

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.

> Hydron Module⁻ By enertech

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

Single Stage Models		Blower	Cooling					Heati	ng		D	imensional	Data
		Biower	Full Load EER Part Load EER			Full Load	COP	Part Load	COP	Height Width Dept			
	COAX (208-230V 1PH)	PSC	6,900	17.1	-	_	5,200	3.5	_	-	12"	20"	40"
ZS006	COAX (265/115V 1PH)	PSC	6,500	16.2	-	_	5,000	3.3	_	-	12"	20"	40"
	COAX (208/230V 1PH)	PSC	9,600	16.7	_	_	7,500	3.5	_	-	12"	20"	40"
ZS009	COAX (265/115V 1PH)	PSC	9,200	15.9	_	_	7,100	3.3	_	_	12"	20"	40"
ZS012		PSC	11,300	14.1	_	_	9,500	3.2	_	_	12"	20"	40"
25012	COAX (208/230V 1PH)										12	20	
ZS015	BPHE (208/230V 1PH)	PSC	15,300	19.2	_	_	11,100	3.8	-	-	17"	21"	40"
	· · · · ·	ECM	15,200	20.3	-	-	10,900	3.9	-	-			
	COAX (208/230V 1PH)	PSC	14,500	17.1	-	-	11,300	3.9	_	-	17"	21"	40"
		ECM	14,200	17.6	-	-	11,200	3.9	_	-			
	BPHE (208/230V 1PH)	PSC	18,300	18.6	-	-	13,400	3.7	-	-	- 17"	21"	40'
70017		ECM	18,100	20.5	-	-	13,000	3.8	-	-	17	21	40
ZS017	COAX (208/230V 1PH)	PSC	17,900	17.1	-	-	13,700	3.7	_	-	- 17"	21"	40"
		ECM	17,800	18.2	-	_	13,500	3.9	_	-			
ZS018	BPHE (208/230V 1PH)	PSC	20,500	18.2	_	_	14,400	3.6	_	-	- 19.25" 21.7		.75" 52'
		ECM	20,800	20.5	_	_	14,200	3.8	_	_		21.75"	
		PSC	19,400	15.5	_	_	14,800	3.5					
	COAX (208/230V 1PH)								-	-	- 19.25"	21.75"	52"
		ECM	20,100	18.7	-	-	14,100	3.7		-			
ZS024	BPHE (208/230V 1PH) COAX (208/230V 1PH)	PSC	25,200	18.7	-	-	18,600	3.7	_	-	- 19.25" - 19.25"	21.75" 21.75"	52" 52"
		ECM	26,100	21.5	-	-	18,600	3.9	_	-			
		PSC	25,700	17.4	-	-	18,500	3.6	-	-			
		ECM	26,200	19.6	-	_	18,000	3.9	-	_			
		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)										- 19.25"	21.75"	52"
		ECM	29,000	18.8	-	_	21,700	3.8		-			
ZS036	BPHE (208/230V 1PH)	PSC	37,600	18.1	-	-	27,800	3.7	_	-	- 21.25"	21.75"	56"
		ECM	38,400	19.5	-	-	27,600	4.0	-	-			
ZS036	COAX (208/230V 1PH)	PSC	36,600	17.9	-	-	28,300	3.7	-	-	- 21.25"	21.75"	56"
		ECM	37,200	18.8	-	-	27,500	3.9	-	-			50
ZS042	BPHE (208/230V 1PH)	PSC	43,400	19.8	-	_	32,800	3.9	_	_	- 21.25"	21.75"	56"
		ECM	44,100	21.1	_	_	32,200	4.1	_	_			
		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											
ZS048	BPHE (208/230V 1PH)		48,500	17.8	-	-	38,500	3.6		_	- 21.25"	21.75"	56
	, ,	ECM	50,400	19.1	-	-	37,800	3.8	-	-			
ZS048	COAX (208/230V 1PH)	PSC	48,600	17.0	-	-	37,800	3.5	_	-	21.25"	21.75"	56
		ECM	49,300	17.4	-	-	36,200	3.6	-	-	21.25		
ZS060 ZS060	BPHE (208/230V 1PH) COAX (208/230V 1PH)	PSC	60,500	17.8	-	-	49,200	3.8	-	-	- 21.25" - 21.25"	24" 24"	61" 61"
		ECM	60,700	19.5	-	-	48,200	4.0	-	-			
		PSC	57,000	16.1	-	_	48,400	3.5	_	_			
		ECM	57,000	17.5	_	_	46,200	3.6	_	_			
		PSC	70,600	17.2	_	_	57,400	3.5		_			
ZS072	BPHE (208/230V 1PH)									_	- 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	-	-			
	ue Cherre Medele	Diaman		Coo	ling			Heati	ng		D	imensional	Data
	wo Stage Models	Blower	Full Load	EER	Part Load	EER	Full Load	СОР	Part Load	COP	Height	Width	Dep
	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
ZT024	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
_1000	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
	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
ZT048	COAX (208/230V 1PH)	ECM	49,800	17.3	39,700	20.0		3.9	29,000		21.25	21.75	56
	, ,						36,900			4.1			
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
			70 100	10.0	F7 100	05.0	== 000	~ ~	47.000	4.0		0.4"	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"	01

Notes:

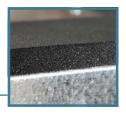
2-stage models rated with ECM blower • Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties • Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature • Cooling capacities based on 80.6°F DB, 68.0°F DB, 68.0°F WB entering air temperature • Entering water 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)

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

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.

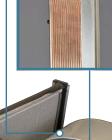


Meets ENERGY STAR® requirements for efficiency, a qualifier

for many rebates and incentives. Ask your dealer or utility about incentives in your area.



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.





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.



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Hydron Module geothermal systems are manufactured by Enertech Global and proudly built in the Heart of America – Mitchell, South Dakota. Enertech Global systems are built with stringent quality control standards and the most comprehensive testing within the geothermal heating and cooling industry.



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