

# Precision Cooling

## Chilled Water Perimeter Mounted



The climate inside your computer rooms is critical to your mission. Trane taps the hidden potential of buildings to become more sustainable, reliable, cost efficient and future proof. We're transforming data centers around the world with unmatched expertise and innovative digital solutions.

Computer Room Chilled Water Air Handling (CRAH) units are a compact solution for efficient cooling in small spaces. They can be easily tucked into a corner, between cabinetry, or side-by-side. Trane units are especially adaptable to raised floors and are available in up-flow and down-flow air pattern configurations.

- State-of-the-art Microprocessor Controller with a range of Building Management Systems interface options
- Optimized air distribution for raised floor configurations
- 100% front service access
- Front and rear return, up-flow and down-flow air patterns
- EC Fan
  - Fan speed is continuously adjustable via a signal from the system controller without the use of VFD's
  - Direct drive - no belt abrasion/dust, maintenance free operation
  - Less vibration / quieter operation



### Technical Data

CRAH		
COS		
Capacity	kW	12 - 35
	MBH	42 - 120
	Tons	3 - 10
Air Flow	CFM	2,700 - 4,800

## Technical Data

Chilled Water						
		Model: TR-COS-	042-CW(-)-EC	060-CW(-)-EC	096-CW(-)-EC	120-CW(-)-EC
NET COOLING CAPACITY - kW(MBH) @ 45°F EWT, 0% Glycol Solution (Includes motor heat @ rated ft <sup>3</sup> /min & esp)						
85°F DB/65.9°F WB, 36% RH, 55°F DP						
High Flow (10 °F ΔTw)	Total	22 (74.9)	28.1 (95.8)	42.1 (143.8)	54.2 (185.1)	
	Sensible	21.3 (72.7)	25.1 (85.5)	39.6 (135.2)	46.6 (159)	
	Flow Rate, gpm (Pressure Drop, ft H <sub>2</sub> O)	15.9 (22.0)	20.3 (29.0)	30.4 (40.8)	38.8 (43.6)	
Medium Flow (12 °F ΔTw)	Total	19.1 (65)	27.1 (92.5)	40.7 (138.9)	52.7 (179.9)	
	Sensible	19.1 (65)	24.6 (83.8)	38.6 (131.6)	45.8 (156.4)	
	Flow Rate, gpm (Pressure Drop, ft H <sub>2</sub> O)	11.6 (13.4)	16.4 (20.2)	24.5 (28.2)	31.5 (30.3)	
Low Flow (14 °F ΔTw)	Total	17.6 (60)	26.3 (89.7)	39.1 (133.4)	51.4 (175.2)	
	Sensible	17.6 (60)	24.1 (82.2)	37.3 (127.2)	45.1 (153.9)	
	Flow Rate, gpm (Pressure Drop, ft H <sub>2</sub> O)	9.2 (9.7)	13.6 (15.0)	20.2 (20.7)	26.3 (22.4)	
75 °F DB/62.5 °F WB, 50% RH, 55 °F DP						
High Flow (10 °F ΔTw)	Total	15.1 (51.6)	20.3 (69.4)	30.2 (103.2)	40.5 (138.2)	
	Sensible	14.2 (48.3)	17.2 (58.8)	27 (92.3)	32.7 (111.7)	
	Flow Rate, gpm (Pressure Drop, ft H <sub>2</sub> O)	11.2 (12.8)	14.9 (17.3)	22.2 (24.0)	29.3 (26.9)	
Medium Flow (12 °F ΔTw)	Total	11.8 (40.2)	19.2 (65.6)	28.2 (96.3)	38.6 (131.7)	
	Sensible	11.8 (40.2)	16.6 (56.7)	25.6 (87.5)	31.8 (108.4)	
	Flow Rate, gpm (Pressure Drop, ft H <sub>2</sub> O)	7.4 (7.4)	11.8 (12.1)	17.3 (16.3)	23.4 (18.6)	
Low Flow (14 °F ΔTw)	Total	10.1 (34.5)	18.2 (62.1)	26.1 (89.2)	36.9 (125.8)	
	Sensible	10.1 (34.5)	16 (54.6)	24.1 (82.1)	30.8 (105)	
	Flow Rate, gpm (Pressure Drop, ft H <sub>2</sub> O)	5.5 (5.6)	9.6 (9.1)	13.8 (11.8)	19.1 (13.8)	
Chilled Water Coil - Aluminum Fin, Copper Tube						
Rows (Face Area, ft <sup>2</sup> )		4 (5.5)	6 (5.5)	4 (9.75)	6 (9.75)	
Face Velocity, ft/min		491	491	492	492	
Evaporator Blower / Motor - Backward Curved EC						
Nominal Motor Power, hp		3.6	3.6	4.1	4.1	
Rated Air Flow, ft <sup>3</sup> /min @0.5 inH <sub>2</sub> O esp		2700	2700	4800	4800	
Quantity of Blowers		1	1	1	1	
Physical Data*						
Approximate Unit Weight, lb		400	410	560	570	
Unit Dimensions, H" x W" x D"		76.0 x 30.6 x 30.6	76.0 x 30.6 x 30.6	76.0 x 47.6 x 33.6	76.0 x 47.6 x 33.6	
Approximate Shipping Dimensions, H" x W" x D"		82.0 X 37.0 X 37.0	82.0 X 37.0 X 37.0	82.0 X 54.0 X 40.0	82.0 X 54.0 X 40.0	
Upflow Plenum Box Dimensions, H" x W" x D"		18.0 x 28.8 x 28.8	18.0 x 28.8 x 28.8	18.5 x 46.0 x 32.0	18.5 x 46.0 x 32.0	

\* Unit dimensions do not include plenum. Add plenum height to height dimension when selecting a plenum. Note that plenum ships loose on a separate pallet.

\*\* Add 17.6 inches to unit depth dimensions for rear-return units.

Visit [trane.com/precisioncooling](https://trane.com/precisioncooling) or [trane.com/datacenters](https://trane.com/datacenters) to learn more.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.com](https://trane.com) or [tranetechnologies.com](https://tranetechnologies.com).

All trademarks referenced in this document are the trademarks of their respective owners.

© 2020 Trane. All Rights Reserved.

AH-SLB024-EN  
04/24/2020