



FOCUSED ON APPLICATION HVAC



### Unit information

Chiller Model	CA2-445-4210
Width (mm)	2250
Length (mm)	11970
Height (mm)	2520
Shipping Weight (kg)	11630
Operating Weight (kg)	11820
Capacity Control	Stepless Control
Starting Control	Y-Δ
Operating Range	T1
Refrigerant	R134a

### Performance Information(Cooling Condition)

Cooling Capacity (TR)	<b>445</b>	<b>1566 kW</b>
Entering Water Temp (°C)	<b>12</b>	<b>53.60 F°</b>
Leaving Water Temp (°C)	<b>7</b>	<b>44.60 F°</b>
Water Flow (m3/h)	<b>269</b>	
Ambient Temperature (DB) (°C)	<b>35</b>	<b>95.00 F°</b>
Ambient Temperature(WB) (°C)	/	
Input Power (kW)	<b>469.6</b>	
IPLV/NPLV.SI(W/W)	<b>4.75</b>	
COP (W/W)	<b>3.33</b>	

### Compressor Information

Type	<b>Semi-Hermetic Screw</b>
Quantity	<b>2</b>
Capacity Regulating Range	<b>12.5%-100%</b>
Oil Charging Volume(L)	<b>68</b>
Brand	<b>BITZER</b>
Circuit	<b>2</b>
Oil Model	<b>BSE170</b>

### Water Side Heat Exchanger Information

Fluid Type	<b>Fresh Water</b>
Concentration	/
Nozzle Type	<b>Victaulic Couping</b>
Water Volume(L)	<b>286</b>
Heat Exchanger Type	<b>Flooded Shell-and-Tube</b>
Fouling Factor ((m2.K)/kW)	<b>0.0180</b>
Nozzle Size(DN)	<b>200</b>
Water Pressure Drop (kPa)	<b>72</b>

### Air Side Heat Exchanger Information

Type	<b>Fin-Tube</b>
Fan Quantity	<b>20</b>
Air Flow(m3/h)	<b>450000</b>
Fan Power Input(kW)	<b>44</b>

### Electrical Information

Power Supply	<b>460V~3N~60Hz</b>
Rating Current (A)	<b>660</b>
Max. Starting Current (A)	<b>1260</b>

- \*Garantía 2 años en partes y en compresores
- \*Resortes anti-vibratorios
- \*Refrigerante ecológico



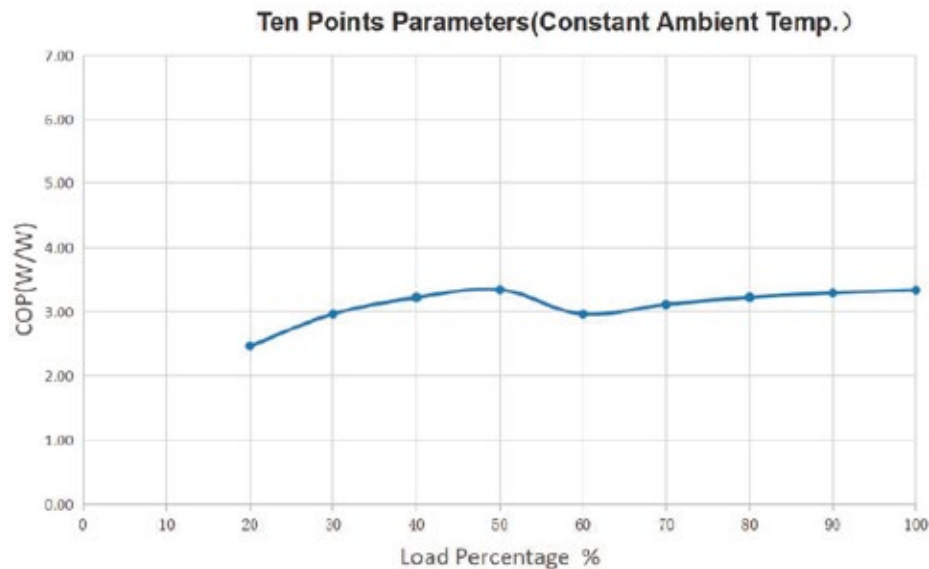
IPLV/NPLV Points													
Load	Cooling capacity	Input Power	Cooling kW/Ton	Cooling COP	Evap. WPD	DBT	DBT	WBT	WBT	EEWT	EEWT	ELWT	ELWT
%	Kw	Kw	KW/TON	W/W	kpA	C°	F°	C°	F°	C°	F°	C°	F°
100	1566	469.6	0.95	3.33	72	35.00	95.00	/	/	12.00	53.6	7.00	44.6
75	1175	290.8	0.78	4.04	72	27.00	80.6	/	/	10.80	51.44	7.00	44.6
50	783	146	0.59	5.36	72	19.00	66.2	/	/	9.50	49.1	7.00	44.6
25	392	76.8	0.62	5.10	72	13.00	55.4	/	/	8.30	46.94	7.00	44.6

IPLV.SI/NPLV.SI=0.01\*A+0.42\*B+0.45\*C+0.12\*D=4.754 w/w  
A=EER At 100%; B=EER At 75%; C=EER At 50%; D=EER At 25%;

Soft in accordance with the AHRI Water-Cooled Water-Chilling and Heat Pump Water-Heating Packages Using Vapor Compression Cycle, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

Ten Points Parameters (Constant Ambient Temp.)													
Load	Cooling capacity	Input Power	Cooling kW/Ton	Cooling COP	Evap. WPD	DBT	DBT	WBT	WBT	EEWT	EEWT	ELWT	ELWT
%	Kw	Kw	KW/TON	W/W	kpA	C°	F°	C°	F°	C°	F°	C°	F°
100	1566	469.6	0.95	3.33	72	35.00	95.00	/	/	12.00	53.6	7.00	44.6
90	1409	428.2	0.96	3.29	72	35.00	95.00	/	/	11.50	52.7	7.00	44.6
80	1253	389.1	0.98	3.22	72	35.00	95.00	/	/	11.00	51.8	7.00	44.6
70	1096	352.1	1.01	3.11	72	35.00	95.00	/	/	10.50	50.9	7.00	44.6
60	940	317.3	1.07	2.96	72	35.00	95.00	/	/	10.00	50	7.00	44.6
50	783	234.7	0.94	3.34	72	35.00	95.00	/	/	9.50	49.1	7.00	44.6
40	626	194.5	0.98	3.22	72	35.00	95.00	/	/	9.00	48.2	7.00	44.6
30	470	158.6	1.06	2.96	72	35.00	95.00	/	/	8.50	47.3	7.00	44.6
20	313	127.1	1.28	2.46	72	35.00	95.00	/	/	8.00	46.4	7.00	44.6
10	157	/	/	/	72	35.00	95.00	/	/	7.50	45.5	7.00	44.6

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

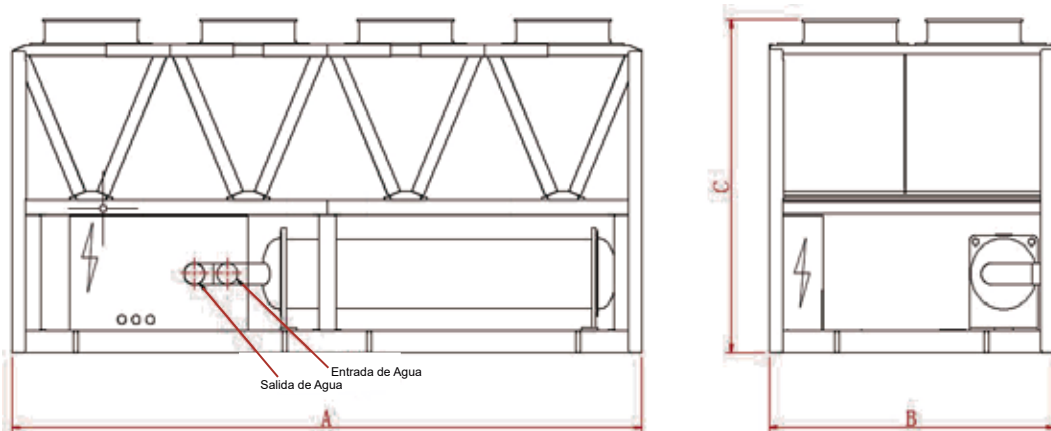
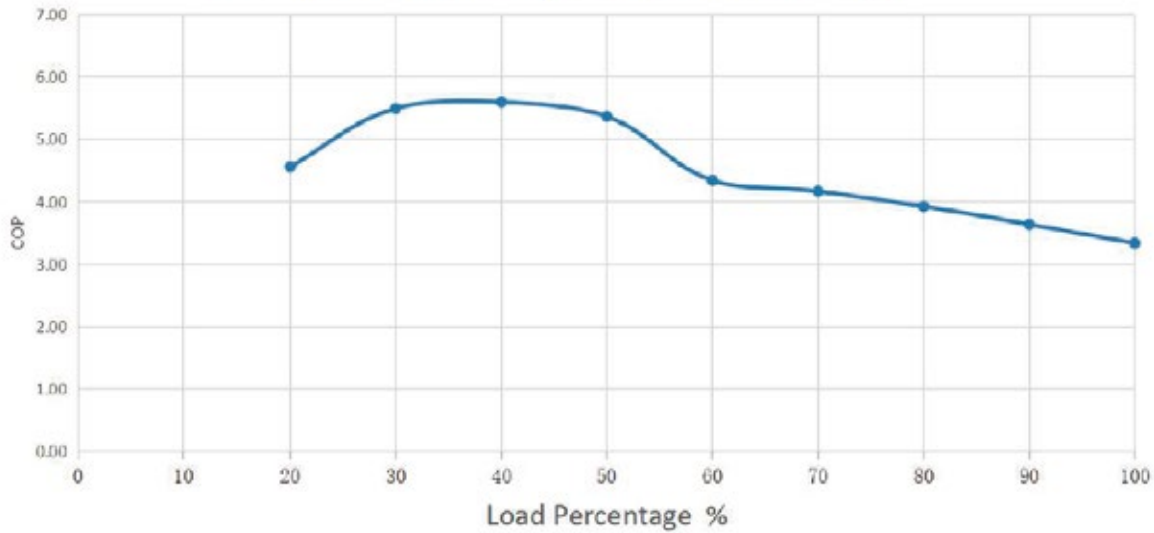


### Ten Points Parameters (Variable Ambient Temp)

Load	Cooling capacity	Input Power	Cooling kW/Ton	Cooling COP	Evap. WPD	DBT	DBT	WBT	WBT	EEWT	EEWT	ELWT	ELWT
%	Kw	Kw	KW/TON	W/W	kpA	C°	F°	C°	F°	C°	F°	C°	F°
100	1566	469.6	0.95	3.33	72	35.00	95.00	/	/	12.00	53.6	7.00	44.6
90	1409	387.2	0.87	3.64	72	31.80	89.24	/	/	11.50	52.7	7.00	44.6
80	1253	319.3	0.80	3.92	72	28.60	83.48	/	/	11.00	51.8	7.00	44.6
70	1096	263.1	0.76	4.17	72	25.40	77.72	/	/	10.50	50.9	7.00	44.6
60	940	216.6	0.73	4.34	72	22.20	71.96	/	/	10.00	50	7.00	44.6
50	783	146	0.59	5.36	72	19.00	66.20	/	/	9.50	49.1	7.00	44.6
40	626	111.8	0.56	5.60	72	15.80	60.44	/	/	9.00	48.2	7.00	44.6
30	470	85.5	0.57	5.50	72	13.00	55.40	/	/	8.50	47.3	7.00	44.6
20	313	68.6	0.69	4.56	72	13.00	55.40	/	/	8.00	46.4	7.00	44.6
10	157	/	/	/	72	13.00	55.40	/	/	7.50	45.5	7.00	44.6

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

### Ten Points Parameters(Variable Ambient Temp.)



Dimension(mm)	A	B	C
	11970	2250	2520

**NOTE:**The outline drawing is only for reference.

