

Subtype alpha SE M-AW 5

Certificate Holder	ait-deutschland GmbH
Address	Industriestr. 3
ZIP	95359
City	Kasendorf
Country	DE
Certification Body	UL International Italia S.r.l.
Subtype title	alpha SE M-AW 5
Registration number	047-A1003
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.5 kg
Certification Date	21.07.2025
Testing basis	Heat Pump Keymark scheme rules V15
Testing laboratory	Centro de Ensayos, Innovación y Servicios (CEIS), ES

Model alpha SE M-AW 5 1P

Model name	alpha SE M-AW 5 1P
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	1x230V 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
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	6.62 kW	6.13 kW
El input	1.47 kW	2.01 kW
COP	4.51	3.04

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	48 dB(A)	49 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	187 %	132 %
Prated	5.10 kW	4.60 kW
SCOP	4.75	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.38 kW	4.07 kW
COP Tj = -7°C	2.67	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.74 kW	2.42 kW
COP Tj = +2°C	4.94	3.29
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.70 kW	1.69 kW

COP Tj = +7°C	6.02	4.16
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.08 kW	0.96 kW
COP Tj = 12°C	7.65	4.90
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.38 kW	4.07 kW
COP Tj = Tbiv	2.67	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.07 kW	3.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.47	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.03 kW	1.03 kW
Annual energy consumption Qhe	2216 kWh	2816 kWh