



# TRANQUILITY® 24 (SY) COMPACT TWO-STAGE SERIES

Sizes: 024-060 | 60 Hz – R-454B



The Tranquility® 24 (SY) Compact Two-Stage Series comes with all the reliability features for which the ClimateMaster Tranquility Series is known. They include superb efficiency ratings, quiet operation, and application flexibility. Tranquility SY surpasses ASHRAE 90.1 efficiency standards and utilizes R-454B low Global Warming Potential (GWP) refrigerant, setting a high standard for eco-friendly performance. Due to its innovative and environmentally-conscious design, the Tranquility SY qualifies for LEED® (Leadership in Energy and Environmental Design) points. It also has one of the industry's smallest footprints, making it suitable for installation in tight spaces and for replacement/retrofit projects.

## The SY Series Advantage

### STANDARD FEATURES

- Sizes 024 (2 ton, 7 kW) through 060 (5 tons, 17.6 kW)
- Refrigerant Detection System (RDS) (mandatory on size 060, optional feature for sizes 024-048)
- Communicating DXM2.5 controls for reduced startup, commissioning, and service time
- Part-load operation significantly lowers annual operating costs
- Field-convertible supply-air arrangement for horizontal units
- Intelligent variable speed Constant Volume (CV) EC blower motors for precise airflow control and soft-start feature
- Unique double-isolation compressor mounting with vibration isolation for quieter operation

### CONFIGURABLE OPTIONS

- BACnet, Modbus and Johnson Controls N2 compatibility options for Building Management Systems (BMS)
- Tin-plated air coils for added protection from formicary corrosion
- Integrated power disconnect
- Easy-to-clean rust-prohibitive stainless-steel drain pans
- Corrosion-resistant cupro-nickel water heat exchanger
- UltraQuiet sound-attenuation package
- Extended-range insulation for geothermal applications



Scan for  
Product Catalog

# TRANQUILITY 24 (SY) COMPACT TWO-STAGE SERIES

Tested in Accordance with ASHRAE/AHRI/ISO 13256-1 English (I-P) Units

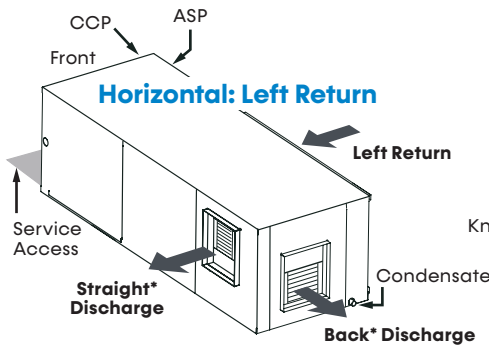
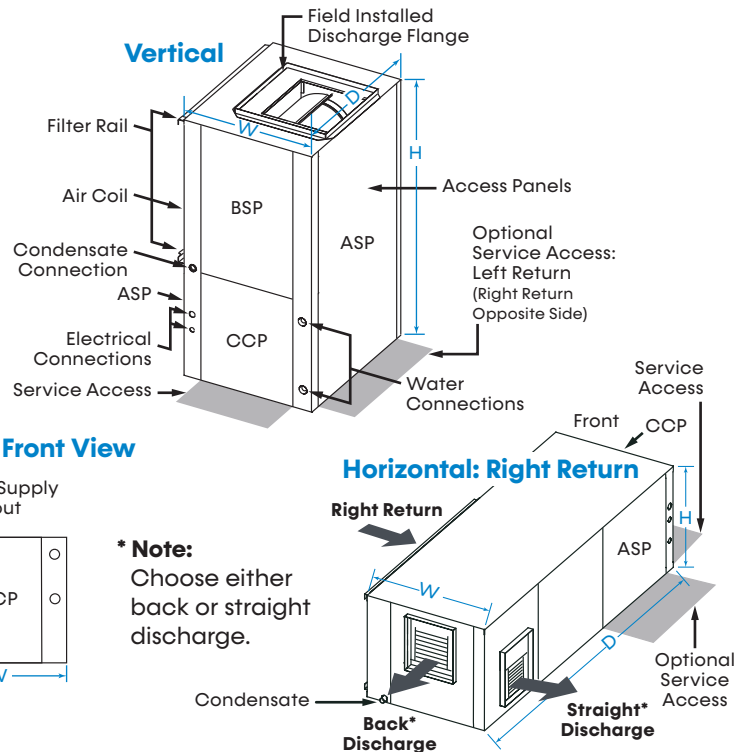
Model Size	Load	Motor Type	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
			Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Full Cooling 77°F		Full Heating 32°F	
			Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
024	Part	EC	17,500	17.0	19,900	5.7	20,000	29.7	16,600	4.8	19,300	25.3	14,600	4.2
	Full	EC	24,000	15.1	28,400	5.3	27,000	24.1	23,500	4.7	25,000	18.0	18,400	3.9
030	Part	EC	21,200	15.2	24,400	5.1	24,700	26.4	20,800	4.4	23,400	22.0	18,700	4.0
	Full	EC	28,700	14.0	33,200	4.6	32,900	21.7	28,700	4.1	30,200	16.3	23,200	3.6
036	Part	EC	26,100	16.1	31,600	5.3	29,900	26.0	25,700	4.4	28,500	22.6	22,600	4.1
	Full	EC	35,000	14.0	44,200	4.6	39,300	20.2	36,300	4.2	36,400	16.4	28,600	3.6
042	Part	EC	32,500	17.0	36,000	5.1	36,000	28.5	29,800	4.5	35,000	23.5	26,400	4.0
	Full	EC	43,000	15.5	49,500	4.7	47,500	22.8	41,000	4.2	44,500	17.3	32,500	3.5
048	Part	EC	34,000	16.5	39,000	5.5	38,500	28.5	31,800	4.5	37,000	24.0	28,000	4.0
	Full	EC	47,500	15.5	55,000	4.8	52,000	22.9	45,000	4.3	49,000	17.7	36,000	3.7
060	Part	EC	42,000	17.5	47,300	5.5	47,000	29.0	38,500	4.7	45,500	24.9	34,000	4.2
	Full	EC	59,000	15.5	67,200	5.0	65,000	22.8	55,700	4.4	61,500	17.8	44,600	3.7

**Notes:**

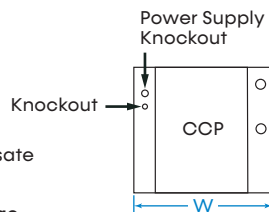
- Where dual voltages are available ratings are based on the lower voltage setting.
- Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature.
- Heating capacities based upon 68°F DB, 59°F WB entering air temperature.
- Ground Loop Heat Pump ratings based on 15% antifreeze solution.

## Dimensional Data

Model Size	Cabinet Configuration	Overall Cabinet (inches)		
		Depth	Width	Height
		D	W	H
024-030	Vertical	21.5	21.6	40.0
036-042		26.0		45.0
048-060		29.3	25.5	50.5
024-030	Horizontal	43.0	20.1	18.3
036-042		47.1		21.0
048-060		54.1	24.1	



**Horizontal: Front View**



**\* Note:**  
 Choose either back or straight discharge.

**LEGEND**

- ASP = ADDITIONAL SERVICE PANEL (OPTIONAL ACCESS)
- BSP = BLOWER SERVICE PANEL
- CCP = CONTROL/COMPRESSOR ACCESS PANEL

Part#: LC3006 | Created: March 01, 2024

7300 SW 44th St.  
 Oklahoma City, OK 73179  
 Phone: 800.299.9747  
 www.climatemaster.com



ClimateMaster works continually to improve its products. As a result, the design and specifications of each product at the time of order may be changed without notice and may not be as described herein. Please contact ClimateMaster's Customer Service Department at 800.299.9747 for specific information on the current design and specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties, but are merely ClimateMaster's opinion or commendation of its products. The latest version of this document is available at www.climatemaster.com. Engineered and assembled in the USA. © ClimateMaster, Inc. All Rights Reserved 2024