

CAWMP

(formerly CAPMP)

Evaporator Coil – A Coil, Cased, Multipoise for use with R-410A Refrigerant

IN THE U.S. THIS PRODUCT IS FOR SERVICE AND WARRANTY ONLY.

Product Data

IMPORTANT: The CAWMP replaces the CAPMP model in the United States and is only available for service and warranty use.
In Canada, the CAWMP can be used for new R-410A installations, service, and warranty use.

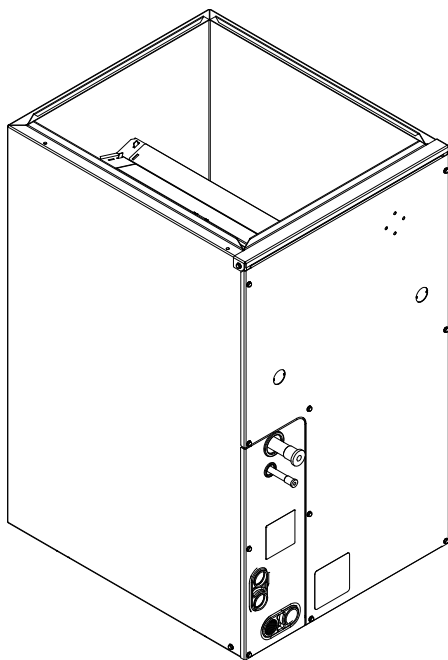


Fig. 1 – CAWMP

A06009



A221610ICP

The CAWMP evaporator coil incorporates proven standards for reliable system operation and performance throughout the life of this quality Air Conditioner or Heat Pump system. These quality evaporator coils, manufactured and installed as part of a total comfort system, provide AHRI-rated performance ratings and are additionally listed with UL and c-UL.

This coil is available for use with R-410A Refrigerant only. It is a cased A-coil that is housed in a durable, 24-gauge, pre-painted taupe metallic cabinet. The fully insulated cabinet (foil faced with R-2.1 insulation properties) provides for quiet efficient operation of the evaporator coil. This multipoise coil offers the most in installation application flexibility; one coil for a variety of applications with fewer SKUs to stock.

DESIGN FEATURES

Performance

Designed with performance in mind, this new A-coil offers low pressure drops to enhance system performance and airflow characteristics.

Thermostatic Expansion Valves (TXV)

All coils have refrigerant-specific, factory-installed TXVs.

Durable Condensate Pans (2)

The corrosion-resistant drain pans, one for vertical applications and one for horizontal, are designed in a “fiberglass reinforced thermoset polyester” material (FRTPE) that offers unsurpassed pan strength. It is engineered with proper slope in both pans to help ensure water drainage, improved moisture removal, and home comfort.

Refrigerant Connections

Provided with industry proven sweat connections for leak-free operation to maintain system reliability. The side mounting tubing to the coil slabs allows for easy cleaning/servicing of the coils, as well as easy access to the TXV.

Burst Pressure

Meets or exceeds burst pressure of 2100 psi, which is at least three to five times the pressure it would see in actual application.

UV Knockouts

This cased coil comes with factory-installed UV knockouts for quick and easy installation of UV lights.

Serviceability

Comes with a “split delta plate” for easy, quick access to the coil for service and cleaning. Also, after the door is removed, the coil is removable from the front of the unit without use of any tools.

WARRANTY

- Default 5-year parts limited warranty:
 - 10-year parts limited warranty with timely registration*.
- Equipment must be registered within 90 days of original installation, except in jurisdictions where warranty benefits cannot be conditioned on registration.
- * Applies to original purchaser/homeowner and not available to subsequent owners, except in jurisdictions where laws dictate otherwise.

See Warranty certificate for complete details and restrictions.

MODEL NUMBER NOMENCLATURE

UNIT	SERIES	A	B	C	D	E	F	G	SHIPPING WT (LBS)
CAWMP2414ALA	A	25 13/16"	14 3/16"	12 7/16"	17 3/16"	10 11/16"	—	5/8"	52.5
CAWMP2417ALA	A	25 13/16"	17 1/2"	15 3/4"	10 11/16"	10 11/16"	—	5/8"	56.6
CAWMP3014ALA	A	25 13/16"	14 3/16"	12 7/16"	17 3/16"	—	19 3/4"	3/4"	58.0
CAWMP3017ALA	A	25 13/16"	17 1/2"	15 3/4"	17 3/16"	—	19 3/4"	3/4"	64.5
CAWMP3617ALA	A	29 3/4"	17 1/2"	15 3/4"	19 3/4"	—	19 3/4"	3/4"	71.0
CAWMP4221ALA	A	29 3/4"	21"	19 1/4"	19 3/4"	—	19 3/4"	7/8"	78.0
CAWMP4821ALA	A	29 3/4"	21"	19 1/4"	19 3/4"	—	19 3/4"	7/8"	84.0
CAWMP6121ALA	A	35"	21"	19 1/4"	19 3/4"	—	19 3/4"	7/8"	98.0
CAWMP6024ALA	A	35"	24 1/2"	22 3/4"	19 3/4"	—	19 3/4"	7/8"	101.0

- NOTES:
- SERIES DESIGNATION IS THE 14th POSITION OF THE UNIT MODEL NUMBER.
 - ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

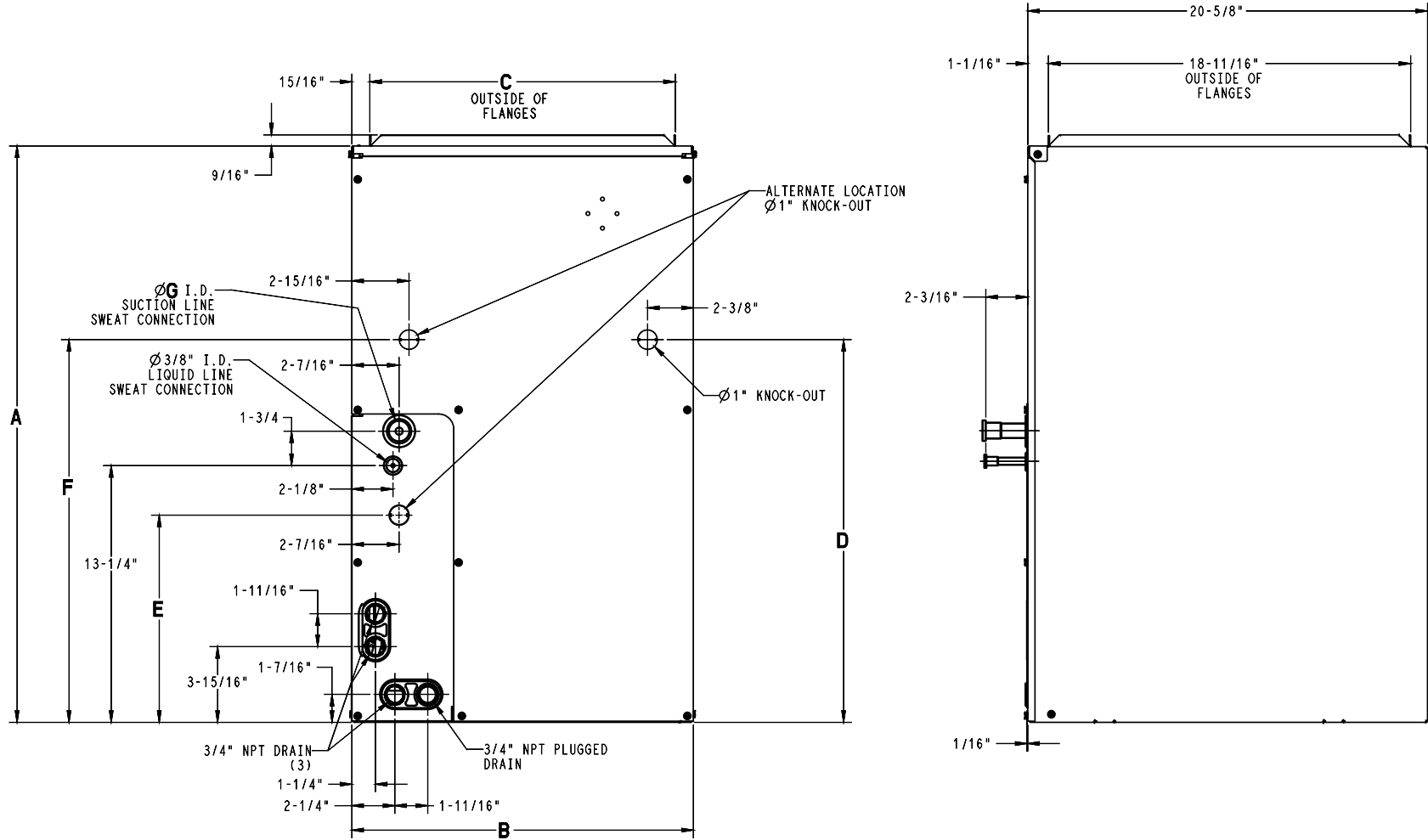


Fig. 2 – Dimensions (English)

UNIT	SERIES	A	B	C	D	E	F	G	SHIPPING WT (Kgs)
CAWMP2414ALA	A	655.6	360.4	315.9	436.6	271.5	—	15.88	23.8
CAWMP2417ALA	A	655.6	444.5	400.0	271.5	271.5	—	15.88	25.6
CAWMP3014ALA	A	655.6	360.4	315.9	436.6	—	501.6	19.05	26.3
CAWMP3017ALA	A	655.6	444.5	400.0	436.6	—	501.6	19.05	29.3
CAWMP3617ALA	A	755.6	444.5	400.0	501.6	—	501.6	19.05	32.2
CAWMP4221ALA	A	755.6	533.4	489.0	501.6	—	501.6	22.23	35.4
CAWMP4821ALA	A	755.6	533.4	489.0	501.6	—	501.6	22.23	38.1
CAWMP6121ALA	A	889.0	533.4	489.0	501.6	—	501.6	22.3	44.5
CAWMP6024ALA	A	889.0	622.3	577.8	501.6	—	501.6	22.23	45.8

NOTES:

- SERIES DESIGNATION IS THE 14th POSITION OF THE UNIT MODEL NUMBER.
- ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

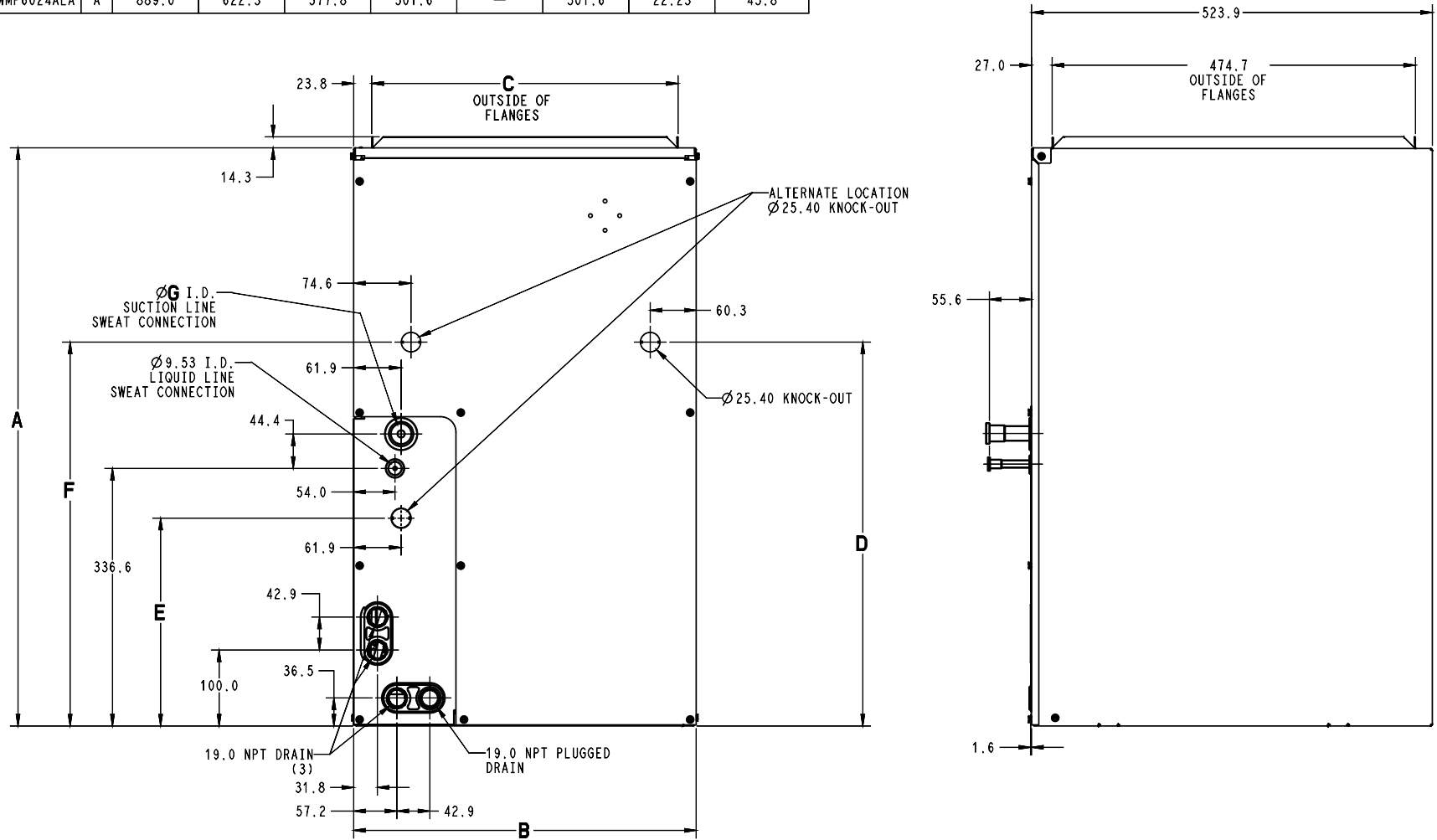


Fig. 3 – Dimensions (Metric)

PERFORMANCE DATA

Table 1 – COOLING CAPACITIES (MBH) - R-410A REFRIGERANT

Unit Size	Indoor Coil Air		Saturated Temperature Leaving Evaporator °F (°C)														
			30 (-1)			35 (2)			40 (4)			45 (7)			50 (10)		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
2414 2417	600	72 (22)	39.40	19.20	0.00	36.30	17.60	0.00	32.80	15.90	0.00	28.90	14.10	0.00	24.50	12.20	0.01
		67 (19)	33.10	20.00	0.01	29.90	18.20	0.01	26.30	16.40	0.01	22.40	14.50	0.02	17.90	12.60	0.02
		62 (17)	27.40	20.50	0.02	24.10	18.70	0.02	20.50	16.90	0.02	16.60	15.00	0.02	13.10	13.10	0.05
	800	72 (22)	47.70	23.20	0.00	44.00	21.40	0.00	39.80	19.40	0.00	35.10	17.30	0.02	19.80	15.10	0.02
		67 (19)	40.30	24.50	0.03	36.40	22.50	0.03	32.10	20.40	0.03	27.30	18.10	0.03	21.80	15.80	0.03
		62 (17)	33.40	25.50	0.04	29.50	23.40	0.04	25.10	21.20	0.04	20.50	19.00	0.04	16.70	16.70	0.09
	1000	72 (22)	54.30	26.40	0.00	50.20	24.40	0.00	45.40	22.30	0.02	40.10	20.00	0.04	34.00	17.50	0.04
		67 (19)	46.00	28.20	0.05	41.70	26.10	0.05	36.80	23.70	0.05	31.20	21.20	0.05	25.00	18.60	0.05
		62 (17)	38.30	29.80	0.05	33.80	27.50	0.06	28.90	25.10	0.06	23.80	22.60	0.06	19.90	19.90	0.14
3014 3017	750	72 (22)	49.10	24.00	0.00	45.00	21.90	0.00	40.50	19.70	0.00	35.50	17.40	0.00	30.00	15.00	0.01
		67 (19)	41.20	24.80	0.01	37.00	22.50	0.02	32.40	20.20	0.02	27.40	17.80	0.02	21.90	15.30	0.02
		62 (17)	34.00	25.40	0.02	29.70	23.00	0.02	25.10	20.60	0.02	20.30	18.30	0.02	16.00	16.00	0.06
	1000	72 (22)	59.90	29.10	0.00	55.00	26.70	0.00	49.50	24.10	0.00	43.30	21.30	0.02	36.50	18.40	0.03
		67 (19)	50.40	30.50	0.03	45.30	27.90	0.04	39.70	25.10	0.04	33.50	22.20	0.04	26.70	19.20	0.04
		62 (17)	41.70	31.60	0.04	36.50	28.80	0.04	30.90	26.00	0.04	25.00	23.10	0.05	20.30	20.30	0.10
	1250	72 (22)	68.80	33.40	0.00	63.20	30.70	0.00	56.80	27.80	0.03	49.70	24.70	0.04	41.90	21.40	0.05
		67 (19)	58.00	35.40	0.06	52.20	32.40	0.06	45.70	29.30	0.06	38.50	26.00	0.06	30.60	22.60	0.07
		62 (17)	48.00	37.00	0.07	42.10	33.90	0.07	35.70	30.70	0.07	29.20	27.50	0.07	24.20	24.20	0.01
3617	900	72 (22)	60.30	29.40	0.00	55.40	26.90	0.00	49.90	24.30	0.00	43.80	21.50	0.01	37.00	18.60	0.02
		67 (19)	50.70	30.60	0.02	45.70	27.90	0.03	40.10	25.10	0.03	33.90	22.20	0.03	27.00	19.20	0.03
		62 (17)	41.90	31.50	0.03	36.70	28.70	0.03	31.10	25.80	0.03	25.10	22.90	0.04	20.00	20.00	0.08
	1200	72 (22)	72.40	35.10	0.00	66.50	32.30	0.00	59.90	29.30	0.02	52.50	26.00	0.04	44.30	22.60	0.05
		67 (19)	61.00	37.10	0.05	55.00	34.00	0.06	48.20	30.70	0.06	40.70	27.30	0.06	32.40	23.70	0.06
		62 (17)	50.50	38.80	0.06	44.30	35.50	0.06	37.60	32.10	0.06	30.60	28.70	0.07	25.20	25.20	0.13
	1500	72 (22)	82.20	39.90	0.00	75.60	36.90	0.02	68.10	33.50	0.05	59.70	29.90	0.07	50.40	26.10	0.08
		67 (19)	69.40	42.70	0.08	62.60	39.30	0.08	55.00	35.70	0.08	46.40	31.80	0.09	37.00	27.80	0.09
		62 (17)	57.70	45.10	0.09	50.70	41.40	0.09	43.10	37.70	0.09	35.50	34.00	0.10	29.80	29.80	0.18
4221	1050	72 (22)	75.00	36.40	0.00	69.30	33.70	0.00	62.60	30.60	0.01	55.10	27.40	0.02	46.90	24.00	0.03
		67 (19)	63.30	38.80	0.03	57.20	35.70	0.03	50.50	32.50	0.03	42.90	29.00	0.04	33.50	25.00	0.04
		62 (17)	52.60	40.80	0.04	46.40	37.60	0.04	39.50	34.10	0.04	32.00	30.40	0.05	26.40	26.40	0.14
	1400	72 (22)	87.10	42.50	0.00	80.60	39.50	0.03	73.00	36.20	0.04	64.20	32.50	0.01	54.40	28.60	0.06
		67 (19)	73.80	46.10	0.06	66.90	42.70	0.06	58.90	39.00	0.07	50.10	35.20	0.07	40.00	30.90	0.07
		62 (17)	61.40	49.30	0.07	54.40	45.70	0.07	46.90	42.10	0.07	39.00	38.10	0.09	33.00	33.00	0.19
	1750	72 (22)	96.50	47.40	0.05	89.50	44.30	0.07	81.30	40.80	0.07	71.70	36.90	0.08	60.50	32.60	0.09
		67 (19)	82.10	52.30	0.09	74.60	48.80	0.09	65.90	44.90	0.09	55.90	40.60	0.09	45.10	36.20	0.10
		62 (17)	68.60	56.80	0.10	61.00	53.10	0.10	52.90	49.10	0.10	44.90	44.90	0.12	38.70	38.70	0.24

Table 1 – COOLING CAPACITIES (MBH) - R-410A REFRIGERANT (Continued)

Unit Size	Indoor Coil Air		Saturated Temperature Leaving Evaporator °F (°C)														
			30 (-1)			35 (2)			40 (4)			45 (7)			50 (10)		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
4821	1200	72 (22)	83.40	40.60	0.00	76.70	37.20	0.00	69.30	33.60	0.00	60.90	29.80	0.01	51.70	25.80	0.02
		67 (19)	70.10	42.30	0.02	63.20	38.60	0.03	55.60	34.80	0.03	47.20	30.80	0.04	37.80	26.60	0.04
		62 (17)	57.90	43.50	0.04	50.90	39.70	0.04	43.20	35.70	0.04	34.90	31.70	0.04	27.70	27.70	0.08
	1600	72 (22)	100.80	48.90	0.00	92.80	45.10	0.00	83.80	40.90	0.01	73.80	36.40	0.04	62.50	31.70	0.05
		67 (19)	84.90	51.70	0.05	76.70	47.40	0.06	67.50	42.90	0.06	57.30	38.10	0.06	45.90	33.20	0.06
		62 (17)	70.40	53.90	0.06	62.00	49.30	0.06	52.60	44.60	0.07	42.80	39.90	0.07	35.00	35.00	0.01
	2000	72 (22)	114.70	55.70	0.00	105.70	51.60	0.00	95.60	47.00	0.05	84.20	42.00	0.07	71.40	36.70	0.08
		67 (19)	97.00	59.50	0.08	87.70	54.90	0.08	77.30	49.90	0.09	65.60	44.60	0.09	52.50	39.00	0.09
		62 (17)	80.60	62.80	0.09	71.00	57.70	0.09	60.50	52.50	0.09	49.60	47.20	0.10	41.30	41.30	0.18
6024	1600	72 (22)	109.20	53.40	0.00	100.00	48.60	0.00	89.90	43.60	0.00	78.60	38.50	0.00	66.40	33.10	0.02
		67 (19)	91.50	55.10	0.02	82.10	50.00	0.03	71.90	44.80	0.03	60.70	39.40	0.03	48.40	34.00	0.03
		62 (17)	75.40	56.30	0.03	65.90	51.00	0.03	55.60	45.70	0.04	44.80	40.40	0.04	35.30	35.30	0.07
	2000	72 (22)	128.00	62.52	0.00	117.20	56.90	0.00	105.20	51.20	0.00	92.00	45.20	0.02	77.50	39.10	0.04
		67 (19)	107.40	64.90	0.04	96.40	59.10	0.04	84.30	53.00	0.05	71.10	46.80	0.05	56.60	40.50	0.05
		62 (17)	88.60	66.90	0.05	77.50	60.80	0.05	65.30	54.60	0.05	52.70	48.50	0.06	42.40	42.40	0.11
	2400	72 (22)	144.20	70.00	0.00	132.10	64.20	0.00	118.50	57.90	0.01	103.60	51.20	0.04	87.20	44.30	0.06
		67 (19)	121.20	73.60	0.06	108.80	67.20	0.06	95.10	60.40	0.07	80.10	53.50	0.07	63.70	46.40	0.07
		62 (17)	100.10	76.40	0.07	87.50	69.60	0.07	73.80	62.70	0.07	59.80	56.00	0.08	48.90	48.90	0.14
6121	1600	72 (22)	133.10	65.29	0.00	124.38	61.09	0.00	114.12	56.35	0.00	102.04	51.04	0.00	87.92	45.18	0.00
		67 (19)	112.92	69.55	0.00	103.56	64.81	0.00	92.62	59.52	0.00	79.80	53.65	0.00	64.92	47.24	0.00
		62 (17)	94.29	73.16	0.00	84.32	67.90	0.00	72.85	62.14	0.00	59.93	55.91	0.00	48.98	48.98	0.00
	2000	72 (22)	150.19	73.70	0.00	140.73	69.39	0.00	129.45	64.43	0.00	116.13	58.76	0.00	100.38	52.39	0.00
		67 (19)	127.98	79.99	0.00	117.77	75.03	0.00	105.67	69.38	0.00	91.36	63.01	0.00	74.55	55.91	0.00
		62 (17)	107.36	85.50	0.00	96.47	79.93	0.00	83.81	73.69	0.00	69.74	66.88	0.00	58.70	58.70	0.00
	2400	72 (22)	163.45	80.69	0.00	153.55	76.31	0.00	141.65	71.22	0.00	127.40	65.35	0.00	110.42	58.64	0.00
		67 (19)	139.86	88.99	0.00	129.06	83.92	0.00	116.15	78.06	0.00	100.72	71.35	0.00	82.51	63.78	0.00
		62 (17)	117.85	96.47	0.00	106.33	90.72	0.00	92.96	84.20	0.00	78.33	76.91	0.00	67.38	67.38	0.00

Legend:

CFM - Cubic Ft. per Minute
BF - Bypass Factor

EWB - Entering Wet Bulb (°F)
MBH - 1000 Btuh

LWB - Leaving Wet Bulb (°F)

TC - Gross Cooling Capacity 1000 Btuh
SHC - Gross Sensible Capacity 1000 Btuh

See notes on page 7.

Table 2 – COIL STATIC PRESSURE DROP (in. w.c.) R-410A REFRIGERANT

Unit Size	STANDARD CFM																			
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	
2414	Dry																			
	0.065	0.091	0.120	0.154	0.194	0.237	0.284													
	Wet																			
2417	0.066	0.094	0.124	0.161	0.203	0.250	0.301													
	Dry																			
	0.056	0.076	0.097	0.123	0.151	0.182	0.215													
3014	Wet																			
	0.060	0.082	0.105	0.132	0.163	0.195	0.231													
	Dry																			
3017	0.054	0.077	0.102	0.133	0.167	0.206	0.248	0.296	0.347											
	Wet																			
	0.059	0.084	0.111	0.142	0.181	0.223	0.269	0.319	0.375											
3617	Dry																			
	0.043	0.059	0.077	0.096	0.119	0.144	0.171	0.201	0.232											
	Wet																			
3617	0.046	0.063	0.083	0.105	0.130	0.157	0.186	0.219	0.252											
	Dry																			
	0.023	0.036	0.052	0.069	0.089	0.110	0.135	0.160	0.189	0.219	0.251									
4221	Wet																			
	0.042	0.058	0.076	0.095	0.117	0.142	0.169	0.198	0.231	0.265	0.299									
	Dry																			
4221			0.044	0.056	0.068	0.082	0.099	0.119	0.138	0.161	0.183	0.205	0.233							
	Wet																			
			0.058	0.073	0.089	0.106	0.125	0.143	0.165	0.189	0.213	0.239	0.268							
4821	Dry																			
			0.055	0.072	0.089	0.107	0.128	0.150	0.175	0.199	0.228	0.257	0.288	0.321	0.356					
	Wet																			
4821			0.058	0.075	0.094	0.115	0.136	0.161	0.188	0.217	0.247	0.279	0.313	0.347	0.386					
	Dry																			
	6024					0.073	0.083	0.095	0.107	0.120	0.136	0.152	0.169	0.184	0.203	0.217	0.238	0.260	0.283	0.307
Wet																				
					0.076	0.086	0.098	0.110	0.124	0.140	0.157	0.175	0.193	0.215	0.238	0.261	0.286	0.314	0.342	
6121	Dry																			
						0.111	0.133	0.153	0.163	0.204	0.234	0.262	0.293	0.326	0.366	0.392	0.437	0.480	0.520	
	Wet																			
6121						0.130	0.150	0.183	0.210	0.245	0.280	0.320	0.355	0.400	0.435	0.480	0.525	0.570	0.630	

COOLING CAPACITIES NOTES:**NOTE:**

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$$

$$\text{Leaving wb} = \text{wb corresponding to enthalpy of air leaving coil (h}_{\text{LWB}})$$

$$h_{\text{LWB}} = h_{\text{EWB}} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$
Where h_{EWB} = enthalpy of air entering coil
- SHC is based on 80°F db temperature of air entering the evaporator coil.
Below 80°F db, subtract (Correction Factor x CFM) from SHC.
Above 80°F db, add (Correction Factor x CFM) to SHC.
- Direct interpolation is permissible. Do not extrapolate.
- Fan motor heat has not been deducted.
- All data points are based on 10°F superheat leaving coil and use of thermostatic expansion valve (TXV) device.
- All units have sweat suction-tube connection and a liquid-tube connection. For 1-1/8-in. system suction tube, 3/4 x 1-1/8-in. suction tube connection adapter is available as accessory.
- The CAWMP coils can be used in any properly designed system using R-410A Refrigerant.
- Before using maximum cfm shown in table, check coil static pressure drop to ensure system blower can provide necessary static pressure needed for coil and duct systems.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

Table 3 – ENTERING AIR DRY BULB TEMPERATURE (°F)

BYPASS FACTOR	79	78	77	76	75	Under 75
	81	82	83	84	84	Above 85
	Correction Factor					
0.10	0.98	0.87	1.96	1.74	2.94	2.62
0.20					3.92	3.49
0.30	0.76	1.53	2.29	3.05	4.91	4.36
					3.82	Use formula shown below

Interpolation is permissible.
Correction Factor = 1.09 x (1 - BF) x (db - 80)