

## Subtype Paros 4

Certificate Holder	ait-deutschland GmbH
Address	Industriestr. 3
ZIP	95359
City	Kasendorf
Country	DE
Certification Body	BRE Global Limited
Subtype title	Paros 4
Registration number	041-K001-49
Heat Pump Type	Outdoor Air/Water
Refrigerant	R454B
Mass of Refrigerant	1.64 kg
Certification Date	10.06.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09
Testing laboratory	Fraunhofer ISE, DE

## Model alpha innotec - Paros 4

Model name	alpha innotec - Paros 4
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	3.47 kW	3.24 kW
El input	0.72 kW	1.05 kW
COP	4.84	3.08

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	41 dB(A)	41 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	180 %	138 %
Prated	5.00 kW	4.00 kW
SCOP	4.58	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.11 kW	3.84 kW
COP Tj = -7°C	2.47	2.01
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.83 kW	2.26 kW
COP Tj = +2°C	4.80	3.64
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.40 kW	2.21 kW

COP Tj = +7°C	6.07	4.56
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.42 kW	2.30 kW
COP Tj = 12°C	6.79	5.24
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	4.11 kW	3.84 kW
COP Tj = Tbiv	2.47	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.06 kW	2.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.27	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	65 °C	65 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.94 kW	1.12 kW
Annual energy consumption Qhe	2257 kWh	2347 kWh

## Model NOVELAN - Polaris 4

Model name	NOVELAN - Polaris 4
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	3.47 kW	3.24 kW
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