Tj = +2°C	4.34	
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.34 kW	
COP Tj = +7°C	5.39	
Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.65 kW	
COP Tj = 12°C	6.73	
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	20.70 kW	
COP Tj = Tbiv	2.50	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980
WTOL	35 °C
Poff	50 W
PTO	100 W
PSB	50 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	6.06 kW
Annual energy consumption Qhe	11432 kWh

**Model AEROTOP EVO 32**

Model name	AEROTOP EVO 32
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	38.00 kW	
EI input	10.30 kW	
COP	3.70	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	162 %	
Prated	25.90 kW	
SCOP	4.11	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	22.95 kW	
COP Tj = -7°C	2.59	
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	13.09 kW	
COP Tj = +2°C	4.16	
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.39 kW	
COP Tj = +7°C	5.17	
Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.70 kW	
COP Tj = 12°C	6.44	
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	22.95 kW	
COP Tj = Tbiv	2.59	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980
WTOL	35 °C
Poff	50 W
PTO	100 W
PSB	50 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	7.45 kW
Annual energy consumption Qhe	13028 kWh