



FOCUSED ON APPLICATION HVAC



Unit information		
Chiller Model	CA2-150-4210	
Width:	2,250.00 mm	88.58 in
Length:	4,790.00 mm	188.58 in
Height:	2,520.00 mm	99.21 in
Shipping Weight:	5,240.00 Kgs	11,552.22 Lbs
Operating Weight:	5,320.00 Kgs	11,728.59 Lbs
Capacity Control	Stepless Control	
Refrigerant:	R134a	
Refrigerant(Ckt1 / Ckt2):	108.00 Kgs	108.00 Kgs
Starting Control:	Y-Δ	

Performance Information(Cooling Condition)		
Cooling Capacity:	528.00 Kw	150.00 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):	91.00 m <sup>3</sup> /hr	400.66 Gpm
Input Power (Electrical):	164.60 Kw	
IPLV/NPLV (W/W - Btu /w):	4.58 EER (W/W)	15.64 EER (Btu/w)
COP (W/W - Btu /w):	3.21 EER (W/W)	10.96 EER (Btu/w)

Compressor Information		
Brand:	Bitzer	
Model:	CSH8553-110Y-40D	
Type Compressor:	Semi-Hermetic Screw	
Maximal Amperaje Control:	163.60 Amperes	
Quantity:	2.00 Piece	
Oil Model ( by compressor):	BSE170	774.30 Oz
Capacity Regulating Range:	25.0% - 100.0 %	

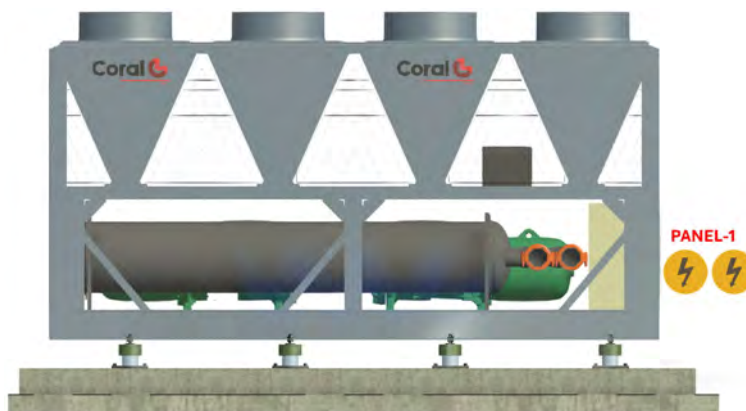
Water Side Heat Exchanger Information		
Fluid Type:	Fresh Water	
Nozzle Type:	Victaulic Couping	
Water Volume:	101.00 Lts	26.68 Galons
Heat Exchanger Type:	Flooded Shell-and-Tube	
Fouling Factor:	0.018 m <sup>2</sup> .K/kW	0.1021 ft <sup>2</sup> .F/Btu
Nozzle Size(DN):	150.00 mm	6.00 in
Water Pressure Drop:	68.00 kPa	22.75 ft CA
Design Pressure of Water Side (Max):	1.00 MPa	145.04 Psi

Air Side Heat Exchanger Information		
Type:	Fine-Tube	
Fan Quantity:	8.00 Units	
Air Flow	196,000.00 m <sup>3</sup> /hr	115,361.09 Cfm
Fan Power Input	2.20 Kw/Unit	17.60 Kw Total

Electrical Conections		
Amperaje	Electrical Circuit 1	Electrical Circuit 2
Maximum operating current (MCA):	185.00 Amp	185.00 Amp
Maximum Overcurrent Protection (MOCP):	315.00 Amp	315.00 Amp

Electrical Information		
Power Supply:	460Volts / 3 Phases / 60 Hertz	
Voltaje Range:	440 Volts	480 Volts
Rating Current (A):	242.00 Amp	
Max. Starting Current (A):	485.00 Amp	
Maximum operating current (A)	370.00 Amp	

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



- \* 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	528.00 Kw	164.60 Kw	0.9839 Kw/Tons	3.21 W/W	68.00 kPa	35.00 °C	12.00 °C	7.00 °C
75	396.00 Kw	101.80 Kw	0.8113 Kw/Tons	3.89 W/W	68.00 kPa	27.00 °C	10.70 °C	7.00 °C
50	264.00 Kw	51.20 Kw	0.6121 Kw/Tons	5.16 W/W	68.00 kPa	19.00 °C	9.50 °C	7.00 °C
25	132.00 Kw	26.90 Kw	0.6432 Kw/Tons	4.91 W/W	68.00 kPa	19.00 °C	8.20 °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	150.27 Tons	164.60 Kw	0.9839 Kw/Tons	10.96 EER (Btu/w-h)	22.75 ft CA	95.00 °F	53.60 °F	44.60 °F
75	112.70 Tons	101.80 Kw	0.8113 Kw/Tons	13.28 EER (Btu/w-h)	22.75 ft CA	80.60 °F	51.26 °F	44.60 °F
50	75.13 Tons	51.20 Kw	0.6121 Kw/Tons	17.61 EER (Btu/w-h)	22.75 ft CA	66.20 °F	49.10 °F	44.60 °F
25	37.57 Tons	26.90 Kw	0.6432 Kw/Tons	16.76 EER (Btu/w-h)	22.75 ft CA	66.20 °F	46.76 °F	44.60 °F

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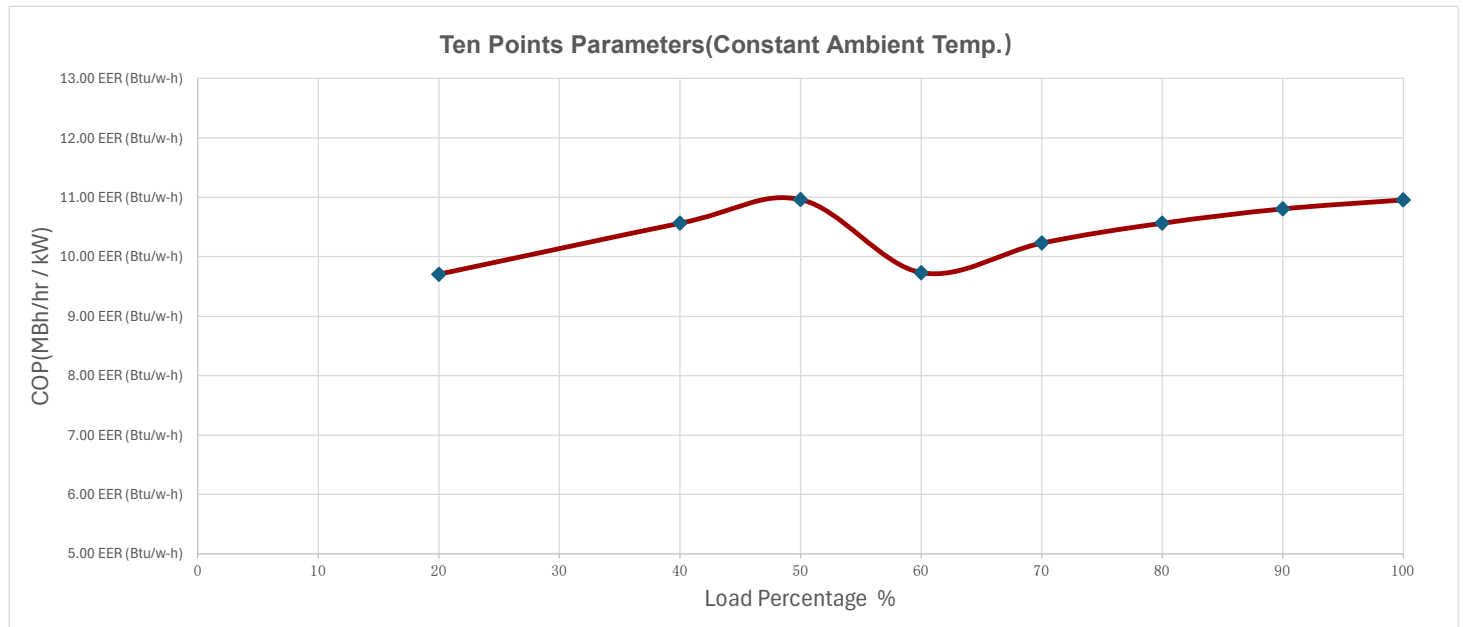
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### Ten Points Parameters(Constant Ambient Temp.)

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	150.27 Tons	164.60 Kw	0.9839 Kw/Tons	10.96 EER (Btu/w-h)	22.75 ft CA	95.00 °F	53.60 °F	44.60 °F
90	135.18 Tons	150.10 Kw	0.9973 Kw/Tons	10.81 EER (Btu/w-h)	22.75 ft CA	95.00 °F	52.70 °F	44.60 °F
80	120.10 Tons	136.40 Kw	1.0201 Kw/Tons	10.57 EER (Btu/w-h)	22.75 ft CA	95.00 °F	51.80 °F	44.60 °F
70	105.30 Tons	123.50 Kw	1.0534 Kw/Tons	10.23 EER (Btu/w-h)	22.75 ft CA	95.00 °F	50.90 °F	44.60 °F
60	90.22 Tons	111.20 Kw	1.1074 Kw/Tons	9.73 EER (Btu/w-h)	22.75 ft CA	95.00 °F	50.00 °F	44.60 °F
50	75.13 Tons	82.30 Kw	0.9832 Kw/Tons	10.96 EER (Btu/w-h)	22.75 ft CA	95.00 °F	49.10 °F	44.60 °F
40	60.05 Tons	68.20 Kw	1.0201 Kw/Tons	10.57 EER (Btu/w-h)	22.75 ft CA	95.00 °F	48.20 °F	44.60 °F
20	44.97 Tons	55.60 Kw	1.1106 Kw/Tons	9.71 EER (Btu/w-h)	22.75 ft CA	95.00 °F	47.30 °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: CA2-150-4210

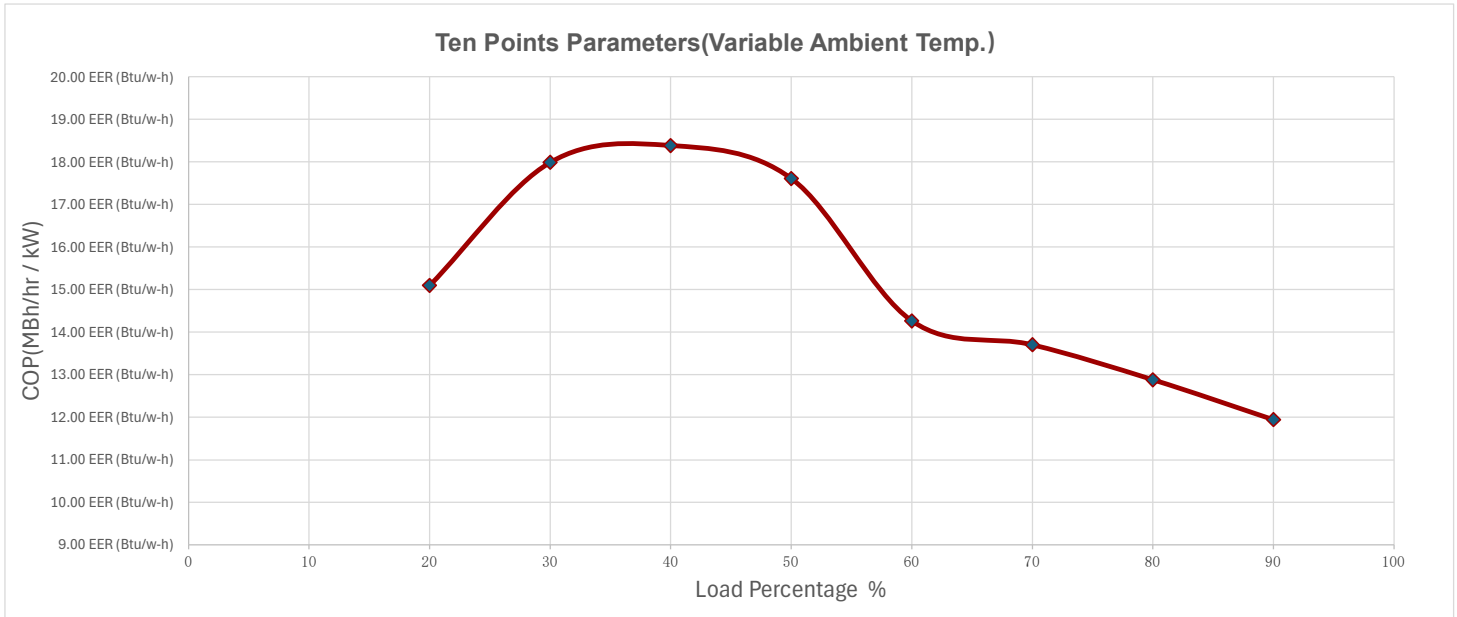


## Ten Points Parameters(Variable Ambient Temp.)

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)
90	135.18 Tons	135.80 Kw	0.9023 Kw/Tons	11.95 EER (Btu/w-h)	22.75 ft CA	89.24 °F	52.70 °F	44.60 °F
80	120.10 Tons	111.90 Kw	0.8369 Kw/Tons	12.88 EER (Btu/w-h)	22.75 ft CA	83.48 °F	51.80 °F	44.60 °F
70	105.30 Tons	92.20 Kw	0.7864 Kw/Tons	13.71 EER (Btu/w-h)	22.75 ft CA	77.72 °F	50.90 °F	44.60 °F
60	90.22 Tons	75.90 Kw	0.7556 Kw/Tons	14.26 EER (Btu/w-h)	22.75 ft CA	71.96 °F	50.00 °F	44.60 °F
50	75.13 Tons	51.20 Kw	0.6121 Kw/Tons	17.61 EER (Btu/w-h)	22.75 ft CA	66.20 °F	49.10 °F	44.60 °F
40	60.05 Tons	39.20 Kw	0.5863 Kw/Tons	18.38 EER (Btu/w-h)	22.75 ft CA	60.44 °F	48.20 °F	44.60 °F
30	44.97 Tons	30.00 Kw	0.5992 Kw/Tons	17.99 EER (Btu/w-h)	22.75 ft CA	55.40 °F	47.30 °F	44.60 °F
20	30.17 Tons	24.00 Kw	0.7140 Kw/Tons	15.10 EER (Btu/w-h)	22.75 ft CA	55.40 °F	46.40 °F	44.60 °F

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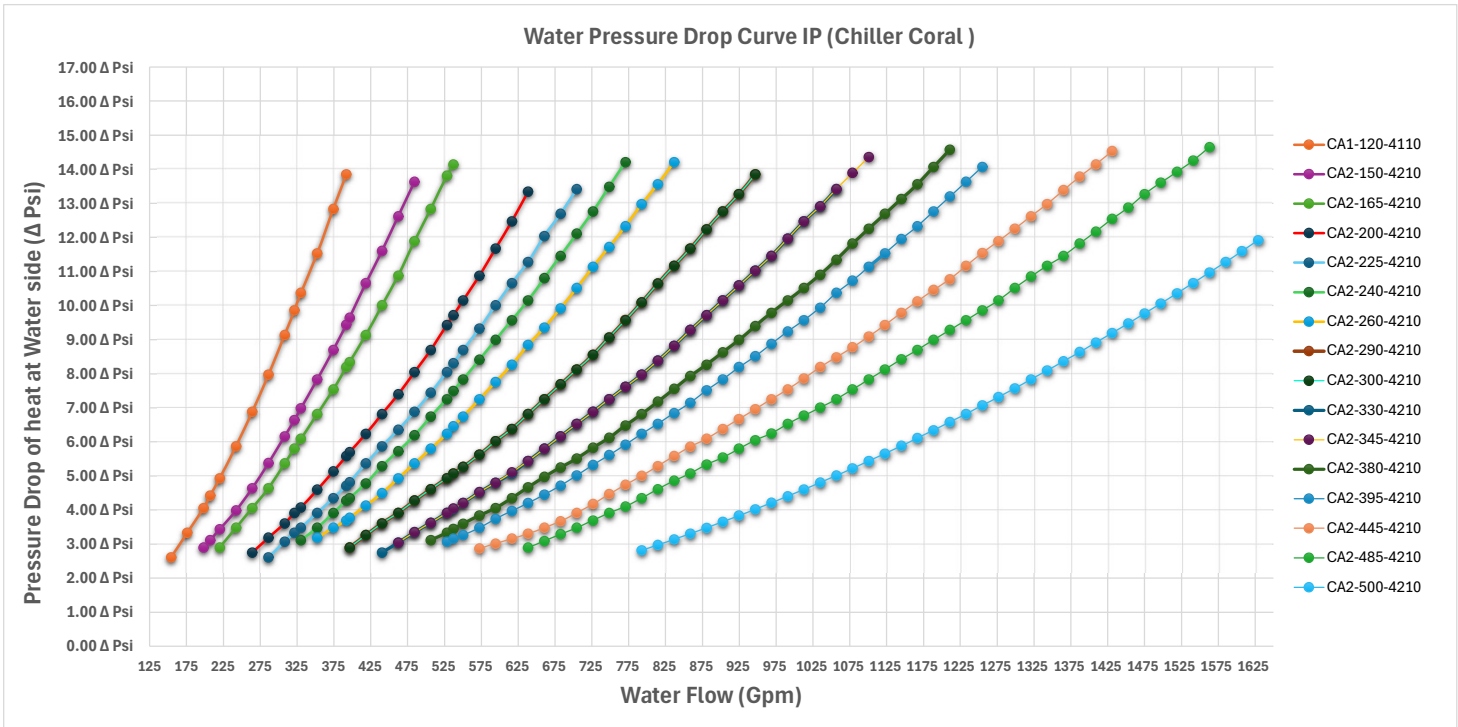
Chiller Model: CA2-150-4210



FALSO

Dimension Model: CA2-150-4210	Length	Width	Height
	4,790.00 mm	2,250.00 mm	2,520.00 mm





<b>CA2-150-4210</b>		
Cooling Capacity:	528.00 Kw	150.00 Tons
Water Flow (Max):	91.00 m <sup>3</sup> /hr	400.66 Gpm
Width:	2,250.00 mm	88.58 in
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