

Coral

FOCUSED ON APPLICATION HVAC



Unit information		
Chiller Model:	CA2-240-4210	
Width:	2,250.00 mm	88.58 in
Length:	7,180.00 mm	282.68 in
Height:	2,460.00 mm	96.85 in
Shipping Weight:	8,240.00 kg	18,166.09 lb
Operating Weight:	8,360.00 kg	18,430.64 lb
Capacity Control:	Slide Valve	
Refrigerant:	R134a	
Refrigerant Charge (Ckt1 / Ckt2):	170.00 kg	170.00 Kg
Starting Control:	Y-Δ	



Performance Information (Cooling Conditions)		
** Cooling Capacity:	859.00 kW	244.47 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:	147.70 m³/h	650.30 GPM
Input Power (Electrical):	267.70 kW	
IPLV/NPLV:	4.40 (W/W)	15.03 (Btu/W.h)
COP:	3.21 (W/W)	10.96 EER (Btu/W.h)

Compressor Information	
Brand:	Bitzer
Model:	CSH8583-160Y-40D
Compressor Type:	Semi-Hermetic Screw
Maximum Compressor Current:	236.00 A
Quantity:	2 Piece/s
Oil Type (per compressor):	BSE170 668.70 oz
Capacity Regulating Range:	12.5% - 100%

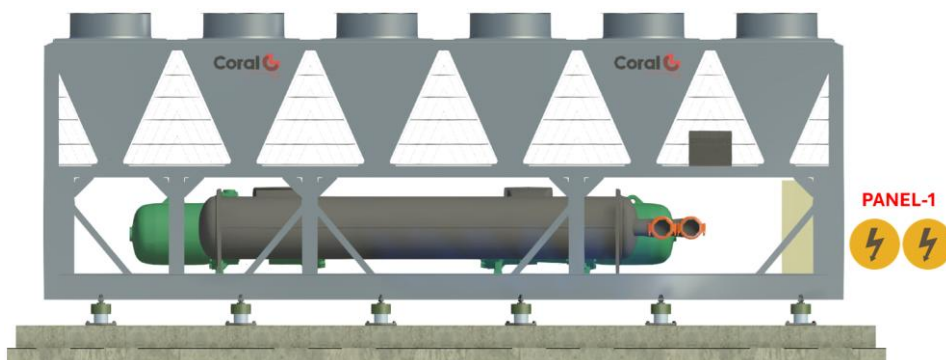
Water-Side Heat Exchanger Information		
Fluid Type:	Water	
Nozzle Type:	Victaulic Coupling	
Water Volume:	163.00 L	43.06 gal
Heat Exchanger Type:	Flooded Shell-and-Tube	
Fouling Factor:	0.018 m².K/kW	0.1021 ft².F/Btu
Nozzle Size(DN):	200.00 mm	8.00 in
Water Pressure Drop:	72.00 kPa	24.09 ft CA
Design Pressure of Water Side (Max):	1.00 MPa	145.04 psi

Air-Side Heat Exchanger Information		
Type:	Fin-and-Tube	
Fan Quantity:	12 Units	
Air Flow:	294,000.00 m³/h	173,041.64 CFM
Fan Power Input:	2.20 kW/unit	26.40 kW Total

Electrical Connections		
Amperage	Electrical Circuit 1	Electrical Circuit 2
Maximum Operating Current (MCA):	268.00 A	268.00 A
Maximum Overcurrent Protection (MOC):	400.00 A	400.00 A

Electrical Information	
Power Supply:	460V / 3 Ph / 60 Hz
Voltage Range:	440 V 480 V
Rating Current (A):	376.00 A
Max. Starting Current (A):	639.00 A
Maximum Operating Current (A):	536.00 A

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



* 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	859.00 kW	267.70 kW	1.0957 kW/TR	3.21 W/W	72.00 kPa	35.00 °C	12.00 °C	7.00 °C
75	644.00 kW	163.50 kW	0.8926 kW/TR	3.94 W/W	72.00 kPa	27.00 °C	10.75 °C	7.00 °C
50	430.00 kW	93.30 kW	0.7629 kW/TR	4.61 W/W	72.00 kPa	19.00 °C	9.50 °C	7.00 °C
25	215.00 kW	40.40 kW	0.6607 kW/TR	5.32 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= 4.40 (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	244.47 TR	267.70 kW	1.0957 kW/TR	10.96 (Btu/W.h)	24.09 ft CA	95.00 °F	53.60 °F	44.60 °F
75	183.28 TR	163.50 kW	0.8926 kW/TR	13.45 (Btu/W.h)	24.09 ft CA	80.60 °F	51.35 °F	44.60 °F
50	122.38 TR	93.30 kW	0.7629 kW/TR	15.74 (Btu/W.h)	24.09 ft CA	66.20 °F	49.10 °F	44.60 °F
25	61.19 TR	40.40 kW	0.6607 kW/TR	18.17 (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= 15.03 EER (Btu/w)

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

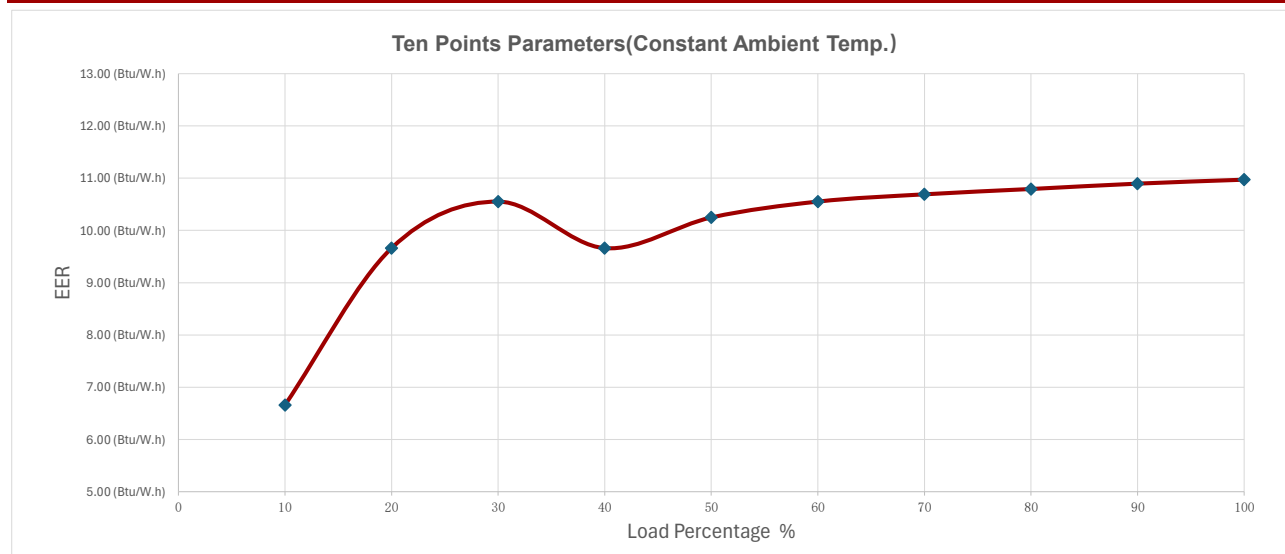
Performance calculations are in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

Ten Points Parameters(Constant Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD	DBT	FLOW RATE	ELWT
100	244.75 TR	267.70 kW	1.0945 kW/TR	10.97 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
90	220.28 TR	242.60 kW	1.1020 kW/TR	10.90 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
80	195.80 TR	217.70 kW	1.1125 kW/TR	10.79 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
70	171.33 TR	192.30 kW	1.1231 kW/TR	10.69 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
60	146.85 TR	167.00 kW	1.1379 kW/TR	10.55 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
50	122.38 TR	143.30 kW	1.1717 kW/TR	10.25 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
40	97.90 TR	121.60 kW	1.2429 kW/TR	9.66 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
30	73.43 TR	83.50 kW	1.1379 kW/TR	10.55 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
20	48.95 TR	60.80 kW	1.1156 kW/TR	9.66 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
10	24.48 TR	44.10 kW	1.6184 kW/TR	6.66 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 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: CA2-240-4210

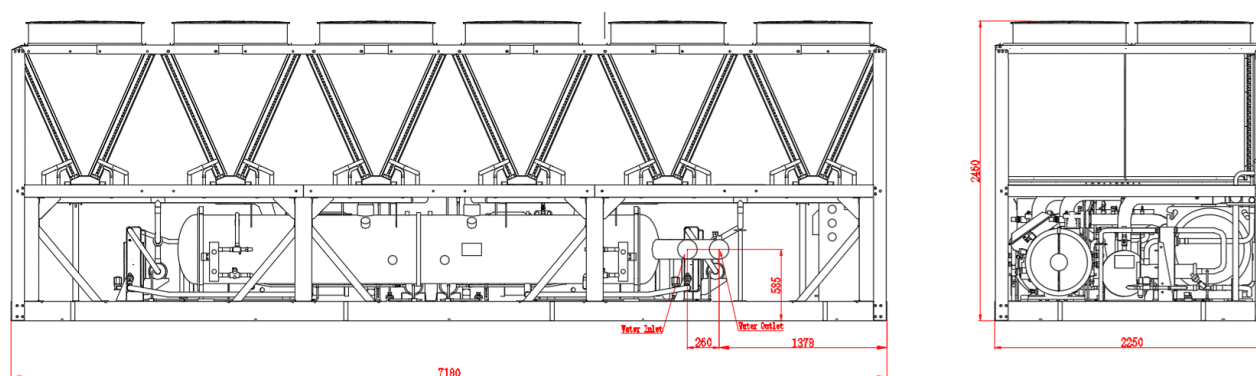
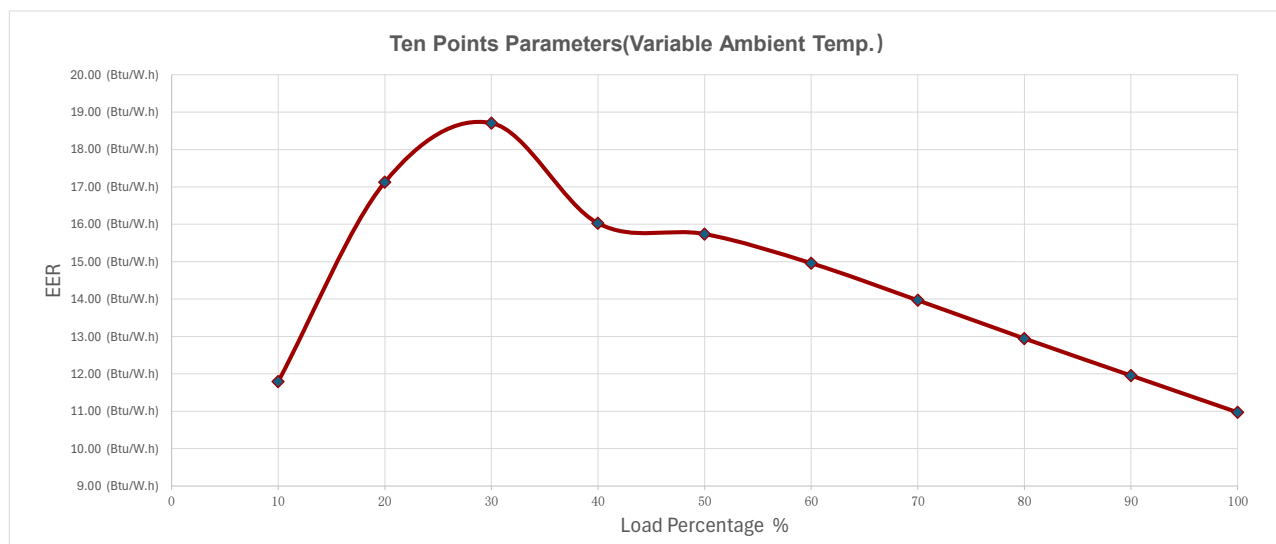


Ten Points Parameters(Variable Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD	DBT	FLOW RATE	ELWT
100	244.75 TR	267.70 kW	1.0945 kW/TR	10.97 (Btu/W.h)	24.09 ft CA	35.00 °C	650.30 GPM	7.00 °C
90	220.28 TR	221.10 kW	1.0044 kW/TR	11.96 (Btu/W.h)	24.09 ft CA	31.80 °C	650.30 GPM	7.00 °C
80	195.80 TR	181.50 kW	0.9275 kW/TR	12.95 (Btu/W.h)	24.09 ft CA	28.60 °C	650.30 GPM	7.00 °C
70	171.33 TR	147.20 kW	0.8597 kW/TR	13.97 (Btu/W.h)	24.09 ft CA	25.40 °C	650.30 GPM	7.00 °C
60	146.85 TR	117.80 kW	0.8027 kW/TR	14.96 (Btu/W.h)	24.09 ft CA	22.20 °C	650.30 GPM	7.00 °C
50	122.38 TR	93.30 kW	0.7629 kW/TR	15.74 (Btu/W.h)	24.09 ft CA	19.00 °C	650.30 GPM	7.00 °C
40	97.90 TR	73.30 kW	0.7492 kW/TR	16.03 (Btu/W.h)	24.09 ft CA	15.80 °C	650.30 GPM	7.00 °C
30	73.43 TR	47.10 kW	0.6419 kW/TR	18.71 (Btu/W.h)	24.09 ft CA	13.00 °C	650.30 GPM	7.00 °C
20	48.95 TR	34.30 kW	0.7012 kW/TR	17.13 (Btu/W.h)	24.09 ft CA	13.00 °C	650.30 GPM	7.00 °C
10	24.48 TR	24.9	1.0180 kW/TR	11.80 (Btu/W.h)	24.09 ft CA	13.00 °C	650.30 GPM	7.00 °C

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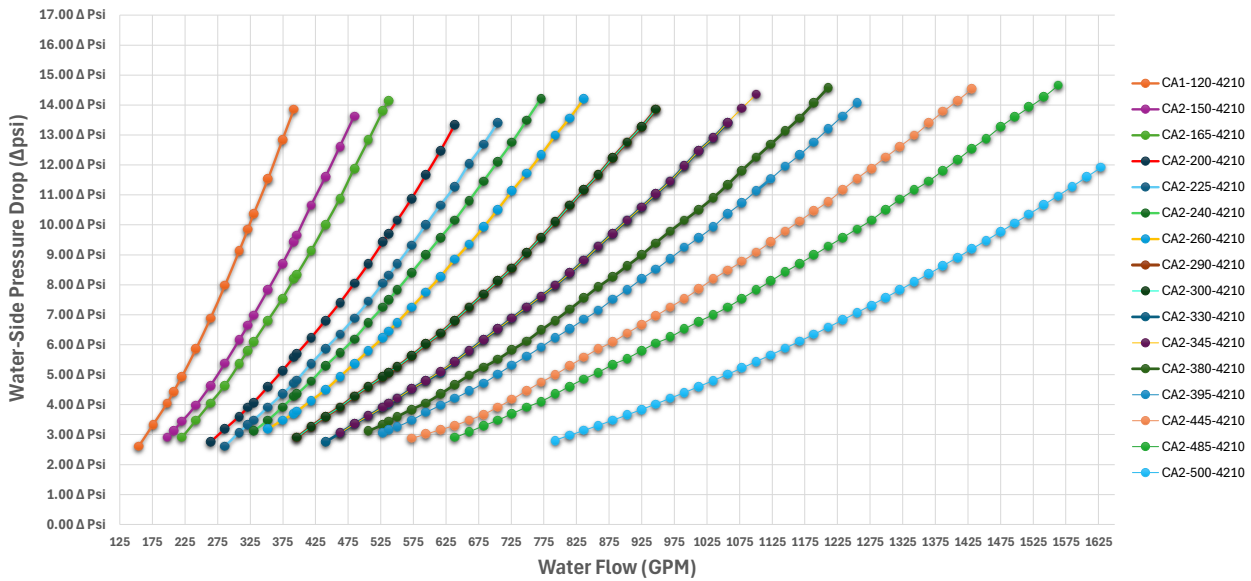
Chiller Model: CA2-240-4210



Dimension Model: CA2-240-4210	Length	Width	Height
	7,180.00 mm	2,250.00 mm	2,460.00 mm

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Water Pressure Drop Curve IP (Chiller Coral)



CA2-240-4210

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