

Subtype AEROTOP M 024 027 032

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	ICIM S.p.A.
Subtype title	AEROTOP M 024 027 032
Registration number	ICIM-PDC-000096-00
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	7.9 kg
Certification Date	30.03.2021
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

Model AEROTOP M 024

Model name	AEROTOP M 024
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 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	169 %	129 %
Prated	21.00 kW	7.00 kW
SCOP	4.30	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	18.30 kW	5.90 kW
COP Tj = -7°C	2.95	2.00
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	11.20 kW	3.70 kW
COP Tj = +2°C	4.10	3.18
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	7.20 kW	2.50 kW
COP Tj = +7°C	5.60	4.52
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	7.10 kW	1.10 kW
COP Tj = 12°C	6.82	5.09
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	20.70 kW	5.90 kW
COP Tj = Tbiv	2.73	2.00

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.70 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	54 °C	49 °C
Poff	19 W	16 W
PTO	200 W	16 W
PSB	19 W	16 W
PCK	0 W	34 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	9946 kWh	4202 kWh

Model AEROTOP M 027

Model name	AEROTOP M 027
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 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	76 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	167 %	129 %
Prated	22.00 kW	7.00 kW
SCOP	4.25	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.10 kW	5.90 kW
COP Tj = -7°C	2.92	2.00
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	11.60 kW	3.70 kW
COP Tj = +2°C	4.00	3.18
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	7.50 kW	2.50 kW
COP Tj = +7°C	5.65	4.52
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	7.10 kW	1.10 kW
COP Tj = 12°C	6.82	5.09
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	21.60 kW	5.90 kW
COP Tj = Tbiv	2.70	2.00

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.60 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	54 °C	49 °C
Poff	19 W	16 W
PTO	200 W	16 W
PSB	19 W	16 W
PCK	0 W	34 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	10500 kWh	4202 kWh

Model AEROTOP M 032

Model name	AEROTOP M 032
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 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	76 dB(A)	67 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	167 %	127 %
Prated	24.00 kW	9.00 kW
SCOP	4.24	3.26
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.90 kW	7.70 kW
COP Tj = -7°C	2.86	1.98
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	12.70 kW	4.90 kW
COP Tj = +2°C	3.98	3.02
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	8.20 kW	3.20 kW
COP Tj = +7°C	5.75	4.67
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	7.10 kW	1.40 kW
COP Tj = 12°C	6.82	6.16
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	23.60 kW	7.70 kW
COP Tj = Tbiv	2.57	1.98

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	23.60 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.57	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	54 °C	49 °C
Poff	19 W	16 W
PTO	200 W	16 W
PSB	19 W	16 W
PCK	0 W	34 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	11514 kWh	5558 kWh