

1. at 1

# ATF Series Air-to-Air & Water Heat Pump



- All-in-one air source forced air heating & cooling and hydronic heating
- Desuperheater for domestic hot water
- Whole home sizes up to 6 nominal tons
- Outdoor temperature range of -7°F (-22°C) to 113°F (45°C)
- COPh up to 3.91



#### **ATF Series**

Our air-to-air & water series transfers heat to and from the outdoor air to heat and cool the indoor air through a central duct system. It also offers in-floor hydronic heating with user-selectable priority. Available from 3 to 6 tons, for whole home applications.



# Features & Benefits

<b>Indoor Unit -</b> A 24" x 28" footprint with field-changeable air discharge from top to side.	<b>Hydronic Heat Coil -</b> Heavy duty coaxial type, for excellent solids tolerance and resistance to freezing. Also available in CuNi.
<b>4-Fan Outdoor Unit -</b> For more efficient heating and cooling in extreme conditions.	<b>Refrigerant Pressure Sensors -</b> Electronic high and low, displayed by user interface.
<b>Fans</b> - Indoor and outdoor unit fans are variable speed ECM motors for energy efficiency.	Electronic Expansion Valves (EEV's) - For precise refrigerant control.
Intelligent Defrost Logic - Minimizes energy required to defrost the outdoor coil.	Start Capacitor Kit - Standard equipment.
<b>Outdoor Ice Channeling Design -</b> Less ice build-up with no bottom tray and angled outdoor coil.	<b>Domestic Hot Water -</b> Double wall heat exchanger and factory installed ECM bronze head circulator.
<b>Compressor -</b> Copeland two-stage scroll with double isolation. Located in the indoor unit for service convenience, and better refrigerant/oil management.	<b>Gen2 Electronic Control Board -</b> With built-in digital user interface. Includes outdoor reset function, data logging, laptop USB connection, and BACnet interface.

## **Performance Ratings**

Standard Capacity Ratings for Air Heating Mode (60Hz)														
lı 70°F (21°C	ndoor Ai ) db / 60°F (1	<b>r</b> ∣5.6°C) wb	H12 - Out	door Air 4	7°F (8.3	°C)	H22 - Outo	door Air 3	7°C)	H32 - Outdoor Air 17°F (-8.3°C)				
Model	I Indoor Airflow		Input Energy Capacity		COPh	Input Energy	Capacity		COPh	Input Energy	Capacity		COPh	
	cfm	L/s	Watts	Btu/hr	kW	W/W	Watts	Btu/hr	kW	W/W	Watts	Btu/hr	kW	W/W
45	1200	566	2,290	30,100	8.8	3.85	2,240	25,500	7.5	3.34	2,100	19,600	5.8	2.74
55	1500	708	3,110	40,700	11.9	3.83	3,030	34,400	10.1	3.33	2,760	25,700	7.5	2.72
65	1900	897	3,955	51,800	15.2	3.84	3,810	43,200	12.7	3.32	3,560	32,800	9.6	2.70
75	2100	991	4,550	59,400	17.4	3.83	4,485	50,700	14.9	3.31	4,295	39,000	11.4	2.66

Standard Capacity Ratings for Air Cooling Mode (60Hz)													
80°F (26.	Indoor Ai 7°C) db / 67°F	r ˈ(19°C) wb	H1	2 - Outdoo	or Air 82°	F (27.8°C)		H22 - Outdoor Air 95°F (35°C)					
Model	Indoor Airflow		Input Energy	ergy Capacity		EER	COPc	Input Energy	Capacity		EER	COPc	
	cfm	L/s	Watts	Watts Btu/hr k		Btu/W-hr	W/W	Watts	Btu/hr	kW	Btu/W-hr	W/W	
45	1200	566	2,235	34,100	10.0	15.2	4.47	2,605	31,400	9.2	12.1	3.53	
55	1500	708	2,925	44,000	12.9	15.0	4.41	3,410	40,600	11.9	11.9	3.49	
65	1900	897	3,725	55,400	16.2	14.9	4.36	4,310	51,200	15.0	11.9	3.48	
75	2100	991	4,385	64,600	18.9	14.7	4.31	5,010	59,200	17.4	11.8	3.46	

## Standard Capacity Ratings for Hydronic Heating Mode (60Hz)

Indoor Air 70°F (21°C) db / 60°F (15.6°C) wb					H12 - O	utdoor Ai	r 47°F (8	.3°C)	H22 - Outdoor Air 35°F (1.7°C) H32 - Outdoor Air						17°F (-8.3°C)		
Model	el Indoor Liquid Flow		Pre: D	ssure rop	Input Energy	Capa	acity COPh		Input Energy	Capacity		COPh	Input Energy Capac		city	COPh	
	GPM	L/s	psi	kPa	Watts	Btu/hr	kW	W/W	Watts	Btu/hr	kW	W/W	Watts	Btu/hr	kW	W/W	
45	10.0	0.63	3.8	26	2,518	33,600	9.9	3.91	2,581	29,200	8.6	3.32	2,742	22,000	6.5	2.35	
55	12.0	0.76	4.1	28	3,270	43,400	12.7	3.89	3,320	37,400	11.0	3.30	3,615	28,700	8.4	2.32	
65	14.0	0.88	5.0	34	3,866	51,000	14.9	3.86	3,837	43,400	12.7	3.31	4,272	33,900	9.9	2.33	
75	16.0	1.01	4.0	36	4,417	58,600	17.2	3.88	4,527	50,200	14.7	3.25	4,893	38,400	11.2	2.30	