CLIMATEMASTER®
Water-Source Heat Pump Systems

Tranquility® Hybrid Vertical Stack

Models TSL09-36 - 60Hz - HFC-410A

Taking advantage of application diversity, the Hybrid system combines the benefits of hydronic heating and water-cooled air conditioning into one product! Building owners can take advantage of high efficient central boilers to provide economical heating in cooler seasons. When cooling is needed the Hybrid functions as a high efficient water-cooled air conditioner out performing traditional hydronic cooling systems. During shoulder seasons Hybrid systems combine the benefits of both functions at high system efficiency to satisfy space occupants with their comfort needs.

The TSL Hybrid Solution Offers:

- Hydronic Heating
- Water cooled air conditioning
- No reversing valve
- Reduced compressor cycling
- Ultra quiet hydronic heating operation
- Two internal motorized water valves
- Optional single 3-way motorized valve for continous water flow operation
- Constant torque ECM fan motor
- Available in 65”, 80”, and 88” height cabinets
- Option to pair with internal circulating pump for single pipe applications

Hydronic Heating Performance Data

Model ECM Motor	Hydronic Heating Entering Air 70°			
	CFM	EWT (°F)	GPM	Capacity Btuh
TSL09	400	105	2.25	10200
TSL12	500	105	3.00	12400
TSL15	700	105	3.75	17000
TSL18	800	105	4.50	19300
TSL24	950	105	6.00	25700
TSL30	1150	105	7.50	31100
TSL36	1350	105	9.00	36000

Cooling Performance

Tested To ASHRAE/AHRI/ISO 13256-1 English (I-P) Units

Model with ECM Motor	Water Loop Heat Pump	
	Cooling 86°F	
	Capacity Btuh	EER Btuh/W
TSL09	9300	14.8
TSL12	12000	15.4
TSL15	14600	16.3
TSL18	17100	15.1
TSL24	25000	16.4
TSL30	28500	16.1
TSL36	35000	15.0

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature.
All units AHRI/ISO/ASHRAE 13256-1 tested on high speed motor TAP.
All ratings based upon operation at lower voltage of dual voltage rated models.

Electrical Data - 208/230V

Model ECM Motor	Compressor		Blower Motor	Total Unit FLA	Min Circuit Amps	Max Fuse Amps
	RLA	LRA	FLA			
TSL09	3.7	22.0	1.5	5.2	6.1	15
TSL12	4.7	25.0	1.5	6.2	7.4	15
TSL15	5.6	29.0	2.6	8.2	9.6	15
TSL18	6.6	33.0	2.6	9.2	10.9	15
TSL24	12.8	58.3	2.6	15.4	18.6	30
TSL30	12.8	64.0	3.9	16.7	19.9	30
TSL36	14.1	77.0	3.9	18.0	21.5	35

Unit Size

Model		W*	D*
09 - 12	in. cm	17.0 (43.1)	20.0 (50.8)
15 - 18	in. cm	19.25 (48.9)	22.0 (55.9)
24 - 36	in. cm	24.25 (61.6)	27.0 (66.0)

* Not Including Riser.

Physical Data

Model	09	12	15	18	24	30	36
Compressor (1 Each)	Rotary				Scroll		
Factory Charge HFC-410A (oz) [kg]	35 [.99]	35 [.99]	43 [2.69]	53 [3.31]	71 [4.44]	66 [4.13]	75 [2.13]
Motor & Blower							
ECM Constant Volume (HP) [W]	1/8 [93]	1/8 [93]	1/3 [249]	1/3 [249]	1/3 [249]	1/2 [373]	3/4 [560]
ECM Constant Torque (HP) [W]	1/4 [186]	1/4 [186]	1/3 [249]	1/3 [249]	1/2 [373]	1/2 [373]	3/4 [560]
Coax Volume (Gallons) [Liters]	0.26 [0.98]		0.36 [1.4]		0.60 [2.3]		
Hydronic Coil Volume (Gallons) [Liters]	0.21 [0.78]		0.34 [1.28]		0.45 [1.72]		
Hose Size (in)	1/2		3/4		1		

Unit Maximum Water Woking Pressure	
Options	Max Pressure PSIG [kPa]
Base Unit	400 [2757]
Hydronic Coil	400 [2757]
Internal Secondary Pump(isp	200 [1378]
Internal Motorized Water Valve (MMWV)	300 [2068]

AHRI CERTIFIED® www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256

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