

Subtype Hybrox 16

Certificate Holder	ait-deutschland GmbH
Address	Industriestr. 3
ZIP	95359
City	Kasendorf
Country	DE
Certification Body	BRE Global Limited
Subtype title	Hybrox 16
Registration number	041-K001-54
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.9 kg
Certification Date	24.06.2024
Testing basis	Heat Pump Keymark Scheme Rules Rev 14
Testing laboratory	Fraunhofer ISE, DE

Model alpha innotec Hybrox 16

Model name	alpha innotec Hybrox 16
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 14511-4 | 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	6.14 kW	4.94 kW
El input	1.12 kW	1.50 kW
COP	5.48	3.29

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	46 dB(A)	46 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	153 %
Prated	15.60 kW	15.25 kW
SCOP	4.95	3.89
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.47 kW	13.19 kW
COP Tj = -7°C	2.81	2.24
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.67 kW	8.30 kW
COP Tj = +2°C	4.93	3.82
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	5.69 kW	5.47 kW

COP Tj = +7°C	6.92	5.41
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	6.38 kW	6.17 kW
COP Tj = 12°C	7.92	6.39
Cdh Tj = +12 °C	0.970	0.983
Pdh Tj = Tbiv	13.47 kW	13.19 kW
COP Tj = Tbiv	2.81	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.38 kW	12.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	78 °C	78 °C
Poff	13 W	14 W
PTO	24 W	17 W
PSB	13 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.23 kW	3.06 kW
Annual energy consumption Qhe	6505 kWh	8089 kWh

Model NOVELAN Helox 16

Model name	NOVELAN Helox 16
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 14511-4 | 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	6.14 kW	4.94 kW
El input	1.12 kW	1.50 kW
COP	5.48	3.29

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