

## Subtype S1X56-18

Certificate Holder	Nibe AB
Address	Box 14
ZIP	S-28521
City	Markaryd
Country	SE
Certification Body	RISE CERT
Subtype title	S1X56-18
Registration number	012-C700188
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R454B
Mass of Refrigerant	1.75 kg
Certification Date	04.09.2023
Testing basis	EN 14511:2022, EN 16147:2017, EN 14825:2022, EN 12102:2017.
Testing laboratory	RISE Research Institutes of Sweden

## Model S1156-18

Model name	S1156-18
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	No

## 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	6.80 kW	5.77 kW
El input	1.33 kW	1.93 kW
COP	5.10	3.00

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	230 %	169 %
Prated	15.10 kW	15.10 kW
SCOP	5.94	4.42
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.37 kW	13.67 kW
COP Tj = -7°C	4.89	3.37
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.22 kW	8.28 kW
COP Tj = +2°C	5.93	4.36
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	5.32 kW	5.35 kW
COP Tj = +7°C	6.73	5.21

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	3.53 kW	3.46 kW
COP Tj = 12°C	6.98	5.66
Cdh Tj = +12 °C	1.000	0.990
Pdh Tj = Tbiv	15.13 kW	15.23 kW
COP Tj = Tbiv	4.64	3.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.13 kW	15.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.64	3.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	65 °C	65 °C
Poff	4 W	4 W
PTO	0 W	5 W
PSB	9 W	9 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5252 kWh	7064 kWh

#### Water/Water

#### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.32 kW	8.40 kW
El input	1.30 kW	2.08 kW
COP	7.18	4.04

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	329 %	228 %
Prated	19.50 kW	19.50 kW
SCOP	8.43	5.89
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.42 kW	17.29 kW
COP Tj = -7°C	6.15	4.04
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	10.68 kW	10.64 kW
COP Tj = +2°C	8.60	5.79
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	6.90 kW	6.86 kW
COP Tj = +7°C	10.22	7.56
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	4.99 kW	4.62 kW

COP Tj = 12 °C	9.78	8.01
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	19.83 kW	19.96 kW
COP Tj = Tbiv	5.62	3.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	19.83 kW	19.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.62	3.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	65 °C	65 °C
Poff	4 W	4 W
PTO	20 W	25 W
PSB	9 W	9 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4781 kWh	6836 kWh

## Model S1256-18 Cu/R/E

Model name	S1256-18 Cu/R/E
Application	Heating + DHW + 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	No

## Brine/Water

### EN 16147 | Average Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	125 %
COP	3.01
Heating up time	1:15 h:min
Standby power input	40.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	235 l

### 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	6.80 kW	5.77 kW
El input	1.33 kW	1.93 kW
COP	5.10	3.00

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	230 %	169 %
Prated	15.10 kW	15.10 kW
SCOP	5.94	4.42

Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.37 kW	13.67 kW
COP Tj = -7°C	4.89	3.37
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WTOL	65 °C	65 °C
Poff	4 W	4 W
PTO	0 W	5 W
PSB	9 W	9 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5252 kWh	7064 kWh

#### Water/Water

#### EN 16147 | Average Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	144 %
COP	3.48
Heating up time	1:15 h:min
Standby power input	34.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	235 l

#### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.32 kW	8.40 kW
El input	1.30 kW	2.08 kW

COP	7.18	4.04
EN 14825   Average Climate		
	Low temperature	Medium temperature
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