

Single and 2-Stage Compact Horizontal Packaged Unit

GEOTHERMAL HEAT PUMP TECHNICAL OVERVIEW



The Hydron Module Compact Horizontal Packaged System provides efficient comfort in all conditions. These versatile models are smaller than previous Hydron horizontal models, making them better suited for installations where space for mechanical equipment is limited. The narrow width easily fits between 24" trussing.

Horizontal models deliver ducted heating and cooling and can provide a portion of needed domestic hot water. The rugged, galvanized steel cabinet is designed to be installed on a flat surface, suspended above the ceiling, or a similar application. The versatile cabinet can be converted in the field for side or end discharge, with left or right return air.



Unit Performance

Ground Loop Heat Pump (See the Commercial Product Catalog for Water Loop Heat Pump AHRI performance ratings)

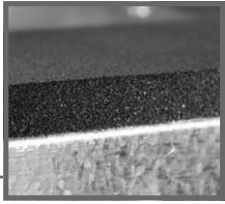
Single Stage Models		Blower	Cooling				Heating				Dimensional Data		
			Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth
ZS006	COAX (208/230V 1PH)	PSC	6,900	17.1	—	—	5,200	3.5	—	—	12"	20"	40"
	COAX (265/115V 1PH)	PSC	6,500	16.2	—	—	5,000	3.3	—	—	12"	20"	40"
ZS009	COAX (208/230V 1PH)	PSC	9,600	16.7	—	—	7,500	3.5	—	—	12"	20"	40"
	COAX (265/115V 1PH)	PSC	9,200	15.9	—	—	7,100	3.3	—	—	12"	20"	40"
ZS012	COAX (208/230V 1PH)	PSC	11,300	14.1	—	—	9,500	3.2	—	—	12"	20"	40"
		PSC	15,300	19.2	—	—	11,100	3.8	—	—			
ZS015	BPHE (208/230V 1PH)	ECM	15,200	20.3	—	—	10,900	3.9	—	—	17"	21"	40"
		PSC	14,500	17.1	—	—	11,300	3.9	—	—			
	COAX (208/230V 1PH)	ECM	14,200	17.6	—	—	11,200	3.9	—	—	17"	21"	40"
		PSC	18,300	18.6	—	—	13,400	3.7	—	—			
ZS017	BPHE (208/230V 1PH)	ECM	18,100	20.5	—	—	13,000	3.8	—	—	17"	21"	40"
		PSC	17,900	17.1	—	—	13,700	3.7	—	—			
	COAX (208/230V 1PH)	ECM	17,800	18.2	—	—	13,500	3.9	—	—	17"	21"	40"
		PSC	20,500	18.2	—	—	14,400	3.6	—	—			
ZS018	BPHE (208/230V 1PH)	ECM	20,800	20.5	—	—	14,200	3.8	—	—	19.25"	21.75"	52"
		PSC	19,400	15.5	—	—	14,800	3.5	—	—			
	COAX (208/230V 1PH)	ECM	20,100	18.7	—	—	14,100	3.7	—	—	19.25"	21.75"	52"
		PSC	25,200	18.7	—	—	18,600	3.7	—	—			
ZS024	BPHE (208/230V 1PH)	ECM	26,100	21.5	—	—	18,600	3.9	—	—	19.25"	21.75"	52"
		PSC	25,700	17.4	—	—	18,500	3.6	—	—			
	COAX (208/230V 1PH)	ECM	26,200	19.6	—	—	18,000	3.9	—	—	19.25"	21.75"	52"
		PSC	30,300	19.1	—	—	21,900	3.7	—	—			
ZS030	BPHE (208/230V 1PH)	ECM	30,700	20.7	—	—	21,500	4.0	—	—	19.25"	21.75"	52"
		PSC	29,700	17.7	—	—	22,900	3.6	—	—			
ZS030	COAX (208/230V 1PH)	ECM	29,000	18.8	—	—	21,700	3.8	—	—	19.25"	21.75"	52"
		PSC	37,600	18.1	—	—	27,800	3.7	—	—			
ZS036	BPHE (208/230V 1PH)	ECM	38,400	19.5	—	—	27,600	4.0	—	—	21.25"	21.75"	56"
		PSC	36,600	17.9	—	—	28,300	3.7	—	—			
ZS036	COAX (208/230V 1PH)	ECM	37,200	18.8	—	—	27,500	3.9	—	—	21.25"	21.75"	56"
		PSC	43,400	19.8	—	—	32,800	3.9	—	—			
ZS042	BPHE (208/230V 1PH)	ECM	44,100	21.1	—	—	32,200	4.1	—	—	21.25"	21.75"	56"
		PSC	41,100	17.9	—	—	31,700	3.7	—	—			
ZS042	COAX (208/230V 1PH)	ECM	40,700	19.2	—	—	30,200	3.8	—	—	21.25"	21.75"	56"
		PSC	48,500	17.8	—	—	38,500	3.6	—	—			
ZS048	BPHE (208/230V 1PH)	ECM	50,400	19.1	—	—	37,800	3.8	—	—	21.25"	21.75"	56"
		PSC	48,600	17.0	—	—	37,800	3.5	—	—			
ZS048	COAX (208/230V 1PH)	ECM	49,300	17.4	—	—	36,200	3.6	—	—	21.25"	21.75"	56"
ZS060	BPHE (208/230V 1PH)	PSC	60,500	17.8	—	—	49,200	3.8	—	—	21.25"	24"	61"
		ECM	60,700	19.5	—	—	48,200	4.0	—	—			
ZS060	COAX (208/230V 1PH)	PSC	57,000	16.1	—	—	48,400	3.5	—	—	21.25"	24"	61"
		ECM	57,000	17.5	—	—	46,200	3.6	—	—			
ZS072	BPHE (208/230V 1PH)	PSC	70,600	17.2	—	—	57,400	3.5	—	—	21.25"	24"	61"
		ECM	72,100	17.7	—	—	56,600	3.7	—	—			
ZS072	COAX (208/230V 1PH)	PSC	70,200	15.3	—	—	56,200	3.2	—	—	21.25"	24"	61"
		ECM	71,200	15.7	—	—	56,200	3.3	—	—			
Two Stage Models		Blower	Cooling				Heating				Dimensional Data		
			Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth
ZT024	BPHE (208/230V 1PH)	ECM	26,800	19.8	20,700	28.8	18,100	4.0	14,900	4.3	19.25"	21.75"	52"
	COAX (208/230V 1PH)	ECM	26,400	18.3	20,000	25.0	18,300	3.9	14,500	4.1	19.25"	21.75"	52"
ZT030	BPHE (208/230V 1PH)	ECM	32,000	18.0	24,800	24.9	22,600	3.7	18,700	4.0	19.25"	21.75"	52"
	COAX (208/230V 1PH)	ECM	31,500	17.5	23,900	22.7	23,300	3.7	19,300	4.0	19.25"	21.75"	52"
ZT036	BPHE (208/230V 1PH)	ECM	38,200	19.9	28,900	29.8	27,600	4.1	21,200	4.4	21.25"	21.75"	56"
	COAX (208/230V 1PH)	ECM	36,700	17.9	28,100	26.6	27,100	3.8	22,000	4.3	21.25"	21.75"	56"
ZT042	BPHE (208/230V 1PH)	ECM	42,600	19.1	33,100	26.2	31,500	3.7	25,800	4.0	21.25"	21.75"	56"
	COAX (208/230V 1PH)	ECM	43,000	18.0	33,500	25.3	32,900	3.6	26,400	4.1	21.25"	21.75"	56"
ZT048	BPHE (208/230V 1PH)	ECM	49,800	18.3	39,700	26.6	37,900	3.9	29,600	4.3	21.25"	21.75"	56"
	COAX (208/230V 1PH)	ECM	48,700	17.3	38,000	24.4	36,900	3.6	29,300	4.1	21.25"	21.75"	56"
ZT060	BPHE (208/230V 1PH)	ECM	61,200	18.7	47,300	26.9	48,100	3.9	34,200	4.1	21.25"	24"	61"
	COAX (208/230V 1PH)	ECM	59,000	16.9	45,800	23.7	46,800	3.6	36,400	4.0	21.25"	24"	61"
ZT072	BPHE (208/230V 1PH)	ECM	70,400	18.0	57,100	25.2	57,900	3.8	47,600	4.2	21.25"	24"	61"
	COAX (208/230V 1PH)	ECM	69,500	15.6	56,000	21.3	55,500	3.4	44,400	3.8	21.25"	24"	61"

Notes:
2-stage models rated with ECM blower • Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties • Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
• Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature • Entering water temperatures Full Load: 32°F heating / 77°F cooling • Entering water temperatures Part Load: 41°F heating / 68°F cooling • Data subject to change



Available Voltages:
208/230V, 60Hz, 1Ph/3Ph
265V, 60Hz, 1Ph
460V, 60Hz, 3Ph
115V, 60Hz, 1Ph

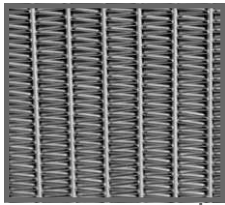
Note: not all sizes are available in all voltages



High Density Closed Cell Foam insulation helps absorb sound. This insulation is UL GREENGUARD Certified, meaning improved air quality.



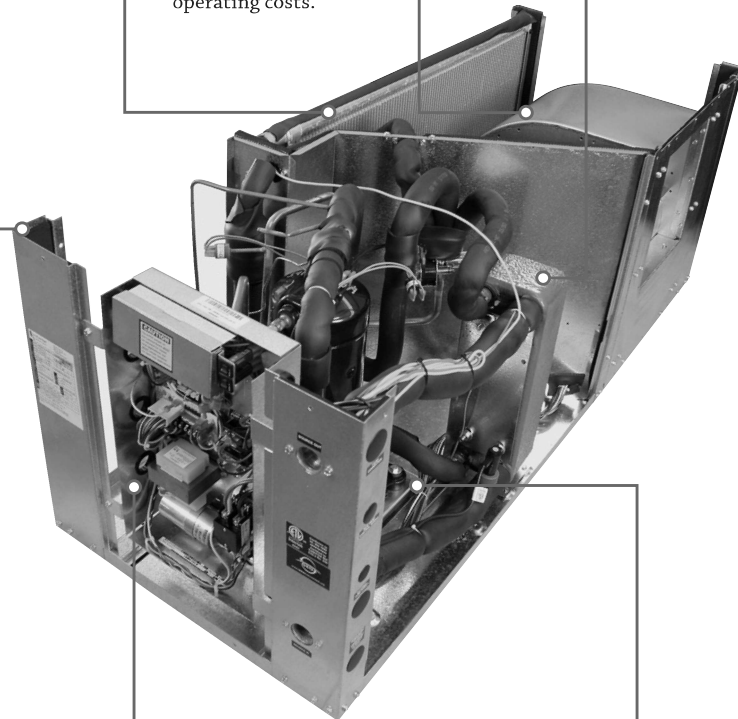
Variable Speed ECM Blower Motor matches to ductwork to deliver optimum airflow, plus has multiple CFM settings to fit any installation.
(Optional on single-stage models, standard on 2-stage)



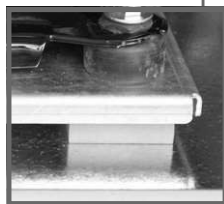
All-aluminum microchannel air coil eliminates the potential for failure due to corrosion and improves heat transfer, which results in better efficiencies and lower operating costs.



Foam enclosed stainless steel Braze Plate Heat Exchanger boosts unit efficiency. It requires less refrigerant charge and reduces unit weight.



Digital Controls ensure proper operation, providing user-friendly diagnostics. Control box swings out for quick access to internal components.



Elastomeric Compressor Vibration Absorption Pads provide superior sound and vibration insulation, resulting in quiet operation.

Additional Features

Field convertible side or end supply air discharge with left or right hand return air.

Factory installed desuperheater (hot water generator) allows the capture of free unused heat, which is used to heat domestic water. This application can cut hot water costs by 25% - 40%.

Source side **1" FPT fittings**.

Stainless steel **braze plate heat exchanger** (sizes 015 - 072) is protected by a sensor and flow switch. The BPHX is foam enclosed to prevent condensation. A **coax heat exchanger** is available for all sizes.

Standard **PSC motor** or optional ECM blower on single stage models. **ECM motor** standard on 2-stage models.

The **stainless steel drain pan** won't rust or corrode, while a **condensate overflow sensor** guards against clogged condensate drains.

Mechanical TXV (thermal expansion valve) for extended range operation.

Airtight blower section allows for refrigerant and electrical service work during operation.

Optional **DDC** (direct digital controls) with Modbus, Lonworks, or Bacnet protocols for building automation systems needs.

High density **UL GREENGUARD Gold certified foam insulation** reduces sound for quiet operation and improves air quality.

All **cabinet panels remove** for ease of installation and service

Water and electrical connections conveniently located on front corner post.



Meets ENERGY STAR® requirements for efficiency, a qualifier for many rebates and incentives. Ask your dealer or utility about incentives in your area.

