

Subtype AEROTOP M 048

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	ICIM S.p.A.
Subtype title	AEROTOP M 048
Registration number	ICIM-PDC-000097-00
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	14 kg
Certification Date	30.03.2021
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

Model AEROTOP M 048

Model name	AEROTOP M 048
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	48.60 kW	4.80 kW
El input	12.12 kW	1.90 kW
COP	4.01	2.53

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	84 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	154 %	129 %
Prated	31.00 kW	7.00 kW
SCOP	3.91	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	27.80 kW	5.90 kW
COP Tj = -7°C	2.72	2.00
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	16.90 kW	3.70 kW
COP Tj = +2°C	3.85	3.18
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	10.90 kW	2.50 kW
COP Tj = +7°C	4.90	4.52

Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	14.20 kW	1.10 kW
COP Tj = 12°C	6.02	5.09
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	31.40 kW	5.90 kW
COP Tj = Tbiv	2.42	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	31.40 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	54 °C	49 °C
Poff	30 W	16 W
PTO	404 W	16 W
PSB	30 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	16591 kWh	4202 kWh