



The GSSD High Efficiency Ground Source Heat Pump

Great Things Do Come in Small Packages

Trane's geothermal GSSD model is a unique, versatile and efficient ground-source split system design. This unit provides flexibility to the homeowner by allowing them to place the waterside heat pump in a garage or basement near a hot water heater, and the air side (ordered separately) inside the home's closet or attic.

The compact unit design offers unparalleled service access through the unique split cabinet design. It is constructed from heavy gauge steel with an electrostatic powder-paint finish. The unit is insulated to reduce noise transmission; and unit sizes range from 2 to 6-tons.

Water hook-up is simplified through the use of brass swivel water connections. The swivel connection requires no back-up wrench during installation.

All sizes are encased inside a 22 x 23 5/16 x 24 5/16-inch cabinet. A high efficiency scroll compressor is provided on all GSSD high efficiency models. It comes equipped with an internal over load safety device. HIGH and LOW pressure safety cutouts are also placed on the refrigeration circuit.

Each GSSD model contains a stainless steel, brazed plate, water-to-refrigerant heat exchanger. The brazed plate design lowers waterside pressure drops in most cases. All low-side tubing in the refrigeration circuit is insulated to prevent condensation from forming in the unit. A filter drier and accumulator are also included on the GSSD design.

A desuperheater option provides heat recovery of the system. This selectable feature offers a low cost means of heating water while in the heating mode, or a means of virtually free hot water heating while in the cooling mode.

The GSSD design is the perfect alternative to heavy, bulky equipment. The flexibility of the design fits most air duct system requirements when connected to a Trane or American Standard multi-position TWE Series air handler. It is the ideal choice for flexibility in home layout and design, while providing high comfort levels to the home owner.



Innovative Design Developed for Earth-Coupled Applications



It's a Smart Combination

Teaming the TWE air handler (ordered separately) with the GSSD split condensing section provides both comfort and flexibility in geothermal system design.

The air handler is available in a vertical downflow or upflow supply-air configuration. A horizontal right or left end supply-air configuration may also be specified. The return air side of the vertical design may be ordered in either a left or right hand arrangement.

All air handlers offer an ICM variable speed blower motor design. This motor is capable of reducing the nominal air flow from 400 CFM to 320 CFM per ton, or increasing nominal air flow from 400 CFM to 480 CFM per ton to provide automatic air flow changes depending upon the room requirements. A PSC blower motor is also available with the TWE design.

Internal electric heat may be factory ordered and field installed in the air side equipment.

Table 1: GSSD Performance Data at GLHP Conditions

Model Number GSSD	Cooling		Heating	
	EER	btuh	COP	btuh
024	15.80	24,100	3.05	17,300
030	15.60	29,600	3.30	22,600
036	15.80	36,400	3.37	26,100
042	14.30	41,100	3.33	30,300
048	14.90	48,700	3.33	37,200
060	13.30	59,200	3.10	46,900
072	13.10	65,600	3.06	52,200



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For more information, contact your local district office or e-mail us at comfort@trane.com

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Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.