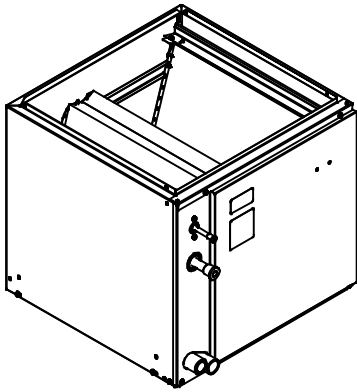




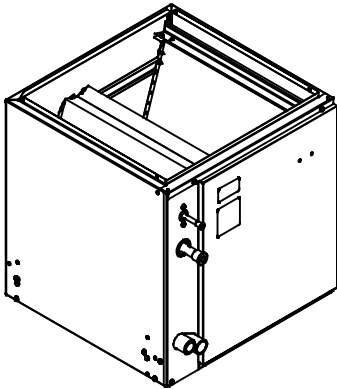
# CNPVP, CNRVP, CNPVT, CNRVT, CNPVU, CNRVU EVAPORATOR COIL N COIL - CASED AND UNCASED UPFLOW, DOWNFLOW

## Product Data



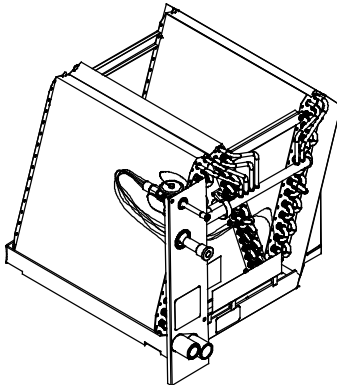
CN(P,R)VP

A06008



CN(P,R)VT (Transition)

A06007



CN(P,R)VU

A06004

This vertical design N-coil is a furnace coil designed to provide the highest standards of reliability and durability. The coils are available for use in R-410A and R-22 refrigerant systems.

Both designs have a painted case and come with factory-installed thermostatic expansion valves (TXV). The coils are offered in different width configurations for use in multiple installation applications. Additionally, they are offered in a transition configuration, a design which simplifies making field-supplied transition duct configurations. Easy maintenance is provided as the coil slides out of the cabinet after removing the access door and service panel. The coils are available in sizes 018 through 061 (1-1/2 to 5 tons).

Transition coil models CNPVT and CNRVT are designed for use with one size smaller width furnaces without field modifications.

CN(P,R)V(P,T) and CNPVU are available in tin-plated copper coil models. These coils are built with special hairpins which are tin-plated to resist both general pitting corrosion and excessive indoor corrosion-formicary corrosion. (Formicary corrosion is an industry phenomenon.)

### STANDARD FEATURES

**Water Management** — These coil designs do an excellent job of water management. The coils are designed to avoid water blow-off into the ducts by directing condensate away from the fins and into the drain pan.

**Durable Condensate Pan** — Each coil is equipped with a corrosion-resistant condensate drain pan. The condensate drain pan is designed with a slope to help ensure proper drainage, improved moisture removal, and home comfort.

**Compact Design** — Unique design offers as much as 2 to 4 in. (51 to 102 mm) less in height to aid in tight installations.

**Brass Inserts** — Every condensate pan features two 3/4 in. female threaded brass insert connections. The unique brass inserts provide for a leak-free condensate line connection to prevent water damage.

**Refrigerant Connections** — The coils are provided with proven sweat-connections for leak-free operation maintaining system reliability.

**Burst Pressures** — 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.

**Thermostatic Expansion Valves (TXV)** — All Payne® coils have refrigerant-specific factory-installed TXVs.

**Teflon Ring** — The ring, installed inside the liquid line connection at the TXV, is the best option for preventing refrigerant leaks and future service calls. Teflon works with both R-410A and R-22 refrigerants.

**Protective Tube Sheets** — Protect the durable copper tubing from being damaged during the manufacturing and installation process.

# MODEL NUMBER NOMENCLATURE

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

**Product**  
 C = Coil

**Type**  
 N = N Coil

**Refrigerant Type**  
 P = R410A TXV  
 R = R-22 TXV

**Coil Configuration**  
 V = Upflow / Downflow

**Cabinet Finish**  
 P = Painted  
 U = Uncased  
 T = Transition N

**Variations**  
 A = Basic

**Tubing Design**  
 C = Copper  
 T = Tin-Plated Copper

**Revision Level**  
 A = 1st

**Cabinet Width**  
 14 = 14" / 356mm  
 17 = 17" / 432mm  
 21 = 21" / 533mm  
 24 = 24" / 610mm

**Unit Capacity**

18 = 1 1/2 Ton	42 = 3 1/2 Ton
24 = 2 Ton	48 = 4 Ton
30 = 2 1/2 Ton	60 = 5 T
36 = 3 Ton	61 = 5 T

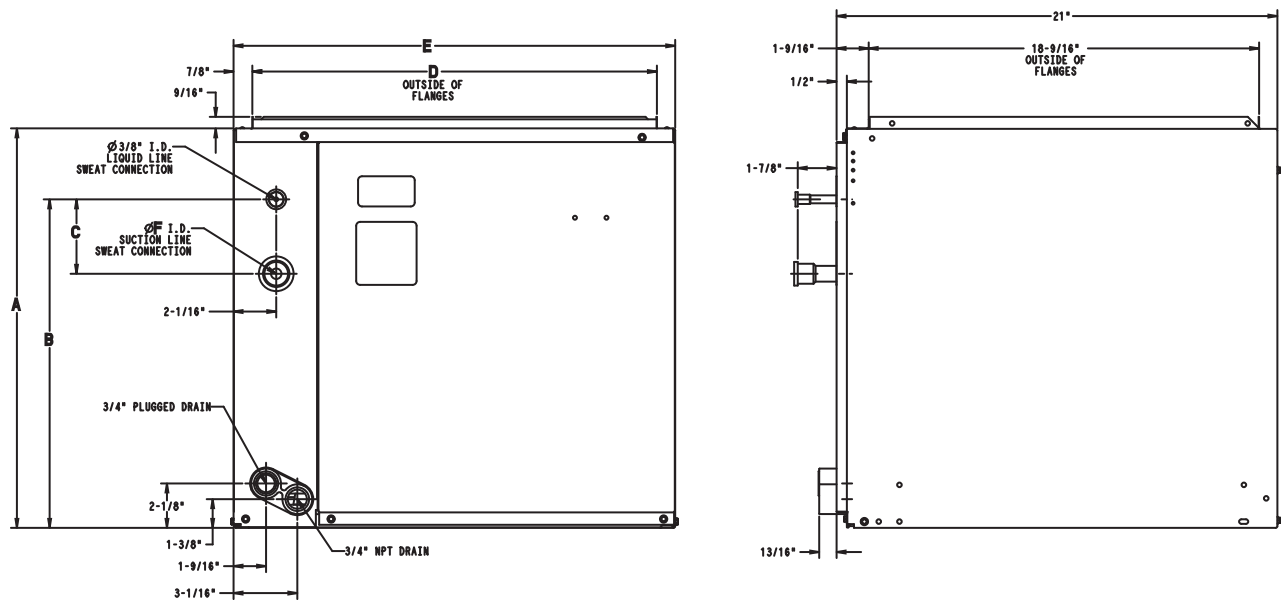
CNPV / CNRV



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI



# DIMENSIONS



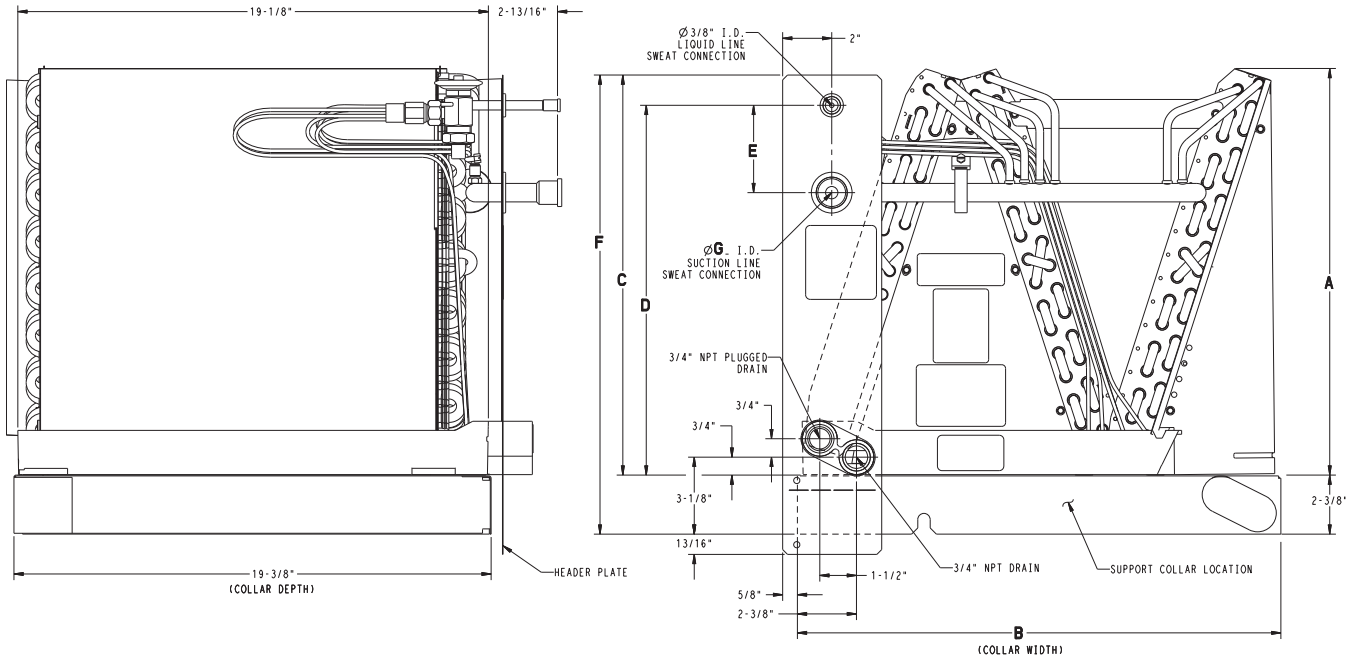
**CNPV / CNRV**

A05429

## DIMENSIONS - CN(P,R)VP

UNIT	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	SHIPPING WT. lbs. (kg)	
							Non-Coated Hairpins (C)	Tin-Coated Hairpins (T)
CN*VP1814A*A	12-5/8 (321)	10-1/16 (255)	5-5/16 (135)	12-1/2 (318)	14-3/16 (361)	5/8 (16)	36.0 (16)	38.5 (17)
CN*VP2414A*A	14-5/8 (371)	12-1/16 (306)	5-5/16 (135)	12-1/2 (318)	14-3/16 (361)	5/8 (16)	39.5 (18)	40.0 (18)
CN*VP2417A*A	14-5/8 (371)	10-1/16 (255)	3-9/16 (90)	15-3/4 (400)	17-1/2 (445)	5/8 (16)	39.5 (18)	42.5 (19)
CN*VP3014A*A	17 (432)	13-5/8 (346)	5-5/16 (135)	12-1/2 (318)	14-3/16 (361)	3/4 (19)	46.5 (21)	50.0 (23)
CN*VP3017A*A	17 (432)	13-7/8 (352)	3-9/16 (90)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	47.0 (21)	49.5 (22)
CN*VP3617A*A	17 (432)	13-7/8 (352)	3-9/16 (90)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	48.5 (22)	51.0 (23)
CN*VP3621A*A	17 (432)	13-9/16 (344)	3-9/16 (90)	19-1/4 (489)	21 (533)	3/4 (19)	48.0 (22)	51.0 (23)
CNPVP4217A*A	21-1/8 (537)	13-7/8 (352)	3-9/16 (90)	15-3/4 (400)	17-1/2 (445)	7/8 (22)	52.0 (24)	55.0 (25)
CN*VP4221A*A	19 (483)	15-5/8 (397)	3-9/16 (90)	19-1/4 (489)	21 (533)	7/8 (22)	56.5 (27)	59.5 (27)
CN*VP4821A*A	22-1/16 (560)	17-1/2 (445)	3-9/16 (90)	19-1/4 (489)	21 (533)	7/8 (22)	65.5 (30)	68.5 (31)
CN*VP4824A*A	22-1/16 (560)	17-1/4 (438)	3-9/16 (90)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	62.0 (28)	65.0 (29)
CN*VP6024A*A	26-5/16 (668)	17-15/16 (456)	3-9/16 (90)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	78.0 (35)	80.5 (37)
CNPVP6124A*A	32-7/16 (824)	17-15/16 (456)	3-9/16 (90)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	83.5 (38)	86.5 (39)

## DIMENSIONS (cont.)



**CNPV / CNRV**

A06503

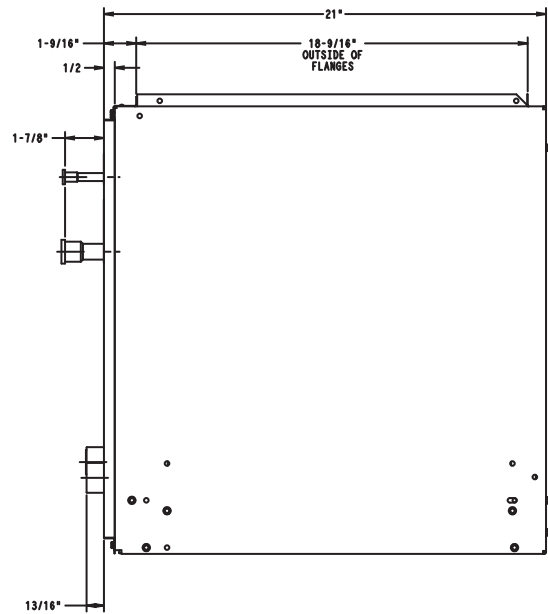
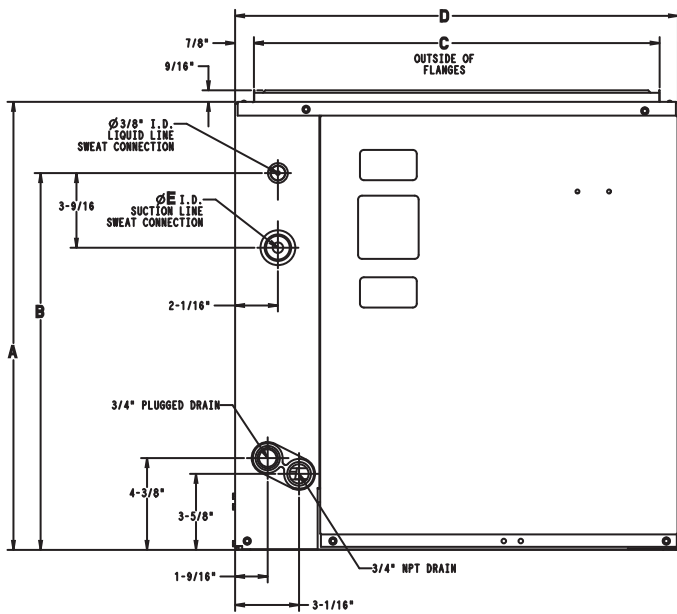
### DIMENSIONS - CNPVU

UNIT	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	SHIPPING WT. lb(kg)
CNPVU1814A*A	10-7/8 (276)	12-1/2 (318)	10-5/8 (270)	9-3/8 (238)	5-5/16 (135)	13 (330)	5/8 (16)	17.0 (8)
CNPVU2414A*A	12-7/8 (327)	12-9/16 (319)	12-5/8 (321)	11-7/16 (290)	5-5/16 (135)	15 (381)	5/8 (16)	21.0 (10)
CNPVU2417A*A	12-3/4 (324)	15-15/16 (405)	12-5/8 (321)	11-7/16 (290)	5-5/16 (135)	15 (381)	5/8 (16)	23.0 (10)
CNPVU3014A*A	14-7/8 (378)	12-5/8 (321)	14-3/16 (361)	13 (330)	5-5/16 (135)	16-9/16 (421)	3/4 (19)	23.0 (10)
CNPVU3017A*A	14-3/4 (375)	15-15/16 (405)	14-3/16 (361)	13 (330)	5-5/16 (135)	16-9/16 (421)	3/4 (19)	25.0 (11)
CNPVU3617A*A	14-11/16 (373)	15-15/16 (405)	14-7/16 (367)	13-1/4 (336)	3-9/16 (90)	16-13/16 (427)	3/4 (19)	26.0 (12)
CNPVU3621A*A	14-1/2 (368)	19-5/16 (490)	14-7/16 (367)	13-1/4 (336)	3-9/16 (90)	16-13/16 (427)	3/4 (19)	28.0 (13)
CNPVU4221A*A	16-1/2 (368)	19-5/16 (490)	16-3/16 (411)	15 (381)	3-9/16 (90)	18-9/16 (471)	7/8 (22)	29.0 (13)
CNPVU4821A*A	20-9/16 (522)	19-5/16 (490)	18-1/16 (459)	16-7/8 (429)	3-9/16 (90)	20-7/16 (519)	7/8 (22)	33.0 (15)
CNPVU4824A*A	20-3/8 (518)	22-7/8 (581)	18-1/16 (459)	16-7/8 (429)	3-9/16 (90)	20-7/16 (519)	7/8 (22)	35.0 (16)
CNPVU6024A*A	24-3/8 (619)	22-7/8 (581)	18-1/2 (470)	17-5/16 (440)	3-9/16 (90)	20-7/8 (530)	7/8 (22)	35.0 (16)

### DIMENSIONS - CNRVU

UNIT	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	SHIPPING WT. lb(kg)
CNRVU1814ACA	10-7/8 (276)	12-1/2 (318)	10-5/8 (270)	9-3/8 (238)	5-5/16 (135)	13 (330)	5/8 (16)	17.0 (8)
CNRVU2414ACA	12-7/8 (327)	12-9/16 (319)	12-5/8 (321)	11-7/16 (290)	5-5/16 (135)	15 (381)	5/8 (16)	21.0 (10)
CNRVU3014ACA	14-7/8 (378)	12-5/8 (321)	14-3/16 (361)	13 (330)	5-5/16 (135)	16-9/16 (421)	3/4 (19)	23.0 (10)
CNRVU3617ACA	14-11/16 (373)	15-15/16 (405)	14-7/16 (367)	13-1/4 (336)	3-9/16 (90)	16-13/16 (427)	3/4 (19)	26.0 (12)
CNRVU4221ACA	16-1/2 (368)	19-5/16 (490)	16-3/16 (411)	15 (381)	3-9/16 (90)	18-9/16 (471)	7/8 (22)	29.0 (13)
CNRVU4821ACA	20-9/16 (522)	19-5/16 (490)	18-1/16 (459)	16-7/8 (429)	3-9/16 (90)	20-7/16 (519)	7/8 (22)	33.0 (15)
CNRVU6024ACA	24-3/8 (619)	22-7/8 (581)	18-1/2 (470)	17-5/16 (440)	3-9/16 (90)	20-7/8 (530)	7/8 (22)	35.0 (16)

## DIMENSIONS (cont.)



**CNPV / CNRV**

A05431

### DIMENSIONS - CN(P,R)VT

UNIT	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	SHIPPING WT. lb (kg)	
						Non-Coated Hairpins (C)	Tin-Coated Hairpins (T)
CN*VT3617A*A	19-13/16 (503)	16-1/8 (410)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	48.5 (22)	51.0 (23)
CN*VT4221A*A	21-13/16 (554)	17-7/8 (454)	19-1/4 (489)	21 (533)	7/8 (22)	62.0 (28)	64.5 (29)
CN*VT4821A*A	24-7/8 (632)	19-3/4 (502)	19-1/4 (489)	21 (533)	7/8 (22)	71.0 (32)	73.5 (33)
CN*VT6024A*A	29-1/8 (740)	20-3/16 (513)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	78.0 (35)	80.5 (37)

**NOTE:** This coil suitable for use on furnace width one size down from coil casing width.

# PERFORMANCE DATA

## COOLING CAPACITIES (MBH) - R410A REFRIGERANT

CNPV 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
1814	450	72 (22)	31.00	15.20	0.00	28.60	13.90	0.00	25.80	12.50	0.00	22.80	11.10	0.00	19.30	9.60	0.00
		67 (19)	26.00	15.70	0.00	23.50	14.30	0.01	20.70	12.80	0.01	17.60	11.30	0.01	14.10	9.80	0.01
		62 (17)	21.50	16.00	0.01	18.90	14.50	0.01	16.10	13.00	0.01	13.00	11.50	0.01	10.10	10.10	0.03
	600	72 (22)	38.30	18.70	0.00	35.30	17.10	0.00	32.00	15.50	0.00	28.20	13.80	0.00	23.90	12.00	0.01
		67 (19)	32.30	19.50	0.01	29.20	17.80	0.02	25.70	16.10	0.02	21.80	14.30	0.02	17.50	12.40	0.02
		62 (17)	26.70	20.10	0.02	23.50	18.40	0.02	20.00	16.60	0.02	16.20	14.80	0.02	12.90	12.90	0.06
	750	72 (22)	44.30	21.50	0.00	40.90	19.90	0.00	37.00	18.10	0.00	32.70	16.10	0.02	27.70	14.00	0.02
		67 (19)	37.40	22.80	0.03	33.90	20.90	0.03	29.90	19.00	0.03	25.40	16.90	0.03	20.40	14.70	0.04
		62 (17)	31.10	23.80	0.04	27.40	21.80	0.04	23.40	19.80	0.04	19.10	17.70	0.04	15.60	15.60	0.10
2414 2417	600	72 (22)	39.00	19.00	0.00	36.00	17.50	0.00	32.70	15.90	0.00	28.80	14.10	0.00	24.60	12.30	0.01
		67 (19)	32.80	19.80	0.01	29.80	18.20	0.01	26.30	16.40	0.01	22.40	14.60	0.02	18.10	12.60	0.02
		62 (17)	27.20	20.50	0.02	24.00	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)	47.10	22.80	0.00	43.60	21.10	0.00	39.60	19.30	0.00	35.00	17.30	0.02	29.90	15.10	0.02
		67 (19)	39.80	24.20	0.03	36.10	22.30	0.03	32.00	20.30	0.03	27.30	18.10	0.03	22.00	15.90	0.03
		62 (17)	33.10	25.40	0.03	29.30	23.40	0.03	25.10	21.20	0.03	20.50	19.00	0.04	16.70	16.70	0.09
	1000	72 (22)	53.40	25.90	0.00	49.50	24.20	0.00	45.10	22.10	0.02	40.00	19.90	0.03	34.10	17.50	0.04
		67 (19)	45.30	27.90	0.05	41.20	25.90	0.05	36.60	23.70	0.05	31.30	21.30	0.05	25.20	18.70	0.05
		62 (17)	37.80	29.60	0.05	33.60	27.40	0.05	28.80	25.10	0.05	23.80	22.70	0.06	20.00	20.00	0.13
3014 3017	750	72 (22)	48.00	23.50	0.00	44.00	21.40	0.00	39.70	19.20	0.00	34.80	17.00	0.00	29.40	14.60	0.01
		67 (19)	40.30	24.20	0.01	36.20	22.00	0.02	31.80	19.70	0.02	26.80	17.40	0.02	21.40	15.00	0.02
		62 (17)	33.20	24.80	0.02	29.10	22.50	0.02	24.60	20.20	0.02	19.90	17.90	0.02	15.60	15.60	0.05
	1000	72 (22)	58.70	28.50	0.00	53.90	26.10	0.00	48.50	23.60	0.00	42.50	20.90	0.02	35.80	18.10	0.03
		67 (19)	49.40	29.90	0.03	44.40	27.30	0.03	38.90	24.60	0.04	32.90	21.70	0.04	26.20	18.80	0.04
		62 (17)	40.80	30.90	0.04	35.80	28.20	0.04	30.30	25.40	0.04	24.60	22.60	0.05	19.90	19.90	0.10
	1250	72 (22)	67.40	32.70	0.00	61.90	30.10	0.00	55.70	27.30	0.02	48.80	24.20	0.04	41.10	21.00	0.05
		67 (19)	56.80	34.70	0.05	51.20	31.80	0.06	44.90	28.70	0.06	37.80	25.50	0.06	30.10	22.20	0.06
		62 (17)	47.10	36.30	0.06	41.30	33.20	0.06	35.00	30.10	0.06	28.60	27.00	0.07	23.70	23.70	0.14
3617 3621 T3617	900	72 (22)	58.10	28.30	0.00	53.40	25.90	0.00	48.00	23.30	0.00	42.10	20.60	0.01	35.50	17.80	0.02
		67 (19)	48.90	29.50	0.02	44.00	26.90	0.03	38.50	24.20	0.03	32.50	21.30	0.03	25.90	18.40	0.03
		62 (17)	40.40	30.40	0.03	35.40	27.70	0.03	29.90	24.90	0.03	24.20	22.10	0.04	19.40	19.40	0.08
	1200	72 (22)	70.00	33.90	0.00	64.30	31.20	0.00	57.80	28.30	0.02	50.70	25.10	0.04	42.70	21.80	0.05
		67 (19)	58.90	35.90	0.05	53.10	32.90	0.05	46.50	29.70	0.05	39.30	26.40	0.06	31.20	22.90	0.06
		62 (17)	48.80	37.50	0.06	42.80	34.30	0.06	36.30	31.00	0.06	29.60	27.80	0.06	24.40	24.40	0.13
	1500	72 (22)	79.30	38.60	0.00	72.90	35.60	0.02	65.70	32.30	0.05	57.50	28.80	0.06	48.50	25.10	0.07
		67 (19)	67.00	41.30	0.08	60.40	38.00	0.08	53.00	34.40	0.08	44.70	30.70	0.08	35.50	26.80	0.09
		62 (17)	55.70	43.60	0.09	48.80	40.00	0.09	41.60	36.50	0.09	34.20	32.90	0.10	28.80	28.80	0.18
4217 4221 4224 T4221	1050	72 (22)	74.40	36.30	0.00	68.10	33.10	0.00	61.20	29.70	0.00	53.50	26.20	0.01	45.00	22.60	0.02
		67 (19)	62.30	37.60	0.02	56.00	34.20	0.03	48.90	30.60	0.03	41.20	27.00	0.03	32.80	23.30	0.03
		62 (17)	51.40	38.60	0.03	44.90	35.00	0.03	37.90	31.40	0.03	30.60	27.80	0.04	24.40	24.40	0.08
	1400	72 (22)	90.20	43.80	0.00	82.60	40.10	0.00	74.10	36.20	0.01	64.70	32.00	0.04	54.40	27.60	0.05
		67 (19)	75.80	46.00	0.05	68.00	42.00	0.05	59.40	37.70	0.06	50.00	33.40	0.06	39.60	28.90	0.06
		62 (17)	62.60	47.70	0.06	54.70	43.50	0.06	46.20	39.20	0.06	37.50	35.00	0.07	30.70	30.70	0.13
	1750	72 (22)	103.00	50.00	0.00	94.30	46.00	0.00	84.60	41.50	0.05	73.90	36.80	0.06	62.00	32.00	0.07
		67 (19)	86.70	53.10	0.08	77.80	48.60	0.08	68.00	43.90	0.08	57.10	39.00	0.08	45.20	33.90	0.09
		62 (17)	71.70	55.70	0.09	62.70	50.90	0.09	53.10	46.20	0.09	43.40	41.50	0.10	36.30	36.30	0.18
4821 4824 T4821	1200	72 (22)	79.30	38.70	0.00	72.90	35.40	0.00	65.70	31.90	0.00	57.70	28.20	0.00	48.80	24.40	0.01
		67 (19)	66.60	40.20	0.02	60.00	36.60	0.02	52.70	32.90	0.02	44.60	29.10	0.02	35.70	25.10	0.03
		62 (17)	55.00	41.30	0.03	48.30	37.60	0.03	40.90	33.80	0.03	33.10	30.00	0.03	26.30	26.30	0.07
	1600	72 (22)	96.00	46.60	0.00	88.30	42.90	0.00	79.60	38.90	0.00	69.90	34.50	0.03	59.10	30.00	0.04
		67 (19)	80.90	49.20	0.04	72.90	45.00	0.04	64.10	40.70	0.05	54.20	36.10	0.05	43.30	31.40	0.05
		62 (17)	67.00	51.20	0.05	58.80	46.80	0.05	49.90	42.30	0.05	40.70	37.90	0.05	33.30	33.30	0.11
	2000	72 (22)	109.40	53.10	0.00	100.70	49.10	0.00	90.90	44.60	0.03	79.90	39.80	0.05	67.50	34.70	0.06
		67 (19)	92.40	56.70	0.06	83.40	52.20	0.07	73.30	47.40	0.07	62.00	42.20	0.07	49.50	36.90	0.07
		62 (17)	76.70	59.70	0.07	67.50	54.90	0.08	57.40	49.90	0.08	47.20	44.90	0.08	39.50	39.50	0.16

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      **MBH** – 1000 Btuh  
 See notes next page.

## PERFORMANCE DATA (cont.)

### COOLING CAPACITIES (MBH) - R410A REFRIGERANT

CNPV 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
6024 T6024	1600	72 (22)	103.20	50.40	0.00	94.40	45.90	0.00	84.80	41.10	0.00	74.10	36.30	0.00	62.40	31.20	0.02
		67 (19)	86.40	52.10	0.02	77.50	47.20	0.02	67.80	42.30	0.02	57.10	37.20	0.03	45.40	32.10	0.03
		62 (17)	71.20	53.30	0.03	62.20	48.30	0.03	52.40	43.30	0.03	42.30	38.30	0.03	33.50	33.50	0.07
	2000	72 (22)	120.70	58.70	0.00	110.40	53.60	0.00	99.00	48.20	0.00	86.40	42.50	0.02	72.60	36.70	0.03
		67 (19)	101.20	61.30	0.03	90.70	55.70	0.04	79.20	50.00	0.04	66.60	44.10	0.04	52.80	38.10	0.05
		62 (17)	83.40	63.20	0.05	72.80	57.40	0.05	61.40	51.60	0.05	49.70	46.00	0.05	40.30	40.30	0.11
	2400	72 (22)	135.60	65.80	0.00	124.10	60.30	0.00	111.20	54.40	0.01	97.00	48.00	0.04	81.30	41.50	0.05
		67 (19)	113.90	69.30	0.05	102.10	63.20	0.06	89.10	56.90	0.06	74.80	50.30	0.06	59.20	43.60	0.06
		62 (17)	94.10	72.10	0.06	82.10	65.70	0.06	69.30	59.30	0.06	56.40	53.00	0.07	46.50	46.50	0.14
6124 T6124	1600	72 (22)	146.13	71.69	0.00	134.50	65.77	0.00	121.56	59.54	0.00	106.83	52.86	0.00	90.32	45.83	0.01
		67 (19)	122.06	74.12	0.02	110.18	67.82	0.02	96.85	61.17	0.02	81.83	54.15	0.02	64.91	46.78	0.02
		62 (17)	100.28	76.03	0.02	88.07	69.40	0.02	74.72	62.59	0.02	60.46	55.67	0.02	48.56	48.56	0.08
	2000	72 (22)	169.63	82.84	0.00	156.39	76.39	0.00	141.33	69.41	0.01	124.36	61.86	0.02	105.10	53.83	0.02
		67 (19)	142.02	86.75	0.03	128.36	79.72	0.03	112.89	72.20	0.03	95.38	64.18	0.03	75.60	55.70	0.03
		62 (17)	116.90	89.93	0.03	102.76	82.43	0.03	87.41	74.75	0.03	71.17	66.88	0.04	58.57	58.57	0.11
	2400	72 (22)	189.44	92.42	0.00	174.81	85.58	0.00	158.22	77.98	0.02	139.30	69.76	0.03	117.75	60.94	0.04
		67 (19)	158.99	97.85	0.04	143.83	90.25	0.04	126.61	82.05	0.04	107.02	73.24	0.05	84.86	63.87	0.05
		62 (17)	131.10	102.40	0.05	115.46	94.29	0.05	98.49	85.91	0.05	80.79	77.29	0.06	67.60	67.60	0.14

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

MBH – 1000 Btuh

#### NOTES:

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

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

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

$$h_{LWB} = h_{EWB} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$
 Where  $h_{EWB}$  = enthalpy of air entering coil
- SHC is based on 80°F (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.
- Direct interpolation is permissible. Do not extrapolate.
- Fan motor heat has not been deducted.
- All data points are based on 10°F (-12°C) 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 CNPVP, CNPVT and CNPVU coils can be used in any properly designed system using R410A refrigerant.
- The CNRVP, CNRVT and CNRVU coils can be used in any properly designed system using R-22 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.

BYPASS FACTOR	ENTERING AIR DRY BULB TEMPERATURE °F (°C)					
	79 (26)	78 (26)	77 (25)	76 (24)	75 (24)	Under 75 (24)
	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	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 x (1 - BF) x (db - 80)

CNPV / CNRV

**PERFORMANCE DATA (cont.)**

**COOLING CAPACITIES (MBH) - R-22 REFRIGERANT**

CNRV 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
1814	450	72 (22)	28.60	13.90	0.00	26.60	12.90	0.00	24.20	11.80	0.00	21.60	10.60	0.00	18.60	9.40	0.00
		67 (19)	24.20	14.80	0.01	22.10	13.70	0.01	19.70	12.50	0.01	16.80	11.20	0.01	13.50	9.70	0.01
		62 (17)	20.20	15.50	0.01	18.00	14.30	0.01	15.40	13.00	0.01	12.50	11.70	0.01	10.20	10.20	0.08
	600	72 (22)	33.70	16.40	0.00	31.40	15.30	0.00	28.70	14.10	0.00	25.60	12.80	0.01	22.00	11.40	0.01
		67 (19)	28.70	17.80	0.02	26.20	16.60	0.02	23.40	15.30	0.02	20.10	13.80	0.02	16.30	12.20	0.02
		62 (17)	24.00	19.00	0.02	21.50	17.80	0.02	18.60	16.40	0.02	15.40	14.80	0.03	13.00	13.00	0.12
	750	72 (22)	37.50	18.40	0.01	35.00	17.30	0.01	32.10	16.00	0.02	28.70	14.60	0.02	24.60	13.00	0.03
		67 (19)	32.00	20.30	0.03	29.40	19.10	0.03	26.20	17.70	0.03	22.60	16.10	0.03	18.60	14.40	0.03
		62 (17)	26.90	22.10	0.03	24.20	20.80	0.04	21.10	19.30	0.04	17.90	17.70	0.05	15.40	15.40	0.16
2414 2417	600	72 (22)	34.60	16.80	0.00	32.30	15.70	0.00	29.60	14.60	0.00	26.50	13.20	0.00	22.90	11.80	0.01
		67 (19)	29.40	18.30	0.01	27.00	17.10	0.01	24.20	15.70	0.01	20.90	14.30	0.01	17.10	12.60	0.02
		62 (17)	24.70	19.50	0.02	22.20	18.30	0.02	19.30	16.80	0.02	16.00	15.30	0.02	13.40	13.40	0.10
	800	72 (22)	39.50	19.40	0.01	37.10	18.40	0.01	34.20	17.10	0.02	30.70	15.70	0.02	26.60	14.10	0.02
		67 (19)	33.90	21.60	0.03	31.20	20.40	0.03	28.00	19.00	0.03	24.30	17.40	0.03	20.10	15.60	0.03
		62 (17)	28.60	23.70	0.03	25.80	22.30	0.03	22.60	20.80	0.04	19.30	19.10	0.05	16.80	16.80	0.16
	1000	72 (22)	43.20	21.50	0.03	40.60	20.50	0.04	37.50	19.20	0.04	33.80	17.70	0.04	29.30	16.00	0.04
		67 (19)	37.10	24.50	0.05	34.30	23.20	0.05	30.90	21.80	0.05	26.80	20.10	0.05	22.20	18.20	0.05
		62 (17)	31.50	27.30	0.05	28.60	25.90	0.05	25.30	24.30	0.06	22.30	22.30	0.11	19.60	19.60	0.21
3014 3017	750	72 (22)	45.90	22.30	0.00	42.50	20.60	0.00	38.60	18.80	0.00	34.10	16.80	0.01	28.60	14.60	0.01
		67 (19)	38.90	23.70	0.02	35.30	21.90	0.02	31.00	19.80	0.02	26.00	17.50	0.02	20.30	15.10	0.02
		62 (17)	32.30	24.80	0.02	28.30	22.80	0.02	24.00	20.60	0.02	19.30	18.30	0.03	15.90	15.90	0.12
	1000	72 (22)	53.80	26.20	0.00	49.90	24.40	0.01	45.40	22.40	0.02	40.30	20.20	0.03	34.30	17.80	0.03
		67 (19)	45.70	28.40	0.03	41.60	26.40	0.04	37.00	24.20	0.04	31.20	21.70	0.04	24.40	18.80	0.04
		62 (17)	38.30	30.40	0.04	34.00	28.20	0.04	29.00	25.80	0.04	23.80	23.20	0.06	20.00	20.00	0.16
	1250	72 (22)	59.80	29.30	0.03	55.50	27.40	0.04	50.60	25.30	0.04	44.80	22.90	0.05	38.40	20.40	0.05
		67 (19)	50.90	32.30	0.06	46.40	30.20	0.06	41.30	27.80	0.06	35.40	25.30	0.06	27.90	22.20	0.06
		62 (17)	42.70	35.10	0.06	38.30	32.90	0.06	33.10	30.30	0.07	27.70	27.50	0.09	23.70	23.70	0.21
900	72 (22)	53.50	26.00	0.00	49.50	24.10	0.00	45.10	22.10	0.01	40.00	19.90	0.02	33.80	17.40	0.02	
	67 (19)	45.40	27.90	0.03	41.30	25.90	0.03	36.60	23.70	0.03	30.70	21.10	0.03	24.00	18.30	0.03	
	62 (17)	37.90	29.70	0.03	33.50	27.40	0.03	28.50	24.90	0.03	23.20	22.30	0.05	19.30	19.30	0.15	
3617 3621 T3617	1200	72 (22)	61.60	30.10	0.02	57.20	28.20	0.03	52.10	26.00	0.04	46.20	23.50	0.04	39.60	20.90	0.05
		67 (19)	52.40	33.10	0.05	47.80	30.90	0.05	42.50	28.50	0.05	36.30	25.80	0.06	28.60	22.60	0.06
		62 (17)	44.00	35.90	0.06	39.40	33.60	0.06	34.00	30.90	0.06	28.30	28.00	0.08	24.10	24.10	0.20
	1500	72 (22)	67.50	33.40	0.06	62.90	31.40	0.06	57.40	29.10	0.07	50.80	26.50	0.07	43.60	23.70	0.08
		67 (19)	57.70	37.40	0.08	52.70	35.10	0.08	46.90	32.60	0.08	40.30	29.80	0.08	32.20	26.50	0.09
		62 (17)	48.60	41.20	0.08	43.70	38.80	0.09	38.30	36.10	0.09	32.90	32.90	0.13	28.30	28.30	0.25
4221 4224 T4221	1050	72 (22)	67.70	32.90	0.00	62.50	30.40	0.00	56.50	27.60	0.00	49.70	24.70	0.02	42.30	21.60	0.02
		67 (19)	57.10	35.00	0.03	51.70	32.20	0.03	45.60	29.30	0.03	38.80	26.20	0.03	30.30	22.60	0.03
		62 (17)	47.40	36.80	0.03	41.90	33.90	0.03	35.70	30.80	0.03	28.90	27.50	0.04	23.80	23.80	0.13
	1400	72 (22)	79.00	38.50	0.00	73.10	35.80	0.02	66.20	32.80	0.04	58.30	29.40	0.04	49.30	25.90	0.05
		67 (19)	66.90	41.80	0.05	60.70	38.70	0.05	53.50	35.40	0.06	45.50	31.90	0.06	36.30	28.10	0.06
		62 (17)	55.70	44.70	0.06	49.40	41.50	0.06	42.60	38.10	0.06	35.40	34.50	0.08	29.90	29.90	0.18
	1750	72 (22)	87.40	42.90	0.04	81.00	40.10	0.06	73.60	37.00	0.07	64.90	33.40	0.07	54.80	29.50	0.08
		67 (19)	74.30	47.40	0.08	67.60	44.20	0.08	59.70	40.60	0.08	50.60	36.70	0.08	40.90	32.80	0.09
		62 (17)	62.20	51.40	0.09	55.30	48.10	0.09	47.90	44.50	0.09	40.70	40.70	0.11	35.20	35.20	0.23
4821 4824 T4821	1200	72 (22)	72.40	35.20	0.00	67.30	32.70	0.00	61.20	30.00	0.00	54.20	27.00	0.01	46.30	23.70	0.02
		67 (19)	61.40	37.70	0.02	55.90	35.00	0.02	49.50	32.00	0.02	42.40	28.80	0.02	34.10	25.20	0.03
		62 (17)	51.20	40.00	0.03	45.50	37.00	0.03	39.20	33.90	0.03	32.20	30.50	0.03	26.70	26.70	0.12
	1600	72 (22)	83.80	41.00	0.00	78.00	38.40	0.02	71.30	35.40	0.03	63.30	32.10	0.03	54.00	28.50	0.04
		67 (19)	71.40	44.90	0.04	65.20	42.00	0.04	58.00	38.70	0.05	49.50	35.00	0.05	40.30	31.20	0.05
		62 (17)	59.80	48.50	0.05	53.40	45.30	0.05	46.30	41.90	0.05	39.00	38.30	0.07	33.40	33.40	0.17
2000	72 (22)	92.10	45.50	0.04	86.00	42.90	0.05	78.70	39.80	0.05	70.10	36.40	0.06	60.00	32.50	0.06	
	67 (19)	78.70	50.90	0.07	72.10	47.80	0.07	64.30	44.40	0.07	55.10	40.40	0.07	44.90	36.30	0.07	
	62 (17)	66.30	55.90	0.07	59.60	52.60	0.07	52.10	48.90	0.08	44.90	44.90	0.11	39.20	39.20	0.22	
6024 T6024	1600	72 (22)	93.60	45.40	0.00	86.30	41.90	0.00	77.90	38.00	0.00	68.30	33.80	0.01	58.00	29.60	0.02
		67 (19)	78.90	48.10	0.02	71.20	44.20	0.02	62.70	40.10	0.02	53.20	35.70	0.03	41.70	30.80	0.03
		62 (17)	65.40	50.40	0.03	57.70	46.30	0.03	49.20	42.00	0.03	39.60	37.40	0.04	32.50	32.50	0.12
	2000	72 (22)	106.40	51.70	0.00	98.20	47.90	0.00	88.80	43.70	0.02	78.00	39.10	0.03	65.80	34.10	0.03
		67 (19)	89.90	55.50	0.04	81.30	51.30	0.04	71.50	46.70	0.04	60.60	41.80	0.04	48.30	36.60	0.04
		62 (17)	74.70	58.90	0.04	65.90	54.40	0.04	56.60	49.70	0.05	46.50	44.80	0.06	38.90	38.90	0.16
2400	72 (22)	116.60	57.00	0.00	107.90	53.00	0.03	97.70	48.50	0.04	85.90	43.60	0.05	72.30	38.20	0.05	
	67 (19)	98.90	61.90	0.06	89.60	57.50	0.06	78.90	52.50	0.06	66.60	47.20	0.06	53.70	41.80	0.06	
	62 (17)	82.30	66.40	0.06	72.90	61.70	0.06	62.70	56.70	0.07	52.60	51.60	0.08	44.70	44.70	0.19	

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      MBH – 1000 Btuh  
 See notes previous page.



**PERFORMANCE DATA (cont.)**

**COIL STATIC PRESSURE DROP (in wc.) R410A and R-22 REFRIGERANTS**

UNIT SIZE	Standard CFM																			
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	
1814	Dry																			
	0.078	0.114	0.156	0.198	0.253															
2414	Wet																			
	0.096	0.138	0.183	0.213	0.277															
2417	Dry																			
	0.070	0.103	0.143	0.182	0.233	0.290	0.354													
3014	Wet																			
	0.089	0.128	0.171	0.214	0.269	0.336	0.413													
3017	Dry																			
	0.048	0.068	0.090	0.112	0.140	0.170	0.203													
3617	Wet																			
	0.064	0.091	0.122	0.150	0.188	0.224	0.263													
T3617	Dry																			
	0.065	0.097	0.135	0.173	0.223	0.278	0.339	0.405	0.478											
3621	Wet																			
	0.078	0.114	0.160	0.206	0.260	0.321	0.388	0.461	0.540											
4217	Dry																			
	0.042	0.060	0.080	0.102	0.128	0.157	0.188	0.222	0.259											
4821	Wet																			
	0.055	0.076	0.104	0.127	0.158	0.190	0.225	0.266	0.309											
T4821	Dry																			
	0.043	0.061	0.082	0.103	0.128	0.157	0.189	0.221	0.259	0.299	0.341									
4824	Wet																			
	0.056	0.079	0.107	0.133	0.166	0.200	0.236	0.276	0.315	0.361	0.413									
6024	Dry																			
	0.035	0.048	0.062	0.076	0.093	0.111	0.132	0.153	0.177	0.201	0.228									
T6024	Wet																			
	0.049	0.066	0.085	0.100	0.122	0.144	0.171	0.192	0.217	0.245	0.276									
6124	Dry																			
			0.072	0.093	0.118	0.145	0.175	0.206	0.243	0.281	0.322	0.366	0.413							
T6124	Wet																			
			0.079	0.102	0.130	0.159	0.192	0.228	0.26	0.303	0.348	0.396	0.446							
T6124	Dry																			
	0.030	0.041	0.054	0.066	0.082	0.099	0.118	0.137	0.158	0.180	0.205	0.231	0.259							
T6124	Wet																			
	0.043	0.059	0.078	0.101	0.126	0.153	0.181	0.207	0.234	0.260	0.288	0.319	0.354							
T6124	Dry																			
			0.047	0.060	0.075	0.092	0.110	0.130	0.152	0.176	0.204	0.230	0.256	0.284	0.318					
T6124	Wet																			
			0.053	0.067	0.085	0.104	0.125	0.147	0.172	0.200	0.228	0.259	0.292	0.327	0.365					
T6124	Dry																			
			0.015	0.046	0.057	0.069	0.094	0.019	0.119	0.124	0.140	0.158	0.175	0.195	0.214					
T6124	Wet																			
			0.032	0.050	0.066	0.081	0.097	0.114	0.131	0.150	0.169	0.190	0.211	0.233	0.257					
T6124	Dry																			
					0.062	0.073	0.084	0.097	0.111	0.126	0.138	0.154	0.172	0.190	0.210	0.228	0.251	0.273	0.293	
T6124	Wet																			
					0.082	0.096	0.112	0.129	0.145	0.163	0.171	0.191	0.212	0.235	0.258	0.283	0.310	0.336	0.366	
T6124	Dry																			
										0.130	0.140	0.160	0.180	0.200	0.220	0.240	0.270	0.290		
T6124	Wet																			
										0.150	0.170	0.190	0.210	0.230	0.260	0.290	0.310	0.340		

**CNPV / CNRV**

## ACCESSORIES

### EMPTY COIL CASING ACCESSORY FOR UNCASSED N-COIL

ACCESSORY PART NUMBER	NOMINAL COIL SIZES	DIMENSIONS in (mm)		
		H	W	D
KCAKC2612ECC	CN*VU1814, 2414, 3014,	17 (432)	14-3/16 (361)	21 (533)
KCAKC2712ECC	CN*VU2417, 3017, 3617	17 (432)	17-1/2 (445)	21 (533)
KCAKC2808ECC	CN*VU3621, 4221, 4821	22-1/16 (560)	21 (533)	21 (533)
KCAKC2904ECC	CN*VU4824, 6024	26-5/16 (668)	24-1/2 (622)	21 (533)

CNPV / CNRV

### COUPLING KIT ACCESSORY FOR UNCASSED VERTICAL N-COIL

ACCESSORY PART NUMBER	NOMINAL COIL SIZES	DESCRIPTION
KCART0101MHA	CN*VU2417	5/8" Mechanical Connection Kit
KCART0101MHA	CN*VU3617, 4821	3/4" Mechanical Connection Kit