

DeltaCool™ Fan Coil Cooling and Dehumidification

Manage the temperature and humidity in your indoor or greenhouse growing environment for healthier crops.

How Chilled Water Cooling Works

Chilled water cooling from Delta T Solutions is a hydronic process that circulates chilled water through a loop piping system. Circulator pumps force the water through a heat exchanger, and a fan draws warm air out and cools it as it passes over cold coils. By modulating the water temperature to the coil, exact cooling and humidity control can be achieved — a capability especially important for growing healthy cannabis crops.

Fan Coil Advantages

By operating the DeltaCool™ Fan Coil, indoor and greenhouse growers gain the following advantages:

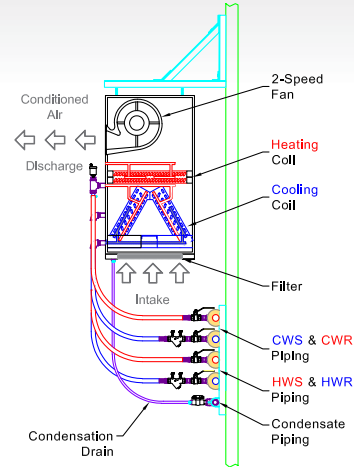
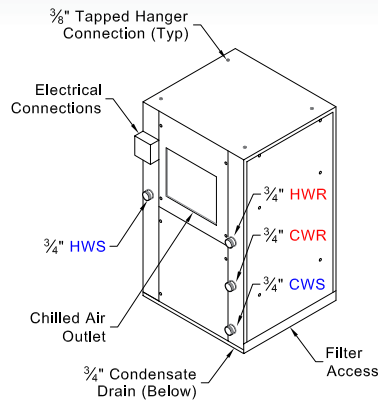
- Precise air temperature and humidity control with one unit
- Available as a 4-ton unit
- Low operating cost due to efficient design
- Easy access to fan and coil via removable air-discharge side, end and front panels
- Overhead suspension points will conserve space and are ideal for ceiling installations where space is limited.
- Drain pan is double sloped to fully remove condensation for optimum mold growth prevention and complies with IAQ standards

Fan Coil Specifications

- Galvanized steel construction
- Front air discharge with bottom air inlet
- Capacity: 1/3hp with 277V, 230V or 208V motor
- Two pipe cooling only model and four pipe cooling and heating model
- Coil connections – 3/4" mpt, drain connections – 3/4" mpt
- Bottom air intake with mesh-type filter (low MERV / low apd)
- Stainless steel drain pan, positively sloped
- 1/2" fiberglass insulation



▶▶ 4-TON DELTACOOL™ FAN COIL COOLING AND DEHUMIDIFICATION



Specifications					
Model Number	Nominal Size	Dimensions	Fans (qty)	Motor Electrical	Net Weight
SGHO-030B	4 Tons	30" W x 44" H x 27-3/4" D	(1) 1/3hp	277V / 2.2 FLA 230V / 2.8 FLA	250 lbs.
SGHOH-030B	4 Tons w/ Heat Coil	30" W x 44" H x 27-3/4" D	(1) 1/3hp	208V / 4.0 FLA	260 lbs.

Cooling Capacities														
Entering Air Dry Bulb Temp EAT	Entering RH % RH	40 °F EWT						42 °F EWT						
		Total Capacity MBH	Sensible Capacity MBH	Latent Capacity MBH	Dehum Rate PPD	Leaving Water Temp °F	Leaving Dry Bulb °F	Total Capacity MBH	Sensible Capacity MBH	Latent Capacity MBH	Dehum Rate PPD	Leaving Water Temp °F	Leaving Dry Bulb °F	
80 °F	50%	54.6	33.7	20.9	495	55.6	47	51.1	32.1	19	450	56.6	48.5	
	55%	58.4	32.8	25.6	607	56.7	47.8	54.9	31.3	23.6	559	57.7	49.3	
	60%	62.2	32.1	30.1	713	57.8	48.4	58.6	30.5	28.1	666	58.8	50	
75 °F	50%	45.1	30.5	14.6	346	52.9	45.5	41.7	29	12.7	301	53.9	47	
	55%	48.2	29.8	18.4	436	53.8	46.1	44.8	28.2	16.6	393	54.8	47.6	
	60%	51.5	29.1	22.4	531	54.7	46.7	48	27.6	20.4	484	55.7	48.2	
70 °F	50%	36.2	27.1	9.1	216	50.3	44.1	32.7	25.5	7.2	171	51.3	45.6	
	55%	38.8	26.4	12.4	294	51.1	44.6	35.3	24.9	10.4	247	52.1	46.1	
	60%	41.5	25.9	15.6	370	51.9	45.2	38	24.3	13.7	325	52.9	46.7	

All calculations are based on an air flow rate of 1050 CFM and water flow rate of 7 GPM with a water pressure drop of 4.7 ft HD.

Heating Capacities														
Entering Air Dry Bulb Temp EAT	Air Flow Rate CFM	Water Flow Rate GPM	180 °F EWT				160 °F EWT				140 °F EWT			
			Total Capacity MBH	Leaving Water Temp °F	Leaving Dry Bulb °F	Water Press Drop Ft WG	Total Capacity MBH	Leaving Water Temp °F	Leaving Dry Bulb °F	Water Press Drop Ft WG	Total Capacity MBH	Leaving Water Temp °F	Leaving Dry Bulb °F	Water Press Drop Ft WG
50°F	1050	3	49.1	146.2	95	0.5	41.2	131.8	87.7	0.5	33.4	117.3	80.6	0.5
55°F	1050	3	46.8	147.8	98	0.5	39	133.3	91.1	0.5	31.3	118.7	84	0.5
60°F	1050	3	44.5	149.4	102	0.5	36.8	134.8	94.5	0.5	29.2	120.1	87.3	0.5
65°F	1050	3	42.3	150.9	105	0.5	34.7	136.3	97.8	0.5	27.2	121.5	90.7	0.5
70°F	1050	3	40.2	152.3	108	0.5	32.7	137.7	101.1	0.5	25.2	122.9	94	0.5

All calculations based on an elevation of 2,000 ft.

Creating custom horticultural heating & cooling solutions for over 30 years

