



TRANQUILITY TMW SERIES

  
**CLIMATEMASTER**<sup>®</sup>  
Water-Source Heat Pump Systems

# TRANQUILITY MODULAR WATER-TO-WATER (TMW) SERIES



The Tranquility Modular Water-to-Water (TMW) Series offers high efficiency and high capacity with advanced features, quiet operation and application flexibility at competitive prices. ClimateMaster's Tranquility Modular Water-to-Water Series can be used for radiant floor heating, snow/ice melt, chilled water for fan coils, industrial process control, potable hot water generation\*, hot/chilled water for make-up air, and many other types of HVAC and industrial applications that require cost effective heated or chilled water.

## UNIT FEATURES

- Sizes 036 (3 tons, 10.2 kW), 060 (5 tons, 17.6 kW), 120 (10 tons, 35.2 kW), 170 (14 tons, 49.3 kW), 340 (28 tons, 98.5 kW), 360 (30 tons, 105.6 kW), and 600 (50 tons, 176 kW)
- Copeland scroll compressor(s)
- Dual independent refrigeration circuits on size 120, 340, 360, and 600
- Exclusive single side service access (front of unit) allows multiple units to be installed side-by-side for large capacity installations (360 and 600 require front and rear access)
- Top water connections on sizes 170, 340, 360, and 600, staggered for ease of manifolding multiple units
- Exceeds ASHRAE 90.1 efficiencies
- Heavy gauge galvanized steel construction with polyester powder coat paint and stainless steel front access panels (036-340)
- Insulated compressor compartment
- Small footprint
- TXV metering devices
- Load leaving temperature range from 25 to 140°F, -4.4 to 60°C (see submittal for specific model range)
- Source entering temperature range from 20 to 130°F, -6.7 to 54.4°C (see submittal for specific model range)
- Microprocessor controls for 036-340. DDC controls for 360-600
- LonWorks, BACnet, Modbus and Johnson N2 compatibility options for DDC controls

\* Requires field supplied secondary heat exchanger.

TMW 036-340 have advanced microprocessor controls with Remote Service Sentinel and compressor "run" and "fault" LED (DDC option available)



TMW 360-600 have advanced digital controls for BAS interface, four LEDs for unit status, and compressor isolation switches standard



Small footprint with convenient front service access (TMW 036 shown)



TMW Series design allows for single side service access (TMW 340 shown)

Units may be installed side-by-side

Extended range insulated water/refrigerant circuit standard



TMW 360-600 have quick release service access panels

Rear access required for factory installed flushing connections and PT ports



TMW 360-600 have source water head pressure regulating valve standard

Valve allows operation below 60°F, 15.6°C



## PERFORMANCE AND SPECIFICATIONS

AHRI/ISO/ASHRAE 13256-2 Data (English (I-P) Units & Metric (S-I) Units)\*

Model	Refrigerant	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
		Cooling		Heating		Cooling		Heating		Cooling		Heating	
		Indoor 53.6°F [12°C] Outdoor 86°F [30°C]		Indoor 104°F [40°C] Outdoor 68°F [20°C]		Indoor 53.6°F [12°C] Outdoor 59°F [15°C]		Indoor 104°F [40°C] Outdoor 50°F [10°C]		Indoor 53.6°F [12°C] Outdoor 77°F [25°C]		Indoor 104°F [40°C] Outdoor 32°F [0°C]	
		Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
	Btuh [kW]	Btuh/W [W/W]	Btuh [kW]		Btuh [kW]	Btuh/W [W/W]	Btuh [kW]		Btuh [kW]	Btuh/W [W/W]	Btuh [kW]		
TMW-036	HFC-410A	32,300 [9.47]	14.60 [4.28]	43,100 [12.64]	4.90	36,200 [10.62]	23.10 [6.77]	35,300 [10.35]	4.00	33,300 [9.77]	16.40 [4.81]	27,400 [8.04]	3.10
TMW-060	HFC-410A	52,800 [15.48]	14.30 [4.19]	72,700 [21.32]	4.70	56,600 [16.60]	20.30 [5.95]	60,300 [17.68]	4.00	55,600 [16.31]	16.20 [4.75]	48,500 [14.22]	3.10
TMW-120	HFC-410A	105,600 [30.97]	14.10 [4.13]	145,400 [42.64]	4.60	113,200 [33.20]	20.10 [5.89]	120,600 [35.37]	3.90	111,200 [32.61]	16.00 [4.69]	97,000 [28.45]	3.10
TMW-170	HFC-410A	123,500 [36.22]	13.30 [3.90]	164,600 [48.27]	4.30	138,400 [40.59]	19.30 [5.66]	136,200 [39.94]	3.70	130,300 [38.21]	15.30 [4.49]	108,600 [31.85]	2.90
TMW-340	HFC-410A	253,500 [74.34]	13.60 [3.99]	336,000 [98.53]	4.40	282,000 [82.70]	19.60 [5.75]	277,000 [81.23]	3.70	266,600 [78.18]	15.60 [4.57]	220,000 [64.52]	3.00
TMW-360	HFC-410A	380,300 [111.46]	16.00 [4.70]	531,000 [155.63]	5.10	438,000 [128.37]	24.20 [7.10]	416,000 [121.92]	4.20	400,500 [117.38]	18.50 [5.40]	321,000 [94.08]	3.40
TMW-600	HFC-410A	619,800 [181.65]	16.00 [4.70]	873,000 [255.86]	5.20	707,400 [207.33]	23.20 [6.80]	680,000 [199.30]	4.30	651,000 [190.80]	18.30 [5.30]	524,000 [153.58]	3.40

All ratings based upon operation at the lower voltage of dual voltage rated models.

\* Indoor = Load side heat exchanger; Outdoor = Source side heat exchanger.

### Dimensional Data

Model		Overall Cabinet		
		W	D	H
036-060	in.	25.4	30.6	33.0
	cm	64.5	77.8	83.8
120	in.	52.9	30.6	37.0
	cm	134.4	77.8	94.0
170-340	in.	26.3	45.1	64.5
	cm	66.9	114.6	163.8
360-600	in.	34.0	55.5	65.1
	cm	86.4	141.0	165.4

### Voltage Options

Model	Volts	Phase
036	208/230	1
	265	1
	208/230	3
	460	3
	575	3
060-120	208/230	1
	208/230	3
	460	3
	575	3
	170-600	208/230
460		3
575		3



## UNIT FEATURES

Product Series	Standard Features										Factory Installed Options																	
	EarthPure® (HFC-410A) Refrigerant	Microprocessor CXM Controls*	Standard Entering Water Temperature Range (60 to 95°F)	Copper Water Coil**	TXV	Dual Level Compressor Vibration Isolation	Field Convertible Discharge (Horizontal Units)	Multiple Access Panels for Installation and Service Ease	Scroll Compressors	Factory Installed Hanger Brackets (Horizontal Units)	Remote Reset at Thermostat	Condensate Overflow Protection	Cupro-Nickel Coil**	High Static Blower	Ultra Quiet (Mute) Package	Extended Entering Water Temperature †	Auto-Flow Water Regulation	Two-Way Control Valve	Downflow Configuration	Desuperheater Coil	DDC Controller	Deluxe DXM Controller*	Coated Air Coil	Internal Secondary Pump	ECM Fan Motor***	ClimADry Reheat	Internal Service Disconnect	
Tranquility 27® Two-Stage (TT)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility 20 Single-Stage (TS)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility High Efficiency (TR)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility 16 Compact (TC)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility Vertical Stack (TRM)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility Vertical Stack (TRW)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility Console (TRC)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility Compact (TC)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility Large (TL)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tranquility Water-to-Water (TMW)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rooftop (TRE)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rx Energy Recovery Ventilator (ERV)			•					•																				
Vertical Dedicated Outdoor Air (TOV)	•		•	•	•			•	•					•	†						•							
Horizontal Dedicated Outdoor Air (TOH)	•		•	•	•			•	•				•	†					•									

Some exceptions may apply to standard features and options, consult product submittal materials to determine availability.

\* Control for TO Series is DDC with modulating HGR. Control for TMW 360-600 is DDC.

\*\* Water coil construction for TO Series and TMW 360-600 is stainless steel.

\*\*\* Standard on TT Series

† Standard on TMW Series

‡ Extended Range = 35°F-95°F EWT



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