

Pre Packaged YCP-2020 GTIAC Solution

YCP-2020 Modular Chiller Plant includes 2 chiller modules and 1 pump & electrical module. The system will be completed with additional water cooling tower.

YCP-2020 Chiller Plant

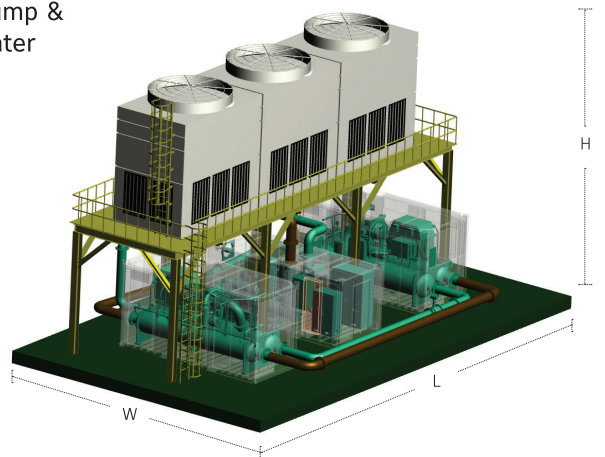
- Dimensions: 18,000 mm (L) X 11,000 mm (W) X 11,000 mm (H)

Chiller module

- Dimensions: 6,058 mm X 2,438 mm X 3,500 mm
- Weight: 20,000 kg

Pump & electrical module

- Dimensions: 6,058 mm X 2,438 mm X 2,896 mm
- Weight: 16,000 kg



Performance Parameters

YCP-2020 Performance Data																			
CHW Leaving Temperature (°C)																			
		4			6			8			10			12			14		
		Capacity (kW)	Input Power (kW)	COP	Capacity (kW)	Input Power (kW)	COP	Capacity (kW)	Input Power (kW)	COP	Capacity (kW)	Input Power (kW)	COP	Capacity (kW)	Input Power (kW)	COP	Capacity (kW)	Input Power (kW)	COP
CW Entering Temperature (°C)	16	8156	1016	8.028	8655	1029	8.411	9066	1016	8.923	.	.	.	.	.	.	.	.	.
	18	8131	1123	7.240	8630	1071	8.058	9040	1066	8.480	.	.	.	.	.	.	.	.	.
	20	8060	1204	6.694	8538	1108	7.706	8972	1052	8.529	9374	1048	8.945	.	.	.	.	.	.
	22	7930	1231	6.442	8434	1191	7.081	8876	1145	7.752	9302	1093	8.511	9712	1044	9.303	.	.	.
	24	7780	1287	6.045	8319	1286	6.469	8766	1224	7.162	9203	1177	7.819	9613	1113	8.637	9958	1068	9.324
	26	7410	1272	5.825	8142	1308	6.225	8637	1291	6.690	9091	1214	7.488	9455	1145	8.258	9794	1099	8.912
	28	7192	1308	5.498	7898	1293	6.108	8371	1280	6.540	8759	1185	7.392	9295	1206	7.707	9630	1135	8.485
	30	6972	1308	5.330	7658	1308	5.855	8100	1308	6.193	8681	1262	6.879	9133	1241	7.359	9465	1197	7.907
	32	6745	1308	5.157	7404	1308	5.661	7958	1308	6.084	8407	1308	6.427	8928	1301	6.862	9298	1233	7.541
	34	6603	1308	5.048	7126	1308	5.448	7666	1308	5.861	8038	1308	6.145	8590	1308	6.567	9129	1297	7.039
	36	6287	1308	4.807	6795	1308	5.195	7130	1308	5.451	7668	1308	5.862	8210	1308	6.277	8796	1308	6.725

YCP-2020 Performance Data																									
CHW Leaving Temperature (°C)																									
		4				6				8				10				12				14			
		CHW Flow Rate (L/s)	CHW PD (kPa)	CW Flow Rate (L/s)	CW PD (kPa)	CHW Flow Rate (L/s)	CHW PD (kPa)	CW Flow Rate (L/s)	CW PD (kPa)	CHW Flow Rate (L/s)	CHW PD (kPa)	CW Flow Rate (L/s)	CW PD (kPa)	CHW Flow Rate (L/s)	CHW PD (kPa)	CW Flow Rate (L/s)	CW PD (kPa)	CHW Flow Rate (L/s)	CHW PD (kPa)	CW Flow Rate (L/s)	CW PD (kPa)	CHW Flow Rate (L/s)	CHW PD (kPa)		
CW Entering Temperature (°C)	16	162.2	38.6	311.9	78	172.1	42.3	329.1	85.9	180.7	45.5	343.3	92.6	.	.	.	.	.	.	.	.	.	.	.
	18	161.7	38.4	315.2	78.7	171.7	42.1	330	85.4	180.1	45.2	344.4	92.2	.	.	.	.	.	.	.	.	.	.	.
	20	160.1	37.7	315.2	77.9	169.7	41.2	328.6	83.9	178.6	44.6	341.9	90.1	186.7	47.6	355.1	96.4	.	.	.	.	.	.	.
	22	157.5	36.6	311.9	75.7	167.5	40.3	327.7	82.7	176.7	43.7	341.8	89.1	185.3	47	354.6	95.2	194.1	50.4	367.8	101.6	.	.	.	.
	24	154.6	35.4	309.2	73.8	165.2	39.3	326.3	81.2	174.5	42.8	339	87	183.1	46	354.1	94	192.1	49.5	366.7	100.1	199	52.1	376.7	105.1
	26	147.5	32.6	297.6	68.3	161.8	37.9	322	78.6	171.7	41.5	338.5	86	181.1	45.1	352.1	92.2	188.8	48	362.7	97.3	195.6	50.5	372.5	102
	28	143.5	31	290.5	64.8	157	35.9	313.6	74.3	166.5	39.3	330.3	81.5	174.1	42.1	338.9	85.4	185.7	46.6	359.2	94.7	192.5	49.1	368.4	99.1
	30	138.7	29.2	282.6	61.1	152.5	34.1	306.5	70.7	161.4	37.2	321.5	77	172.4	41.3	338.9	84.6	182.5	45.2	355.4	92.1	189.2	47.6	365	96.7
	32	134.4	27.6	275.6	57.9	147.6	32.2	298.1	66.7	158.3	36	316.4	74.2	167.3	39.2	331.8	80.8	178	43.2	349.8	88.8	185.9	46.1	360.8	93.9
	34	131.8	26.7	271	55.8	142.4	30.2	289.1	62.6	152.8	33.8	307.1	69.7	160.3	36.3	320.1	75.1	171.1	40.3	338.4	83	182.5	44.7	357.3	91.5
	36	125.1	24.3	259.6	51.2	135.3	27.6	277.3	57.6	142.1	29.7	289.1	62.1	153.1	33.5	307.9	69.5	163.4	37.1	325.5	76.8	175.4	41.6	345.5	85.4

Note:

1. CHW=Chilled Water; CW=Cooling Water; PD=Pressure Drop
2. Parameters above are based on these conditions:
 - Chilled water temperature difference: 12°C; Fouling Factor: 0.0176 m²·°C/kw
 - Cooling water temperature difference: 7°C; Fouling Factor: 0.044 m²·°C/kw
3. The power consumption is for chillers in series counter flow configuration only, excluding pumps and auxiliaries
4. The water pressure drop is only for chiller heater exchangers, excluding field intermediate piping
5. Check with Johnson Controls' experts for pumps data based on your requirement