Subtype SW 142 3~

Certificate Holder	ait-deutschland GmbH
Address	Industriestr. 3
ZIP	95359
City	Kasendorf
Country	DE
Certification Body	BRE Global Limited
Subtype title	SW 142 3~
Registration number	041-K001-06
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.38 kg
Certification Date	12.05.2017
Testing basis	Transitional Rules

Model alpha innotec SW 142H3	
Model name	alpha innotec SW 142H3
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	3x400V 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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.76 kW
El input	2.66 kW	4.00 kW
COP	5.08	2.94

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	214 %	141 %
Prated	15.03 kW	13.55 kW
SCOP	5.55	3.72
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.30 kW	11.98 kW
COP Tj = -7°C	5.26	3.16
Pdh Tj = +2°C	13.44 kW	12.46 kW
COP Tj = +2°C	5.61	3.72
Pdh Tj = +7°C	13.58 kW	12.75 kW
COP Tj = +7°C	5.95	4.14
Pdh Tj = 12°C	13.72 kW	13.05 kW
COP Tj = 12°C	6.23	4.58
Pdh Tj = Tbiv	13.30 kW	11.98 kW
COP Tj = Tbiv	5.26	3.16

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	11.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	70 °C	70 °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	1.81 kW	1.78 kW
Annual energy consumption Qhe	5596 kWh	7530 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	222 %	145 %
Prated	14.92 kW	13.43 kW
SCOP	5.74	3.82
Tbiv	-18 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.47 kW	12.36 kW
COP Tj = -7°C	5.68	3.59
Pdh Tj = +2°C	13.59 kW	12.69 kW
COP Tj = +2°C	5.98	4.05
Pdh Tj = +7°C	13.68 kW	12.96 kW
COP Tj = +7°C	6.19	4.47
Pdh Tj = 12°C	13.70 kW	13.15 kW
COP Tj = 12°C	6.05	4.71
Pdh Tj = Tbiv	13.35 kW	12.02 kW
COP Tj = Tbiv	5.39	3.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	11.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	70 °C	70 °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	1.70 kW	1.66 kW
Annual energy consumption Qhe	6405 kWh	8673 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	216 %	141 %
Prated	15.57 kW	14.03 kW
SCOP	5.59	3.74
Tbiv	4 °C	4 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	13.42 kW	11.76 kW
COP Tj = +2°C	5.09	2.94
Pdh Tj = +7°C	13.63 kW	12.26 kW
COP Tj = +7°C	5.56	3.47
Pdh Tj = 12°C	13.34 kW	12.86 kW
COP Tj = 12°C	6.08	4.31
Pdh Tj = Tbiv	13.23 kW	12.03 kW
COP Tj = Tbiv	5.37	3.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	11.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	70 °C	70 °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	2.34 kW	2.27 kW
Annual energy consumption Qhe	3719 kWh	5018 kWh

Model alpha innotec SWC 142(H)(K)3		
Model name	alpha innotec SWC 142(H)(K)3	
Application	Heating (low 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	3x400V 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	

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	13.50 kW	
El input	2.66 kW	
COP	5.08	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	214 %	
Prated	15.03 kW	
SCOP	5.55	
Tbiv	-7 °C	
TOL	-22 °C	
Pdh Tj = -7°C	13.30 kW	
COP Tj = -7°C	5.26	
Pdh Tj = +2°C	13.44 kW	
COP Tj = +2°C	5.61	
Pdh Tj = +7°C	13.58 kW	
COP Tj = +7°C	5.95	
Pdh Tj = 12°C	13.72 kW	
COP Tj = 12°C	6.23	
Pdh Tj = Tbiv	13.30 kW	
COP Tj = Tbiv	5.26	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
WTOL	70 °C
Poff	15 W
PTO	15 W
PSB	15 W
PCK	0 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.81 kW
Annual energy consumption Qhe	5596 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	222 %	
Prated	14.92 kW	
SCOP	5.74	
Tbiv	-18 °C	
TOL	-22 °C	
Pdh Tj = -7°C	13.47 kW	
COP Tj = -7°C	5.68	
Pdh Tj = +2°C	13.59 kW	
COP Tj = +2°C	5.98	
Pdh Tj = +7°C	13.68 kW	
COP Tj = +7°C	6.19	
Pdh Tj = 12°C	13.70 kW	
COP Tj = 12°C	6.05	
Pdh Tj = Tbiv	13.35 kW	
COP Tj = Tbiv	5.39	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	
WTOL	70 °C	
Poff	15 W	
PTO	15 W	
PSB	15 W	

PCK	0 W	
Supplementary Heater: Type of energy input	Electricity	
Supplementary Heater: PSUP	1.70 kW	
Annual energy consumption Qhe	6405 kWh	

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	216 %	
Prated	15.57 kW	
SCOP	5.59	
Tbiv	4 °C	
TOL	-22 °C	
Pdh Tj = +2°C	13.42 kW	
COP Tj = +2°C	5.09	
Pdh Tj = +7°C	13.63 kW	
COP Tj = +7°C	5.56	
Pdh Tj = 12°C	13.34 kW	
COP Tj = 12°C	6.08	
Pdh Tj = Tbiv	13.23 kW	
COP Tj = Tbiv	5.37	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	
WTOL	70 °C	
Poff	15 W	
PTO	15 W	
PSB	15 W	
PCK	0 W	
Supplementary Heater: Type of energy input	Electricity	
Supplementary Heater: PSUP	2.34 kW	
Annual energy consumption Qhe	3719 kWh	

Model NOVELAN SI 14.2H3	
Model name	NOVELAN SI 14.2H3
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	3x400V 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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.76 kW
El input	2.66 kW	4.00 kW
COP	5.08	2.94

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	214 %	141 %
Prated	15.03 kW	13.55 kW
SCOP	5.55	3.72
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.30 kW	11.98 kW
COP Tj = -7°C	5.26	3.16
Pdh Tj = +2°C	13.44 kW	12.46 kW
COP Tj = +2°C	5.61	3.72
Pdh Tj = +7°C	13.58 kW	12.75 kW
COP Tj = +7°C	5.95	4.14
Pdh Tj = 12°C	13.72 kW	13.05 kW
COP Tj = 12°C	6.23	4.58
Pdh Tj = Tbiv	13.30 kW	11.98 kW
COP Tj = Tbiv	5.26	3.16

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	11.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	70 °C	70 °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	1.81 kW	1.78 kW
Annual energy consumption Qhe	5596 kWh	7530 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	222 %	145 %
Prated	14.92 kW	13.43 kW
SCOP	5.74	3.82
Tbiv	-18 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.47 kW	12.36 kW
COP Tj = -7°C	5.68	3.59
Pdh Tj = +2°C	13.59 kW	12.69 kW
COP Tj = +2°C	5.98	4.05
Pdh Tj = +7°C	13.68 kW	12.96 kW
COP Tj = +7°C	6.19	4.47
Pdh Tj = 12°C	13.70 kW	13.15 kW
COP Tj = 12°C	6.05	4.71
Pdh Tj = Tbiv	13.35 kW	12.02 kW
COP Tj = Tbiv	5.39	3.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	11.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	70 °C	70 °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	1.70 kW	1.66 kW
Annual energy consumption Qhe	6405 kWh	8673 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	216 %	141 %
Prated	15.57 kW	14.03 kW
SCOP	5.59	3.74
Tbiv	4 °C	4 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	13.42 kW	11.76 kW
COP Tj = +2°C	5.09	2.94
Pdh Tj = +7°C	13.63 kW	12.26 kW
COP Tj = +7°C	5.56	3.47
Pdh Tj = 12°C	13.34 kW	12.86 kW
COP Tj = 12°C	6.08	4.31
Pdh Tj = Tbiv	13.23 kW	12.03 kW
COP Tj = Tbiv	5.37	3.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	11.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	2.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	70 °C	70 °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	2.34 kW	2.27 kW
Annual energy consumption Qhe	3719 kWh	5018 kWh

Model NOVELAN SIC 14.2H3		
Model name	NOVELAN SIC 14.2H3	
Application	Heating (low 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	3x400V 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	

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	13.50 kW	
El input	2.66 kW	
COP	5.08	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	214 %	
Prated	15.03 kW	
SCOP	5.55	
Tbiv	-7 °C	
TOL	-22 °C	
Pdh Tj = -7°C	13.30 kW	
COP Tj = -7°C	5.26	
Pdh Tj = +2°C	13.44 kW	
COP Tj = +2°C	5.61	
Pdh Tj = +7°C	13.58 kW	
COP Tj = +7°C	5.95	
Pdh Tj = 12°C	13.72 kW	
COP Tj = 12°C	6.23	
Pdh Tj = Tbiv	13.30 kW	
COP Tj = Tbiv	5.26	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
WTOL	70 °C
Poff	15 W
PTO	15 W
PSB	15 W
PCK	0 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.81 kW
Annual energy consumption Qhe	5596 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	222 %	
Prated	14.92 kW	
SCOP	5.74	
Tbiv	-18 °C	
TOL	-22 °C	
Pdh Tj = -7°C	13.47 kW	
COP Tj = -7°C	5.68	
Pdh Tj = +2°C	13.59 kW	
COP Tj = +2°C	5.98	
Pdh Tj = +7°C	13.68 kW	
COP Tj = +7°C	6.19	
Pdh Tj = 12°C	13.70 kW	
COP Tj = 12°C	6.05	
Pdh Tj = Tbiv	13.35 kW	
COP Tj = Tbiv	5.39	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	
WTOL	70 °C	
Poff	15 W	
PTO	15 W	
PSB	15 W	

PCK	0 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6405 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	216 %	
Prated	15.57 kW	
SCOP	5.59	
Tbiv	4 °C	
TOL	-22 °C	
Pdh Tj = +2°C	13.42 kW	
COP Tj = +2°C	5.09	
Pdh Tj = +7°C	13.63 kW	
COP Tj = +7°C	5.56	
Pdh Tj = 12°C	13.34 kW	
COP Tj = 12°C	6.08	
Pdh Tj = Tbiv	13.23 kW	
COP Tj = Tbiv	5.37	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.23 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.09	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	
WTOL	70 °C	
Poff	15 W	
PTO	15 W	
PSB	15 W	
PCK	0 W	
Supplementary Heater: Type of energy input	Electricity	
Supplementary Heater: PSUP	2.34 kW	
Annual energy consumption Qhe	3719 kWh	