

Coral

FOCUSED ON APPLICATION HVAC



Unit information Water Cooled Screw Chiller		
Chiller Model:	CW2-150-4200	
Width:	1,549.91 mm	61.02 in
Length:	3,899.92 mm	153.54 in
Height:	2,109.98 mm	83.07 in
Shipping Weight:	4,150.00 kg	9,149.18 lb
Operating Weight:	4,850.00 kg	10,692.42 lb
Capacity Control:	Slide valve	
Refrigerant:	R-134a	
Refrigerant Charge (Ckt1 / Ckt2):	110.00 kg	110.00 kg
Starting Control:	Y-Δ	

Performance Information (Cooling Conditions)		
Cooling Capacity:	527.53 kW	150.13 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:	81.99 m³/h	360.99 GPM
Input Power (Electrical):	94.70 kW	
IPLV/NPLV:	7.48 (W/W)	25.55 (Btu/W.h)
COP:	5.57 (W/W)	19.02 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:	77.29 kPa	25.86 ft CA
Design Pressure of Water-Side:	1.00 MPa	145.03 psi
Passes:	2	
Pipe Wall Thickness:	1.07	
Flow Rate:	81.99 m³/h	360.99 GPM

Electrical Connections		
Amperage:	Electrical Circuit 1	Electrical Circuit 2
Maximum operating current (MCA):	-	----
Operating Current:	139.00 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)	89.30 dBA	-	-	-	-	-	-

* Garantía de 2 años en partes y compresores

* Refrigerante HFC, libre de cloro, ODP = 0

* Aisladores antivibratorios de neopreno

* Conexiones de tubería ranurada tipo Victaulic

Unit information Water Cooled Screw Chiller (page 1)

Coral

V3.01

IPLV/NPLV Points (SI)

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Evap. WPD		EWT	LWT
100%	531.05 kW	93.90 kW	0.62 kW/TR	5.64 W/W	77.71 kPa	---	12.22 °C	6.67 °C
75%	398.28 kW	59.90 kW	0.53 kW/TR	6.64 W/W	78.31 kPa	---	10.83 °C	6.67 °C
50%	265.52 kW	31.50 kW	0.42 kW/TR	8.40 W/W	78.61 kPa	---	9.44 °C	6.67 °C
25%	132.76 kW	17.60 kW	0.47 kW/TR	7.51 W/W	79.21 kPa	---	8.06 °C	6.67 °C

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Cond. WPD		EWT	LWT
100%	531.05 kW	93.90 kW	0.62 kW/TR	5.64 W/W	52.31 kPa	---	29.44 °C	34.61 °C
75%	398.28 kW	59.90 kW	0.53 kW/TR	6.64 W/W	53.50 kPa	---	23.89 °C	27.67 °C
50%	265.52 kW	31.50 kW	0.42 kW/TR	8.40 W/W	55.00 kPa	---	18.33 °C	20.82 °C
25%	132.76 kW	17.60 kW	0.47 kW/TR	7.51 W/W	55.00 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%	151.00 TR	93.90 kW	0.62 kW	19.27 Btu/W.h	26.00 ft CA	---	54.00°F	44.00°F
75%	113.00 TR	59.90 kW	0.53 kW	22.66 Btu/W.h	26.20 ft CA	---	51.50°F	44.00°F
50%	75.00 TR	31.50 kW	0.42 kW	28.68 Btu/W.h	26.30 ft CA	---	49.00°F	44.00°F
25%	38.00 TR	17.60 kW	0.46 kW	25.66 Btu/W.h	26.50 ft CA	---	46.50°F	44.00°F

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Cond. WPD		EWT	LWT
100%	151.00 TR	93.90 kW	0.62 kW	19.27 Btu/W.h	17.50 ft CA	---	85.00°F	94.30°F
75%	113.00 TR	59.90 kW	0.53 kW	22.66 Btu/W.h	17.90 ft CA	---	75.00°F	81.82°F
50%	75.00 TR	31.50 kW	0.42 kW	28.68 Btu/W.h	18.40 ft CA	---	65.00°F	69.42°F
25%	38.00 TR	17.60 kW	0.46 kW	25.66 Btu/W.h	18.40 ft CA	---	65.00°F	67.24°F

NPLV (SI) (AHRI 550/590)

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Evap. WPD		EWT	LWT
100%	527.55 Kw	94.70 Kw	0.63 Kw/Ton	5.57 w/w	77.42 kPa	---	12.22 °C	6.67 °C
75%	393.90 Kw	60.20 Kw	0.54 Kw/Ton	6.57 w/w	77.71 kPa	---	10.83 °C	6.67 °C
50%	263.78 Kw	31.70 Kw	0.42 Kw/Ton	8.33 w/w	78.01 kPa	---	9.44 °C	6.67 °C
25%	130.13 Kw	17.60 Kw	0.47 Kw/Ton	7.48 w/w	78.61 kPa	---	8.06 °C	6.67 °C

Load %	Cooling Capacity	Input Power	Cooling	Cooling COP	Cond. WPD		EWT	LWT
100%	527.55 kW	94.70 kW	0.63 kW/TR	5.57 W/W	45.73 kPa	---	29.44 °C	35.00 °C
75%	393.90 kW	60.20 kW	0.54 kW/TR	6.57 W/W	46.63 kPa	---	23.89 °C	27.96 °C
50%	263.78 kW	31.70 kW	0.42 kW/TR	8.33 W/W	47.82 kPa	---	18.33 °C	20.97 °C
25%	130.13 kW	17.60 kW	0.47 kW/TR	7.48 W/W	48.12 kPa	---	18.33 °C	19.67 °C

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

NPLV (IP) (AHRI 550/590)

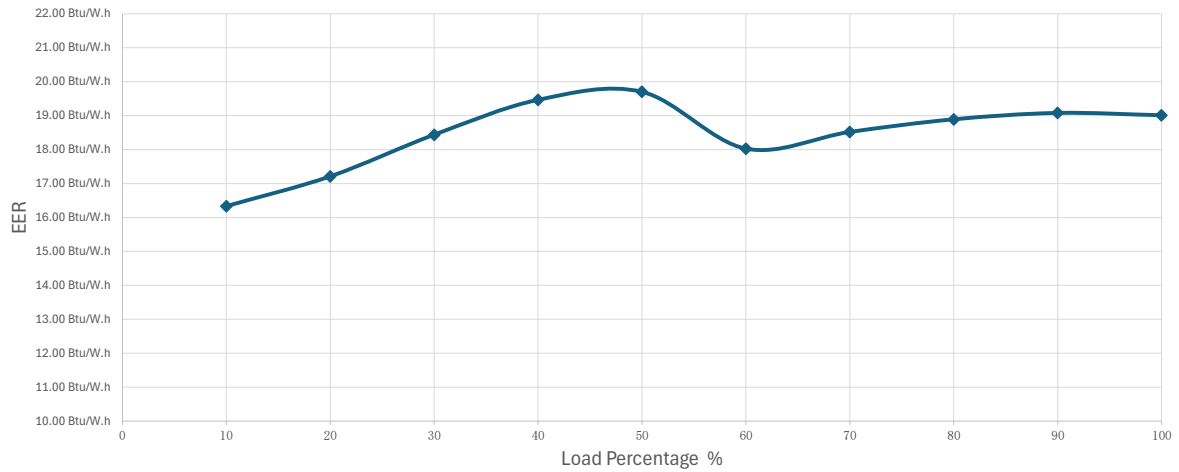
Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Evap. WPD		EWT	LWT
100%	150.00 TR	94.70 kW	0.63 kW/TR	19.02 Btu/W.h	25.90 ft CA	---	54.00°F	44.00°F
75%	112.00 TR	60.20 kW	0.54 kW/TR	22.43 Btu/W.h	26.00 ft CA	---	51.50°F	44.00°F
50%	75.00 TR	31.70 kW	0.42 kW/TR	28.46 Btu/W.h	26.10 ft CA	---	49.00°F	44.00°F
25%	37.00 TR	17.60 kW	0.48 kW/TR	25.54 Btu/W.h	26.30 ft CA	---	46.50°F	44.00°F

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	Cond. WPD		EWT	LWT
100%	150.00 TR	94.70 kW	0.63 kW/TR	19.02 Btu/W.h	15.30 ft CA	---	85.00°F	95.00°F
75%	112.00 TR	60.20 kW	0.54 kW/TR	22.43 Btu/W.h	15.60 ft CA	---	75.00°F	82.33°F
50%	75.00 TR	31.70 kW	0.42 kW/TR	28.46 Btu/W.h	16.00 ft CA	---	65.00°F	69.75°F
25%	37.00 TR	17.60 kW	0.48 kW/TR	25.54 Btu/W.h	16.10 ft CA	---	65.00°F	67.40°F

Ten Points Parameters(Constant Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	EVAPORATOR (WPD --- Kpa)		Condenser (WPD --- Kpa)	
					EWT	ELWT	EEWT	ELWT
100	150.00 TR	94.80 kW	0.63 kW/TR	19.01 Btu/W.h	54.00°F	44.00°F	85.00°F	95.00°F
90	135.00 TR	85.00 kW	0.63 kW/TR	19.08 Btu/W.h	53.00°F	44.00°F	85.00°F	94.00°F
80	120.00 TR	76.30 kW	0.64 kW/TR	18.89 Btu/W.h	52.00°F	44.00°F	85.00°F	93.01°F
70	105.00 TR	68.10 kW	0.65 kW/TR	18.52 Btu/W.h	51.00°F	44.00°F	85.00°F	92.03°F
60	90.00 TR	59.90 kW	0.67 kW/TR	18.03 Btu/W.h	50.00°F	44.00°F	85.00°F	91.05°F
50	75.00 TR	45.70 kW	0.61 kW/TR	19.70 Btu/W.h	49.00°F	44.00°F	85.00°F	89.97°F
40	60.00 TR	37.00 kW	0.62 kW/TR	19.47 Btu/W.h	48.00°F	44.00°F	85.00°F	88.99°F
30	45.00 TR	29.30 kW	0.65 kW/TR	18.44 Btu/W.h	47.00°F	44.00°F	85.00°F	88.01°F
20	30.00 TR	20.90 kW	0.70 kW/TR	17.21 Btu/W.h	46.00 °F	44.00 °F	85.00 °F	87.03 °F
10	15.00 TR	11.00 kW	0.74 kW/TR	16.33 Btu/W.h	45.00 °F	44.00 °F	85.00 °F	86.02 °F

Ten Points Parameters (Constant Ambient Temp)



Ten Points Parameters(Variable Ambient Temp.)

Load %	Cooling Capacity	Input Power	Cooling	Cooling EER	EVAPORATOR (WPD --- Kpa)		Condenser (WPD --- Kpa)	
					EWT	ELWT	EEWT	ELWT
100	150.00 TR	95.00 kW	0.63 kW/TR	19.02 Btu/W.h	54.00°F	44.00°F	85.00°F	95.00°F
90	135.00 TR	79.00 kW	0.59 kW/TR	20.53 Btu/W.h	53.00°F	44.00°F	81.00°F	89.90°F
80	120.00 TR	66.00 kW	0.55 kW/TR	21.82 Btu/W.h	52.00°F	44.00°F	77.00°F	84.84°F
70	105.00 TR	55.00 kW	0.52 kW/TR	22.98 Btu/W.h	51.00°F	44.00°F	73.00°F	79.82°F
60	90.00 TR	45.00 kW	0.50 kW/TR	24.08 Btu/W.h	50.00°F	44.00°F	69.00°F	74.81°F
50	75.00 TR	32.00 kW	0.42 kW/TR	28.45 Btu/W.h	49.00°F	44.00°F	65.00°F	69.75°F
40	60.00 TR	26.00 kW	0.43 kW/TR	27.73 Btu/W.h	48.00°F	44.00°F	65.00°F	68.81°F
30	45.00 TR	21.00 kW	0.46 kW/TR	26.33 Btu/W.h	47.00°F	44.00°F	65.00°F	67.87°F
20	30.00 TR	15.00 kW	0.48 kW/TR	24.83 Btu/W.h	46.00 °F	44.00 °F	65.00 °F	66.93 °F
10	-	-	-	-	-	-	-	-

Ten Points Parameters (Variable Ambient Temp)

