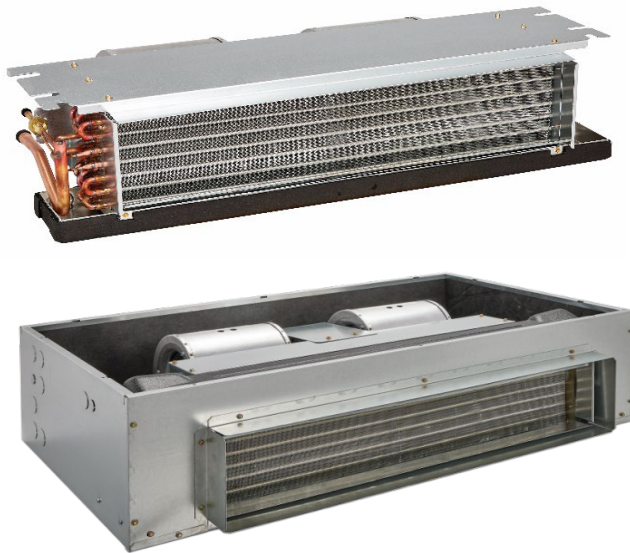


## Specification Guide

# CP Series

## Ceiling/Soffit Mount Air Handlers

*Electric Heat, Cased and Uncased, available with High Efficiency ECM Motor*



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# A1 Refrigerants Product Nomenclature

**C P 18 01C 9 H P 03 1 C A**

**Series**

C = Ceiling mount (uncased)

**Blower Motor Type**

P = PSC  
E = ECM Constant Torque

**Unit Size (Nominal MBTUH)**

18, 19, 23, 24, 25, 29, 30

**Slab No.**

01C, 02C, 03C, 04C, etc. = Copper  
01A, 02A, 03A, 04A, etc. = Aluminum

**Metering Device**

1 = Piston (R-410A)  
7 = R-410A Bleed HP-A/C TXV  
9 = R-410A Non-bleed HP-A/C TXV

**Airflow Configuration**

H = Horizontal only

**Revision**

**Case**

C = Cased  
U = Uncased

**Voltage**

1 = 208/240V, 60 Hz, 1 ph

**Heat**

00 = No heat  
03 = 3 kW (18-24)  
05 = 5 kW (all sizes)  
06 = 6 kW (all sizes)  
08 = 8 kW (all sizes)  
10 = 10 kW (24-30)

**Line Connection**

S = Stripped Wire (No heat models only)  
P = Pull Disconnect

# A2L Refrigerants Product Nomenclature

**C P 18 01C A H P 03 1 C R**

**Series**

C = Ceiling mount (uncased)

**Refrigerant Detection System**

R = Included (factory installed)

**Blower Motor Type**

P = PSC

E = ECM Constant Torque

**Case**

C = Cased

U = Uncased

**Unit Size (Nominal MBTUH)**

18, 19, 23, 24, 25, 29, 30

**Voltage**

1 = 208/240V, 60 Hz, 1 ph

**Slab No.**

01C, 02C, 03C, 04C, etc. = Copper

01A, 02A, 03A, 04A, etc. = Aluminum

**Heat**

00 = No heat

03 = 3 kW (18-24)

05 = 5 kW (all sizes)

06 = 6 kW (all sizes)

08 = 8 kW (all sizes)

10 = 10 kW (24-30)

**Metering Device**

1 = Piston (R-454B & R-32)

A = R-454B Non-bleed HP-A/C TXV

B = R-32 Non-bleed HP-A/C TXV

C = R-454B Bleed HP-A/C TXV

**Line Connection**

S = Stripped Wire (No heat models only)

P = Pull Disconnect

**Airflow Configuration**

H = Horizontal only

# Product Features

## General Features

- Available in uncased and cased configurations from factory.
- Cases also available for field installation as accessory.
- Designed for drop ceiling or Fur-Down application.
- Constructed of heavy-gauge, corrosion-resistant galvanized steel.
- Left hand refrigerant connections.
- Condensate drain connections on left and right side of air handler.
- Decorative panels available as accessory.
- Suitable for free air-return installation (non-ducted return).

## Evaporator Coil Features

- Coils are air pressure tested at 500psi, leak tested with helium, sealed with rubber plugs, and then charged with dry air.
- A1 models suitable for use with R-22 and R-410A.
- A2L models suitable for use with R-32 and R-454B
- A2L models include factory installed Refrigerant Detections System (RDS)
- Available in copper or aluminum construction.
- High efficiency lanced fin design.
- Enhanced copper or aluminum tubing.
- Piston or HP-A/C TXV available factory installed. Screw-on TXVs available as kits for field installation (see Accessories & Replacement Parts list for available kits)

## Electrical Features

- ECM Constant Torque motor or PSC motor available.
- Easy to service electric heat section.

## Physical Data

		Unit Size						
		18	19	23	24	25	29	30
<b>Available Voltage</b>		208/240 V, 60 Hz, 1 ph						
<b>Maximum Elec. Heat Available (kW)</b>		8	8	8	10	10	10	10
<b>Transformer Size and Type</b>		40 VA, Class 2						
<b>Blower Data:</b> PSC Motor (CP Models)	<b>Motor H. P.</b>	1/8	1/8	1/3	1/3	1/3	1/3	1/3
	<b>F. L. A. @ 240 V</b>	1.25	1.25	1.9	1.9	1.9	1.9	1.9
<b>Blower Data:</b> ECM Motor (CE Models)	<b>Motor H. P.</b>	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	<b>F. L. A. @ 240 V</b>	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<b>Nominal CFM</b>		600	600	800	800	800	1000	1000
<b>Refrigerant Conn. (IDS) Suction (in)</b>		3/4						
<b>Refrigerant Conn. (IDS) Liquid (in)</b>		3/8						
<b>R-410A Piston Size (in)</b>		.049	.049	.053	.053	.053	.059	.059
<b>Pallet Quantity (min order per model)</b>		8						
<b>Max Unit Weight (uncased)</b>		63	68	63	68	73	70	73
<b>Max Shipping Weight (uncased)</b>		66	71	66	71	76	73	76
<b>Max Unit Weight (cased)</b>		92	100	92	100	108	105	108
<b>Max Shipping Weight (cased)</b>		95	103	95	103	111	108	111

# Blower Performance

## 2-Speed PSC Motor

Unit Size	Blower Speed Setting	Airflow (CFM) vs. External Static Pressure (inches W.C.)				
		0.1	0.2	0.3	0.4	0.5
18, 19	Low - Red	610	536	468	392	316
	<b>High -Black</b>	680	607	532	456	368
23	Low - Red	846	777	702	627	546
	<b>High -Black</b>	902	830	755	667	589
24, 29	Low - Red	833	781	725	658	580
	<b>High -Black</b>	1039	976	903	825	728
25, 30	Low - Red	839	771	706	644	553
	<b>High -Black</b>	1050	975	901	820	744

- All airflow data is with a dry coil and electric heat.
- Speeds marked in **bold with asterisk** are the factory speed settings for both heating and cooling.
- Heating speeds should not be reduced below factory setting.
- Different speeds can be set for cooling mode; see installation instructions for changing cooling speeds.
- When matched with heat pump, and the room thermostat calls for second stage heat (electric heat strips), the first stage (heat pump) operation must be locked out. See parts sheet for Heat Pump Relay Kit - Part #76701444.

## ECM Constant Torque Motor

Unit Size	Blower Speed Setting	Airflow (CFM) vs. External Static Pressure (inches W.C.)				
		0.1	0.2	0.3	0.4	0.5
18, 19	Tap 1 (G)	604	514	453	437	301
	Tap 2 (DS)	604	514	453	437	301
	Tap 3 (Y1)	735	651	577	506	444
	Tap 4 (Y2)	890	826	764	700	605
	^ Tap 5 (W1)	890	826	764	700	605
23, 24, 29	Tap 1 (G)	618	547	464	344	270
	Tap 2 (DS)	617	547	469	351	273
	Tap 3 (Y1)	779	720	633	549	441
	Tap 4 (Y2)	940	876	812	750	675
	^ Tap 5 (W1)	937	875	812	750	674
25, 30	Tap 1 (G)	630	557	485	380	277
	Tap 2 (DS)	630	556	483	378	277
	Tap 3 (Y1)	803	719	640	576	521
	Tap 4 (Y2)	981	909	833	766	705
	^ Tap 5 (W1)	984	909	837	769	709

^ Factory setting for heating.

## Electrical Data

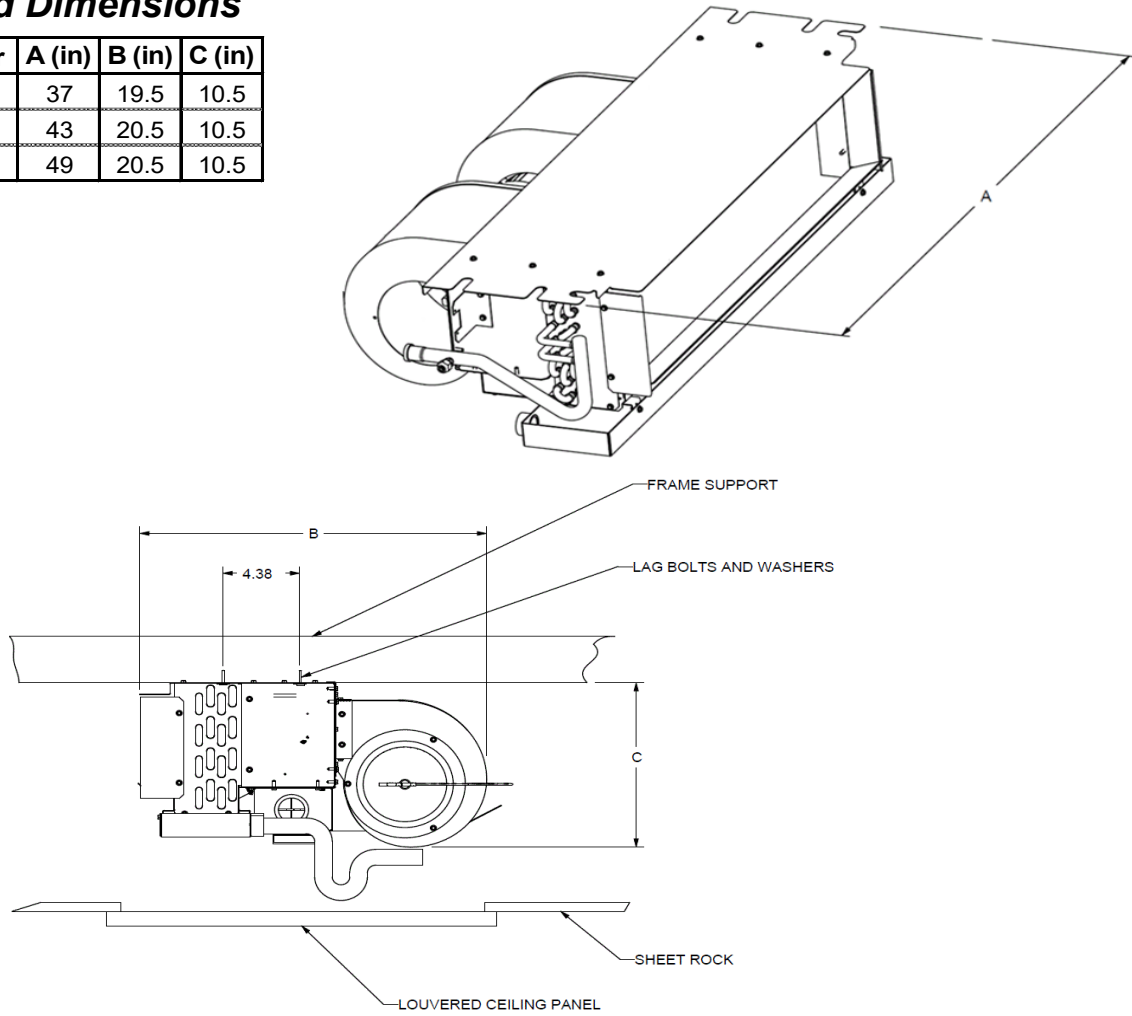
Unit Size	Heat Capacity		Minimum Circuit Ampacity				Pull Disconnect Amps Per Stage
	kW	BTUH	PSC		ECM		
	240 V <sup>[1]</sup>	240 V <sup>[1]</sup>	208 V	240 V	208 V	240 V	
18, 19	0.0	0	1.6	1.6	2.6	2.5	15
	3.0	10,236	15.1	17.2	16.0	18.1	30
	5.0	17,060	23.2	26.6	24.1	27.5	30
	6.0	20,472	28.6	32.8	29.5	33.8	45
	8.0	27,296	37.6	43.2	38.5	44.2	45
23, 24, 29	0.0	0	2.5	2.4	2.6	2.5	15
	3.0	10,236	15.9	18.0	16.0	18.1	30
	5.0	17,060	24.0	27.4	24.1	27.5	30
	6.0	20,472	29.4	33.6	29.5	33.8	45
	8.0	27,296	38.4	44.0	38.5	44.2	45
	10 <sup>[2]</sup>	34,120	41.4	54.4	41.6	54.5	60
25, 30	0.0	0	2.5	2.40	2.6	2.5	15
	5.0	17,060	24.0	27.4	24.1	27.5	30
	6.0	20,472	29.4	33.6	29.5	33.8	45
	8.0	27,296	38.4	44.0	38.5	44.2	45
	10.0	34,120	41.4	54.4	41.6	54.5	60

[1] For 208 Volts use .751 correction factor for kW & MBTUH.

[2] 10kW not available in -23 model

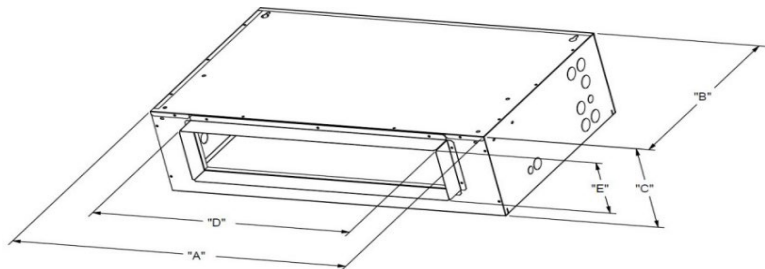
## Uncased Dimensions

Air Handler	A (in)	B (in)	C (in)
18, 23	37	19.5	10.5
19, 24, 29	43	20.5	10.5
25, 30	49	20.5	10.5



## Cased Dimensions

Air Handler Size	A (in)	B (in)	C (in)	D (in)	E (in)
18, 23	39.7	24	11	30.5	7
19, 24, 29	45.7	24	11	36.5	7
25, 30	51.7	24	11	42.5	7



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