

CWAC Series

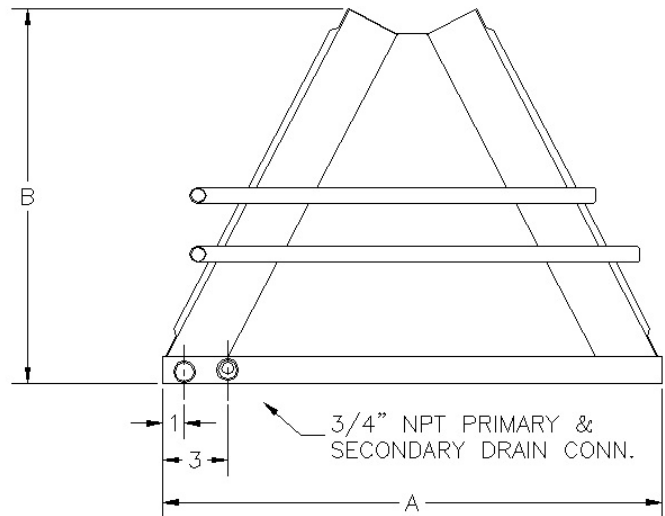
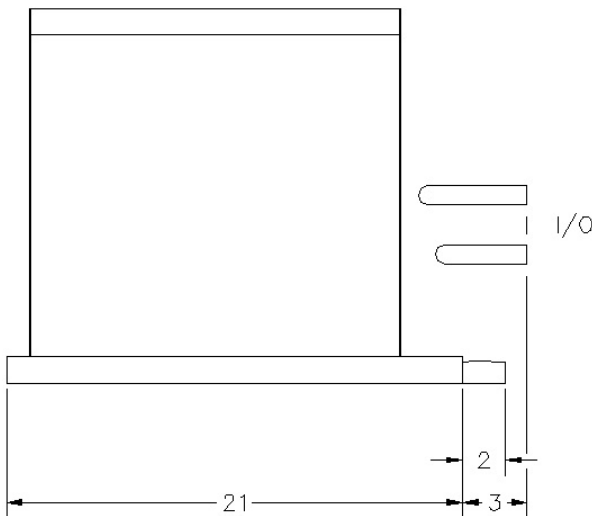
A Style
Hydronic Coils



DIVERSIFIED HEAT TRANSFER, INC.

1710 Flushing Avenue • Ridgewood, NY 11385
Phone: 718-386-6666 / 800-221-1522 • Fax: 718-386-7809
Manufacturers and Designers Since 1938.

The CWAC Series Hydronic A-Coils are designed to provide high performance cooling capacities for residential and light commercial applications. Use with your preferred OEM air handling equipment or within the system ductwork. Applicable in upflow or counter-flow on the return end of the air handling system. The coils are designed and tested in accordance with the current AHRI Standard 410 and manufactured with UL listed components.



Model CWAC-	Face (ft ²)	Coil Rows	A	B	I/O (nom)
1824	2.75	3	17"	11-7/8"	3/4"
3036	3.67	3	20"	15-1/2"	
4260	4.58	4	25"	19-1/2"	1"

Cooling or Heating

Bi-Directional Airflow

Enhanced Aluminum Fins

Dual Condensate Drains

Available through our large network of wholesale distributors



Chilled Water - Coil Performance

CWAC-1824																				
'F EWT LWT	CFM	Air "wg	75°F DB / 63°F WB Entering Air						80°F DB / 67°F WB Entering Air						85°F DB / 71°F WB Entering Air					
			GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB	GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB	GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB
40 50	400	0.05	3.1	1.7	15.2	11.2	49.4	49.3	4.8	4.4	20.0	13.1	49.8	49.8	5.1	4.9	25.4	15.1	49.9	49.9
	500	0.07	3.7	2.6	18.0	13.5	50.2	50.0	5.5	5.6	23.9	15.8	50.8	50.7	6.1	6.7	30.1	18.1	51.2	51.2
	600	0.09	4.2	3.3	20.6	15.7	51.0	50.7	6.1	6.8	27.3	18.3	51.8	51.7	7.0	8.5	34.4	20.9	52.5	52.3
	700	0.12	4.6	4.1	22.9	17.8	51.8	51.4	6.7	7.9	30.3	20.6	52.8	52.5	7.8	10.3	38.4	23.6	53.6	53.4
	800	0.14	5.1	4.8	25.0	19.7	52.5	51.9	7.2	9.0	33.1	22.8	53.7	53.3	8.5	12.1	41.8	26.0	54.6	54.3
	900	0.17	5.5	5.4	27.0	21.5	53.1	52.4	7.7	10.1	35.6	24.9	54.5	53.9	9.1	13.8	44.9	28.3	55.6	55.2
	1000	0.21	5.8	6.1	28.7	23.2	53.7	52.9	8.1	11.2	37.9	26.8	55.2	54.6	9.7	15.4	47.7	30.5	56.5	56.0
45 55	400	0.05	2.3	1.1	11.2	9.4	53.5	53.2	3.7	2.9	15.5	11.1	54.3	54.2	4.1	3.2	20.4	13.0	54.8	54.8
	500	0.07	2.7	1.5	13.3	11.4	54.1	53.7	4.3	3.6	18.4	13.5	55.1	54.9	4.9	4.4	24.3	15.7	55.8	55.7
	600	0.09	3.1	2.0	15.3	13.3	54.7	54.2	4.7	4.4	21.1	15.7	55.9	55.6	5.6	5.6	27.7	18.2	56.7	56.6
	700	0.12	3.5	2.5	17.0	15.1	55.3	54.6	5.2	5.1	23.4	17.7	56.6	56.2	6.2	6.8	30.7	20.5	57.6	57.4
	800	0.14	3.8	3.0	18.7	16.7	55.8	54.9	5.6	5.8	25.5	19.7	57.3	56.8	6.8	8.0	33.5	22.8	58.5	58.1
	900	0.17	4.1	3.4	20.2	18.3	56.4	55.3	5.9	6.4	27.5	21.5	57.9	57.2	7.3	9.1	36.0	24.8	59.3	58.8
	1000	0.21	4.4	3.8	21.6	19.8	56.9	55.6	6.3	7.1	29.3	23.3	58.5	57.7	7.8	10.2	38.3	26.8	60.0	59.3
50 60	400	0.05	1.7	0.7	82.6	7.9	56.9	55.9	2.7	1.6	11.3	9.4	58.2	58.0	3.2	2.1	15.6	11.1	59.1	59.1
	500	0.07	1.9	0.8	95.0	9.3	57.7	56.5	3.1	2.1	13.5	11.5	58.8	58.5	3.8	2.9	18.5	13.5	59.9	59.8
	600	0.09	2.2	1.0	11.0	10.8	58.3	56.8	3.5	2.5	15.5	13.4	59.4	58.9	4.3	3.6	21.1	15.7	60.6	60.4
	700	0.12	2.5	1.3	12.3	12.2	58.8	57.0	3.8	3.0	17.3	15.2	60.0	59.3	4.8	4.3	23.5	17.8	61.3	60.9
	800	0.14	2.8	1.6	13.6	13.5	59.3	57.2	4.2	3.4	18.9	16.9	60.5	59.6	5.2	5.0	25.7	19.8	62.0	61.4
	900	0.17	3.0	1.9	14.8	14.7	59.8	57.4	4.4	3.8	20.5	18.5	61.0	59.9	5.6	5.7	27.6	21.6	62.6	61.9
	1000	0.21	3.2	2.2	15.9	15.8	60.3	57.6	4.7	4.2	21.9	20.0	61.5	60.2	6.0	6.4	29.4	23.4	63.1	62.3

See Page 5 for Heating Performance

See Bottom Left of Page 5 for Glycol Correction Factors



Chilled Water - Coil Performance

CWAC-3036																				
'F EWT LWT	CFM	Air "wg	75°F DB / 63°F WB Entering Air						80°F DB / 67°F WB Entering Air						85°F DB / 71°F WB Entering Air					
			GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB	GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB	GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB
40 50	800	0.09	5.6	3.5	27.6	21.0	50.9	50.6	8.0	6.7	36.5	24.4	51.8	51.6	9.3	8.8	46.1	28.0	52.4	52.2
	900	0.10	6.1	4.0	30.0	23.1	51.5	51.1	8.6	7.6	39.6	26.8	52.5	52.2	10.1	10.2	49.9	30.6	53.3	53.1
	1000	0.11	6.5	4.6	32.2	25.1	52.0	51.6	9.2	8.5	42.5	29.1	53.1	52.8	10.9	11.6	53.6	33.2	54.0	53.8
	1100	0.12	6.9	5.1	34.3	27.0	52.6	52.0	9.7	9.4	45.2	31.2	53.8	53.4	11.5	13.0	57.0	35.6	54.8	54.5
	1200	0.13	7.3	5.7	36.2	28.8	53.1	52.4	10.1	10.2	47.7	33.2	54.4	53.9	12.2	14.3	60.0	37.9	55.6	55.1
	1300	0.15	7.7	6.2	38.0	30.5	53.5	52.7	10.6	11.1	50.0	35.2	55.0	54.4	12.8	15.6	63.0	40.0	56.3	55.7
	1400	0.18	8.0	6.7	39.7	32.2	54.0	53.1	11.0	11.9	52.2	37.1	55.5	54.8	13.2	16.7	65.5	42.1	57.0	56.4
45 55	800	0.09	4.2	2.1	20.5	17.8	54.6	54.1	6.2	4.3	28.2	21.0	55.8	55.5	7.5	5.9	37.1	24.3	56.7	56.5
	900	0.10	4.5	2.5	22.3	19.6	55.0	54.4	6.7	4.9	30.7	23.0	56.3	56.0	8.1	6.8	40.2	26.7	57.3	57.1
	1000	0.11	4.9	2.9	24.0	21.3	55.5	54.7	7.1	5.4	32.9	25.0	56.9	56.4	8.7	7.7	43.1	29.0	58.0	57.7
	1100	0.12	5.2	3.2	25.6	23.0	55.9	55.0	7.5	6.0	34.9	26.9	57.4	56.8	9.3	8.6	45.8	31.1	58.6	58.2
	1200	0.13	5.5	3.5	27.1	24.5	56.3	55.2	7.8	6.5	36.9	28.8	57.9	57.2	9.8	9.4	48.2	33.2	59.2	58.7
	1300	0.15	5.8	3.8	28.6	26.0	56.7	55.5	8.2	7.0	38.7	30.5	58.3	57.5	10.2	10.3	50.6	35.2	59.8	59.1
	1400	0.18	6.1	4.2	29.9	27.4	57.1	55.7	8.5	7.6	40.4	32.2	58.7	57.8	10.7	11.1	52.7	37.1	60.3	59.6
50 60	800	0.09	3.0	1.1	14.8	14.5	58.1	56.7	4.6	2.5	20.8	17.9	59.3	58.8	5.7	3.7	28.4	21.0	60.5	60.3
	900	0.10	3.3	1.3	16.2	16.0	58.5	56.9	4.9	2.9	22.6	19.7	59.8	59.1	6.2	4.3	30.8	23.1	61.1	60.7
	1000	0.11	3.5	1.5	17.5	17.3	58.9	57.1	5.3	3.2	24.4	21.4	60.2	59.4	6.7	4.9	33.0	25.1	61.6	61.1
	1100	0.12	3.8	1.7	18.7	18.5	59.3	57.2	5.6	3.5	26.0	23.1	60.6	59.6	7.1	5.4	35.1	27.1	62.1	61.5
	1200	0.13	4.0	2.0	19.9	19.7	59.7	57.4	5.9	3.9	27.5	24.7	61.0	59.9	7.5	5.9	37.0	29.0	62.5	61.8
	1300	0.15	4.2	2.2	21.0	20.9	60.0	57.5	6.1	4.2	29.0	26.2	61.4	60.1	7.9	6.5	38.9	30.7	63.0	62.1
	1400	0.18	4.5	2.4	22.0	22.0	60.4	57.7	6.4	4.5	30.3	27.7	61.7	60.3	8.2	7.0	40.6	32.5	63.4	62.4

See Page 5 for Heating Performance

See Bottom Left of Page 5 for Glycol Correction Factors



Chilled Water - Coil Performance

CWAC-4260																				
'F EWT LWT	CFM	Air "wg	75°F DB / 63°F WB Entering Air						80°F DB / 67°F WB Entering Air						85°F DB / 71°F WB Entering Air					
			GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB	GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB	GPM	Fluid DP'	Tot MBH	Sens MBH	DB	WB
40 50	1200	0.15	8.7	2.0	43.1	32.4	50.3	50.1	12.2	3.8	56.8	37.7	51.0	50.9	14.5	4.9	71.4	43.19	51.5	51.5
	1300	0.17	9.2	2.3	45.7	34.6	50.6	50.4	12.8	4.2	60.2	40.2	51.4	51.3	15.3	5.5	75.7	45.9	52.1	52.0
	1400	0.19	9.7	2.6	48.2	36.8	50.9	50.7	13.5	4.5	63.5	42.6	51.9	51.7	16.1	6.0	79.8	48.7	52.6	52.5
	1500	0.21	10.3	2.9	50.7	39.0	51.2	50.9	14.1	4.9	66.6	45.0	52.3	52.1	16.9	6.6	83.7	51.3	53.1	53.0
	1600	0.23	10.7	3.1	53.0	41.0	51.6	51.2	14.7	5.3	69.7	47.4	52.6	52.4	17.7	7.1	87.4	53.9	53.6	53.4
	1700	0.25	11.2	3.3	55.2	43.0	51.9	51.5	15.2	5.6	72.5	49.6	53.0	52.8	18.4	7.7	90.9	56.4	54.0	53.8
	1800	0.28	11.6	3.5	57.3	44.9	52.2	51.7	15.8	6.0	75.2	51.8	53.4	53.1	19.1	8.2	94.3	58.9	54.5	54.3
	1900	0.30	12.0	3.7	59.3	46.8	52.5	52.0	16.3	6.3	77.8	53.9	53.8	53.4	19.7	8.7	97.5	61.2	54.9	54.7
	2000	0.33	12.4	3.9	61.3	48.6	52.8	52.2	16.8	6.7	80.3	56.0	54.1	53.7	20.3	9.2	100.6	63.5	55.4	55.0
45 55	1200	0.15	6.5	1.2	32.3	27.6	53.9	53.6	9.5	2.4	44.1	32.3	55.1	55.0	11.7	3.5	57.8	37.4	55.9	55.9
	1300	0.17	6.9	1.3	34.3	29.5	54.2	53.8	10.0	2.6	46.8	34.5	55.5	55.3	12.4	3.8	61.2	39.9	56.3	56.2
	1400	0.19	7.3	1.4	36.3	31.4	54.5	54.0	10.5	2.9	49.3	36.7	55.8	55.6	13.0	4.2	64.5	42.4	56.8	56.6
	1500	0.21	7.7	1.6	38.1	33.3	54.7	54.2	11.0	3.1	51.8	38.8	56.1	55.8	13.7	4.6	67.7	44.8	57.1	56.9
	1600	0.23	8.1	1.7	39.9	35.0	55.0	54.4	11.4	3.3	54.2	40.9	56.4	56.1	14.3	5.0	70.6	47.1	57.5	57.3
	1700	0.25	8.4	1.9	41.6	36.8	55.2	54.5	11.9	3.6	56.4	42.9	56.7	56.3	14.9	5.3	73.5	49.4	57.9	57.6
	1800	0.28	8.8	2.1	43.3	38.5	55.4	54.7	12.3	3.8	58.9	44.8	57.0	56.5	15.5	5.7	76.2	51.6	58.3	57.9
	1900	0.30	9.1	2.2	44.9	40.1	55.7	54.8	12.7	4.0	60.6	46.7	57.3	56.8	16.0	6.0	78.8	53.8	58.6	58.2
	2000	0.33	9.4	2.4	46.5	41.7	55.9	55.0	13.1	4.2	62.6	48.6	57.6	57.0	16.5	6.4	81.3	55.9	59.0	58.5
50 60	1200	0.15	4.8	0.6	23.7	23.0	57.1	56.3	7.0	1.3	32.8	27.7	58.7	58.4	9.0	2.2	44.4	32.3	59.9	59.8
	1300	0.17	5.1	0.7	25.2	24.6	57.4	56.4	7.4	1.5	34.8	29.6	58.9	58.6	9.5	2.4	47.1	34.5	60.2	60.1
	1400	0.19	5.4	0.8	26.7	26.2	57.6	56.5	7.8	1.6	36.8	31.5	59.2	58.7	10.1	2.6	49.7	36.8	60.5	60.3
	1500	0.21	5.7	0.9	28.1	27.6	57.8	56.6	8.2	1.8	38.7	33.4	59.4	58.9	10.6	2.9	52.2	38.9	60.8	60.5
	1600	0.23	6.0	1.0	29.5	29.1	58.1	56.7	8.6	2.0	40.5	35.2	59.7	59.1	11.1	3.1	54.5	41.0	61.1	60.8
	1700	0.25	6.2	1.0	30.8	30.5	58.3	56.8	8.9	2.1	42.3	37.0	59.9	59.2	11.5	3.3	56.8	43.0	61.4	61.0
	1800	0.28	6.5	1.1	32.2	31.9	58.5	56.9	9.2	2.3	44.0	38.7	60.1	59.4	11.9	3.5	58.9	45.0	61.7	61.2
	1900	0.30	6.8	1.2	33.4	33.2	58.7	57.0	9.5	2.4	45.6	40.4	60.4	59.5	12.4	3.8	60.9	47.0	62.0	61.4
	2000	0.33	7.0	1.3	34.6	34.5	58.9	57.1	9.9	2.5	47.2	42.0	60.6	59.6	12.8	4.0	62.9	48.8	62.2	61.6

See Page 5 for Heating Performance

See Bottom Left of Page 5 for Glycol Correction Factors



Hot Water - Coil Performance

CWAC-1824					
CFM	Air "wg	GPM	Fluid DP'	Lvg Air Temp °F	Heat MBH
400	0.04	4.6	3.6	166.5	46
500	0.06	5.6	5.1	162.5	56
600	0.08	6.4	6.7	158.9	64
700	0.10	7.2	8.3	155.5	72
800	0.12	8.0	10.0	152.4	80
900	0.15	8.7	11.7	149.4	87
1000	0.18	9.3	13.3	146.6	93

CWAC-3036					
CFM	Air "wg	GPM	Fluid DP'	Lvg Air Temp °F	Heat MBH
800	0.08	8.6	6.9	159.0	86
900	0.1	9.4	8.1	156.5	94
1000	0.11	10.2	9.5	154.1	102
1100	0.13	10.9	10.8	151.8	109
1200	0.15	11.6	12.1	149.5	116
1300	0.17	12.3	13.4	147.4	123
1400	0.19	12.9	14.6	145.4	129

CWAC-4260					
CFM	Air "wg	GPM	Fluid DP'	Lvg Air Temp °F	Heat MBH
1200	0.14	13.7	4.1	164.9	137
1300	0.16	14.6	4.6	163.3	146
1400	0.18	15.5	5.1	161.7	155
1500	0.2	16.3	5.6	160.1	163
1600	0.22	17.1	6.1	158.6	171
1700	0.24	17.9	6.7	157.1	179
1800	0.26	18.6	7.2	155.6	186
1900	0.29	19.4	7.7	154.2	194
2000	0.31	20.1	8.3	152.9	201

Heating Tables: 65°F Air, 180°F Entering Water, 160°F Lvg Water

HEATING Correction Factors

Adjust For	Entering Air Temperature			
	67°F	70°F	73°F	75°F
GPM	0.98	0.95	0.92	0.90
DP'	0.96	0.90	0.86	0.82
LAT °F	1.00	1.00	1.01	1.01

Adjust For	Entering Water Temperature		
	160°F	140°F	120°F
GPM	0.80	0.60	0.39
DP'	0.69	0.41	0.20
LAT °F	0.88	0.77	0.66

Adjust Table Values for 30°F ΔT Water:

- Multiply PD' x 0.43
- Multiply Lvg Air Temp °F x 0.96
- Multiply GPM x 0.63
- Multiply New GPM x 15 for adjusted Heat MBH

COOLING Correction Factors

Adjust For	Propylene Glycol Percentage				
	10%	20%	30%	40%	50%
GPM	0.93	0.87	0.79	0.78	0.78
DP'	0.94	0.96	1.19	1.57	2.20
MBH	0.93	0.85	0.76	0.72	0.69
LAT °F	1.01	1.02	1.05	1.06	1.07

Adjust For	Propylene Glycol Percentage				
	10%	20%	30%	40%	50%
GPM	0.99	0.99	0.99	0.99	1.00
DP'	1.02	1.07	1.11	1.17	1.24
MBH	0.99	0.98	0.96	0.95	0.94
LAT °F	0.99	0.99	0.98	0.97	0.96