Subtype WZSV 42

Certificate Holder	ait-deutschland GmbH
Address	Industriestr. 3
ZIP	95359
City	Kasendorf
Country	DE
Certification Body	BRE Global Limited
Subtype title	WZSV 42
Registration number	041-K001-50
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	0.9 kg
Certification Date	21.06.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09
Testing laboratory	Universität Stuttgart, Prüfstelle HLK am Institut für Gebäudeenergetik, Thermotechnik und Energiespeicherung (IGTE), DE

Model alpha innotec - WZSV 42K3M	
Model name	alpha innotec - WZSV 42K3M
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	Yes

Brine/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	3.86 kW	3.51 kW
El input	0.89 kW	1.25 kW
COP	4.34	2.81

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	192 %	135 %
Prated	3.90 kW	4.20 kW
SCOP	5.01	3.56
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.46 kW	3.58 kW
COP Tj = -7°C	4.44	3.04
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.07 kW	2.18 kW
COP Tj = +2°C	5.18	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.42 kW	1.48 kW
COP Tj = +7°C	5.59	3.98

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	1.42 kW	1.36 kW
COP Tj = 12°C	5.85	4.72
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	3.86 kW	3.58 kW
COP Tj = Tbiv	4.34	3.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.86 kW	3.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.34	2.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	44 W	44 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	1610 kWh	2436 kWh

Model alpha innotec - WZSV 42K3MC	
Model name	alpha innotec - WZSV 42K3MC
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	Yes

Brine/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	3.86 kW	3.51 kW
El input	0.89 kW	1.25 kW
COP	4.34	2.81

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	192 %	135 %
Prated	3.90 kW	4.20 kW
SCOP	5.01	3.56
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.46 kW	3.58 kW
COP Tj = -7°C	4.44	3.04
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.07 kW	2.18 kW
COP Tj = +2°C	5.18	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.42 kW	1.48 kW
COP Tj = +7°C	5.59	3.98

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	1.42 kW	1.36 kW
COP Tj = 12°C	5.85	4.72
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	3.86 kW	3.58 kW
COP Tj = Tbiv	4.34	3.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.86 kW	3.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.34	2.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	44 W	44 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	1610 kWh	2436 kWh

Model NOVELAN - WSV 4.2K3M

Model name	NOVELAN - WSV 4.2K3M
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	Yes

Brine/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	3.86 kW	3.51 kW
El input	0.89 kW	1.25 kW
COP	4.34	2.81

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	192 %	135 %
Prated	3.90 kW	4.20 kW
SCOP	5.01	3.56
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.46 kW	3.58 kW
COP Tj = -7°C	4.44	3.04
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.07 kW	2.18 kW
COP Tj = +2°C	5.18	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.42 kW	1.48 kW
COP Tj = +7°C	5.59	3.98

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	1.42 kW	1.36 kW
COP Tj = 12°C	5.85	4.72
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	3.86 kW	3.58 kW
COP Tj = Tbiv	4.34	3.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.86 kW	3.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.34	2.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	44 W	44 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	1610 kWh	2436 kWh