



FOCUSED ON APPLICATION HVAC



Unit information		
Chiller Model	CA2-380-4210	
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:	11,040.00 Kgs	24,339.03 Lbs
Operating Weight:	11,200.00 Kgs	24,691.77 Lbs
Capacity Control	Stepless Control	
Refrigerant:	R134a	
Refrigerant(Ckt1 / Ckt2):	240.00 Kgs	240.00 Kgs
Starting Control:	Y-Δ	

Performance Information(Cooling Condition)		
Cooling Capacity:	1,335.00 Kw	380.00 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):	230.00 m³/hr	1,012.66 Gpm
Input Power (Electrical):	402.20 Kw	
IPLV/NPLV (W/W - Btu /w):	4.78 EER (W/W)	16.32 EER (Btu/w)
COP (W/W - Btu /w):	3.32 EER (W/W)	11.34 EER (Btu/w)

Compressor Information		
Brand:	Bitzer	
Model:	CSH9573-240Y-40D	
Type Compressor:	Semi-Hermetic Screw	
Maximal Amperaje Control:	325.00 Amperes	
Quantity:	2.00 Piece	
Oil Model (by compressor):	BSE170	1,055.90 Oz
Capacity Regulating Range:	25.0% - 100.0 %	

Water Side Heat Exchanger Information		
Fluid Type:	Fresh Water	
Nozzle Type:	Victaulic Couping	
Water Volume:	256.00 Lts	67.63 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:	73.00 kPa	24.42 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:	2.20 Kw/Unit	44.00 Kw Total

Electrical Conections		
Amperaje	Electrical Circuit 1	Electrical Circuit 2
Maximum operating current (MCA):	378.00 Amp	378.00 Amp
Maximum Overcurrent Protection (MOCP):	500.00 Amp	500.00 Amp

Electrical Information		
Power Supply:	460Volts / 3 Phases / 60 Hertz	
Voltaje Range:	440 Volts	480 Volts
Rating Current (A):	566.00 Amp	
Max. Starting Current (A):	1,028.00 Amp	
Maximum operating current (A)	756.00 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	1,336.00 Kw	402.40 Kw	0.9506 Kw/Tons	3.32 W/W	60.00 kPa	35.00 °C	12.50 °C	7.00 °C
75	1,002.00 Kw	248.00 Kw	0.7811 Kw/Tons	4.04 W/W	60.00 kPa	27.00 °C	11.10 °C	7.00 °C
50	668.00 Kw	124.40 Kw	0.5877 Kw/Tons	5.37 W/W	60.00 kPa	19.00 °C	9.80 °C	7.00 °C
25	334.00 Kw	63.30 Kw	0.5981 Kw/Tons	5.28 W/W	60.00 kPa	19.00 °C	8.40 °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	380.22 Tons	402.40 Kw	0.9506 Kw/Tons	11.34 EER (Btu/w-h)	20.07 ft CA	95.00 °F	54.50 °F	44.60 °F
75	285.17 Tons	248.00 Kw	0.7811 Kw/Tons	13.80 EER (Btu/w-h)	20.07 ft CA	80.60 °F	51.98 °F	44.60 °F
50	190.11 Tons	124.40 Kw	0.5877 Kw/Tons	18.34 EER (Btu/w-h)	20.07 ft CA	66.20 °F	49.64 °F	44.60 °F
25	95.06 Tons	63.30 Kw	0.5981 Kw/Tons	18.02 EER (Btu/w-h)	20.07 ft CA	66.20 °F	47.12 °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%;

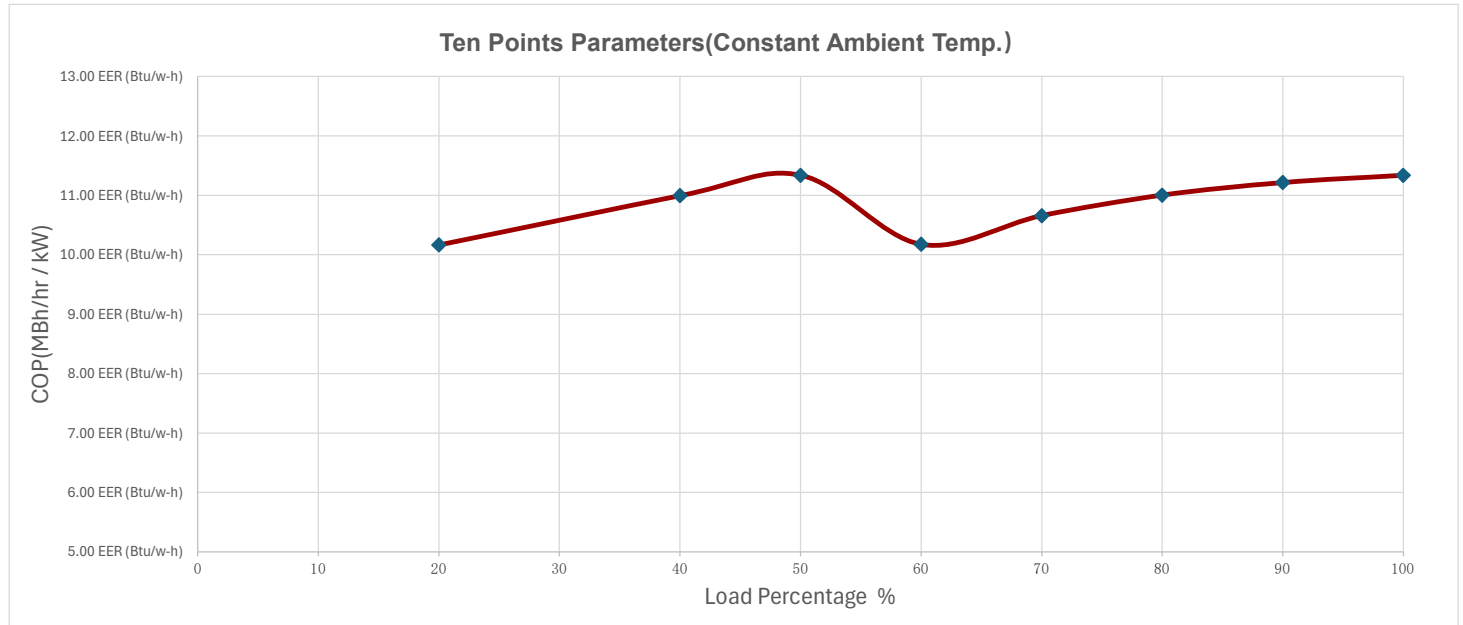
Soft in accordance with the AHRI Water-Cooled Water-Chilling and Heat Pump Water-Heating Packages Using Vapor Compression Cycle , which is based on AHRI Standard 550/590 (I-P) and AHRI Standard

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	380.22 Tons	402.40 Kw	0.9506 Kw/Tons	11.34 EER (Btu/w-h)	20.07 ft CA	95.00 °F	54.50 °F	44.60 °F
90	342.09 Tons	366.00 Kw	0.9610 Kw/Tons	11.22 EER (Btu/w-h)	20.07 ft CA	95.00 °F	53.60 °F	44.60 °F
80	304.24 Tons	331.80 Kw	0.9796 Kw/Tons	11.00 EER (Btu/w-h)	20.07 ft CA	95.00 °F	52.52 °F	44.60 °F
70	266.10 Tons	299.60 Kw	1.0113 Kw/Tons	10.66 EER (Btu/w-h)	20.07 ft CA	95.00 °F	51.62 °F	44.60 °F
60	228.25 Tons	269.40 Kw	1.0591 Kw/Tons	10.18 EER (Btu/w-h)	20.07 ft CA	95.00 °F	50.54 °F	44.60 °F
50	190.11 Tons	201.10 Kw	0.9506 Kw/Tons	11.34 EER (Btu/w-h)	20.07 ft CA	95.00 °F	49.64 °F	44.60 °F
40	151.98 Tons	165.90 Kw	0.9805 Kw/Tons	10.99 EER (Btu/w-h)	20.07 ft CA	95.00 °F	48.56 °F	44.60 °F
20	114.12 Tons	134.70 Kw	1.0601 Kw/Tons	10.17 EER (Btu/w-h)	20.07 ft CA	95.00 °F	47.66 °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: CA2-380-4210

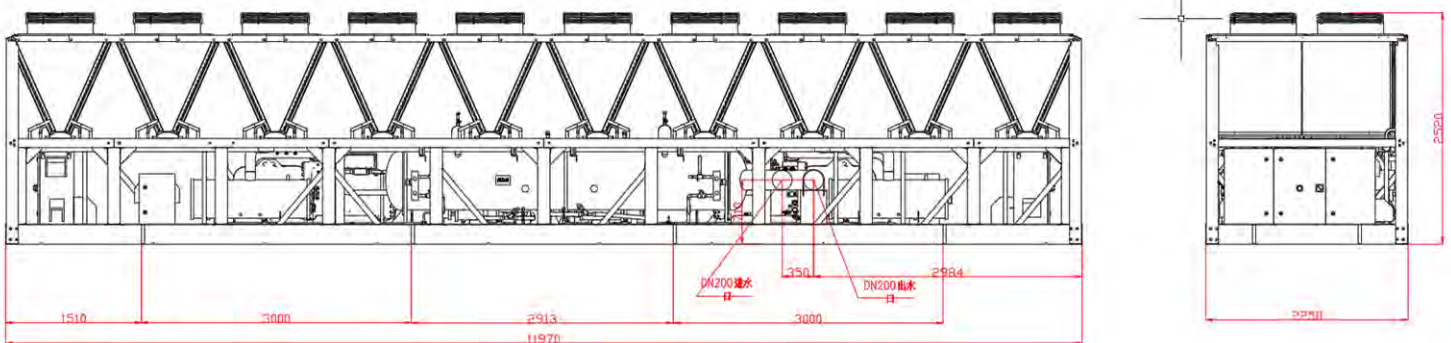
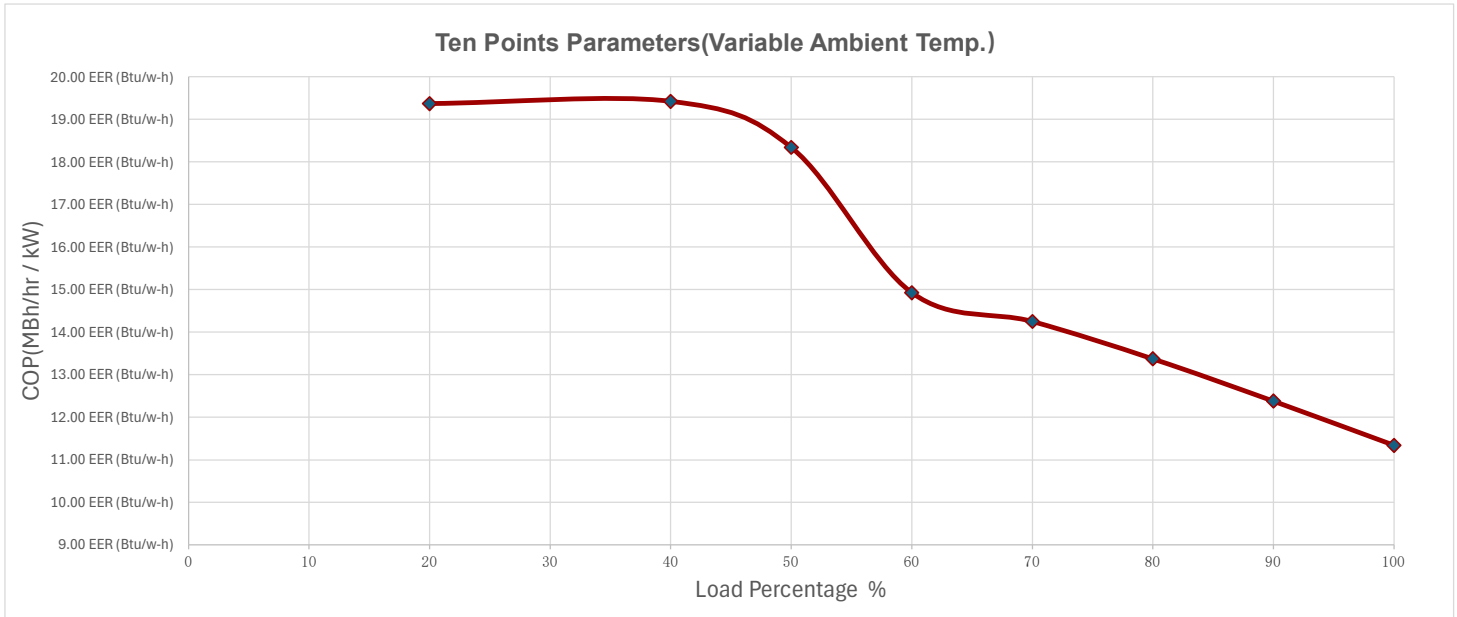


Ten Points Parameters(Variable Ambient Temp.)

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	380.22 Tons	402.40 Kw	0.9506 Kw/Tons	11.34 EER (Btu/w-h)	20.07 ft CA	95.00 °F	54.50 °F	44.60 °F
90	342.09 Tons	331.60 Kw	0.8707 Kw/Tons	12.38 EER (Btu/w-h)	20.07 ft CA	89.24 °F	53.60 °F	44.60 °F
80	304.24 Tons	273.00 Kw	0.8060 Kw/Tons	13.37 EER (Btu/w-h)	20.07 ft CA	83.48 °F	52.52 °F	44.60 °F
70	266.10 Tons	224.10 Kw	0.7564 Kw/Tons	14.25 EER (Btu/w-h)	20.07 ft CA	77.72 °F	51.62 °F	44.60 °F
60	228.25 Tons	183.50 Kw	0.7221 Kw/Tons	14.93 EER (Btu/w-h)	20.07 ft CA	71.96 °F	50.54 °F	44.60 °F
50	190.11 Tons	124.40 Kw	0.5877 Kw/Tons	18.34 EER (Btu/w-h)	20.07 ft CA	66.20 °F	49.64 °F	44.60 °F
40	151.98 Tons	93.90 Kw	0.5550 Kw/Tons	19.42 EER (Btu/w-h)	20.07 ft CA	60.44 °F	48.56 °F	44.60 °F
20	114.12 Tons	70.70 Kw	0.5564 Kw/Tons	19.37 EER (Btu/w-h)	20.07 ft CA	55.40 °F	47.66 °F	44.60 °F

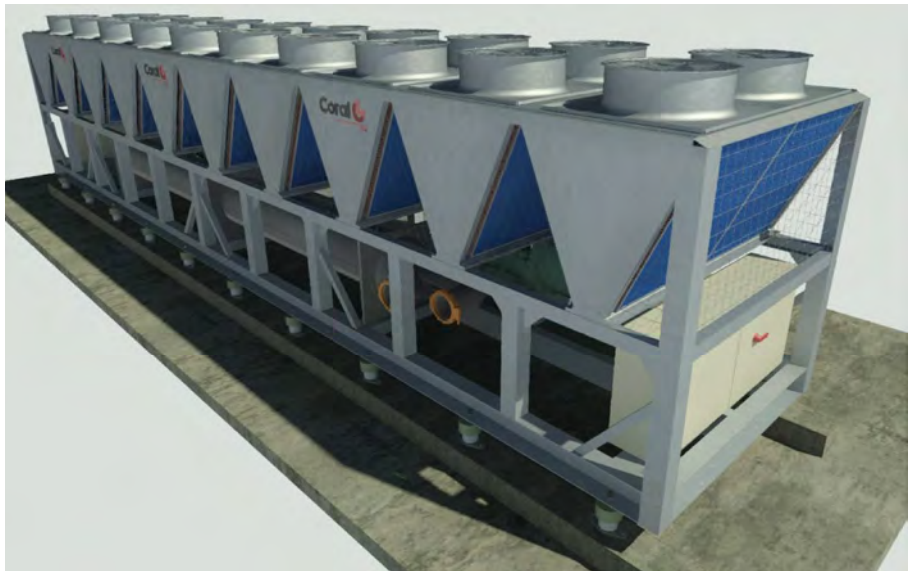
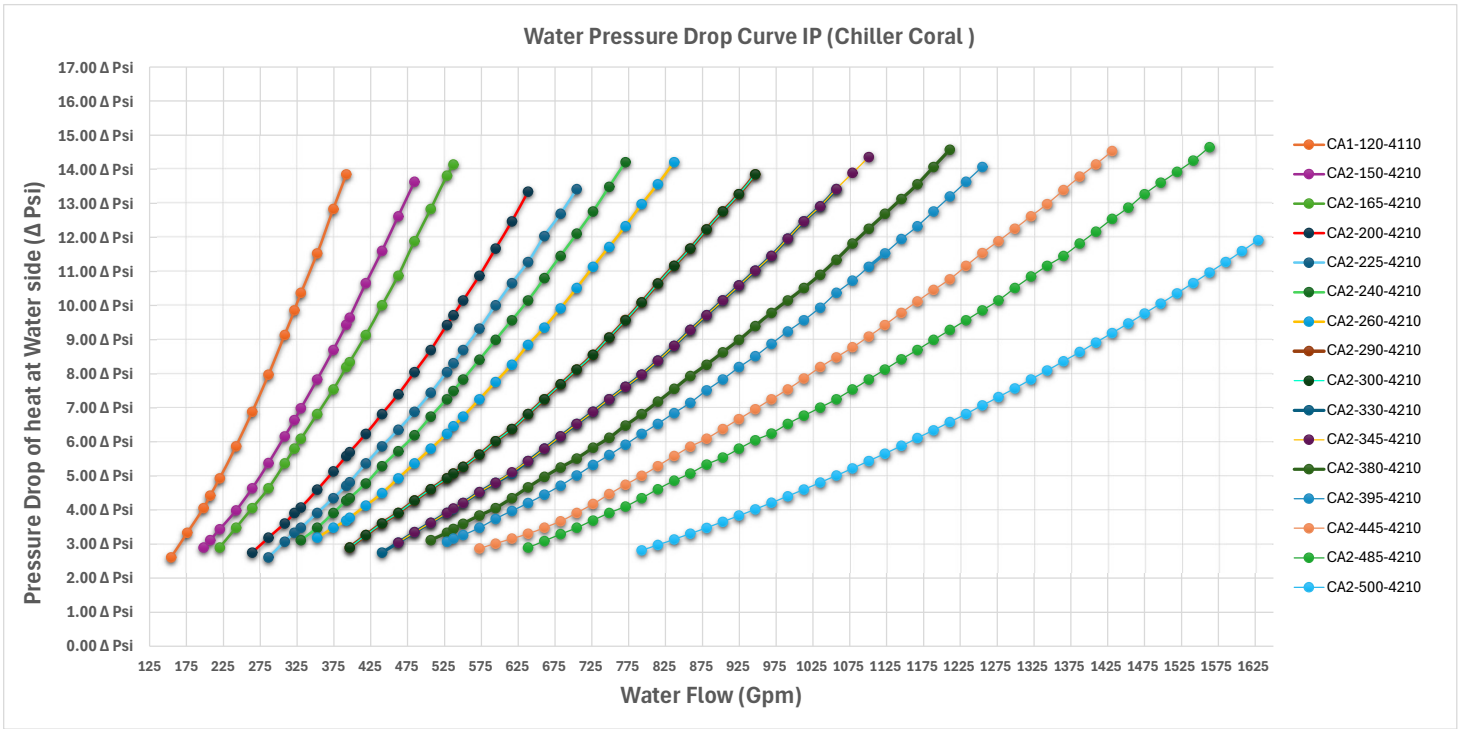
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Chiller Model: CA2-380-4210



Dimension Model: CA2-380-4210	Length	Width	Height
	11,970.00 mm	2,250.00 mm	2,520.00 mm





CA2-380-4210		
Cooling Capacity:	1,335.00 Kw	380.00 Tons
Water Flow (Max):	230.00 m ³ /hr	1,012.66 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:	11,200.00 Kgs	24,691.77 Lbs