



FOCUSED ON APPLICATION HVAC



Unit information		
Chiller Model	CA2-500-4210	
Width:	2,250.00 mm	88.58 in
Length:	11,970.00 mm	471.26 in
Height:	2,520.00 mm	99.21 in
Shipping Weight:	12,640.00 Kgs	27,866.43 Lbs
Operating Weight:	12,840.00 Kgs	28,307.35 Lbs
Capacity Control	Stepless Control	
Refrigerant:	R134a	
Refrigerant(Ckt1 / Ckt2):	250.00 Kgs	250.00 Kgs
Starting Control:	Y-Δ	

Performance Information(Cooling Condition)		
Cooling Capacity:	1,761.00 Kw	500.00 Tons
Entering Water Temp:	12.00 °C	53.60 °F
Leaving Water Temp:	7.00 °C	44.60 °F
Ambient Temperatura (DB):	35.00 °C	95.00 °F
Water Flow (Max):	303.00 m³/hr	1,334.07 Gpm
Input Power (Electrical):	580.00 Kw	
IPLV/NPLV (W/W - Btu /w):	4.21 EER (W/W)	14.38 EER (Btu/w)
COP (W/W - Btu /w):	3.04 EER (W/W)	10.38 EER (Btu/w)

Compressor Information		
Brand:	Bitzer	
Model:	CSH95113-320Y-40D	
Type Compressor:	Semi-Hermetic Screw	
Maximal Amperaje Control:	402.00 Amperes	
Quantity:	2.00 Piece	
Oil Model ( by compressor):	BSE170	2,502.24 Oz
Capacity Regulating Range:	25.0% - 100.0 %	

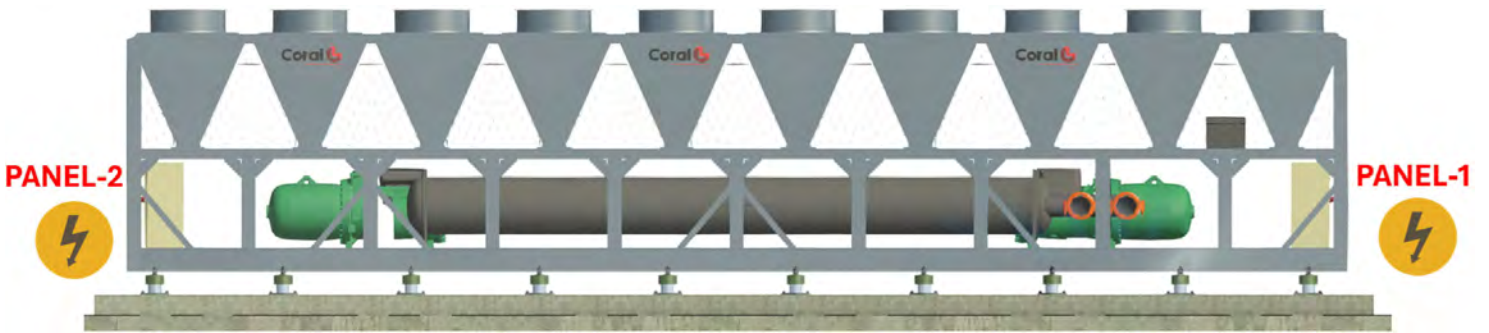
Water Side Heat Exchanger Information		
Fluid Type:	Fresh Water	
Nozzle Type:	Victaulic Coupling	
Water Volume:	304.00 Lts	80.31 Galons
Heat Exchanger Type:	Flooded Shell-and-Tube	
Fouling Factor:	0.018 m².K/kW	0.1021 ft².F/Btu
Nozzle Size(DN):	200.00 mm	8.00 in
Water Pressure Drop:	60.00 kPa	20.07 ft CA
Design Pressure of Water Side (Max):	1.00 MPa	145.04 Psi

Air Side Heat Exchanger Information		
Type:	Fine-Tube	
Fan Quantity:	20.00 Units	
Air Flow	490,000.00 m³/hr	288,402.73 Cfm
Fan Power Input	3.50 Kw/Unit	70.00 Kw Total

Electrical Conections		
Amperaje	Electrical Circuit 1	Electrical Circuit 2
Maximum operating current (MCA):	515.00 Amp	515.00 Amp
Maximum Overcurrent Protection (MOCP):	630.00 Amp	630.00 Amp

Electrical Information		
Power Supply:	460Volts / 3 Phases / 60 Hertz	
Voltaje Range:	440 Volts	480 Volts
Rating Current (A):	838.00 Amp	
Max. Starting Current (A):	1,432.00 Amp	
Maximum operating current (A)	1,030.00 Amp	

Electrical Panel	Electrical Circuit 1	Electrical Circuit 2
Point Conection Electrical:	Panel E-1	Panel E-2



- \* Garantía 2 Años en partes y en compresores
- \* Resortes anti-vibratorios

- \* Refrigerante Ecologico
- \* Conexiones de Tuberia ranurada (Victaulic)



### IPLV/NPLV Points (SI)

Load %	Cooling Capacity (Kw)	Input Power (Kw)	Cooling kW/Ton	Cooling COP (w/w)	Evap. WPD (kPa)	DBT (°C)	EEWT (°C)	ELWT (°C)
100	1,760.90 Kw	580.00 Kw	1.1581 Kw/Tons	3.04 W/W	60.10 kPa	35.00 °C	12.00 °C	7.00 °C
75	1,320.90 Kw	353.28 Kw	0.9403 Kw/Tons	3.74 W/W	60.10 kPa	27.00 °C	10.80 °C	7.00 °C
50	881.00 Kw	198.86 Kw	0.7937 Kw/Tons	4.43 W/W	60.10 kPa	19.00 °C	9.50 °C	7.00 °C
25	439.97 Kw	85.16 Kw	0.6806 Kw/Tons	5.17 W/W	60.10 kPa	19.00 °C	8.30 °C	7.00 °C

$$IPLV.SI/NPLV.SI=0.01*A+0.42*B+0.45*C+0.12*D=4.024$$

A=EER At 100%; B=EER At 75%; C=EER At 50%; D=EER At 25%;

Soft in accordance with the AHRI Water-Cooled Water-Chilling and Heat Pump Water-Heating Packages Using Vapor Compression Cycle , which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

### IPLV/NPLV Points (IP)

Load %	Cooling Capacity (Tons)	Input Power (Kw)	Cooling kW/Ton	Cooling COP (Btu/w-h)	Evap. WPD (ft CA)	DBT (°F)	EEWT (°F)	ELWT (°F)
100	501.15 Tons	580.00 Kw	1.1581 Kw/Tons	10.37 EER (Btu/w-h)	20.11 ft CA	95.00 °F	53.60 °F	44.60 °F
75	375.93 Tons	353.28 Kw	0.9403 Kw/Tons	12.77 EER (Btu/w-h)	20.11 ft CA	80.60 °F	51.44 °F	44.60 °F
50	250.73 Tons	198.86 Kw	0.7937 Kw/Tons	15.13 EER (Btu/w-h)	20.11 ft CA	66.20 °F	49.10 °F	44.60 °F
25	125.21 Tons	85.16 Kw	0.6806 Kw/Tons	17.64 EER (Btu/w-h)	20.11 ft CA	66.20 °F	46.94 °F	44.60 °F

$$IPLV.SI/NPLV.SI=0.01*A+0.42*B+0.45*C+0.12*D=4.024$$

A=EER At 100%; B=EER At 75%; C=EER At 50%; D=EER At 25%;

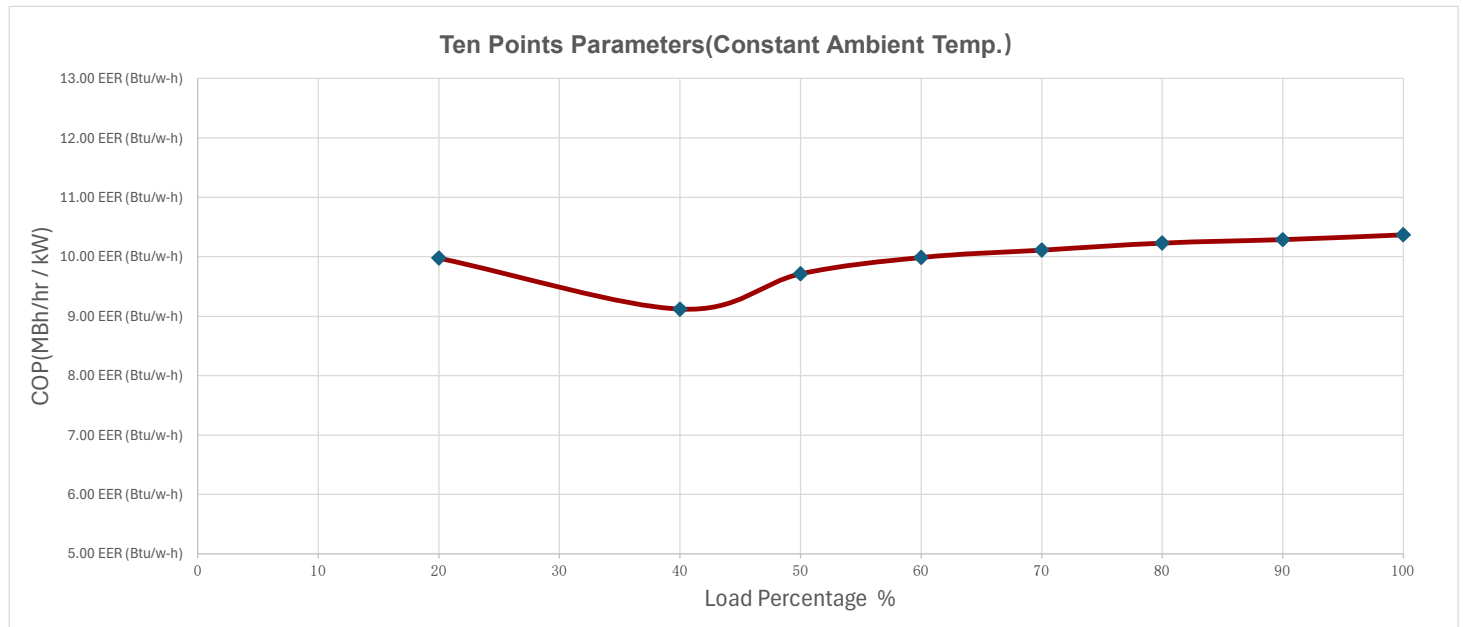
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### Ten Points Parameters(Constant Ambient Temp.)

Load %	Cooling Capacity (Tons)	Input Power (Kw)	Cooling kW/Ton	Cooling COP (Btu/w-h)	Evap. WPD (ft CA)	DBT (°F)	EEWT (°F)	ELWT (°F)
100	501.15 Tons	580.00 Kw	1.1581 Kw/Tons	10.37 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
90	451.06 Tons	525.97 Kw	1.1668 Kw/Tons	10.29 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
80	400.97 Tons	470.25 Kw	1.1735 Kw/Tons	10.23 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
70	350.88 Tons	416.44 Kw	1.1876 Kw/Tons	10.11 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
60	300.79 Tons	361.40 Kw	1.2022 Kw/Tons	9.99 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
50	250.73 Tons	309.74 Kw	1.2362 Kw/Tons	9.71 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
40	200.36 Tons	263.61 Kw	1.3166 Kw/Tons	9.12 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
20	150.27 Tons	180.70 Kw	1.2034 Kw/Tons	9.98 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F

For single COMP chiller, the 10% and 20% load are out of running range, so the data is only for reference;For double COMP chiller, the 10% load are out of running range, so the data is only for reference

Chiller Model: CA2-500-4210

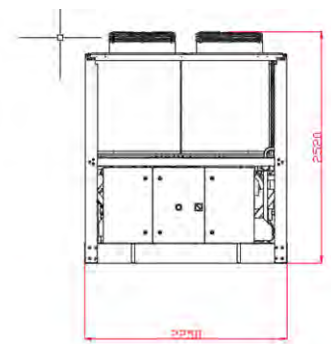
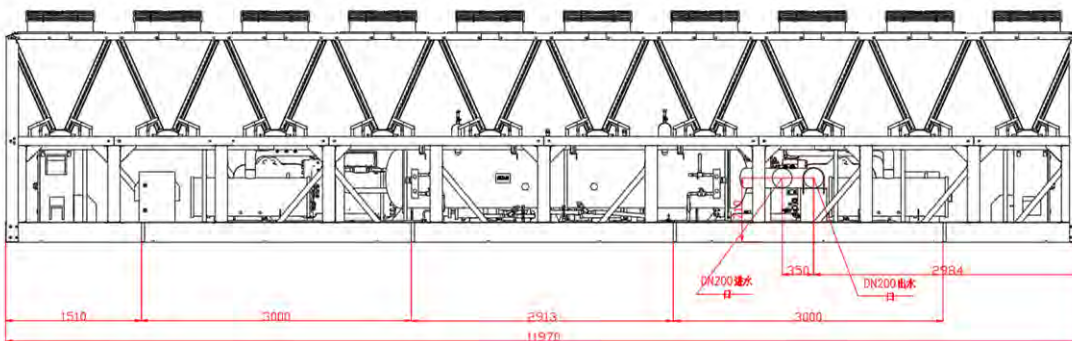
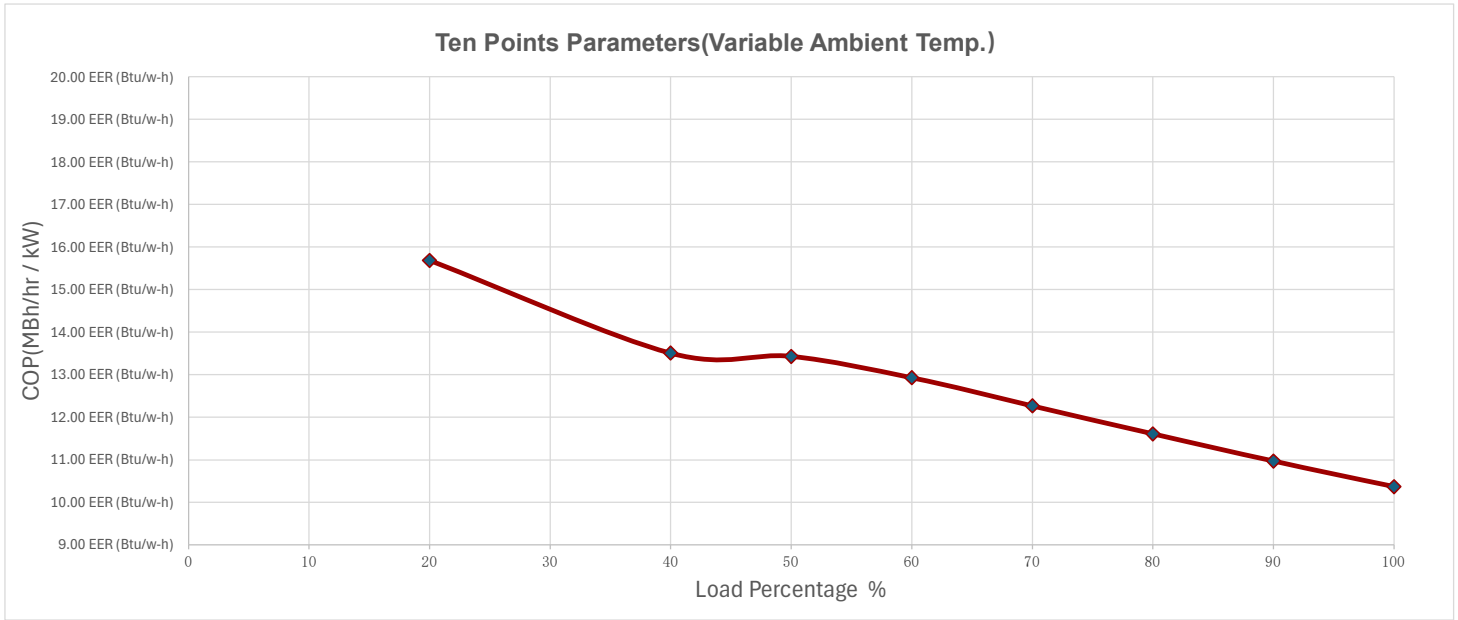


## Ten Points Parameters(Variable Ambient Temp.)

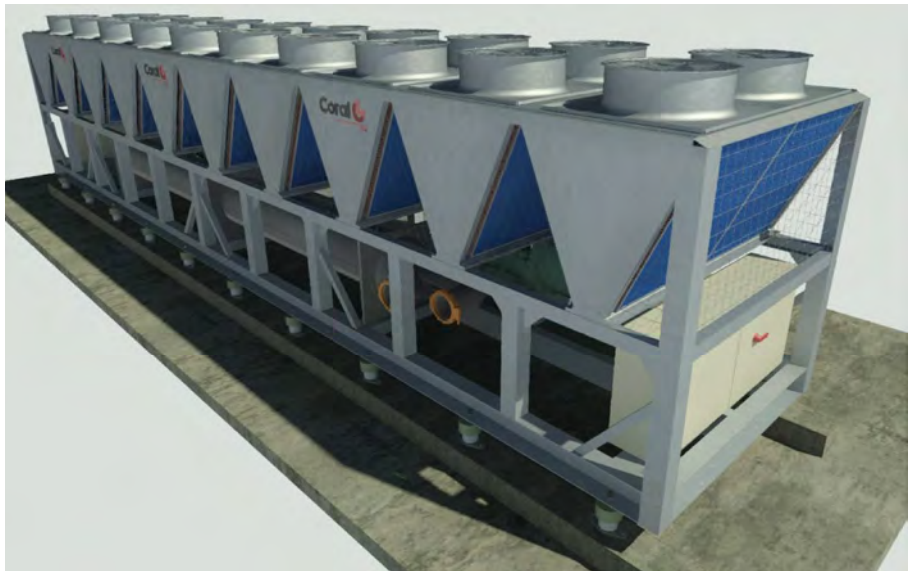
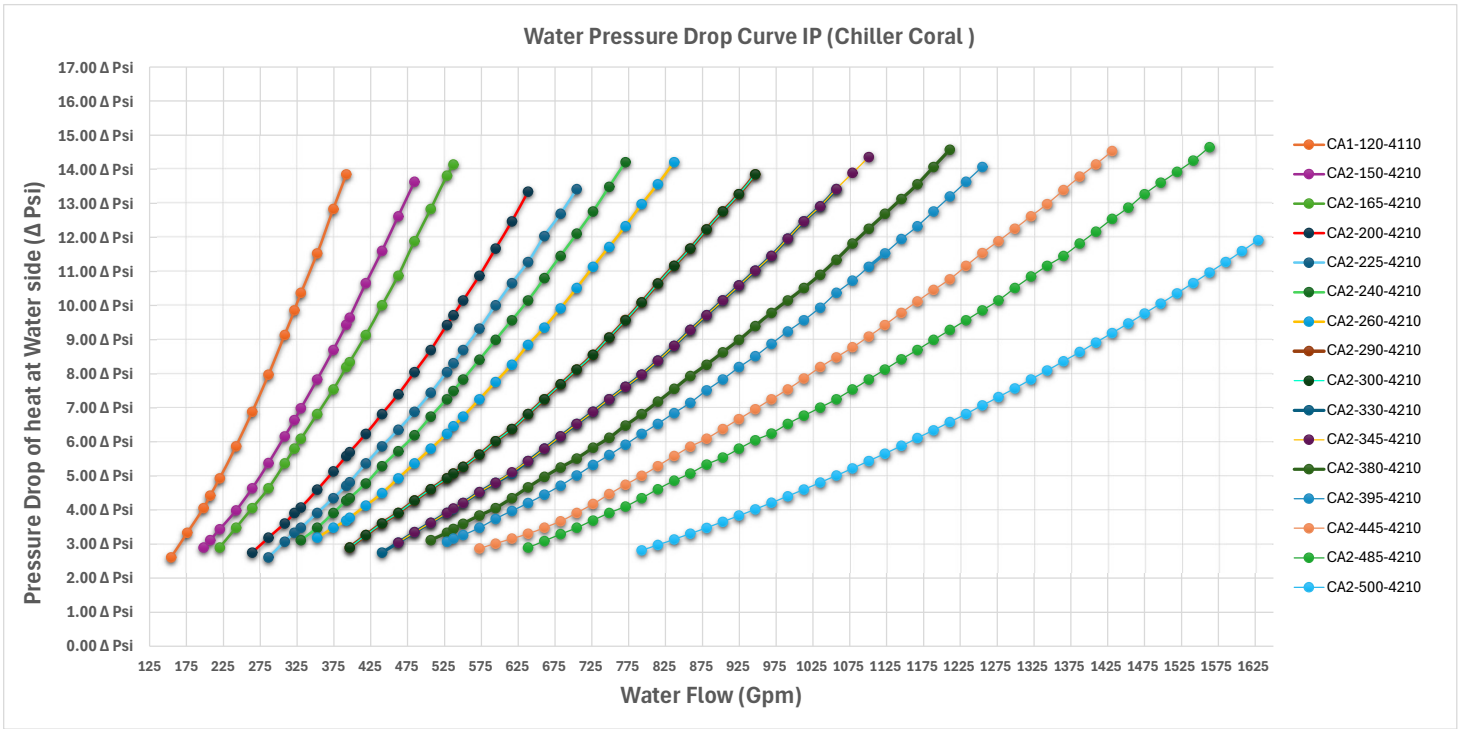
Load %	Cooling Capacity (Tons) (Dual Compressor)	Input Power (Kw)	Cooling kW/Ton	Cooling COP (Btu/w-h)	Evap. WPD (ft CA)	DBT (°F)	EEWT (°F)	ELWT (°F)
100	501.15 Tons	580.00 Kw	1.1581 Kw/Tons	10.37 EER (Btu/w-h)	20.11 ft CA	95.00 °F	577.76 °F	44.60 °F
90	451.06 Tons	493.37 Kw	1.0945 Kw/Tons	10.97 EER (Btu/w-h)	20.11 ft CA	89.24 °F	577.76 °F	44.60 °F
80	400.97 Tons	414.53 Kw	1.0345 Kw/Tons	11.61 EER (Btu/w-h)	20.11 ft CA	83.48 °F	577.76 °F	44.60 °F
70	350.88 Tons	343.24 Kw	0.9788 Kw/Tons	12.27 EER (Btu/w-h)	20.11 ft CA	77.72 °F	577.76 °F	44.60 °F
60	300.79 Tons	279.17 Kw	0.9287 Kw/Tons	12.93 EER (Btu/w-h)	20.11 ft CA	71.96 °F	577.76 °F	44.60 °F
50	250.73 Tons	224.01 Kw	0.8941 Kw/Tons	13.43 EER (Btu/w-h)	20.11 ft CA	66.20 °F	577.76 °F	44.60 °F
40	200.36 Tons	177.99 Kw	0.8890 Kw/Tons	13.51 EER (Btu/w-h)	20.11 ft CA	60.44 °F	577.76 °F	44.60 °F
20	150.27 Tons	114.94 Kw	0.7654 Kw/Tons	15.69 EER (Btu/w-h)	20.11 ft CA	55.40 °F	577.76 °F	44.60 °F

For single COMP chiller, the 10% and 20% load are out of running range, so the data is only for reference; For double COMP chiller, the 10% load are out of running range, so the data is only for reference

Chiller Model: CA2-500-4210



Dimension Model: CA2-500-4210	Length	Width	Height
	11,970.00 mm	2,250.00 mm	2,520.00 mm



<b>CA2-500-4210</b>		
Cooling Capacity:	1,761.00 Kw	500.00 Tons
Water Flow (Max):	303.00 m <sup>3</sup> /hr	1,334.07 Gpm
Width:	2,250.00 mm	88.58 in
Length:	11,970.00 mm	471.26 in
Height:	2,520.00 mm	99.21 in
Fan Quantity:	20.00 Units	
Nozzle Size(DN):	200.00 mm	8.00 in
Operating Weight:	12,840.00 Kgs	28,307.35 Lbs