

Tranquility[®] Horizontal Hybrid

Models TRH06-60 - 60Hz - HFC-410A



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 provide either heating or cooling functions at high system efficiency to satisfy comfort needs as load profiles change throughout the day.

The TRH Hybrid Solution Offers:

Standard Features

- Hydronic Heating with Water Cooled Air Conditioning
- High efficient Constant Torque ECM fan motor
- No reversing valve
- · Reduced compressor cycling
- · Ultra quiet hydronic heating operation
- · Two internal motorized water valves
- Air gap between coils to prevent ice bridging

Configurable Options

- Intelligent DXM2 controls for reduced start up, commissioning, and service time
- Advanced Constant Volume ECM fan motor for maximum CFM control
- Internal circulating pump for single pipe applications
- · MPC controller for operation with DDC controls

Hydronic Heating Performance Data

Model with ECM Motor	Hydronic Heating Entering Air 70°F								
	CFM	EWT (°F)	GPM	Capacity	LAT				
TRH06	225	105	1.50	6,600	96				
TRH09	325	105	2.25	9,100	95				
TRH12	400	105	3.00	11,000	95				
TRH15	525	105	3.75	15,400	96				
TRH18	600	105	4.50	17,700	96				
TRH24	800	105	6.00	23,600	96				
TRH30	1000	105	7.50	28,400	95				
TRH36	1150	105	9.00	36,600	99				
TRH42	1400	105	10.50	43,000	98				
TRH48	1500	105	12.00	46,400	98				
TRH60	1950	105	15.00	57,700	96				

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

	Water Loop Cooling 86°F						
Model	Capacity Btuh	EER					
TRH06	5,800	14.0					
TRH09	8,600	14.2					
TRH012	11,100	13.0					
TRH015	14,300	15.5					
TRH018	18,000	15.0					
TRH024	23,000	13.5					
TRH030	27,700	13.6					
TRH036	34,500	13.5					
TRH042	41,000	14.0					
TRH048	48,000	14.0					
TRH060	59,500	14.6					

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.

Dimensional Data

Model		W	D	н	
06-12	in.	25.4	43.1	11.5	
	cm	[64.5]	[109.5]	[29.2]	
15-30	in.	25.4	50.3	17.5	
	cm	[64.5]	[127.9]	[44.5]	
36-42	in.	25.4	56.1	21.3	
	cm	[64.5]	[142.5]	[54.1]	
48-60	in.	28.4	70.9	21.3	
	cm	[72.1]	[180.5]	[54.1]	

Electrical Data - 208/230V/60

Model ECM Motor	Compressor		Blower Motor	Total Unit	Min Circuit	Max Fuse	
	RLA	LRA	FLA	FLA	Amps	HACR	
TRH06	2.6	17.7	1.50	4.1	4.8	15	
TRH09	3.7	22	1.50	5.2	6.1	15	
TRH012	5.6	32.5	2.60	8.2	9.6	15	
TRH015	5.6	29	2.60	8.2	9.6	15	
TRH018	7.4	33	2.60	10.0	11.9	15	
TRH024	12.8	58.3	3.90	16.7	19.9	30	
TRH030	14.1	73	6.00	20.1	23.6	35	
TRH036	16.7	79	6.00	22.7	26.9	40	
TRH042	17.9	112	6.00	23.9	28.4	45	
TRH048	4.9	34	7.50	12.4	34.8	50	
TRH060	13.7	83.1	7.50	21.2	40.4	60	

Constant Volume ECM fan motor data shown

Physical Data

TR Hybrid Series	006	009	012	015	018	024	030	036	042	048	060
Compressor (1 each)	Rotary				Scroll						
Factory Charge R410A - (oz.)	17	20	23	35	43	43	48	50	70	74	82
ECM - CV Fan Motor & Blower											
Fan Motor - Hybrid (hp) [W]	1/8	1/8	1/4	1/3	1/3	1/2	3/4	3/4	3/4	1	1
ECM - CT Fan Motor & Blower											
Fan Motor - Hybrid (hp) [W]	1/4	1/4	1/4	1/3	1/3	1/2	3/4	3/4	3/4	1	1
Water Connection Size											
FPT - All Other	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	1"	1"
Filter											
Filter Standard - 1" Throwaway	10x18	10x18	10x18	16x25	16x25	18x25	18x25	20x28 or 2-20x14	20x28 or 2-20x14	1-20x24, 1-20x14	1-20x24, 1-20x14
Weight - Operating - Hybrid (lbs.)											
Weight - Packaged - Hybrid (lbs.)											



