

ES AWH air-to-water heat pumps

AWH 19 & 20 V5+

Economic and effective air-to-water heat pump for Nordic climate

- Inverter controlled compressor enables direct docking to heating systems with district heating or other heating sources.
- Possible to connect to all types of heating systems.
- Modular system with possibility to connect up to 7 units with a total power of 140 kW
For more information see www.esnordflex.se/eng
- Suitable for larger villas, residential buildings, offices and warehouses.
- Automatic restart in case of a power failure.
- Heat pump operates in conditions down to -25°C .
- Reasonable price and short pay back time.
- Nano-coated evaporator.
- Dockable solution, developed for hybrid energy solutions.



ES AWH air-to-water heat pumps

AWH 19 & 20 V5+

The heat pump converts energy from the outdoor air to heat and domestic hot water for your warehouse, residential, office or industrial building as well as for your home.

By converting the energy from the outdoor air you lower your energy costs in an environmental friendly way at the same time you create the perfect indoor climate. AWH V5+ series are developed to replace or complete an existing heat source and for new production.

AWH V5+ series is developed to give biggest possible energy saving and quiet operation.

Components from leading manufacturers and smart control enables big energy savings and quiet operation. Both AWH 19 and AWH 20 V5+ is labeled A++.

Developed for Nordic climate

A split system means that the heat exchange is made indoors and that only the refrigerant circulates outdoor. This is an effective and safe solution for cold climates.

Top quality defrost- nano-coated outdoor evaporator unit.

Large volumes of air circulates the out-door and energy is collected from this air. This results in ice forming on the outdoor unit's heat exchanger, The ES defrost programme has been designed to melt the ice only when necessary and only for the necessary period of time. The surface of the outdoor unit's heat exchanger is coated with nano particles to prevent ice formation and increase effectiveness.

Complete heat control

Connected to the ES NordFlex controls the heat pumps can either be controlled locally or remote through smart phone or laptop. On the user friendly display you can make all the necessary settings for an effective and problem free operation and at the same time control present status of your system. Even when you are not on site you get total control through smartphone or laptop. (for more information see esnordflex.se/en/)

Keep your old boiler

All correctly designed heat pump systems need back up to manage the energy needs during the coldest days of the year. AWH V5+ series enables you to keep your current

electric, oil, pellet or wood boiler. If your present system works – keep it as backup.

The heat pump consists of three parts:

- Outdoor unit, which houses the high-quality compressor from Panasonic.
- Indoor unit, which for instance houses the heat exchanger, heat pump control device and circulation pump.
- Refrigerant tubes, which connect the indoor and outdoor unit.

Under normal circumstances the heat pump capacity should be enough to provide approximately half of the necessary heat on the coldest days.

- The dockable solution means that the heat pump can be connected to the other heating device, which can deliver the heat demand alone.
- If the heat pump can deliver half of the heat demand on the coldest days, then it is usually capable of fulfilling 80–90% of the heat demand on every day of the year.

		AWH 19 kW – V5+	AWH 20 kW – V5+
Maximum heating power (1)	kW	19,8	20,2
Maximum cooling power (3)	kW	17	12,6
Maximum heating power (2)	kW	19,3	19,06
C.O.P min./max. (1)	W/W	3,12 / 4,27	4,02/4,96
Energy label		A++	A++
SCOP average climate, low temperature sys.	W	3,7	3,73
Total power consumption Min./Max.(1)	W	2260/5600	1950/4300
Total power consumption Min./Max.(2)	W	2047/6400	2460/5980
Defrost upon demand		Yes	Yes
Heating cable for defrosting		Yes	Yes
Compressor pre-heat		Yes	Yes
Electronic expansion valve		Yes	Yes
A-class circulation pump		Yes	Yes
Compressor / System / Number		Panasonic / Twin Rotary / 2	
Outdoor unit fan	Psc	2	2
	Airflow m ³ /h	4500	6000
	Powwer range W	150	150
	Power label W	150	150
Sound pressure level	Indoor/outdoor unit dB (A)	46/65	35/66
Heat exchanger	Type	Plateheatexchanger	
	Water press. drop kPa	35	
	Connection Tum	G1"	
Dimensions (LxDxH)	Outdoor unit mm	1058 x 562 x 1143	920 x 412 x 1440
	Indoor unit mm	530 x 275 x 835	530 x 275 x 835
Unit weight	Outdoor unit kg	110	100
	Indoor unit kg	39	39
Outdoor temperature operating range	Heating °C	–25–45	
	Cooling °C	0–55	
Water inlet temperature	°C	10–50	
Residual current device and overvoltage protection		Required	
Power supply, grounded	V / Hz / A	380 V / 50 Hz / 16 A	230V / 50 Hz / 16 A x 2
Refrigerant and piping dimensions		R410a / (3/8" ~ 1/2")	
Article number indoor/outdoor		120238/120237	120213 / 120214

(1) Heating condition: water inlet/outlet temperature: 30 °C/35°C, Ambient temperature : DB 7 °C /WB 6 °C

(2) Heating condition: water inlet/outlet temperature: 40°C/45°C , Ambient temperature: DB 7 °C /WB 6 °C

(3) Cooling condition : water inlet/outlet temperature: 23°C /18°C , Ambient temperature: DB35°C /WB24°C

The specifications are subject to change without prior notice. For actual specifications of unit, please refer to the stickers on the unit.

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