



FOCUSED ON APPLICATION HVAC



Unit information		
Chiller Model	CA2-345-4210	
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:	10,850.00 kg	23,920.15 lb
Operating Weight:	11,000.00 kg	24,250.85 lb
Capacity Control	Slide Valve	
Refrigerant:	R134a	
Refrigerant Charge (Ckt1 / Ckt2):	210.00 kg	210.00 Kg
Starting Control:	Y-Δ	

Performance Information (Cooling Conditions)		
** Cooling Capacity:	1,210.00 kW	344.37 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	208.10 m³/h	916.24 GPM
Input Power (Electrical):	369.10 kW	
IPLV/NPLV:	4.45 (W/W)	15.19 (Btu/W.h)
COP:	3.28 (W/W)	11.20 EER (Btu/W.h)

Water-Side Heat Exchanger Information		
Fluid Type:	Water	
Nozzle Type:	Victaulic Coupling	
Water Volume:	208.00 L	54.95 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

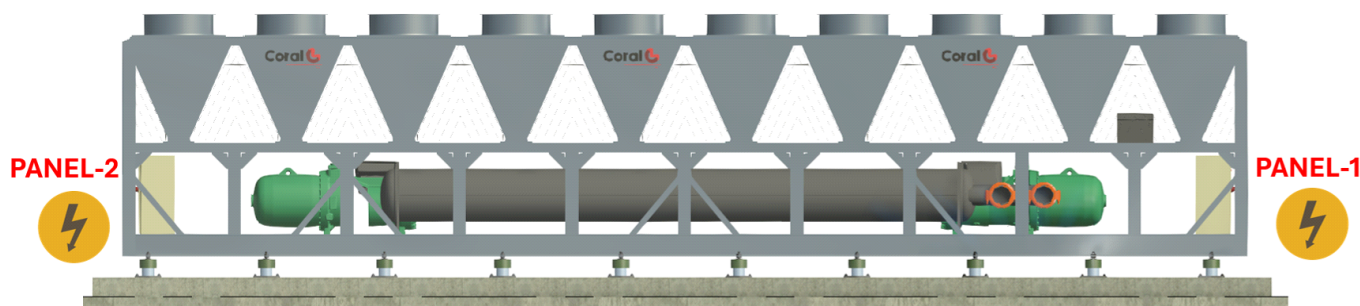
Electrical Connections		
Amperage	Electrical Circuit 1	Electrical Circuit 2
Maximum Operating Current (MCA):	378.00 A	378.00 A
Maximum Overcurrent Protection (MOCP):	500.00 A	500.00 A

Compressor Information		
Brand:	Bitzer	
Model:	CSH9573-240Y-40D	
Compressor Type:	Semi-Hermetic Screw	
Maximum Compressor Current:	325.00 A	
Quantity:	2 Piece/s	
Oil Type (per compressor):	BSE170	1,055.90 oz
Capacity Regulating Range:	12.5% - 100%	

Air-Side Heat Exchanger Information		
Type:	Fin-and-Tube	
Fan Quantity:	20 Units	
Air Flow	490,000.00 m³/h	288,402.73 CFM
Fan Power Input	2.20 kW/unit	44.00 kW Total

Electrical Information		
Power Supply:	460V / 3 Ph / 60 Hz	
Voltage Range:	440 V	480 V
Rating Current (A):	527.00 A	
Max. Starting Current (A):	1,028.00 A	
Maximum Operating Current (A)	756.00 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	1,210.00 kW	369.10 kW	1.0725 kW/TR	3.28 W/W	72.00 kPa	35.00 °C	12.00 °C	7.00 °C
75	908.00 kW	227.60 kW	0.8813 kW/TR	3.99 W/W	72.00 kPa	27.00 °C	10.75 °C	7.00 °C
50	605.00 kW	130.10 kW	0.7561 kW/TR	4.65 W/W	72.00 kPa	19.00 °C	9.50 °C	7.00 °C
25	303.00 kW	56.20 kW	0.6521 kW/TR	5.39 W/W	72.00 kPa	13.00 °C	8.25 °C	7.00 °C

IPLV /NPLV =0.01*A+0.42*B+0.45*C+0.12*D= 4.45 (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	344.36 TR	369.10 kW	1.0725 kW/TR	11.20 (Btu/W.h)	24.09 ft CA	95.00 °F	53.60 °F	44.60 °F
75	258.42 TR	227.60 kW	0.8813 kW/TR	13.62 (Btu/W.h)	24.09 ft CA	80.60 °F	51.35 °F	44.60 °F
50	172.18 TR	130.10 kW	0.7561 kW/TR	15.88 (Btu/W.h)	24.09 ft CA	66.20 °F	49.10 °F	44.60 °F
25	86.23 TR	56.20 kW	0.6521 kW/TR	18.41 (Btu/W.h)	24.09 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= 15.19 EER (Btu/w)

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

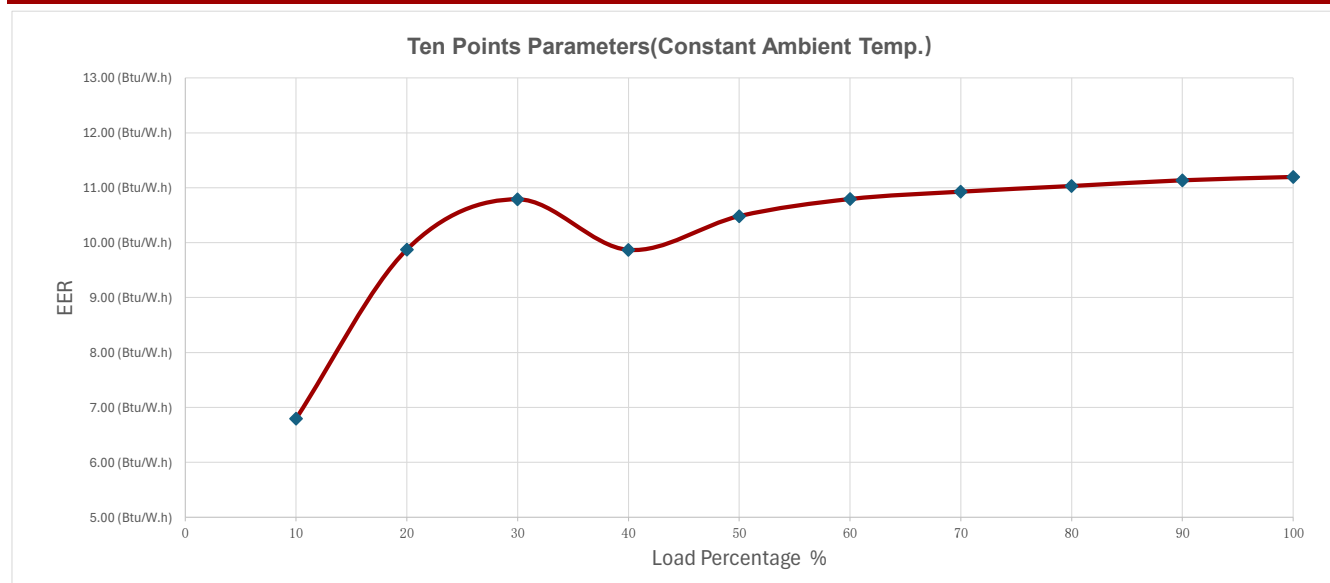
Performance calculations are in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

Ten Points Parameters(Constant Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD	DBT	FLOW RATE	ELWT
100	344.36 TR	369.10 kW	1.0725 kW/TR	11.20 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
90	309.93 TR	334.00 kW	1.0784 kW/TR	11.14 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
80	275.49 TR	299.70 kW	1.0886 kW/TR	11.03 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
70	241.05 TR	264.70 kW	1.0988 kW/TR	10.93 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
60	206.62 TR	229.70 kW	1.1124 kW/TR	10.79 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
50	172.18 TR	197.10 kW	1.1455 kW/TR	10.48 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
40	137.75 TR	167.50 kW	1.2168 kW/TR	9.87 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
30	103.31 TR	114.90 kW	1.1129 kW/TR	10.79 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
20	68.87 TR	83.70 kW	1.0916 kW/TR	9.87 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
10	34.44 TR	60.80 kW	1.5858 kW/TR	6.80 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 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: CA2-345-4210

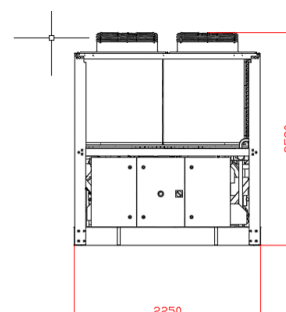
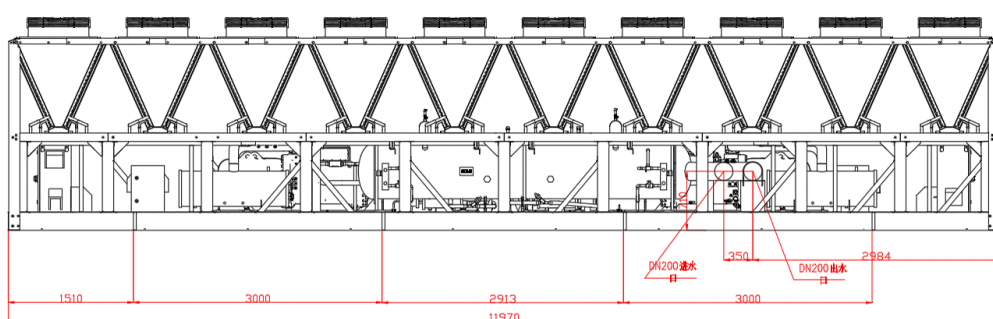
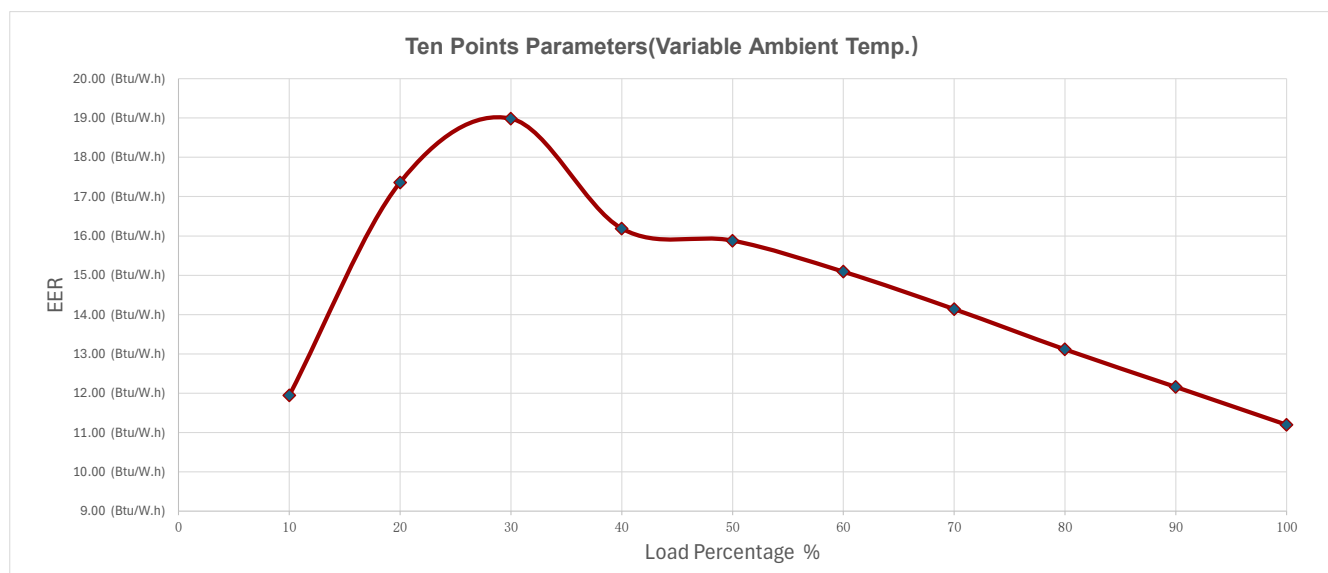


Ten Points Parameters(Variable Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD	DBT	FLOW RATE	ELWT
100	344.36 TR	369.10 kW	1.0725 kW/TR	11.20 (Btu/W.h)	23.75 ft CA	35.00 °C	916.24 GPM	7.00 °C
90	309.93 TR	305.90 kW	0.9876 kW/TR	12.16 (Btu/W.h)	23.75 ft CA	31.80 °C	916.24 GPM	7.00 °C
80	275.49 TR	252.10 kW	0.9157 kW/TR	13.11 (Btu/W.h)	23.75 ft CA	28.60 °C	916.24 GPM	7.00 °C
70	241.05 TR	204.60 kW	0.8493 kW/TR	14.14 (Btu/W.h)	23.75 ft CA	25.40 °C	916.24 GPM	7.00 °C
60	206.62 TR	164.30 kW	0.7957 kW/TR	15.09 (Btu/W.h)	23.75 ft CA	22.20 °C	916.24 GPM	7.00 °C
50	172.18 TR	130.10 kW	0.7561 kW/TR	15.88 (Btu/W.h)	23.75 ft CA	19.00 °C	916.24 GPM	7.00 °C
40	137.75 TR	102.10 kW	0.7417 kW/TR	16.19 (Btu/W.h)	23.75 ft CA	15.80 °C	916.24 GPM	7.00 °C
30	103.31 TR	65.30 kW	0.6325 kW/TR	18.98 (Btu/W.h)	23.75 ft CA	13.00 °C	916.24 GPM	7.00 °C
20	68.87 TR	47.60 kW	0.6916 kW/TR	17.36 (Btu/W.h)	23.75 ft CA	13.00 °C	916.24 GPM	7.00 °C
10	34.44 TR	34.6	1.0054 kW/TR	11.94 (Btu/W.h)	23.75 ft CA	13.00 °C	916.24 GPM	7.00 °C

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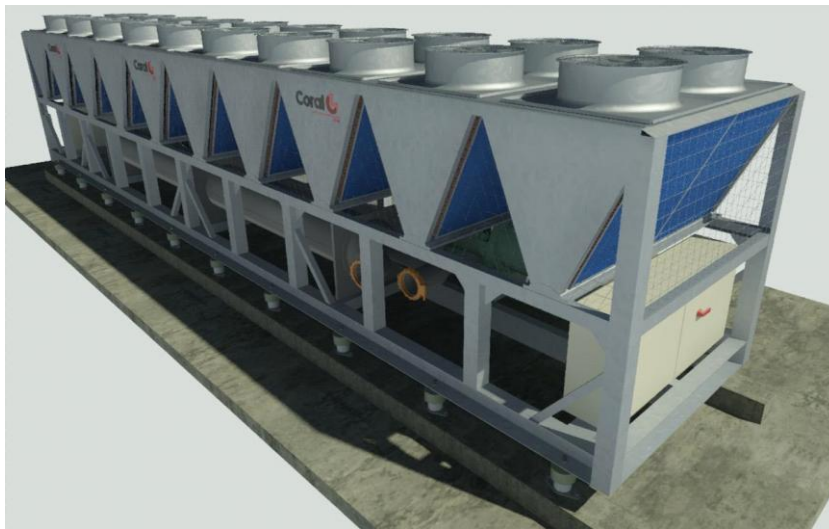
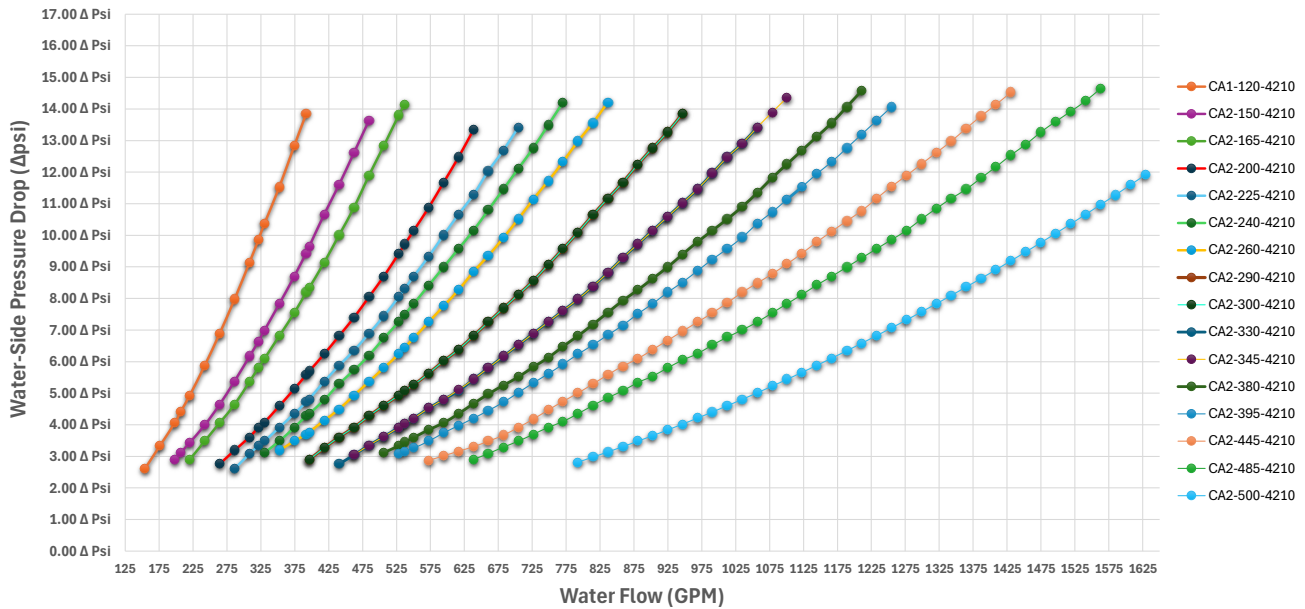
Chiller Model: CA2-345-4210



Dimension Model: CA2-345-4210	Length	Width	Height
	11,970.00 mm	2,250.00 mm	2,520.00 mm

Coral

Water Pressure Drop Curve IP (Chiller Coral)



CA2-345-4210

Cooling Capacity:	1,210.00 kW	344.36 TR
Chilled Water Flow:	208.10 m³/h	916.24 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 Units	
Nozzle Size(DN):	200.00 mm	8.00 in
Operating Weight:	11,000.00 kg	24,250.85 lb