

# PACKAGE AIR COOLED CHILLER UNIT

MODEL: PNSA-CWB

CAPACITY: 41.7 to 183.8 Nominal Tons

500,000 to 2,205,000 BtuH

146.5 to 646.1 KW



## Features/Benefits

The PNSA-CWB unit has a compact design that is up to 30% smaller than earlier air-cooled chillers. The compact footprint can yield substantial installation savings by requiring less structural steel, concrete, security fencing or architectural screening. The NSA-CWB unit is delivered as a complete package for easy installation. A quick start-up is assured once installation is complete, since each PNSA-CWB unit is manufactured at an ISO 9002 listed manufacturing facility to ensure quality. In addition, all units are factory run tested under full load to provide reliable start-up.

## PHYSICAL DATA & ELECTRICAL DATA

MODEL: PNSA-CWB (2 CIRCUITS)		050	060	070	080	100	120	140	160	180	210	240	
Nominal Cooling Capacity	BTUH	500,000	555,000	645,000	735,000	1,000,000	1,110,000	1,290,000	1,470,000	1,665,000	1,935,000	2,205,000	
	Tons	41.67	46.25	53.75	61.25	83.33	92.50	107.50	122.50	138.75	161.25	183.75	
	KWH	146.5	162.6	189.0	215.4	293.0	325.2	378.0	430.7	487.9	567.0	646.1	
Compressor	Type	Semi-Hermetic											
	HP	25	30	35	40	25	30	35	40	30	35	40	
	Qty./Unit	2	2	2	2	4	4	4	4	6	6	6	
Condenser Coil	Type/Material	Plate Fin / Copper Fin & Copper Tube											
	Face area (Sq. Ft.)	69.4	100.7	100.7	100.7	138.8	138.9	170.1	170.1	201.4	201.4	239.6	
	Tube Size (in)	1/2											
Condenser Fan	FAN	Type	Propeller Fan : Vertical Discharge : Direct Drive										
		Diameter (in)	30										
		Diameter (mm)	761										
	MOTOR	Each Motor (HP.)	1										
		Rpm.	900										
		Qty./Unit	4	6	6	6	8	8	10	10	12	12	14
		Air Quantity CFM	40,000	60,000	60,000	60,000	96,000	96,000	120,000	120,000	144,000	144,000	168,000
		Air Quantity CMH	68,000	102,000	102,000	102,000	163,200	163,200	204,000	204,000	244,800	244,800	285,600
Refrigerant	Type	R-22 (R-407C On Request Only)											
	Charge	Holding											
Water Chiller													
No. Of Circuits		2											
Chilled Water Flow Rate (GPM)		100	111	129	147	200	222	258	294	333	387	441	
Chilled Water Temp. In/Out	° F	55/45											
	° C	13/7											
Chilled Water Pressure Drop (Ft.WG)		3.9	2.58	4.93	5.87	9.17	4.41	6.19	7.11	7.06	11.33	8.82	
Water Connection In/Out	(in) (mm)	3 (75)		4 (100)			5 (125)			6 (150)			
Compressor	V / PH / Hz	380V / 3P / 50Hz											
	V / PH / Hz	440V / 3P / 60Hz											
	RLA. (Amp.)	56	68	67.5	95	56	68	67.5	95	68	67.5	95	
	LRA (Amp.)	223	253	225	345	223	253	225	345	253	225	345	
Fan Motor (Each)	V / PH / Hz	380V / 3P / 50Hz											
	V / PH / Hz	440V / 3P / 60Hz											
	RLA. (Amp.)	2.3											
Weight	Operation (Kgs.)	1860	2337	2495	3403	4084	5013	5535	6352	6621	6847	7035	

Note :

RLA = Rated Load Amp.

LRA = Locked Rotor Amp.

\* Nominal Cooling Capacity Based on 3 ° C Suction Temp. and 35 ° C Ambient Temp.

Liquid Subcooled -9.4 ° C

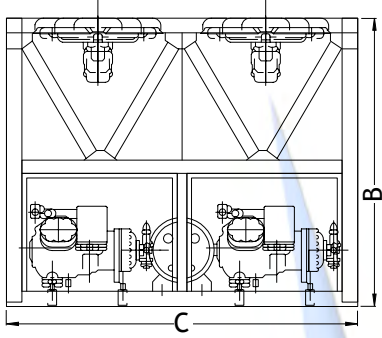
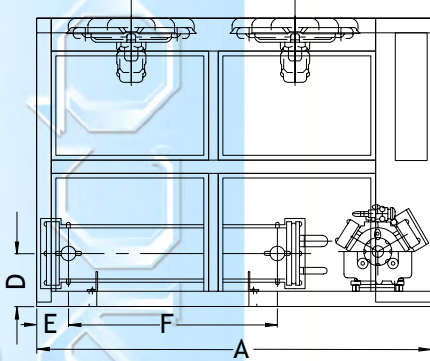
Fouling Factor 0.0005 Ft<sup>2</sup> .h.F/Btu in Chiller

Temperature: 1 ° C = 33.8 ° F

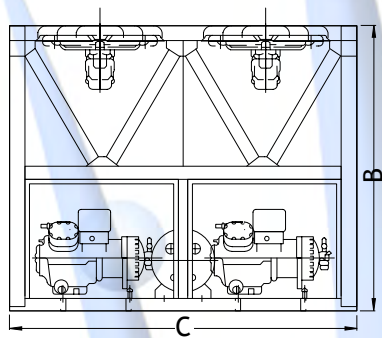
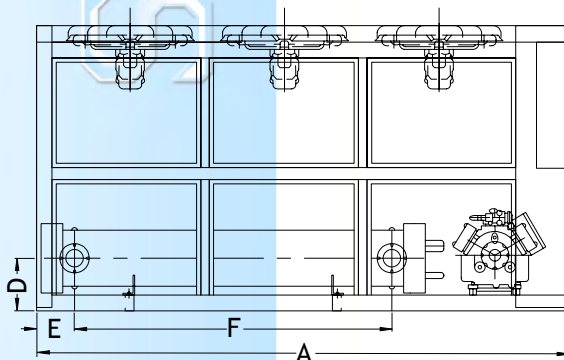
1 ° F = -17.2 ° C

Air Flow: 1 CFM = 1.699011 CMH

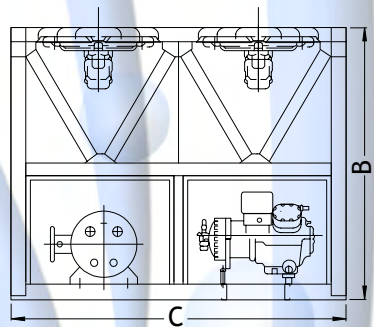
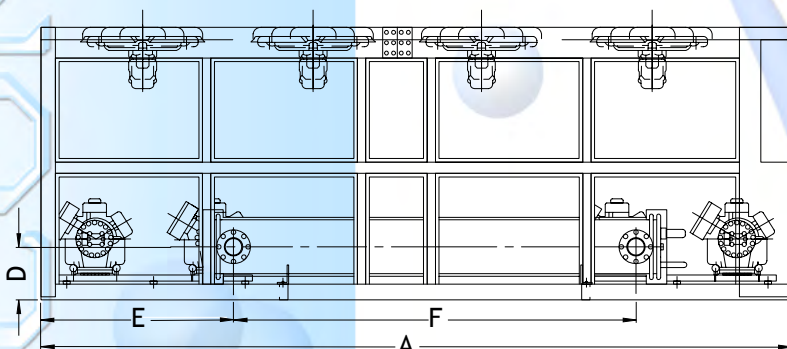
# DIMENSIONAL DRAWING



PNSA-CWB	A	B	C	D	E	F
	(mm) (inch)					
<b>050</b>	2528 (100)	1830 (72)	2240 (88)	335 (13)	216 (9)	1334 (53)



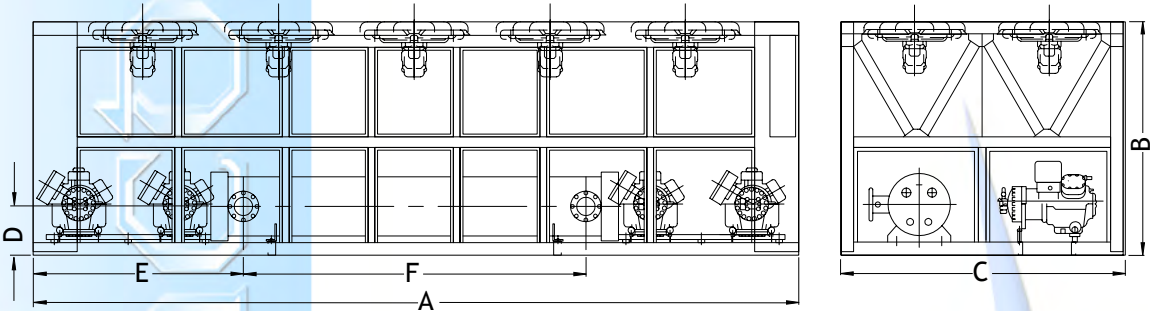
PNSA-CWB	A	B	C	D	E	F
	(mm) (inch)					
<b>060</b>	3442 (136)	1830 (72)	2240 (88)	335 (13)	465 (18)	1601 (63)
<b>070-080</b>	3442 (136)	1830 (72)	2240 (88)	335 (13)	250 (10)	2032 (80)



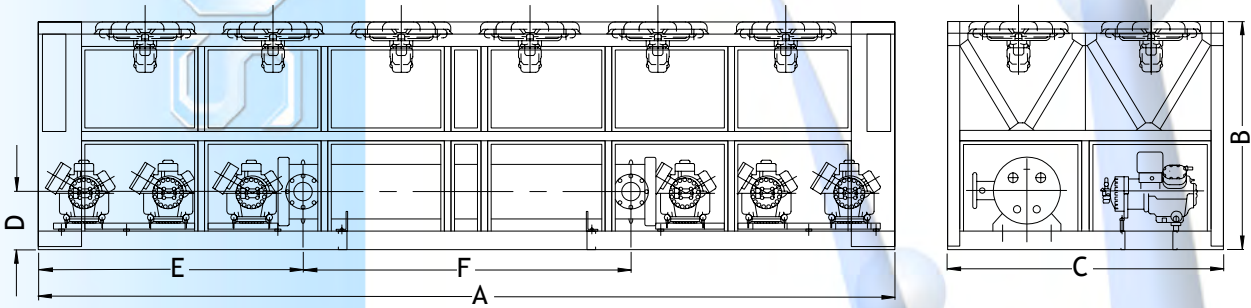
PNSA-CWB	A	B	C	D	E	F
	(mm) (inch)					
<b>100</b>	5080 (200)	1830 (72)	2240 (88)	354 (14)	1301 (51)	2201 (87)
<b>120</b>	5080 (200)	1830 (72)	2240 (88)	354 (14)	1312 (52)	2718 (107)



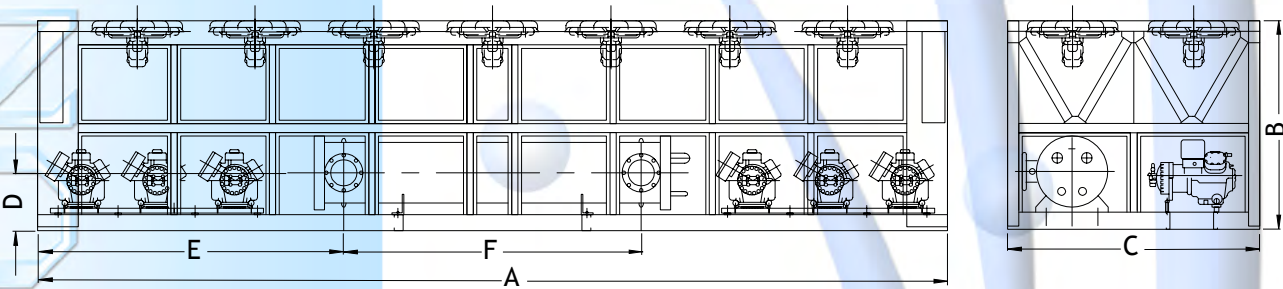
# DIMENSIONAL DRAWING



PNSA-CWB	A	B	C	D	E	F
	(mm) (inch)					
140-160	6081 (240)	1830 (72)	2240 (88)	380 (15)	1681 (66)	2718 (107)



PNSA-CWB	A	B	C	D	E	F
	(mm) (inch)					
180	7076 (279)	1880 (74)	2240 (88)	405 (16)	2607 (103)	2463 (97)
210	7076 (279)	1880 (74)	2240 (88)	405 (16)	2179 (86)	2718 (107)



PNSA-CWB	A	B	C	D	E	F
	(mm) (inch)					
240	8136 (321)	1880 (74)	2240 (88)	481 (19)	2734 (108)	2668 (105)