



FOCUSED ON APPLICATION HVAC



Unit information		
Chiller Model	CA2-300-4210	
Width:	2,250.00 mm	88.58 in
Length:	9,570.00 mm	376.77 in
Height:	2,520.00 mm	99.21 in
Shipping Weight:	9,260.00 kg	20,414.80 lb
Operating Weight:	9,390.00 kg	20,701.41 lb
Capacity Control	Slide Valve	
Refrigerant:	R134a	
Refrigerant Charge (Ckt1 / Ckt2)	175.00 kg	175.00 kg
Starting Control:	Y-Δ	

Performance Information (Cooling Conditions)		
** Cooling Capacity:	1,052.00 kW	299.40 TR
** Entering Water Temp:	12.00 °C	53.60 °F
** Leaving Water Temp:	7.00 °C	44.60 °F
Ambient Temperature (DB):	35.00 °C	95.00 °F
Design Water Flow	180.90 m³/h	796.48 GPM
Input Power (Electrical):	328.50 kW	
IPLV/NPLV:	4.38 (W/W)	14.97 (Btu/W.h)
COP:	3.20 (W/W)	10.93 EER (Btu/W.h)

Compressor Information		
Brand:	Bitzer	
Model:	CSH9563-210Y-40D	
Compressor Type:	Semi-Hermetic Screw	
Maximum Compressor Current:	293.00 A	
Quantity:	2 Piece/s	
Oil Type (per compressor):	BSE170	1,055.90 oz
Capacity Regulating Range:	12.5% - 100.0 %	

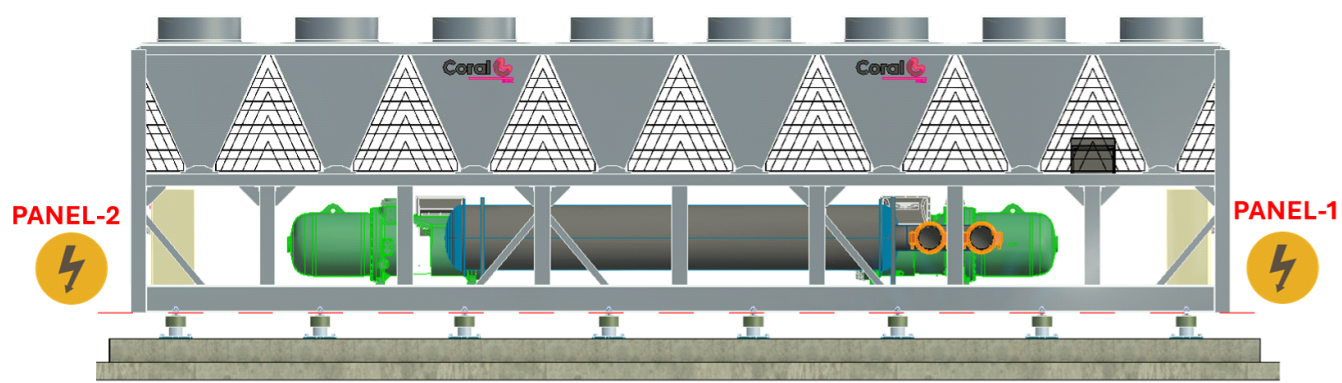
Water Side Heat Exchanger Information		
Fluid Type:	Water	
Nozzle Type:	Victaulic Coupling	
Water Volume:	190.00 L	50.20 gal
Heat Exchanger Type:	Flooded Shell-and-Tube	
Fouling Factor:	0.018 m².K/kW	0.1021 ft².F/Btu
Nozzle Size(DN):	200.00 mm	8.00 in
Water Pressure Drop:	71.00 kPa	23.75 ft CA
Design Pressure of Water Side (Max):	1.00 MPa	145.04 psi

Air Side Heat Exchanger Information		
Type:	Fin-and-Tube	
Fan Quantity:	16 Units	
Air Flow	392,000.00 m³/h	230,722.18 CFM
Fan Power Input	2.20 kW/unit	35.20 kW Total

Electrical Connections		
Current	Electrical Circuit 1	Electrical Circuit 2
Maximum operating current (MCA):	335.50 A	335.50 A
Maximum Overcurrent Protection (MOCP):	500.00 A	500.00 A

Electrical Information		
Power Supply:	460 V / 3 Ph / 60 Hz	
Voltage Range:	440 V	480 V
Rating Current (A):	474.00 A	
Max. Starting Current (A):	921.00 A	
Maximum operating current (A)	671.00 A	

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



- * Garantía de 2 años en partes y compresores
- * Resortes antivibratorios

- * Refrigerante HFC, libre de cloro, ODP = 0
- * Conexiones de tubería ranurada tipo Victaulic



IPLV/NPLV Points (SI)

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Evap. WPD	DBT	EEWT	ELWT
100	1,052.00 kW	328.50 kW	1.0979 kW/TR	3.20 W/W	71.00 kPa	35.00 °C	12.00 °C	7.00 °C
75	789.00 kW	199.70 kW	0.8899 kW/TR	3.95 W/W	71.00 kPa	27.00 °C	10.75 °C	7.00 °C
50	526.00 kW	114.60 kW	0.7660 kW/TR	4.59 W/W	71.00 kPa	19.00 °C	9.50 °C	7.00 °C
25	263.00 kW	50.40 kW	0.6738 kW/TR	5.22 W/W	71.00 kPa	13.00 °C	8.25 °C	7.00 °C

IPLV /NPLV =0.01*A+0.42*B+0.45*C+0.12*D= 4.38 (W/W)

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

Performance calculations are in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

IPLV/NPLV Points (IP)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD	DBT	EEWT	ELWT
100	299.40 TR	328.50 kW	1.0979 kW/TR	10.94 (Btu/W-h)	23.75 ft CA	95.00 °F	53.60 °F	44.60 °F
75	224.55 TR	199.70 kW	0.8899 kW/TR	13.49 (Btu/W-h)	23.75 ft CA	80.60 °F	51.35 °F	44.60 °F
50	149.70 TR	114.60 kW	0.7660 kW/TR	15.68 (Btu/W-h)	23.75 ft CA	66.20 °F	49.10 °F	44.60 °F
25	74.85 TR	50.40 kW	0.6738 kW/TR	17.82 (Btu/W-h)	23.75 ft CA	55.40 °F	46.85 °F	44.60 °F

IPLV /NPLV =0.01*A+0.42*B+0.45*C+0.12*D= 14.97 EER (Btu/W-h)

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

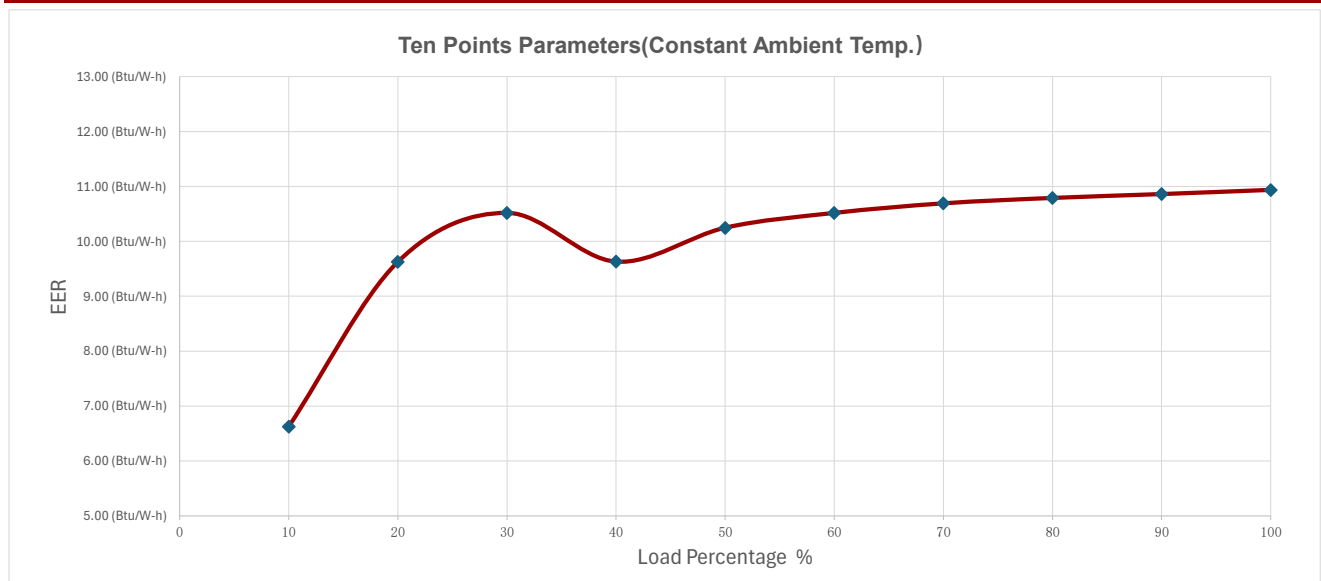
Performance calculations are in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

Ten Points Parameters(Constant Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD	DBT	FLOW RATE	ELWT
100	299.40 TR	328.50 kW	1.0979 kW/TR	10.94 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
90	269.51 TR	297.80 kW	1.1057 kW/TR	10.86 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
80	239.63 TR	266.50 kW	1.1128 kW/TR	10.79 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
70	209.46 TR	235.10 kW	1.1231 kW/TR	10.69 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
60	179.58 TR	204.90 kW	1.1417 kW/TR	10.52 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
50	149.70 TR	175.30 kW	1.1718 kW/TR	10.25 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
40	119.82 TR	149.30 kW	1.2469 kW/TR	9.63 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
30	89.93 TR	102.60 kW	1.1416 kW/TR	10.52 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
20	59.77 TR	74.50 kW	1.1196 kW/TR	9.63 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
10	29.88 TR	54.10 kW	1.6261 kW/TR	6.63 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C

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: CA2-300-4210



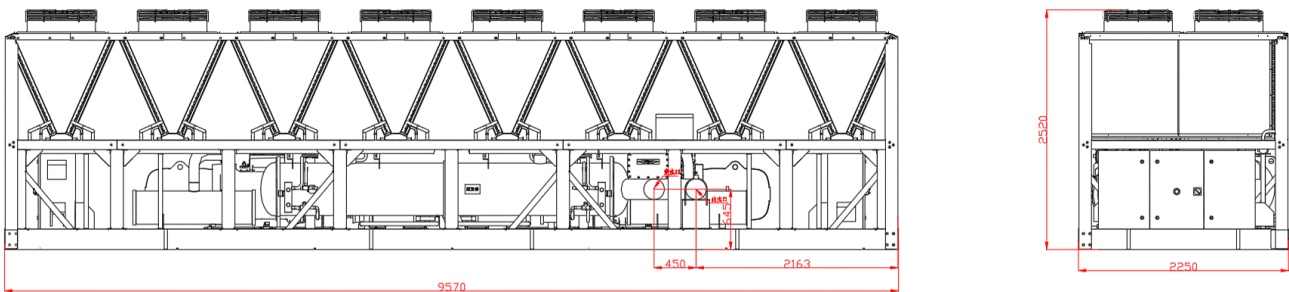
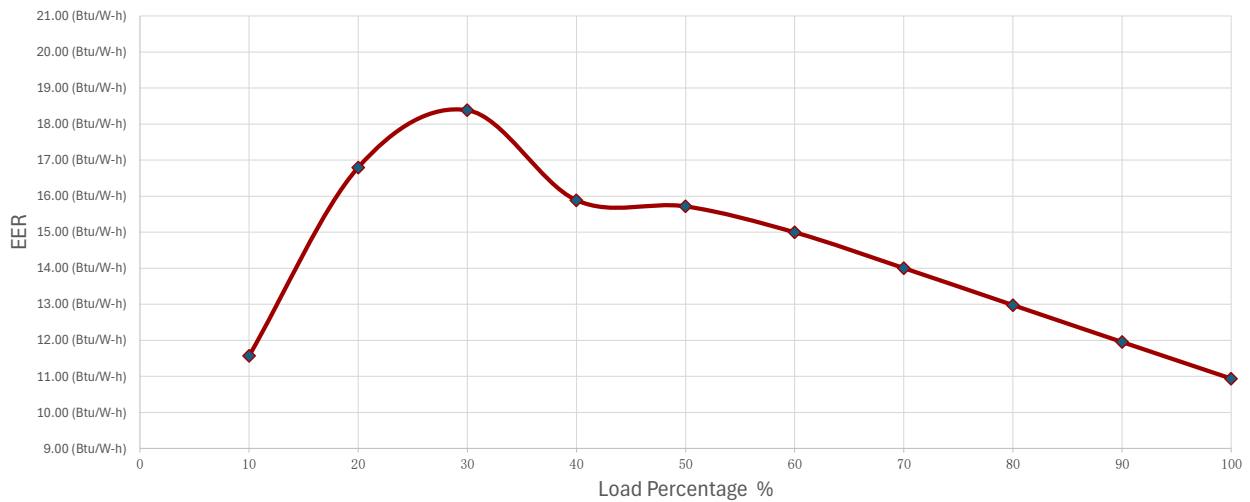
Ten Points Parameters(Variable Ambient Temp.)

Load %	Cooling Capacity (TR)	Input Power (kW)	Cooling kW/TR	Cooling EER	Evap. WPD (ft CA)	DBT (°C)	FLOW RATE	ELWT (°C)
100	299.40 TR	328.50 kW	1.0979 kW/TR	10.94 (Btu/W-h)	23.75 ft CA	35.00 °C	796.48 GPM	7.00 °C
90	269.51 TR	270.60 kW	1.0047 kW/TR	11.95 (Btu/W-h)	23.75 ft CA	31.80 °C	796.48 GPM	7.00 °C
80	239.63 TR	221.60 kW	0.9254 kW/TR	12.98 (Btu/W-h)	23.75 ft CA	28.60 °C	796.48 GPM	7.00 °C
70	209.46 TR	179.50 kW	0.8575 kW/TR	14.00 (Btu/W-h)	23.75 ft CA	25.40 °C	796.48 GPM	7.00 °C
60	179.58 TR	143.70 kW	0.8007 kW/TR	15.00 (Btu/W-h)	23.75 ft CA	22.20 °C	796.48 GPM	7.00 °C
50	149.70 TR	114.30 kW	0.7640 kW/TR	15.72 (Btu/W-h)	23.75 ft CA	19.00 °C	796.48 GPM	7.00 °C
40	119.82 TR	90.50 kW	0.7558 kW/TR	15.89 (Btu/W-h)	23.75 ft CA	15.80 °C	796.48 GPM	7.00 °C
30	89.93 TR	58.70 kW	0.6531 kW/TR	18.38 (Btu/W-h)	23.75 ft CA	13.00 °C	796.48 GPM	7.00 °C
20	59.77 TR	42.70 kW	0.7149 kW/TR	16.80 (Btu/W-h)	23.75 ft CA	13.00 °C	796.48 GPM	7.00 °C
10	29.88 TR	31.00 kW	1.0381 kW/TR	11.57 (Btu/W-h)	23.75 ft CA	13.00 °C	796.48 GPM	7.00 °C

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Ten Points Parameters(Variable Ambient Temp.)



Dimension Model: CA2-300-4210

Length

9,570.00 mm

Width

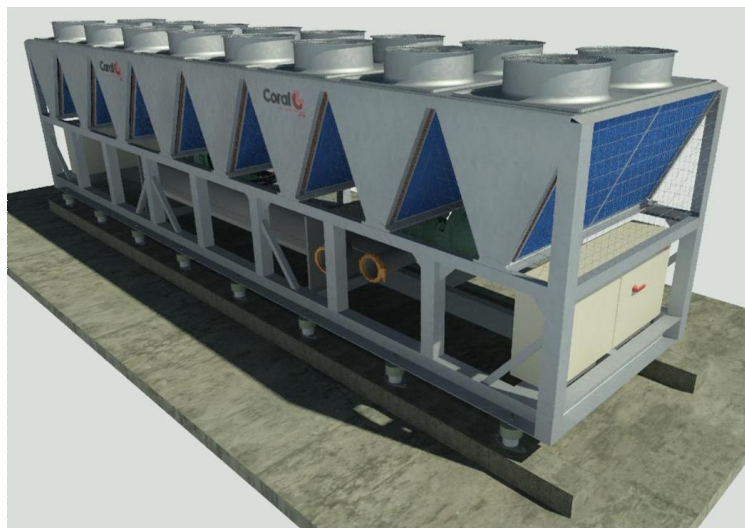
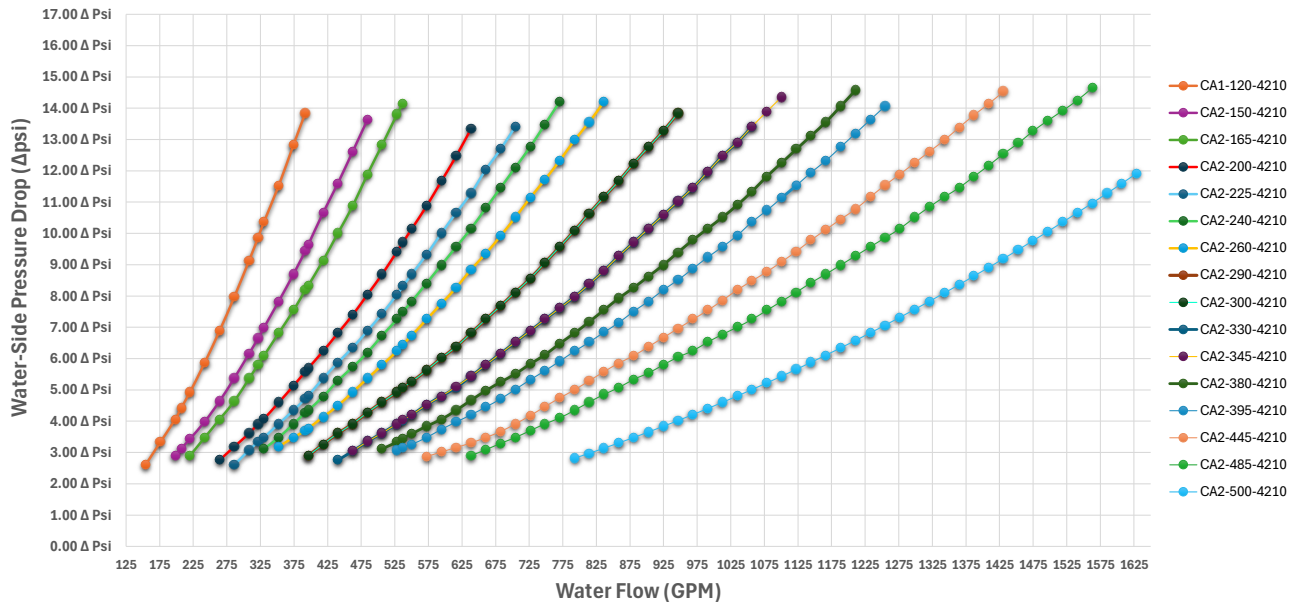
2,250.00 mm

Height

2,520.00 mm



Water Pressure Drop Curve IP (Chiller Coral)



CA2-300-4210

Cooling Capacity:	1,052.00 kW	299.40 TR
Chilled Water Flow:	180.90 m³/h	796.48 GPM
Width:	2,250.00 mm	88.58 in
Length:	9,570.00 mm	376.77 in
Height:	2,520.00 mm	99.21 in
Fan Quantity:	16 Units	
Nozzle Size(DN):	200.00 mm	8.00 in
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