

ATW Series Air-to-Water Heat Pump





- Desuperheater for domestic hot water
- COP up to 4.23
- Compressor housed inside home
- Electronic TXV's
- Outdoor temperature range of -7°F (-21.7°C) to 113°F (45°C)
- Micoprocessor controlled with BACnet and wifi connections

ATW Series

The Air-to-Water (ATW) Series uses heat transfer from the outdoor air to heat water for a hydronic heating system, or cool water for air conditioning via hydronic fan coils. Available in sizes from 2 to 6 nominal tons for whole-house applications.

Hot Water for Radiant In-Floor Heating

The ATW Series produces hot water at ideal temperatures for radiant in-floor heating and hydronic fan coil heating.

Chilled Water for Cooling

This reversible heat pump chills water for air conditioning via hydronic fan coils or radiant cooling.

Desuperheater for Domestic Hot Water

Preheat your domestic hot water via the built-in desuperheater, saving up to 50% on your domestic hot water heating costs.

Features & Benefits

Indoor Unit - compact 28" x 28" footprint with premium appearance.

High Performance Outdoor Unit - for superior heating in cold temperatures & efficient cooling in hot climates. Hinge mounted door for ease of service. Raised mounting leg kits available.

Fan Unit - Outdoor unit fan is true variable speed with ECM-style hub motor, for maximum energy efficiency and minimum service.

Intelligent Defrost Logic - minimizes energy required to defrost the outdoor coil.

Outdoor Ice Channeling Design - no bottom tray & angled outdoor coil for no ice build-up.

Compressor - Copeland Ultratech® two-stage scroll, with double isolation for quiet operation; located in indoor unit for ease of cold-weather service, and better refrigerant/oil management.

Gen2 Electronic Control Board - with external two-line digital user interface. Includes automatic hot water output control based on outdoor temperature, data logging, internet and laptop USB connections, and BACnet interface.

Refrigerant Pressure Sensors - electronic high and low, displayed by user interface.

Electronic Expansion Valves (EEV's) - for precise refrigerant control.

Start Capacitor Kit & Suction Accumulator - standard equipment.

Domestic Hot Water - double walled heat exchanger and ECM bronze head circulator factory installed, an exclusive Nordic feature in the air-source market.

Performance Ratings

Complete performance ratings can be found in the ATW Series product manual.

Standard Capacity Ratings for Heating Mode (60Hz)												
	LLT 1	05°F (41	°C)		Outdoor Air 47°F (8.3°C)				Outdoor Air 17°F (-8.3°C)			
Model	Indoor Liquid Flow		Pressure Drop		Input Energy	Capacity		COPh	Input Energy	Capacity		COPh
	USGPM	L/s	PSI	kPA	Watts	Btu/hr	kW	W/W	Watts	Btu/hr	kW	W/W
25	8.0	0.50	3.0	21	1,690	22,700	6.64	3.93	1,860	14,800	4.35	2.35
45	10.0	0.63	3.8	26	2,340	33,700	9.89	4.23	2,600	22,200	6.51	2.51
55	12.0	0.76	3.4	23	3,030	43,700	12.80	4.23	3,430	28,800	8.43	2.46
65	14.0	0.88	4.7	32	3,600	51,500	15.10	4.19	4,070	33,900	9.94	2.44
75	16.0	1.00	3.8	26	4,100	59,100	17.30	4.23	4,640	38,400	11.30	2.44
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