

Subtype SW 132 1~

Certificate Holder	ait-deutschland GmbH
Address	Industriestr. 3
ZIP	95359
City	Kasendorf
Country	DE
Certification Body	BRE Global Limited
Subtype title	SW 132 1~
Registration number	041-K001-19
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.13 kg
Certification Date	12.05.2017
Testing basis	Transitional Rules

Model alpha innotec SW 132H1

Model name	alpha innotec SW 132H1
Application	Heating (medium temp)
Units	Indoor
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

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
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EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.00 kW	11.75 kW
El input	2.77 kW	4.00 kW
COP	4.70	2.94

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	188 %	139 %
Prated	17.03 kW	15.77 kW
SCOP	4.89	3.67
Tbiv	-4 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.02 kW	11.93 kW
COP Tj = -7°C	4.75	3.12
Pdh Tj = +2°C	13.17 kW	12.44 kW
COP Tj = +2°C	5.07	3.74
Pdh Tj = +7°C	13.27 kW	12.71 kW
COP Tj = +7°C	5.29	4.15
Pdh Tj = 12°C	13.37 kW	12.99 kW
COP Tj = 12°C	5.46	4.58
Pdh Tj = Tbiv	13.10 kW	12.13 kW
COP Tj = Tbiv	4.93	3.35

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.96 kW	11.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.63	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.07 kW	4.02 kW
Annual energy consumption Qhe	7192 kWh	8874 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	195 %	144 %
Prated	15.57 kW	14.32 kW
SCOP	5.08	3.79
Tbiv	-16 °C	-16 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.18 kW	12.32 kW
COP Tj = -7°C	5.08	3.58
Pdh Tj = +2°C	13.27 kW	12.65 kW
COP Tj = +2°C	5.28	4.04
Pdh Tj = +7°C	13.34 kW	12.90 kW
COP Tj = +7°C	5.42	4.44
Pdh Tj = 12°C	13.35 kW	13.09 kW
COP Tj = 12°C	5.30	4.68
Pdh Tj = Tbiv	13.12 kW	12.06 kW
COP Tj = Tbiv	4.96	3.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.96 kW	11.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.63	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.61 kW	2.57 kW
Annual energy consumption Q _{he}	7550 kWh	9305 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	191 %	140 %
Prated	15.23 kW	13.96 kW
SCOP	4.97	3.70
T _{biv}	4 °C	4 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	12.96 kW	11.75 kW
COP T _j = +2°C	4.63	2.94
P _{dh} T _j = +7°C	13.12 kW	12.21 kW
COP T _j = +7°C	4.97	3.44
P _{dh} T _j = 12°C	13.30 kW	12.79 kW
COP T _j = 12°C	5.32	4.27
P _{dh} T _j = T _{biv}	13.06 kW	11.97 kW
COP T _j = T _{biv}	4.83	3.16
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	12.96 kW	11.75 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.63	2.94
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	2.21 kW
Annual energy consumption Q _{he}	4097 kWh	5040 kWh

Model alpha innotec SWC 132H1

Model name	alpha innotec SWC 132H1
Application	Heating (medium temp)
Units	Indoor
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

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.00 kW	11.75 kW
El input	2.77 kW	4.00 kW
COP	4.70	2.94

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	188 %	139 %
Prated	17.03 kW	15.77 kW
SCOP	4.89	3.67
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Pdh Tj = +7°C	13.27 kW	12.71 kW
COP Tj = +7°C	5.29	4.15
Pdh Tj = 12°C	13.37 kW	12.99 kW
COP Tj = 12°C	5.46	4.58
Pdh Tj = Tbiv	13.10 kW	12.13 kW

COP Tj = Tbiv	4.93	3.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.96 kW	11.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.63	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.07 kW	4.02 kW
Annual energy consumption Qhe	7192 kWh	8874 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	195 %	144 %
Prated	15.57 kW	14.32 kW
SCOP	5.08	3.79
Tbiv	-16 °C	-16 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.18 kW	12.32 kW
COP Tj = -7°C	5.08	3.58
Pdh Tj = +2°C	13.27 kW	12.65 kW
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Pdh Tj = +7°C	13.34 kW	12.90 kW
COP Tj = +7°C	5.42	4.44
Pdh Tj = 12°C	13.35 kW	13.09 kW
COP Tj = 12°C	5.30	4.68
Pdh Tj = Tbiv	13.12 kW	12.06 kW
COP Tj = Tbiv	4.96	3.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.96 kW	11.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.63	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W

PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.61 kW	2.57 kW
Annual energy consumption Q _{he}	7550 kWh	9305 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	191 %	140 %
Prated	15.23 kW	13.96 kW
SCOP	4.97	3.70
T _{biv}	4 °C	4 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	12.96 kW	11.75 kW
COP T _j = +2°C	4.63	2.94
P _{dh} T _j = +7°C	13.12 kW	12.21 kW
COP T _j = +7°C	4.97	3.44
P _{dh} T _j = 12°C	13.30 kW	12.79 kW
COP T _j = 12°C	5.32	4.27
P _{dh} T _j = T _{biv}	13.06 kW	11.97 kW
COP T _j = T _{biv}	4.83	3.16
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	12.96 kW	11.75 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.63	2.94
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	2.21 kW
Annual energy consumption Q _{he}	4097 kWh	5040 kWh

Model alpha innotec PWZS 132H1S

Model name	alpha innotec PWZS 132H1S
Application	Heating (medium temp)
Units	Indoor
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

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.00 kW	11.75 kW
El input	2.77 kW	4.00 kW
COP	4.70	2.94

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	188 %	139 %
Prated	17.03 kW	15.77 kW
SCOP	4.89	3.67
Tbiv	-4 °C	-4 °C
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Pdh Tj = -7°C	13.02 kW	11.93 kW
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COP Tj = +2°C	5.07	3.74
Pdh Tj = +7°C	13.27 kW	12.71 kW
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Pdh Tj = 12°C	13.37 kW	12.99 kW
COP Tj = 12°C	5.46	4.58
Pdh Tj = Tbiv	13.10 kW	12.13 kW

COP Tj = Tbiv	4.93	3.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.96 kW	11.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.63	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.07 kW	4.02 kW
Annual energy consumption Qhe	7192 kWh	8874 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	195 %	144 %
Prated	15.57 kW	14.32 kW
SCOP	5.08	3.79
Tbiv	-16 °C	-16 °C
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Pdh Tj = -7°C	13.18 kW	12.32 kW
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Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W

PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.61 kW	2.57 kW
Annual energy consumption Q _{he}	7550 kWh	9305 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	191 %	140 %
Prated	15.23 kW	13.96 kW
SCOP	4.97	3.70
T _{biv}	4 °C	4 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	12.96 kW	11.75 kW
COP T _j = +2°C	4.63	2.94
P _{dh} T _j = +7°C	13.12 kW	12.21 kW
COP T _j = +7°C	4.97	3.44
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P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	12.96 kW	11.75 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.63	2.94
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	2.21 kW
Annual energy consumption Q _{he}	4097 kWh	5040 kWh

Model alpha innotec PWZS 132H2S

Model name	alpha innotec PWZS 132H2S
Application	Heating (medium temp)
Units	Indoor
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

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.00 kW	11.75 kW
El input	2.77 kW	4.00 kW
COP	4.70	2.94

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
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Prated	17.03 kW	15.77 kW
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Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.07 kW	4.02 kW
Annual energy consumption Qhe	7192 kWh	8874 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	195 %	144 %
Prated	15.57 kW	14.32 kW
SCOP	5.08	3.79
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.61 kW	2.57 kW
Annual energy consumption Q _{he}	7550 kWh	9305 kWh

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	Low temperature	Medium temperature
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