

Product Data

The CAPVU evaporator coils incorporate proven standards for reliable system operation and performance throughout the life of a quality Carrier Air Conditioner or Heat Pump system. Evaporator coils manufactured by Carrier and installed as part of a total comfort system provide ARI-rated performance ratings and are additionally listed with UL and c-UL.

DESIGN FEATURES

Performance — Designed with performance in mind, these A-coils offer low pressure drops to enhance system performance and airflow characteristics.

Aluminum Coils — Models are built with aluminum hairpins, designed to resist both general pitting corrosion and excessive indoor Formicary Corrosion. (Formicary Corrosion is an industry phenomenon.)

Thermostatic Expansion Valves (TXV) — All Carrier coils have refrigerant-specific, factory-installed TXVs.

Durable Condensate Pan —The corrosion-resistant drain pan is designed with a "fiberglass reinforced thermoset polyester" material (FRTP) that offers unsurpassed pan strength. It is engineered with proper slope to help ensure water drainage, reduced pan sweating and improved moisture removal for better home comfort.

Refrigerant Connections — The coils are provided with proven sweat connections for leak-free operation maintaining system reliability. The side mounting tubing to the coil slabs allows for easy cleaning and servicing of the coils, as well as easy access to the TXV

Burst Pressure — These coils meet or exceed burst pressure of 2100 psi which is at least three to five times the pressure they will see in actual application.

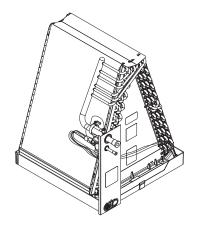
UV Knockouts — The cased coils also come with factory-installed UV knockouts for quick and easy installation of Carrier UV lights.

Serviceability — All the coils come with a "split-delta plate" for easy, quick access to the coil for service and cleaning. Also the coils are removable from the front of the unit without use of any tools (once the door is removed). The units are also designed with a single size screw, the same size as used on all our Carrier furnaces. One tool required for all jobs.

Installation Flexibility — The CAPVU evaporator coils are uncased A-coils that provide flexibility for a wide variety of field applications installed in either a factory-manufactured accessory casing, or a field-supplied plenum enclosure. Water management capabilities have been enhanced for downflow applications.

Coil Support — Carrier provides a standard factory pan support for the uncased coil, providing precise, durable support in the plenum for easier installations.

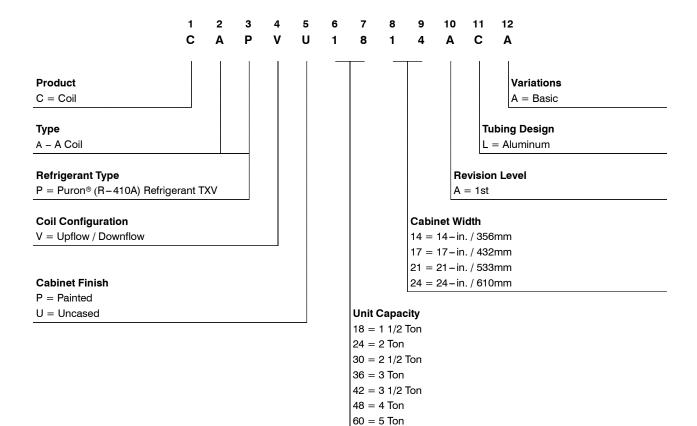
Face Plate — A unique Carrier feature, the face plate comes shipped with the uncased evaporator coil models, provides for a



CAPVU

A06002

MODEL NUMBER NOMENCLATURE



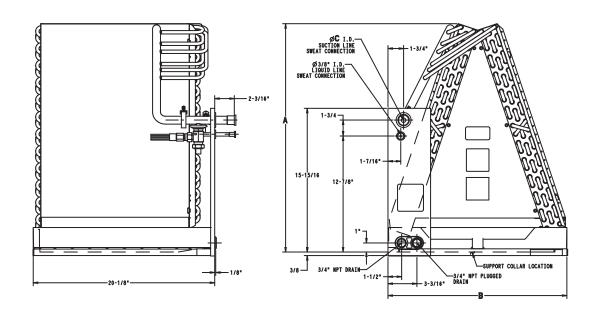






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A05393

DIMENSIONS - CAPVU

	Α	В	С	SHIPPING WT.
UNIT	in.	in.	in.	lb.
	(mm.)	(mm.)	(mm.)	(kg.)
CAD\/	13-5/8	13	5/8	21.0
CAPVU1814ALA	(346)	(330)	(16)	(10)
CAPVU2414ALA	17-3/4	13	5/8	25.0
CAF VUZ4 14ALA	(451)	(330)	(16)	(12)
CAPVU2417ALA	17-1/4	16-5/16	5/8	28.0
CAPVUZ417ALA	(438)	(414)	(16)	(12)
CAPVU3014ALA	21-7/8	13	3/4	32.0
OAI VOOUIHALA	(556)	(330)	(19)	(14)
CAPVU3017ALA	21-7/16	16-5/16	3/4	32.0
CAPVU301/ALA	(545)	(414)	(19)	(14)
CAPVU3614ALA	23-15/16	13	3/4	31.0
CAF VUSUI4ALA	(608)	(330)	(19)	(14)
CAPVU3617ALA	23-9/16	16-5/16	3/4	35.0
CAF VUSUITALA	(598)	(414)	(19)	(16)
CAPVU3621ALA	23	19-13/16	3/4	36.0
CAF VUSUZ IALA	(584)	(503)	(19)	(16)
CAPVU4221ALA	25-1/16	19-13/16	7/8	38.0
CAF VU422 IALA	(637)	(503)	(22)	(17)
CAPVU4224ALA	24-1/2	23-5/16	7/8	42.0
CAF VU4ZZ4ALA	(622)	(592)	(22)	(19)
CAPVU4817ALA	29-7/8	16-5/16	7/8	50.0
CAF VU40 I / ALA	(759)	(414)	(22)	(23)
CAPVU4821ALA	25-5/16	19-13/16	7/8	47.0
CAF VU40Z IALA	(643)	(503)	(22)	(21)
CAPVU4824ALA	24-13/16	23-5/16	7/8	49.0
CAF VU40Z4ALA	(630)	(592)	(22)	(22)
CAPVU6021ALA	31-1/2	19-13/16	7/8	57.0
CAF VUUUZ IALA	(800)	(503)	(22)	(26)
CAB\/LI6004ALA	31-1/16	23-5/16	7/8	557.0
CAPVU6024ALA	(789)	(592)	(22)	(25)

PERFORMANCE DATA

COOLING CAPACITIES (MBH) - PURON® R-410 REFRIGERANT

CAPV	INDOOR COIL							EMPE			APORATOR °F (°C)						
UNIT				0 (-1)			35 (2)		40 (4)			45 (7)			50 (10)		
SIZE	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
	450	72 (22)	32.00	15.70	0.00	29.30	14.30	0.00	26.40	12.80	0.00	23.10	11.30	0.00	19.50	9.70	0.01
	450	67 (19) 62 (17)	26.80 22.10	16.10 16.50	0.01	24.10 19.30	14.60 14.90	0.01	21.10	13.10 13.40	0.01	17.80 13.20	11.50 11.80	0.02	14.20 10.30	9.90 10.30	0.02 0.05
		72 (22)	39.20	19.10	0.02	36.00	17.40	0.02	16.40 32.30	15.70	0.02	28.30	13.90	0.02	23.80	12.00	0.05
1814	600	67 (19)	32.90	19.10	0.03	29.60	18.20	0.03	25.90	16.30	0.03	21.90	14.40	0.02	17.40	12.50	0.02
1014	000	62 (17)	27.20	20.60	0.04	23.80	18.80	0.04	20.20	16.90	0.04	16.30	15.00	0.04	13.20	13.20	0.09
		72 (22)	45.10	21.90	0.00	41.40	20.10	0.00	37.20	18.20	0.02	32.60	16.10	0.04	27.40	14.00	0.04
	750	67 (19)	38.00	23.20	0.05	34.20	21.20	0.05	29.90	19.10	0.05	25.20	17.00	0.05	20.00	14.70	0.06
		62 (17)	31.50	24.20	0.06	27.60	22.10	0.06	23.40	20.00	0.06	19.10	17.90	0.06	15.70	15.70	0.13
		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
	600	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
2414		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	29.80	15.10	0.02
2417	800	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
	1000	67 (19) 62 (17)	46.00 38.30	28.20 29.80	0.05	41.70 33.80	26.10 27.50	0.05	36.80 28.90	23.70 25.10	0.05	31.20 23.80	21.20 22.60	0.05	25.00 19.90	18.60 19.90	0.05 0.14
		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	0.14
	750	67 (19)	41.20	24.80	0.01	37.00	22.50	0.02	32.40	20.20	0.02	27.40	17.40	0.02	21.90	15.30	0.02
	'00	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
0011		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
3014	1000	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
3017		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
		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
	1250	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	0.14
		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
	900 1200 1500	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
0614		62 (17)	41.90 72.40	31.50 35.10	0.03	36.70 66.50	28.70 32.30	0.03	31.10 59.90	25.80 29.30	0.03	25.10 52.50	22.90 26.00	0.04	20.00	20.00	0.08
3614 3617		72 (22) 67 (19)	61.00	37.10	0.05	55.00	34.00	0.00	48.20	30.70	0.02	40.70	27.30	0.04	32.40	23.70	0.05
3621		62 (17)	50.50	38.80	0.06	44.30	35.50	0.06	37.60	32.10	0.06	30.60	28.70	0.00	25.20	25.20	0.13
		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
	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
4221	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	0.05	54.40	28.60	0.06
4224		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 96.50	49.30 47.40	0.07	54.40 89.50	45.70 44.30	0.07	46.90 81.30	42.10 40.80	0.07	39.00 71.70	38.10 36.90	0.09	33.00 60.50	33.00 32.60	0.19
	1750	72 (22) 67 (19)	82.10	52.30	0.03	74.60	48.80	0.07	65.90	44.90	0.07	55.90	40.60	0.08	45.10	36.20	0.10
	1750	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
		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
	1200	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		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
4817		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
4821	1600	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
4824		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	0.13
	000-	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	80.0
	2000	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
ļ		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
	1600	72 (22) 67 (19)	109.20 91.50	53.40 55.10	0.00	100.00 82.10	48.60 50.00	0.00	89.90 71.90	43.60 44.80	0.00	78.60 60.70	38.50 39.40	0.00	66.40 48.40	33.10 34.00	0.02
	1600	62 (17)	75.40	56.30	0.02	65.90	51.00	0.03	55.60	45.70	0.03	44.80	40.40	0.03	35.30	35.30	0.03
		72 (22)	128.00	62.20	0.00	117.20	56.90	0.00	105.20	51.20	0.00	92.00	45.20	0.04	77.50	39.10	0.04
6021	2000	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
6024		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
		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
	2400	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
Legend:	•				•					•	•			•		•	

Legend:

CFM - Cubic Ft. per Minute

EWB - Entering Wet Bulb

LWB - Leaving Wet Bulb

TC - Gross Cooling Capacity 1000 Btuh

SHC - Gross Sensible Capacity 1000 Btuh BF - Bypass Factor See notes on page 7.

MBH - 1000 Btuh

NOTES:

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

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

Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{LWB})

$$h_{LWB} = h_{EWB} - \frac{\text{total capacity (Btuh)}}{4.5 \text{ x CFM}}$$

Where h_{EWB} = enthalpy of air entering coil

3. SHC is based on 80°F (27°C) db temperature of air entering the evaporator coil.

Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC.

Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.

- 4. Direct interpolation is permissible. Do not extrapolate.
- 5. Fan motor heat has not been deducted.
- 6. All data points are based on 10°F (-12°C) superheat leaving coil and use of thermostatic expansion valve (TXV) device.
- 7. 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.
- 8. The CAPVU coils can be used in any properly designed system using Puron® refrigerant.
- 9. 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.
- 10. Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

	ENTERING AIR DRY BULB TEMPERATURE °F (°C)											
BYPASS FACTOR	79 (26)	78 (26)	77 (25)	76 (24)	75 (24)	Under 75 (24)						
BIFAGGIACION	81 (27)	82 (28)	83 (28)	84 (29)	84 (29)	Above 85 (29)						
	Correction Factor											
0.10	0.98	1.96	2.94	3.92	4.91							
0.20	0.87	0.87 1.74		3.49	4.36	Use formula shown below						
0.30	0.76	1.53	2.29	3.05	3.82							

Interpolation is permissible.

Correction Factor = $1.09 \times (1 - BF) \times (db - 80)$

ACCESSORIES

EMPTY COIL CASING ACCESSORY FOR UNCASED A-COIL

ACCESSORY PART NUMBER	CAPVU NOMINAL COIL SIZES	DIMENSIONS in. (mm.)								
TAITI NOMBER	SIZES	Н	W	D						
KCAKC2212ECC	1814, 2414, 3014, 3614	25-7/8 (657)	14-3/16 (360)	20-5/8 (524)						
KCAKC2306ECC	2417, 3017, 3617, 4817	33-7/8 (860)	17-1/2 (445)	20-5/8 (524)						
KCAKC2404ECC	3621, 4221, 4821, 6021	33-7/8 (860)	21 (533)	20-5/8 (524)						
KCAKC2504ECC	4224, 4824, 6024	33-7/8 (860)	24-1/2 (622)	20-5/8 (524)						

COIL STATIC PRESSURE DROP (in. w.c.) PURON® R-410A REFRIGERANT

UNIT					CE DI					DARD		UA IX							
SIZE	400	500	600	700	800	900	1000	1100				1500	1600	1700	1800	1900	2000	2100	2200
										Dry									
1814	0.079	0.111	0.145	0.186	0.232					Wet									
	0.083	0.116	0.151	0.196	0.243					vvei									
										Dry									
2414	0.065	0.091	0.120	0.154	0.194	0.237	0.284			Wet									
	0.066	0.094	0.124	0.161	0.203	0.250	0.301			vvei									
		ı								Dry									
2417	0.056	0.076	0.097	0.123	0.151	0.182	0.215			Wet									
	0.060	0.082	0.105	0.132	0.163	0.195	0.231			vvei									
										Dry	ı								
3014	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	VVCI									
										Dry									
3017	0.043	0.059	0.077	0.096	0.119	0.144	0.171	0.201	0.232	Wet									
	0.046	0.063	0.083	0.105	0.130	0.157	0.186	0.219	0.252	VVCI									
		1								Dry									
3614	0.047	0.069	0.093	0.119	0.151	0.187	0.227	0.270	0.317	0.362 Wet	0.418								
	0.053	0.076	0.101	0.129	0.162	0.200	0.241	0.286	0.335		0.447								
										Dry									
3617	0.023	0.036	0.052	0.069	0.089	0.110	0.135	0.160	0.189	0.219 Wet	0.251								
	0.042	0.058	0.076	0.095	0.117	0.142	0.169	0.198	0.231		0.299								
										Dry									
3621	0.026	0.037	0.050	0.062	0.077	0.092	0.109	0.128	0.148	0.170 Wet	0.193								
	0.029	0.040	0.053	0.065	0.082	0.099	0.119	0.138	0.160		0.209								
										Dry									
4221			0.044	0.056	0.068	0.082	0.099	0.119	0.138	0.161 Wet	0.183	0.205	0.233						
			0.058	0.073	0.089	0.106	0.125	0.143	0.165		0.213	0.239	0.268						
										Dry								1	
4224			0.039	0.049	0.060	0.072	0.085	0.099	0.114	0.130 Wet	0.146	0.164	0.182						
			0.054	0.066	0.079	0.092	0.103	0.125	0.142		0.182	0.202	0.222						
		1			•				•	Dry								1	
4817			0.065	0.082	0.105	0.128	0.156	0.185	0.216	0.253 Wet	0.290	0.331	0.372	0.417	0.464				
			0.066	0.084	0.106	0.130	0.159	0.188	0.222		0.296	0.337	0.379	0.425	0.476				
										Dry				•				1	
4821			0.055	0.072	0.089	0.107	0.128	0.150	0.175	0.199 Wet	0.228	0.257	0.288	0.321	0.356				
			0.058	0.075	0.094	0.115	0.136	0.161	0.188		0.247	0.279	0.313	0.347	0.386				
										Dry									
4824			0.044	0.056	0.069	0.084	0.100	0.118	0.137	0.159 Wet	0.180	0.198	0.222	0.247	0.275				
			0.052	0.065	0.080	0.095	0.112	0.131	0.150		0.193	0.214	0.241	0.270	0.296				
										Dry									
6021					0.075	0.093	0.112	0.133	0.157	0.181	0.206	0.234	0.264	0.294	0.326	0.360	0.396	0.432	0.478
					0.077	0.095	0.115	0.137	0.159	Wet 0.184	0.209	0.238	0.268	0.300	0.334	0.370	0.407	0.444	0.488
				1						Dry									
6024					0.073	0.083	0.095	0.107	0.120	0.136 Wet	0.152	0.169	0.184	0.203	0.217	0.238	0.260	0.283	0.307
					0.076	0.086	0.098	0.110	0.124		0.157	0.175	0.193	0.215	0.238	0.261	0.286	0.314	0.342
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