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-000229
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	17.5 kg
Certification Date	22.11.2023
Testing basis	HP KEYMARK certification scheme rules rev. no. 9

Model AEROTOP EVO PLUS 79

Model name	AEROTOP EVO PLUS 79
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	78.60 kW	75.70 kW
El input	18.20 kW	29.80 kW
COP	4.31	2.54

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	170 %	125 %
Prated	53.40 kW	58.02 kW
SCOP	4.33	3.20
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	47.21 kW	47.66 kW
COP Tj = -7°C	2.73	1.96
Cdh Tj = -7 °C	0.970	0.970
Pdh Tj = +2°C	30.76 kW	29.59 kW
COP Tj = +2°C	4.34	3.12
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	35.04 kW	39.10 kW
COP Tj = +7°C	5.60	4.42
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	40.87 kW	33.21 kW
COP Tj = 12°C	7.28	6.07
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	47.21 kW	49.09 kW
COP Tj = Tbiv	2.73	2.02

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	44.78 kW	45.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.970
WTOL	35 °C	55 °C
Poff	110 W	110 W
PTO	200 W	200 W
PSB	110 W	110 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	8.59 kW	12.98 kW
Annual energy consumption Qhe	25443 kWh	37519 kWh

Model AEROTOP EVO PLUS 88

Model name	AEROTOP EVO PLUS 88
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	87.50 kW	86.10 kW
El input	22.10 kW	35.20 kW
COP	3.95	2.44

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	81 dB(A)	81 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	125 %
Prated	58.90 kW	62.63 kW
SCOP	4.29	3.19
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	52.10 kW	51.45 kW
COP Tj = -7°C	2.67	1.94
Cdh Tj = -7 °C	0.970	0.970
Pdh Tj = +2°C	30.80 kW	31.11 kW
COP Tj = +2°C	4.30	3.09
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	35.10 kW	40.31 kW
COP Tj = +7°C	5.53	4.42
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	40.91 kW	34.24 kW
COP Tj = 12°C	7.19	6.43
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	52.10 kW	53.00 kW
COP Tj = Tbiv	2.67	2.00

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	50.10 kW	48.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.970
WTOL	35 °C	55 °C
Poff	110 W	110 W
PTO	200 W	200 W
PSB	110 W	110 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	8.80 kW	14.01 kW
Annual energy consumption Qhe	28335 kWh	40595 kWh

Model AEROTOP EVO 79		
Model name	AEROTOP EVO 79	
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	84.80 kW	
El input	21.20 kW	
COP	4.01	

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	162 %	
Prated	55.80 kW	
SCOP	4.12	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	49.33 kW	
COP Tj = -7°C	2.70	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	31.45 kW	
COP Tj = +2°C	4.15	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	35.74 kW	
COP Tj = +7°C	5.34	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	41.42 kW	
COP Tj = 12°C	6.68	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	49.33 kW	
COP Tj = Tbiv	2.70	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	46.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
WTOL	35 °C
Poff	110 W
PTO	200 W
PSB	110 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	9.48 kW
Annual energy consumption Qhe	27961 kWh

Model AEROTOP EVO 88		
Model name	AEROTOP EVO 88	
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	94.20 kW	
El input	25.70 kW	
COP	3.67	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	160 %	
Prated	62.80 kW	
SCOP	4.08	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	55.56 kW	
COP Tj = -7°C	2.62	
Cdh Tj = -7 °C	0.950	
Pdh Tj = +2°C	33.51 kW	
COP Tj = +2°C	4.10	
Cdh Tj = +2 °C	0.950	
Pdh Tj = +7°C	35.91 kW	
COP Tj = +7°C	5.30	
Cdh Tj = +7 °C	0.950	
Pdh Tj = 12°C	42.87 kW	
COP Tj = 12°C	6.60	
Cdh Tj = +12 °C	0.950	
Pdh Tj = Tbiv	55.56 kW	
COP Tj = Tbiv	2.62	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	50.14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950
WTOL	35 °C
Poff	110 W
PTO	200 W
PSB	110 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	12.67 kW
Annual energy consumption Qhe	31806 kWh

Model AEROTOP EVO 105		
Model name	AEROTOP EVO 105	
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	101.00 kW	
El input	27.70 kW	
COP	3.64	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	162 %	
Prated	67.00 kW	
SCOP	4.13	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	59.24 kW	
COP Tj = -7°C	2.60	
Cdh Tj = -7 °C	0.970	
Pdh Tj = +2°C	36.53 kW	
COP Tj = +2°C	4.08	
Cdh Tj = +2 °C	0.970	
Pdh Tj = +7°C	36.00 kW	
COP Tj = +7°C	5.40	
Cdh Tj = +7 °C	0.970	
Pdh Tj = 12°C	42.95 kW	
COP Tj = 12°C	6.76	
Cdh Tj = +12 °C	0.970	
Pdh Tj = Tbiv	59.24 kW	
COP Tj = Tbiv	2.60	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	55.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.44
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970
WTOL	35 °C
Poff	110 W
PTO	200 W
PSB	110 W
PCK	10 W
Supplementary Heater: Type of energy input	n/a
Supplementary Heater: PSUP	11.53 kW
Annual energy consumption Qhe	33528 kWh