

NORD

HTechnology

EcoHeat brochure

We have the solution

Best in PV usage with HEAT PUMP technology





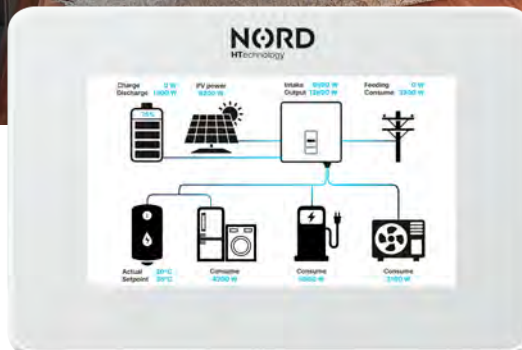
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Best in PV usage with HEAT PUMP technology

- ◀ A monoblock EcoHeat pump from NORD with a Panasonic compressor is used to obtain thermal energy from the environment and transfer it to the building for room heating or for the production of domestic hot water.



- ◀ In order to ensure that all components from photovoltaics to heating system cooperate together, bring maximum benefit and whole system reaches its potential, NORD introduces to you EcoControl, which is necessary to control and distribute the energy in your system efficiently. Explore more on www.nord-solution.com.

The NORD project

NORD HT AS is an association of engineering companies and renowned prestigious universities from the EU. Company's (NORD's/The) first projects started already in 2014 with the support of financial resources from Norwegian funds.

Main vision of NORD HT AS is to connect sectors of renewable resources, home heating, domestic hot water heating and electromobility for residential and small industrial applications.

Intelligent design enables maximum utilization of available green energy. As result of that, savings are maximized and return of the investment is shortened.



Eco-Mode operation

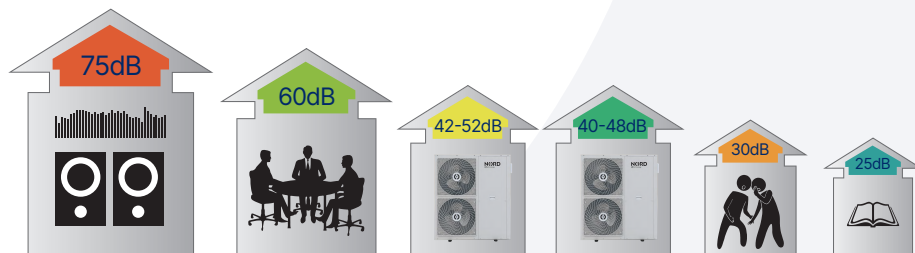
With the unique functionality you can use pv-energy surplus with your heat pump as much you have available. Use the full capability of the system with EcoControl and EcoMaster devices and maximize your savings now!



NORD
We have the solution

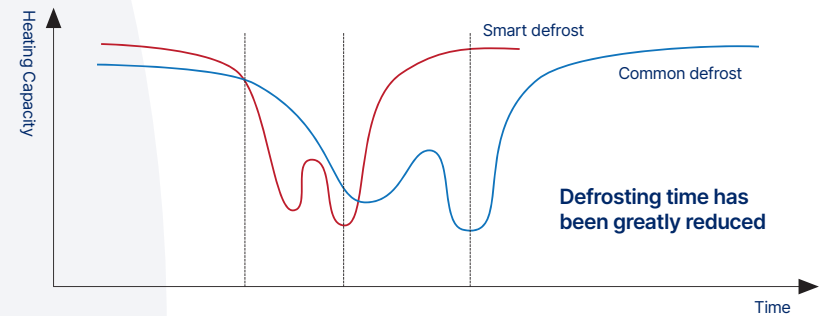
Noise Control

NORD EcoHeat achieves a lower noise level than normal office conversation thanks to specially designed components.



Smart defrost technology

Winter heating worry-free. NORD EcoHeat thanks to the intelligent defrost function, it can defrost yourself within 3~5 minutes.



Smart Grid Ready

Smart grid ready certifies, that NORD EcoHeat pump can work smartly according to a defined interface for load management with third party systems.



EcoHeat including Panasonic compressor EVI

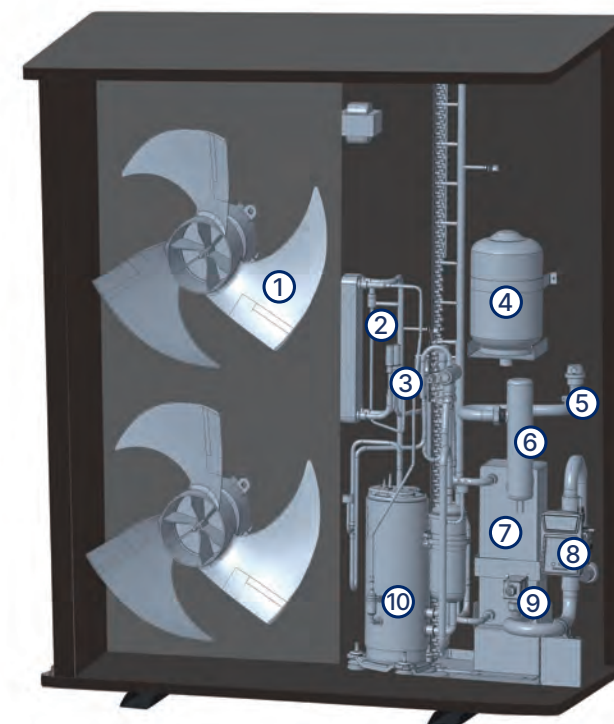
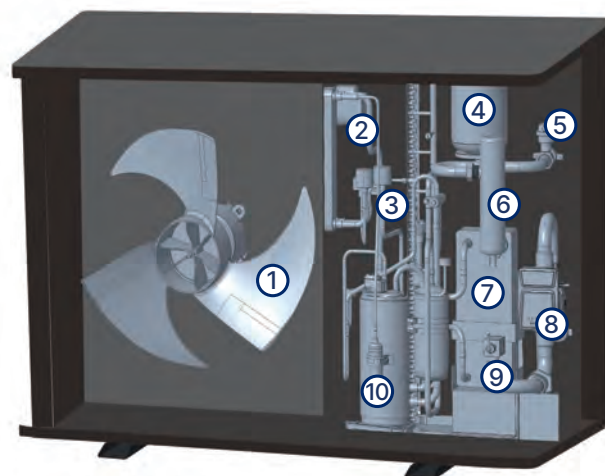
Panasonic

Panasonic compressor used in NORD heat pumps ensures high efficiency and reliability, thanks to which the device is characterized by low electricity consumption and high efficiency of heat generation.

The device consists of one housing in which all components are installed, including a Panasonic compressor, evaporator injection, condenser, two exchangers, expansion valve and electronic control system. This makes the monoblock design very compact and easy to install.

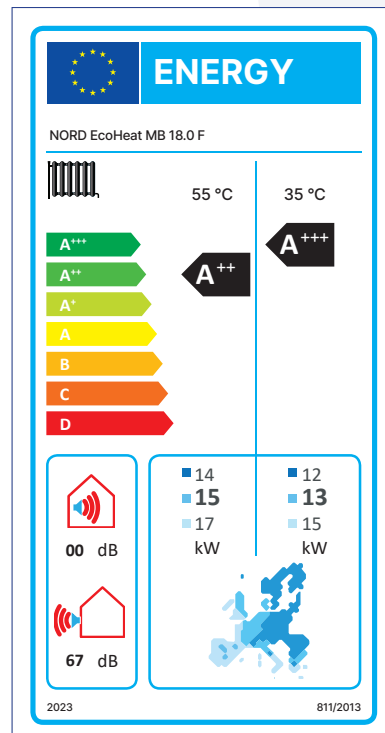
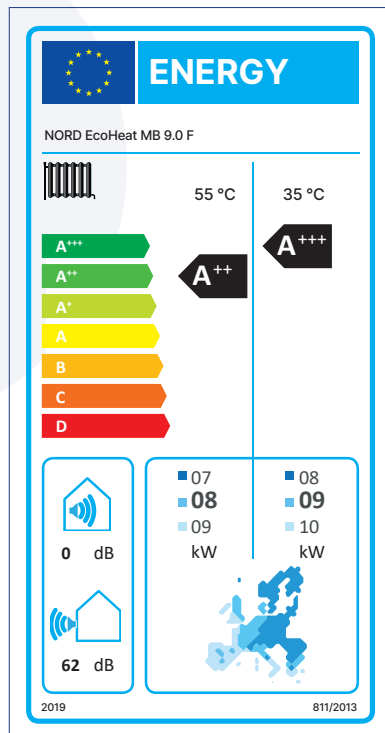
EASY INSTALLATION AND MAINTENANCE ALL-IN-ONE CONCEPT

- ① Fan
- ② 2-way valve
- ③ Electrical expansion valve
- ④ Expansion vessel
- ⑤ Exhaust valve
- ⑥ Electrical Heater
- ⑦ Plate heat Exchanger
- ⑧ DC Water pump
- ⑨ Water flow switch
- ⑩ DC Inverter EVI Compressor

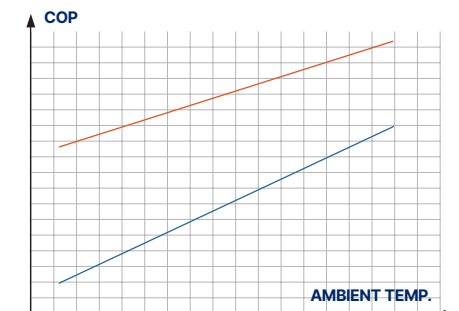
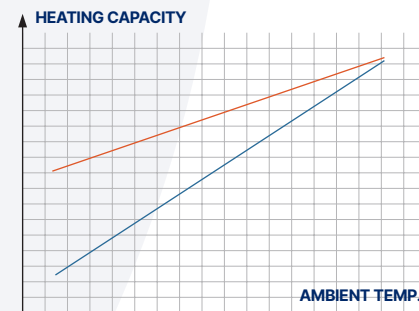
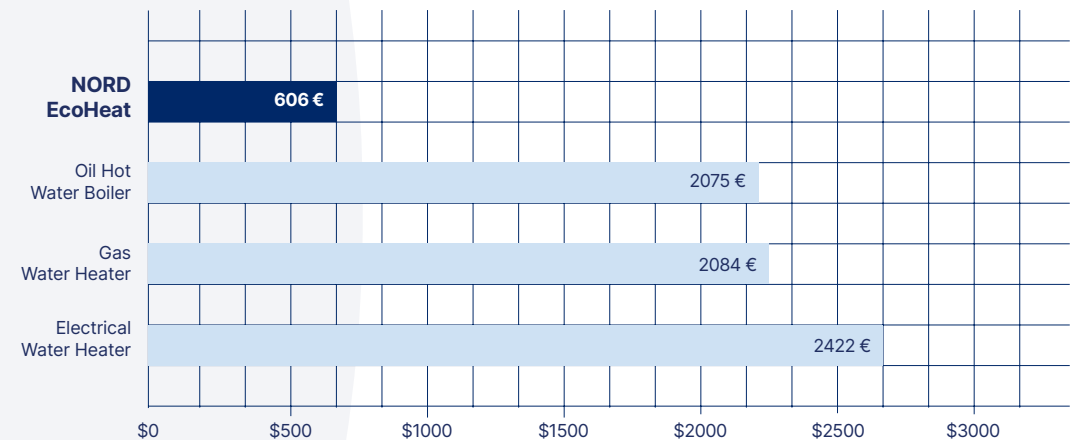


A+++ energy

Save your energy with NORD EcoHeat. The highest energy efficiency level can reach the EU Energy Efficiency A+++, which ensures that users can get a better experience at a lower cost.



COST COMPARISON UNDER 15°C ~ 55°C



— NORD EcoHeat inverter
— Traditional inverter

— NORD EcoHeat inverter
— Traditional inverter

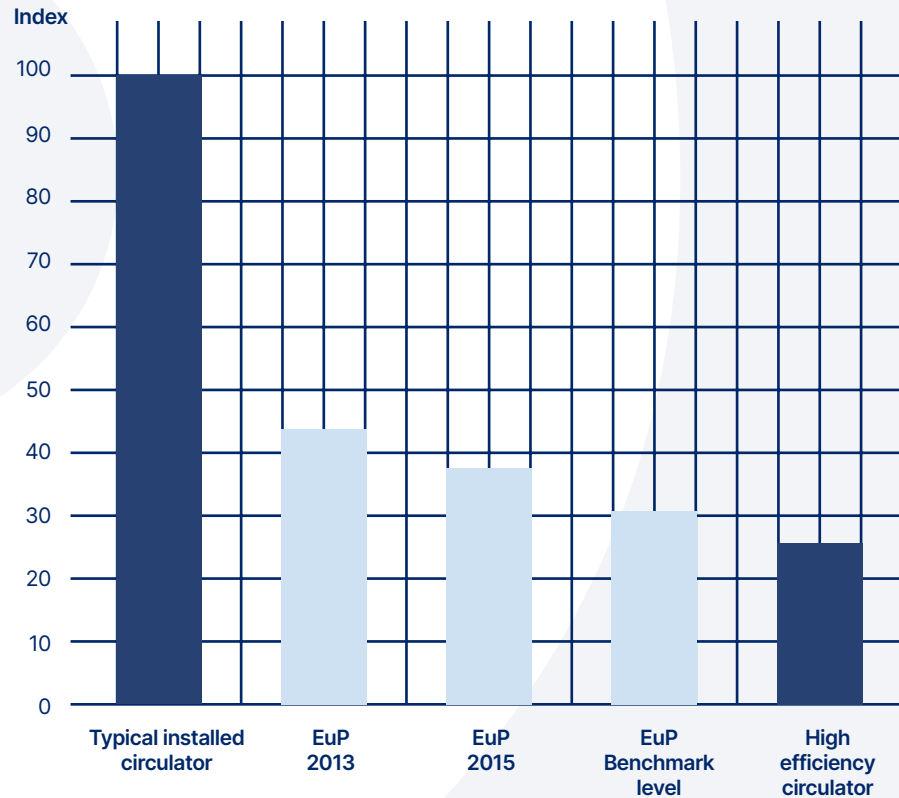
Seven protections of silence

NORD EcoHeat achieves a lower noise level than normal office conversation thanks to specially designed components.



High efficiency pump

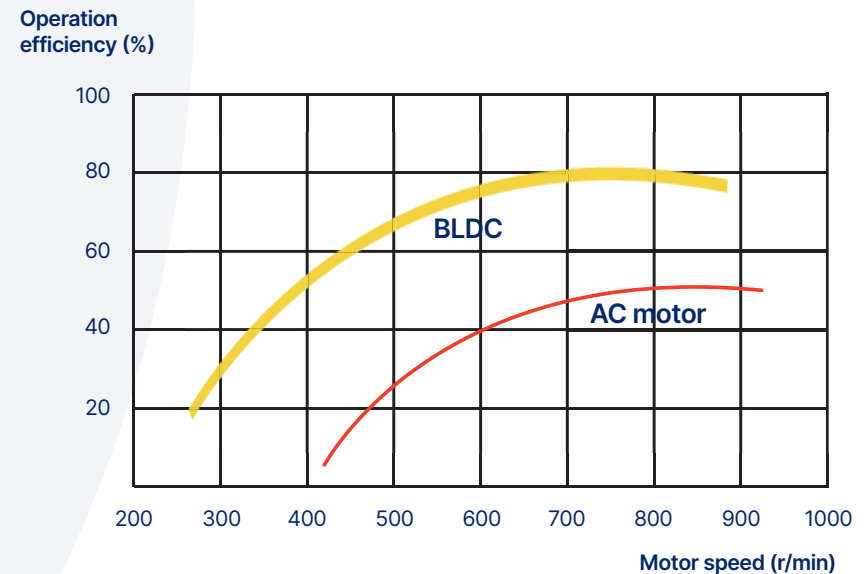
High efficiency ensures reduction of electricity consumption by 85% ~ 90%. depending on how much you pay per kilowatt hour, electricity savings can translate to 12-20 EUR per month during the heating season.



BLDC motor fan

The rotor is made of permanent magnets and the stator of high density pure copper coils are concentrated and wound together to keep low noise and efficient operation.

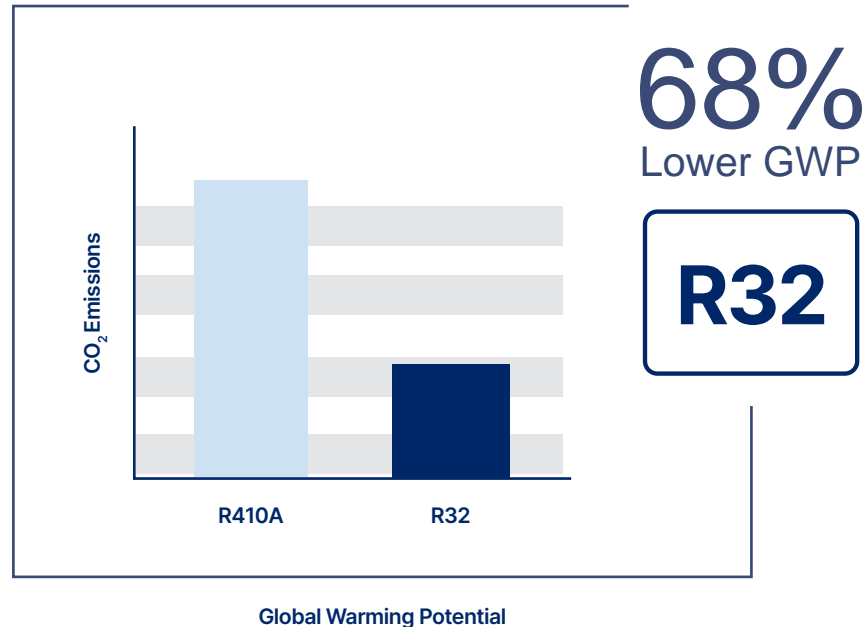
Stepless adjustment can be carried out according to the changes of system operation. The system operates efficiently under different loads, with the system efficiency up to 85%.



We save the environment

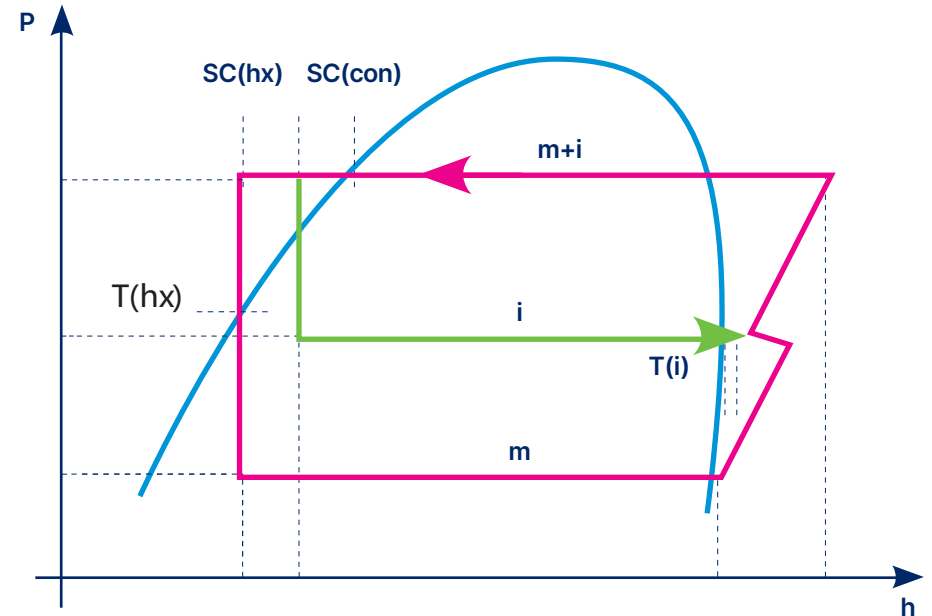
Optimization of auto consumption of electricity from a photovoltaic installation at home allows for a significant reduction in electricity costs and carbon dioxide emissions, which has a positive impact on the natural environment.

In addition, it allows home users to be energy independent and to have more control over their home's energy consumption.



DC inverter EVI technology

DC Inverter EVI Technology can effectively reduce power consumption and improve the heating capacity of heat pump units to ensure stable performance even at ambient temperatures as low as -25°C.



Technical data

NORD EcoHeat MB	5.0 F	7.0 F	9.0 F	12.0 F	16.0 F	18.0 F	22.0 F
ErP Level (35 °C)	A+++	A+++	A+++	A+++	A+++	A+++	A+++
ErP Level (55 °C)	A++	A++	A++	A++	A++	A++	A++

A7W35 - HEATING

Capacity Range (kW)	3.00-6.00	3.00-9.00	4.00-12.50	8.00-17.50	8.00-17.50	8.60-24.00	8.60-24.00
Rated Capacity (kW)	5.0	7.0	9.0	12.5	16	18.0	22
Input Power Range (kW)	0.60-1.54	0.60-2.15	0.95-3.25	1.75-4.22	1.75-4.22	1.80-5.95	1.80-5.95

A35W7 - COOLING

Capacity Range (kW)	2.00-5.00	2.00-7.00	3.20-7.70	5.40-14.00	5.40-14.00	5.70-15.50	5.70-15.50
Rated Capacity (kW)	3.5	5.0	6.4	9.7	12.0	12.4	14.0
Input Power Range (kW)	0.7-2.15	1.05-2.65	1.05-3.50	2.03-6.01	2.03-6.01	1.80-7.00	1.80-7.50

A20W15-55 - DWH

Capacity Range (kW)	2.60-8.00	2.60-9.00	4.20-10.13	9.00-15.00	9.00-15.00	9.50-27.00	9.50-27.00
Rated Capacity (kW)	7.0	8.5	10.2	15.0	15.0	23.0	27.0
Input Power Range (kW)	0.52-1.85	0.87-2.35	0.87-2.38	1.92-3.56	1.92-3.56	1.97-7.20	2.37-7.25

POWER SUPPLY

Power Supply (V / Phases / Hz)	220/1/50	220/1/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Max. Input Power (kW)	2.2	3	4	5.5	6.5	8	9
Max. Input Current (A)	10	13.5	6.4	8	9.5	12	13.5

NOISE LEVEL

Sound Pressure [dB(A)]	≤44	≤46	≤50	≤50	≤53	≤57	≤57
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REFRIGERANT	5.0 F	7.0 F	9.0 F	12.0 F	16.0 F	18.0 F	22.0 F
Type / GWP	R32/675	R32/675	R32/675	R32/675	R32/675	R32/675	R32/675
Charged Volume (kg)	2.2	2.2	2.2	2.15	2.2	2.8	2.8

OPERATION RANGE

Ambient Temperature (°C)	-25 ~ +43	-25 ~ +43	-25 ~ +43	-25 ~ +43	-25 ~ +43	-25 ~ +43	-25 ~ +43
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COMPRESSOR

Type	Twin rotary DC compressor Heat Pump						
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PUMP

Type	Inverter						
Pump Head (m)	8						

HYDRAULIC

Rated Water Flow Rate (m³/hr)	0.90	1.2	1.5	2	2.75	3	3.8
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PIPING CONNECTIONS

Piping Connections Inlet	DN25						
Piping Connections Outlet	DN25						

PACKING

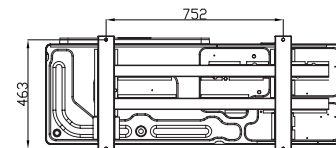
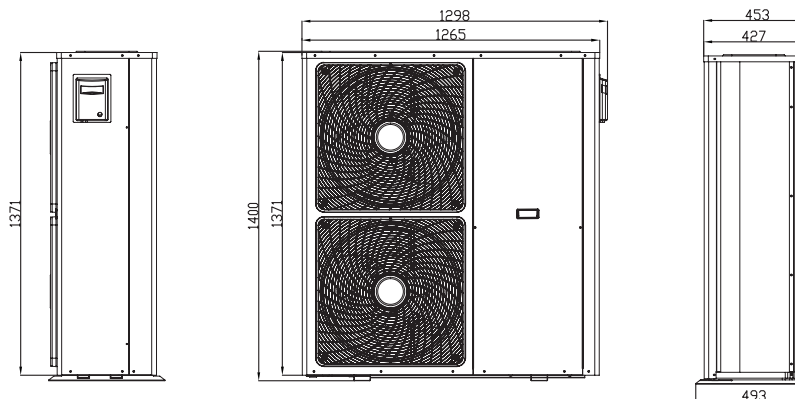
Dimensions L x W x H (mm)	1298×493×891		1298×493×891			1298×493×1400	
Packing Dimensions L x W x H (mm)	1340×523×1015		1340×523×1015			1340×523×1524	
Net Weight (kg)	100	100	115	115	115	125	125
Gross Weight (kg)	115	115	130	130	130	145	145



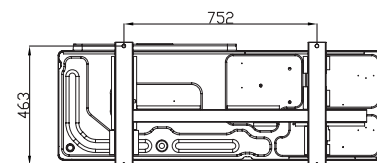
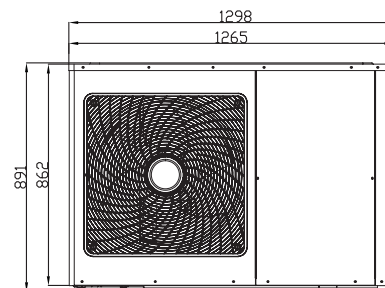
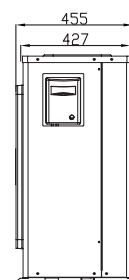
Dimensions



NORD EcoHeat MB 18.0 F | 22.0 F



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www.nord-solution.com

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