

**Subtype AEROTOP EVO LN / AEROTOP EVO PLUS LN**

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	ICIM S.p.A.
Subtype title	AEROTOP EVO LN / AEROTOP EVO PLUS LN
Registration number	ICIM-PDC-000246
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	14 kg
Certification Date	21.03.2024
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

**Model AEROTOP EVO PLUS LN 48**

Model name	AEROTOP EVO PLUS LN 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	44.80 kW	37.00 kW
EI input	9.92 kW	13.30 kW
COP	4.51	2.79

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	71 dB(A)	71 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	171 %	127 %
Prated	30.70 kW	28.10 kW
SCOP	4.34	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	27.14 kW	23.07 kW
COP Tj = -7°C	2.71	1.95
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	20.72 kW	18.78 kW
COP Tj = +2°C	4.42	3.26
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	24.84 kW	23.47 kW
COP Tj = +7°C	5.70	4.49
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	29.72 kW	28.35 kW
COP Tj = 12°C	7.42	6.23
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	27.14 kW	23.80 kW
COP Tj = Tbiv	2.71	2.04

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	23.79 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	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	6.89 kW	14.13 kW
Annual energy consumption Qhe	14596 kWh	17941 kWh

**Model AEROTOP EVO PLUS LN 54**

Model name	AEROTOP EVO PLUS LN 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	48.70 kW	41.50 kW
El input	11.20 kW	15.30 kW
COP	4.35	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	71 dB(A)	71 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	170 %	127 %
Prated	35.40 kW	30.10 kW
SCOP	4.33	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	31.30 kW	24.97 kW
COP Tj = -7°C	2.74	1.94
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	21.20 kW	18.78 kW
COP Tj = +2°C	4.35	3.26
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	24.84 kW	23.47 kW
COP Tj = +7°C	5.63	4.49
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	29.72 kW	28.35 kW
COP Tj = 12°C	7.30	6.23
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	31.30 kW	25.50 kW
COP Tj = Tbiv	2.74	2.02

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	28.24 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	7.14 kW	16.14 kW
Annual energy consumption Qhe	16879 kWh	19220 kWh

**Model AEROTOP EVO PLUS LN 65**

Model name	AEROTOP EVO PLUS LN 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	53.40 kW	45.90 kW
El input	12.30 kW	16.70 kW
COP	4.32	2.75

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	169 %	127 %
Prated	38.70 kW	34.90 kW
SCOP	4.30	3.25
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.22 kW	28.56 kW
COP Tj = -7°C	2.70	1.92
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	21.31 kW	18.78 kW
COP Tj = +2°C	4.31	3.26
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	24.93 kW	23.47 kW
COP Tj = +7°C	5.55	4.49
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	29.80 kW	28.35 kW
COP Tj = 12°C	7.20	6.23
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	34.22 kW	29.50 kW
COP Tj = Tbiv	2.70	2.00

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.59 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	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	8.09 kW	20.86 kW
Annual energy consumption Qhe	18600 kWh	22215 kWh

**Model AEROTOP EVO LN 48**

Model name	AEROTOP EVO LN 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	46.30 kW	
EI input	10.50 kW	
COP	4.41	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	163 %	
Prated	34.10 kW	
SCOP	4.15	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	30.13 kW	
COP Tj = -7°C	2.77	
Cdh Tj = -7 °C	0.940	
Pdh Tj = +2°C	20.70 kW	
COP Tj = +2°C	4.25	
Cdh Tj = +2 °C	0.940	
Pdh Tj = +7°C	25.09 kW	
COP Tj = +7°C	5.44	
Cdh Tj = +7 °C	0.940	
Pdh Tj = 12°C	29.72 kW	
COP Tj = 12°C	6.66	
Cdh Tj = +12 °C	0.940	
Pdh Tj = Tbiv	30.13 kW	
COP Tj = Tbiv	2.77	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	28.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.940
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	5.82 kW
Annual energy consumption Qhe	16959 kWh

**Model AEROTOP EVO LN 54**

Model name	AEROTOP EVO LN 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	51.20 kW	
EI input	11.90 kW	
COP	4.31	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	161 %	
Prated	37.30 kW	
SCOP	4.11	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	32.96 kW	
COP Tj = -7°C	2.72	
Cdh Tj = -7 °C	0.940	
Pdh Tj = +2°C	22.00 kW	
COP Tj = +2°C	4.13	
Cdh Tj = +2 °C	0.940	
Pdh Tj = +7°C	25.20 kW	
COP Tj = +7°C	5.44	
Cdh Tj = +7 °C	0.940	
Pdh Tj = 12°C	29.84 kW	
COP Tj = 12°C	6.66	
Cdh Tj = +12 °C	0.940	
Pdh Tj = Tbiv	32.96 kW	
COP Tj = Tbiv	2.72	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.940
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	6.67 kW
Annual energy consumption Qhe	18726 kWh

**Model AEROTOP EVO LN 65**

Model name	AEROTOP EVO LN 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	55.30 kW	
EI input	13.00 kW	
COP	4.25	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	161 %	
Prated	41.80 kW	
SCOP	4.10	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	37.00 kW	
COP Tj = -7°C	2.70	
Cdh Tj = -7 °C	0.940	
Pdh Tj = +2°C	23.50 kW	
COP Tj = +2°C	4.10	
Cdh Tj = +2 °C	0.940	
Pdh Tj = +7°C	25.19 kW	
COP Tj = +7°C	5.44	
Cdh Tj = +7 °C	0.940	
Pdh Tj = 12°C	29.81 kW	
COP Tj = 12°C	6.59	
Cdh Tj = +12 °C	0.940	
Pdh Tj = Tbiv	37.00 kW	
COP Tj = Tbiv	2.70	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	33.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.940
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	7.92 kW
Annual energy consumption Qhe	21051 kWh