

**CVPVP
Evaporator Coil
Upflow/Downflow
AC Only**

Product Data



Fig. 1 – CVPVP

A200490

The CVPVP evaporator coil incorporates proven standards for reliable system operation and performance throughout the life of this product. 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 in Puron® Refrigerant (R-410A) only. It is a cased V-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) provides for quiet efficient operation of the evaporator coil.

DESIGN FEATURES

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

Thermostatic Expansion Valves (TXV) — All coils have refrigerant-specific, factory-installed TXVs. Adjustable, factory set for 8 degrees of superheat.

Durable Condensate Pan — The corrosion-resistant drain pan is designed of a “Polybutylene terephthalate” material (PBT) that offers unsurpassed pan strength. It is engineered with proper slope 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 location of the lineset connections allows for removal of the access door for easy cleaning/servicing of the coils, as well as easy access to the TXV.

Burst Pressure — Meets or exceeds burst pressure of 1900 psi, which is at least three to five times the pressure it would see in actual application.

UV Knockout — This cased coil comes with a factory-installed UV knockout for quick and easy installation of UV light.

Serviceability — Comes with a “no 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 the use of any tools.

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12
C	V	P	V	P	3	6	1	7	A	A	A

Product

C = Coil

Type

V = V-Coil

Refrigerant Type

P = Puron® Refrigerant (R-410A) TXV

Coil Configuration

V = Upflow/Downflow

Cabinet Finish

P = Painted

Variations

A = Basic

Internal Designator

A= 1st

Revision Level

A = 1st

Cabinet Width

17 = 17-in (432 mm)

24 = 24-in (610 mm)

Unit Capacity

25 = 2 Ton

36 = 3 Ton

49 = 4 Ton

60 = 5 Ton



Use of the AHRI Certified™ Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

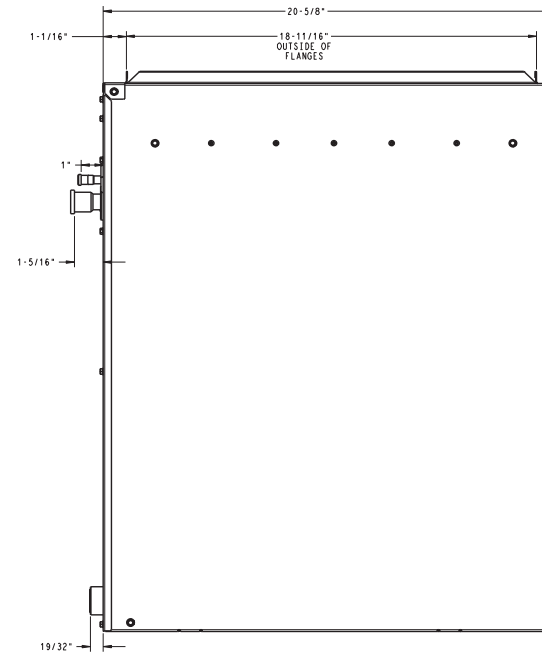
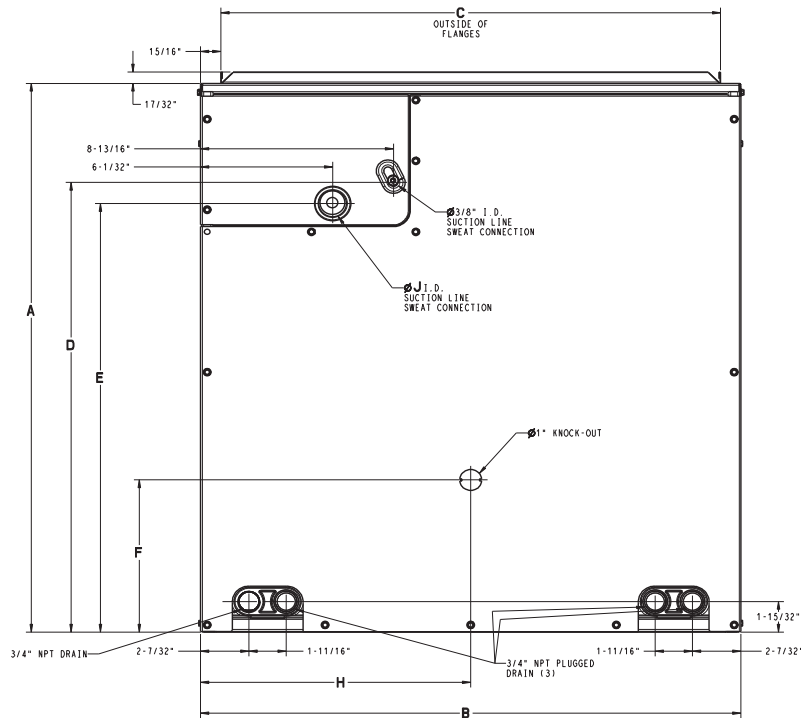


DIMENSIONS

UNIT	SERIES	A		B (Cabinet Width)		C		D		E		F		H		J (Suction Line)		SHIPPING WEIGHT	
		INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs
CVPVP2517AMC	A	19 7/16	494.5	17 5/8	447.5	15 3/4	400.3	14 11/16	373.8	13 11/16	348.1	7 1/8	180.9	8 13/16	223.8	7/8	22.23	34.0	15.4
CVPVP3617AMC	A	19 7/16	494.5	17 5/8	447.5	15 3/4	400.3	14 11/16	373.8	13 11/16	348.1	7 1/8	180.9	8 13/16	223.8	7/8	22.23	34.0	15.4
CVPVP4924AMC	A	26 5/16	669.0	24 5/8	625.3	22 3/4	578.1	21 5/8	548.6	20 5/8	523.5	7 5/16	185.4	12 5/16	312.7	7/8	22.23	48.0	21.8
CVPVP6024AMC	A	26 5/16	669.0	24 5/8	625.3	22 3/4	578.1	21 5/8	548.6	20 5/8	523.5	7 5/16	185.4	12 5/16	312.7	7/8	22.23	48.0	21.8

NOTES:

1. SERIES DESIGNATION IS THE 14TH POSITION OF THE UNIT MODEL NUMBER.
2. ALL DIMENSIONS ARE IN INCH (MM) UNLESS NOTED.



U.S. EXPORT CLASSIFICATION: EAR99

SD5571-4

PERFORMANCE DATA

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

INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C)														
		35 (2)			40 (4)			45 (7)			50 (10)			55 (13)		
CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
CVPV2517AMCEAAA																
600	72 (22)	33.56	17.10	0.00	30.39	15.54	0.00	26.85	13.88	0.01	22.99	12.12	0.05	18.72	10.31	0.06
	67 (19)	27.90	17.68	0.05	24.69	15.96	0.06	21.16	14.19	0.07	17.27	12.32	0.09	12.91	10.31	0.11
	62 (17)	22.70	17.96	0.08	19.46	16.13	0.09	15.87	14.23	0.10	12.23	12.23	0.10	10.23	10.23	0.24
800	72 (22)	41.48	21.03	0.00	37.61	19.20	0.00	33.29	17.12	0.06	28.52	14.97	0.09	23.22	12.75	0.10
	67 (19)	34.54	21.88	0.09	30.60	19.79	0.10	26.25	17.64	0.10	21.42	15.31	0.12	16.03	12.86	0.15
	62 (17)	28.13	22.34	0.12	24.13	20.10	0.13	19.69	17.78	0.14	15.63	15.63	0.12	13.05	13.05	0.27
1000	72 (22)	48.28	24.47	0.00	43.82	22.32	0.05	38.87	19.95	0.10	33.33	17.48	0.12	27.15	14.92	0.13
	67 (19)	40.26	25.54	0.13	35.73	23.18	0.13	30.68	20.68	0.14	25.05	17.97	0.16	18.77	15.15	0.18
	62 (17)	32.85	26.21	0.15	28.20	23.63	0.16	23.03	20.95	0.17	18.63	18.63	0.15	15.57	15.57	0.29
CVPV3617AMCEAAA																
900	72 (22)	52.79	27.01	0.00	47.89	24.62	0.03	42.48	21.98	0.10	36.45	19.24	0.12	29.73	16.40	0.12
	67 (19)	43.88	28.03	0.12	38.93	25.40	0.12	33.42	22.65	0.13	27.30	19.68	0.14	20.45	16.60	0.16
	62 (17)	35.70	28.65	0.14	30.64	25.82	0.14	25.01	22.87	0.15	20.05	20.05	0.13	16.79	16.79	0.27
1200	72 (22)	63.55	32.54	0.03	57.86	29.64	0.12	51.44	26.57	0.16	44.22	23.34	0.17	36.10	19.97	0.17
	67 (19)	53.01	33.97	0.17	47.15	30.91	0.17	40.56	27.61	0.18	33.16	24.07	0.19	24.86	20.37	0.20
	62 (17)	43.23	34.97	0.19	37.18	31.63	0.19	30.39	28.12	0.20	24.99	24.99	0.18	20.96	20.96	0.31
1500	72 (22)	72.52	37.00	0.13	66.17	33.84	0.19	58.95	30.46	0.20	50.76	26.87	0.21	41.51	23.04	0.21
	67 (19)	60.61	39.03	0.21	54.03	35.65	0.21	46.57	31.89	0.22	38.14	27.91	0.23	28.62	23.70	0.24
	62 (17)	49.54	40.42	0.23	42.70	36.70	0.23	34.96	32.74	0.24	29.40	29.40	0.22	24.68	24.68	0.35
CVPV4924AMCEAAA																
1200	72 (22)	73.47	37.81	0.00	67.14	34.63	0.07	59.98	31.20	0.10	51.83	27.54	0.11	42.61	23.67	0.11
	67 (19)	61.42	39.68	0.11	54.87	36.25	0.11	47.43	32.59	0.11	39.02	28.64	0.12	29.48	24.36	0.13
	62 (17)	50.22	41.17	0.12	43.39	37.40	0.12	35.67	33.38	0.13	29.05	29.05	0.12	24.46	24.46	0.26
1600	72 (22)	87.16	44.72	0.12	79.99	41.21	0.15	71.73	37.38	0.16	62.23	33.21	0.16	51.34	28.74	0.16
	67 (19)	73.16	47.65	0.16	65.61	43.82	0.16	56.96	39.66	0.16	47.02	34.98	0.17	35.63	29.93	0.18
	62 (17)	60.04	49.98	0.16	52.11	45.68	0.17	43.00	41.02	0.17	36.18	36.18	0.18	30.51	30.51	0.30
2000	72 (22)	98.07	50.29	0.20	90.27	46.59	0.20	81.20	42.49	0.20	70.68	37.99	0.20	58.51	33.08	0.19
	67 (19)	82.54	54.30	0.20	74.28	50.22	0.20	64.71	45.62	0.20	53.62	40.45	0.21	40.76	34.82	0.22
	62 (17)	67.97	57.49	0.21	59.21	52.82	0.21	49.04	47.70	0.21	42.48	42.48	0.22	35.89	35.89	0.34
CVPV6024AMCEAAA																
1600	72 (22)	87.23	44.37	0.11	79.99	40.85	0.14	71.65	37.01	0.15	62.10	32.85	0.15	51.17	28.39	0.15
	67 (19)	73.21	47.22	0.16	65.60	43.39	0.16	56.89	39.23	0.16	46.92	34.55	0.17	35.53	29.53	0.18
	62 (17)	60.07	49.47	0.16	52.08	45.16	0.17	42.93	40.51	0.17	36.03	36.03	0.18	30.36	30.36	0.30
2000	72 (22)	98.28	49.95	0.19	90.38	46.23	0.20	81.22	42.12	0.20	70.62	37.61	0.19	58.38	32.71	0.19
	67 (19)	82.70	53.86	0.20	74.36	49.76	0.19	64.71	45.15	0.20	53.56	39.98	0.21	40.67	34.36	0.22
	62 (17)	68.08	56.93	0.21	59.24	52.25	0.21	49.02	47.12	0.21	42.33	42.33	0.22	35.73	35.73	0.34
2400	72 (22)	107.32	54.61	0.24	98.93	50.77	0.24	89.13	46.48	0.23	77.72	41.72	0.23	64.45	36.47	0.23
	67 (19)	90.52	59.58	0.23	81.61	55.30	0.23	71.24	50.30	0.24	59.15	44.77	0.24	45.06	38.68	0.25
	62 (17)	74.72	63.45	0.24	65.23	58.50	0.24	54.18	53.02	0.25	47.95	47.95	0.26	40.56	40.56	0.38

CFM - Cubic Ft. per Minute
EWB - Entering Wet Bulb (°F)
LWB - Leaving Wet Bulb (°F)
TC - Gross Cooling Capacity 1000 Btuh
SHC - Gross Sensible Capacity 1000 Btuh
BF - Bypass Factor
MBH - 1000 Btuh

See notes on page 5.

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

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

Unit Size	STANDARD CFM																		
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
2517	Wet																		
	0.046	0.060	0.078	0.100	0.126	0.156	0.185												
3617	Wet																		
	0.046	0.060	0.078	0.100	0.126	0.156	0.185	0.220	0.260	0.305	0.350								
4924	Wet																		
			0.066	0.071	0.077	0.086	0.096	0.108	0.122	0.138	0.155	0.175	0.196	0.219	0.244				
6024	Wet																		
					0.077	0.086	0.096	0.108	0.122	0.138	0.155	0.175	0.196	0.219	0.244	0.271	0.299	0.329	0.361

COOLING CAPACITIES NOTES:

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:
 Leaving db = entering db - $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
 Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{LWB})

 $h_{LWB} = h_{EWB} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$
 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 8°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.
- 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.

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

Interpolation is permissible.
 Correction Factor = $1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$

NOTES: