

## Subtype F2050-16

Certificate Holder	Nibe AB
Address	Box 14
ZIP	S-28521
City	Markaryd
Country	SE
Certification Body	RISE CERT
Subtype title	F2050-16
Registration number	012-C700252
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.9 kg
Certification Date	11.03.2024
Testing basis	EN 14511:2022, EN 14825:2022, EN 12102:2022
Testing laboratory	RISE Research Institutes of Sweden

## Model F2050-16

Model name	F2050-16
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	1x230V 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	14.00 kW	14.50 kW
El input	3.11 kW	5.37 kW
COP	4.50	2.70

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	dB(A)	63 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	180 %	134 %
Prated	11.50 kW	11.50 kW
SCOP	4.58	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.44 kW	10.50 kW
COP Tj = -7°C	2.90	2.06
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.69 kW	6.32 kW
COP Tj = +2°C	4.29	3.18
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.23 kW	4.11 kW

COP Tj = +7°C	6.37	4.83
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	4.64 kW	4.63 kW
COP Tj = 12°C	8.82	7.42
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	10.44 kW	10.50 kW
COP Tj = Tbiv	2.90	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.70 kW	9.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	28 W	28 W
PTO	31 W	31 W
PSB	31 W	31 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.80 kW	2.12 kW
Annual energy consumption Qhe	5182 kWh	6950 kWh