

Coral

FOCUSED ON APPLICATION HVAC



Unit information Water Cooled Screw Chiller		
Chiller Model:	CW2-250-4200	
Width:	1,549.91 mm	61.02 in
Length:	4,500.12 mm	177.17 in
Height:	2,109.98 mm	83.07 in
Shipping Weight:	5,200.00 kg	11,464.04 lb
Operating Weight:	5,900.00 kg	13,007.27 lb
Capacity Control:	Slide Valve	
Refrigerant:	R-134a	
Refrigerant Charge (Ckt1 / Ckt2):	130.00 kg	130.00 kg
Starting Control:	Y-Δ	

Performance Information (Cooling Conditions)		
Cooling Capacity:	879.21 kW	250.22 TR
Entering Water Temp (Evaporator):	12.22 °C	54.00 °F
Leaving Water Temp (Evaporator):	6.66 °C	43.99 °F
Entering Water Temp (Condenser):	29.44 °C	84.99 °F
Leaving Water Temp (Condenser):	35.00 °C	95.00 °F
Ambient Temperature (DB):	---	---
Evaporator Water Flow:	136.50 m³/h	600.99 GPM
Input Power (Electrical):	155.00 kW	
IPLV/NPLV:	7.46 (W/W)	25.48 (Btu/W.h)
COP:	5.67 (W/W)	19.37 EER (Btu/W.h)

Water-Side Heat Exchanger Information (Evaporator)		
Fluid Type:	Water	
Nozzle Type:	Victaulic Coupling	
Heat Exchanger Type:	Flooded Shell-and-Tube	
Fouling Factor:	0.018 m².K/kW	0.1021 ft².F/Btu
Nozzle Size (DN):	150.00 mm	6 in
Water Pressure Drop:	73.40 kPa	24.56 ft CA
Design Pressure of Water-Side:	1.00 MPa	145.03 psi
Passes:	2	
Pipe Wall Thickness:	1.15	
Flow Rate:	136.50 m³/h	600.99 GPM

Electrical Connections		
Amperage:	Electrical Circuit 1	Electrical Circuit 2
Maximum operating current (MCA):	-	----
Operating Current:	226.00 A	----
Maximum Overcurrent Protection (MOCP):	----	----

Options	
Bottom Channels	YES
Circuit Breaker	NO
Safety Valve	Single Safety Valves
Thermal Insulation:	20 mm
Shock Absorber	Rubber Vibration Isolator
Rubber Ball Cleaning Device	NO
Testing	Factory Self-Testing
RS485	YES
Control Cabinet IP rating	IP20
Harmonic Wave (Only Frequency)	---

Noise (Full Load)							
Frequency (Hz)	1/3rd octave	1st octave	63.00 Hz	125.00 Hz	250.00 Hz	500.00 Hz	1,000.00 Hz
Noise (dBA)	91.10 dBA	-	-	-	-	-	-

* Garantía de 2 años en partes y compresores

* Aisladores antivibratorios de neopreno

* Refrigerante HFC, libre de cloro, ODP = 0

* Conexiones de tubería ranurada tipo Victaulic

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V3.01

IPLV/NPLV Points (SI)

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Evap. WPD		EWT	LWT
100%	882.73 kW	119.60 kW	0.61 kW/TR	5.74 W/W	73.83 kPa	---	12.22 °C	6.67 °C
75%	661.17 kW	76.40 kW	0.52 kW/TR	6.71 W/W	74.43 kPa	---	10.83 °C	6.67 °C
50%	439.61 kW	41.00 kW	0.43 kW/TR	8.22 W/W	74.73 kPa	---	9.44 °C	6.67 °C
25%	221.56 kW	22.80 kW	0.48 kW/TR	7.34 W/W	75.02 kPa	---	8.06 °C	6.67 °C

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Cond. WPD		EWT	LWT
100%	882.73 kW	119.60 kW	0.61 kW/TR	5.74 W/W	87.58 kPa	---	29.44 °C	34.61 °C
75%	661.17 kW	76.40 kW	0.52 kW/TR	6.71 W/W	89.67 kPa	---	23.89 °C	27.68 °C
50%	439.61 kW	41.00 kW	0.43 kW/TR	8.22 W/W	92.06 kPa	---	18.33 °C	20.80 °C
25%	221.56 kW	22.80 kW	0.48 kW/TR	7.34 W/W	92.36 kPa	---	18.33 °C	19.58 °C

Performance calculated in accordance with AHRI Standards 550/590 (I-P) and AHRI 551/591 (SI).

IPLV/NPLV Points (IP)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD		EWT	LWT
100%	251.00 TR	119.60 kW	0.48 kW	19.62 Btu/W.h	24.70 ft CA	---	54.00°F	44.00°F
75%	188.00 TR	76.40 kW	0.41 kW	22.91 Btu/W.h	24.90 ft CA	---	51.50°F	44.00°F
50%	125.00 TR	41.00 kW	0.33 kW	28.07 Btu/W.h	25.00 ft CA	---	49.00°F	44.00°F
25%	63.00 TR	22.80 kW	0.36 kW	25.06 Btu/W.h	25.10 ft CA	---	46.50°F	44.00°F

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Cond. WPD		EWT	LWT
100%	251.00 TR	119.60 kW	0.48 kW	19.62 Btu/W.h	29.30 ft CA	---	85.00°F	94.30°F
75%	188.00 TR	76.40 kW	0.41 kW	22.91 Btu/W.h	30.00 ft CA	---	75.00°F	81.83°F
50%	125.00 TR	41.00 kW	0.33 kW	28.07 Btu/W.h	30.80 ft CA	---	65.00°F	69.44°F
25%	63.00 TR	22.80 kW	0.36 kW	25.06 Btu/W.h	30.90 ft CA	---	65.00°F	67.25°F

NPLV (SI) (AHRI 550/590)

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Evap. WPD		EWT	LWT
100%	879.25 Kw	155.00 Kw	0.62 Kw/Ton	5.67 w/w	73.53 kPa	---	12.22 °C	6.67 °C
75%	661.20 Kw	99.20 Kw	0.53 Kw/Ton	6.65 w/w	73.83 kPa	---	10.83 °C	6.67 °C
50%	439.63 Kw	53.80 Kw	0.43 Kw/Ton	8.16 w/w	74.13 kPa	---	9.44 °C	6.67 °C
25%	221.57 Kw	30.10 Kw	0.48 Kw/Ton	7.31 w/w	74.73 kPa	---	8.06 °C	6.67 °C

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Cond. WPD		EWT	LWT
100%	879.25 kW	155.00 kW	0.62 kW/TR	5.67 W/W	76.52 kPa	---	29.44 °C	35.00 °C
75%	661.20 kW	99.20 kW	0.53 kW/TR	6.65 W/W	78.31 kPa	---	23.89 °C	27.97 °C
50%	439.63 kW	53.80 kW	0.43 kW/TR	8.16 W/W	80.40 kPa	---	18.33 °C	20.98 °C
25%	221.57 kW	30.10 kW	0.48 kW/TR	7.31 W/W	80.70 kPa	---	18.33 °C	19.68 °C

Performance calculated in accordance with AHRI Standards 550/590 (I-P) and AHRI 551/591 (SI).

NPLV (IP) (AHRI 550/590)

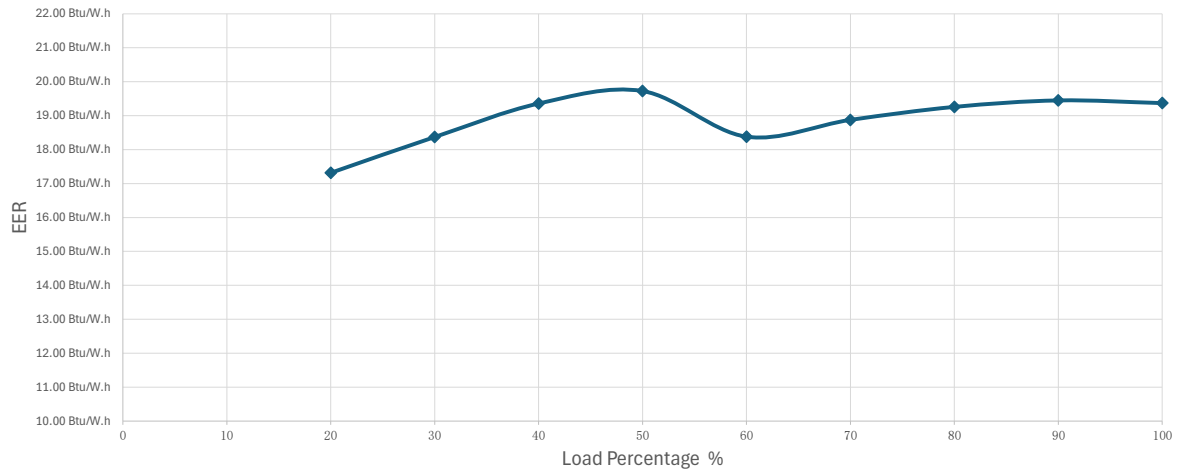
Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD		EWT	LWT
100%	250.00 TR	155.00 kW	0.62 kW/TR	19.38 Btu/W.h	24.60 ft CA	---	54.00°F	44.00°F
75%	188.00 TR	99.20 kW	0.53 kW/TR	22.70 Btu/W.h	24.70 ft CA	---	51.50°F	44.00°F
50%	125.00 TR	53.80 kW	0.43 kW/TR	27.88 Btu/W.h	24.80 ft CA	---	49.00°F	44.00°F
25%	63.00 TR	30.10 kW	0.48 kW/TR	24.97 Btu/W.h	25.00 ft CA	---	46.50°F	44.00°F

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Cond. WPD		EWT	LWT
100%	250.00 TR	155.00 kW	0.62 kW/TR	19.38 Btu/W.h	25.60 ft CA	---	85.00°F	95.00°F
75%	188.00 TR	99.20 kW	0.53 kW/TR	22.70 Btu/W.h	26.20 ft CA	---	75.00°F	82.34°F
50%	125.00 TR	53.80 kW	0.43 kW/TR	27.88 Btu/W.h	26.90 ft CA	---	65.00°F	69.77°F
25%	63.00 TR	30.10 kW	0.48 kW/TR	24.97 Btu/W.h	27.00 ft CA	---	65.00°F	67.42°F

Ten Points Parameters(Constant Condenser Entering Water Temperature)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	EVAPORATOR (WPD --- Kpa)		Condenser (WPD --- Kpa)	
					EWT	ELWT	EEWT	ELWT
100	250.00 TR	155.00 kW	0.62 kW/TR	19.37 Btu/W.h	54.00°F	44.00°F	85.00°F	95.00°F
90	225.00 TR	139.00 kW	0.62 kW/TR	19.45 Btu/W.h	53.00°F	44.00°F	85.00°F	94.00°F
80	200.00 TR	124.70 kW	0.62 kW/TR	19.26 Btu/W.h	52.00°F	44.00°F	85.00°F	93.01°F
70	175.00 TR	111.30 kW	0.64 kW/TR	18.88 Btu/W.h	51.00°F	44.00°F	85.00°F	92.03°F
60	150.00 TR	98.00 kW	0.65 kW/TR	18.38 Btu/W.h	50.00°F	44.00°F	85.00°F	91.05°F
50	125.00 TR	76.10 kW	0.61 kW/TR	19.73 Btu/W.h	49.00°F	44.00°F	85.00°F	89.99°F
40	100.00 TR	62.10 kW	0.62 kW/TR	19.36 Btu/W.h	48.00°F	44.00°F	85.00°F	89.00°F
30	75.00 TR	49.00 kW	0.65 kW/TR	18.37 Btu/W.h	47.00°F	44.00°F	85.00°F	88.02°F
20	50.00 TR	34.70 kW	0.69 kW/TR	17.31 Btu/W.h	46.00 °F	44.00 °F	85.00 °F	87.04°F
10	-	-	-	-	-	-	-	-

Ten Points Parameters(Constant Condenser Entering Water Temperature.)



Ten Points Parameters(Variable Condenser Water Temperature)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	EVAPORATOR (WPD --- Kpa)		Condenser (WPD --- Kpa)	
					EWT	ELWT	EEWT	ELWT
100	250.00 TR	155.00 kW	0.62 kW/TR	19.36 Btu/W.h	54.00°F	44.00°F	85.00°F	95.00°F
90	225.00 TR	129.00 kW	0.58 kW/TR	20.87 Btu/W.h	53.00°F	44.00°F	81.00°F	89.90°F
80	200.00 TR	109.00 kW	0.54 kW/TR	22.16 Btu/W.h	52.00°F	44.00°F	77.00°F	84.85°F
70	175.00 TR	91.00 kW	0.52 kW/TR	23.22 Btu/W.h	51.00°F	44.00°F	73.00°F	79.83°F
60	150.00 TR	75.00 kW	0.50 kW/TR	24.18 Btu/W.h	50.00°F	44.00°F	69.00°F	74.82°F
50	125.00 TR	54.00 kW	0.43 kW/TR	27.87 Btu/W.h	49.00°F	44.00°F	65.00°F	69.77°F
40	100.00 TR	45.00 kW	0.44 kW/TR	27.01 Btu/W.h	48.00°F	44.00°F	65.00°F	68.83°F
30	75.00 TR	35.00 kW	0.47 kW/TR	25.65 Btu/W.h	47.00°F	44.00°F	65.00°F	67.89°F
20	50.00 TR	25.00 kW	0.49 kW/TR	24.38 Btu/W.h	46.00 °F	44.00 °F	65.00 °F	66.94 °F
10	-	-	-	-	-	-	-	-

Ten Points Parameters(Variable Condenser Water Temperature.)

