

Subtype F2050-12

Certificate Holder	Nibe AB
Address	Box 14
ZIP	S-28521
City	Markaryd
Country	SE
Certification Body	RISE CERT
Subtype title	F2050-12
Registration number	012-C700251
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2 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 F2050-12**

Model name	F2050-12
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	10.00 kW	9.00 kW
El input	2.33 kW	3.05 kW
COP	4.30	2.95

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	dB(A)	60 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	192 %	137 %
Prated	7.50 kW	7.80 kW
SCOP	4.87	3.49
Tbiv	-8 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.63 kW	6.92 kW
COP Tj = -7°C	2.85	2.00
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.24 kW	4.38 kW
COP Tj = +2°C	4.85	3.45
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	3.47 kW	3.28 kW

COP Tj = +7°C	6.95	4.85
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	4.05 kW	3.96 kW
COP Tj = 12°C	8.10	6.90
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	6.96 kW	6.92 kW
COP Tj = Tbiv	2.50	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.94 kW	5.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.00	1.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	1.56 kW	2.36 kW
Annual energy consumption Qhe	3183 kWh	4613 kWh