

**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-000245
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	7.9 kg
Certification Date	21.03.2024
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

**Model AEROTOP EVO PLUS LN 24**

Model name	AEROTOP EVO PLUS LN 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 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	21.50 kW	17.60 kW
El input	4.76 kW	6.64 kW
COP	4.52	2.62

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	69 dB(A)	69 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	174 %	126 %
Prated	14.28 kW	14.49 kW
SCOP	4.41	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.63 kW	11.86 kW
COP Tj = -7°C	2.56	2.02
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	10.50 kW	9.50 kW
COP Tj = +2°C	4.72	3.20
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	12.42 kW	11.10 kW
COP Tj = +7°C	5.65	4.40
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	14.75 kW	13.45 kW
COP Tj = 12°C	7.42	6.15
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	12.63 kW	12.26 kW
COP Tj = Tbiv	2.56	2.09

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.39 kW	8.63 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	1.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	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	2.89 kW	5.86 kW
Annual energy consumption Qhe	6681 kWh	9272 kWh

**Model AEROTOP EVO PLUS LN 27**

Model name	AEROTOP EVO PLUS LN 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	24.30 kW	19.70 kW
El input	5.54 kW	7.70 kW
COP	4.40	2.56

**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
$\eta_s$	172 %	126 %
Prated	17.18 kW	15.92 kW
SCOP	4.38	3.23
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	15.20 kW	13.03 kW
COP Tj = -7°C	2.50	1.98
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	10.57 kW	9.50 kW
COP Tj = +2°C	4.62	3.20
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	12.50 kW	11.47 kW
COP Tj = +7°C	2.60	4.41
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	14.82 kW	13.80 kW
COP Tj = 12°C	7.32	6.14
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	15.20 kW	13.47 kW
COP Tj = Tbiv	2.50	2.07

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.41 kW	9.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	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	2.77 kW	6.83 kW
Annual energy consumption Qhe	8100 kWh	10191 kWh

**Model AEROTOP EVO PLUS LN 32**

Model name	AEROTOP EVO PLUS LN 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	26.90 kW	21.80 kW
El input	6.17 kW	8.27 kW
COP	4.35	2.64

**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
$\eta_s$	171 %	126 %
P <sub>rated</sub>	19.55 kW	17.21 kW
SCOP	4.35	3.22
T <sub>biv</sub>	-7 °C	-6 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub> = -7°C</sub>	17.29 kW	14.09 kW
COP T <sub>j</sub> = -7°C	2.38	1.97
C <sub>dh T<sub>j</sub> = -7 °C</sub>	0.970	0.980
P <sub>dh T<sub>j</sub> = +2°C</sub>	10.68 kW	9.31 kW
COP T <sub>j</sub> = +2°C	4.59	3.19
C <sub>dh T<sub>j</sub> = +2 °C</sub>	0.970	0.980
P <sub>dh T<sub>j</sub> = +7°C</sub>	12.52 kW	11.10 kW
COP T <sub>j</sub> = +7°C	5.60	4.40
C <sub>dh T<sub>j</sub> = +7 °C</sub>	0.970	0.980
P <sub>dh T<sub>j</sub> = 12°C</sub>	14.85 kW	13.45 kW
COP T <sub>j</sub> = 12°C	7.30	6.15
C <sub>dh T<sub>j</sub> = +12 °C</sub>	0.970	0.980
P <sub>dh T<sub>j</sub> = T<sub>biv</sub></sub>	17.29 kW	14.56 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.38	2.00

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.06 kW	10.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.32	1.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	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	3.49 kW	7.00 kW
Annual energy consumption Qhe	9282 kWh	11062 kWh

**Model AEROTOP EVO LN 24**

Model name	AEROTOP EVO LN 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	21.10 kW	
EI input	4.86 kW	
COP	4.35	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	164 %	
Prated	15.95 kW	
SCOP	4.18	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	14.11 kW	
COP Tj = -7°C	2.60	
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	10.50 kW	
COP Tj = +2°C	4.48	
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.42 kW	
COP Tj = +7°C	5.30	
Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.75 kW	
COP Tj = 12°C	6.51	
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	14.11 kW	

COP Tj = Tbiv	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50
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	2.88 kW
Annual energy consumption Qhe	7886 kWh

**Model AEROTOP EVO LN 27**

Model name	AEROTOP EVO LN 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	24.50 kW	
EI input	5.79 kW	
COP	4.24	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	162 %	
Prated	18.60 kW	
SCOP	4.12	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	16.44 kW	
COP Tj = -7°C	2.43	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	11.20 kW	
COP Tj = +2°C	4.38	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	12.42 kW	
COP Tj = +7°C	5.30	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	14.75 kW	
COP Tj = 12°C	6.51	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	16.44 kW	
COP Tj = Tbiv	2.43	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.36 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
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	3.22 kW
Annual energy consumption Qhe	9320 kWh

**Model AEROTOP EVO LN 32**

Model name	AEROTOP EVO LN 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	27.50 kW	
EI input	6.51 kW	
COP	4.22	

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	159 %	
Prated	20.60 kW	
SCOP	4.05	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	18.20 kW	
COP Tj = -7°C	2.30	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	12.00 kW	
COP Tj = +2°C	4.28	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	12.52 kW	
COP Tj = +7°C	5.22	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	14.85 kW	
COP Tj = 12°C	6.51	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	18.20 kW	
COP Tj = Tbiv	2.30	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.28
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
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	3.48 kW
Annual energy consumption Qhe	10501 kWh