



Model no. PA-W low temp www.puriwellglobal.com



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PA-W SERIES (WATER COOLED) LOW TEMPERATURE CHILLER (T = -10 DEGREE)

参数 Item		类型 Model	PAW-03L	PAW-05L	PAW-06L	PAW-08L	PAW-10L	PAW-12L	PAW-15L	PAW-20L(D)	PAW-25L(D)	PAW-30L(D)	PAW-40L
标准制冷量 Nominal cooling Capacity	Kcal/h		3870	6622	7826	10062	13846	16426	20038	27692	32852	40076	53750
	50Hz/50Hz		4644	7998	9460	12126	16598	19694	24080	33196	39388	48160	64500
	Kw		4.5	7.7	9.1	11.7	16.1	19.1	23.3	32.2	38.2	46.6	62.5
输入总功率 Total input power	50Hz/50Hz		5.4	9.3	11	14.1	19.3	22.9	28	38.6	45.8	56	75
	Kw		3	4.5	5.25	6.75	8.6	10.1	12.8	17.2	21	26.5	34
电源 Power			3PH-380V 50Hz/200V/220V/115V 400V 50Hz/60Hz										
制冷剂 Refrigerant	名称 Type		R22(R404A/R507)										
	控制方式 Control method		外平衡式热力膨胀阀 Expansion valve										
压缩机 Compressor	类型 Type		全封闭涡旋式(活塞式) Hermetic scroll(piston type)										
	功率 Power(kw)		2.25	3.75	4.5	6	7.5	9	11.3	7.5*2	9.4*2	11.3*2	30
冷凝器 Condenser	类型 Type		壳管式Shell and Tube										
	冷却水量(m³/h) Cooling water flow		1	1.7	2.03	2.62	3.6	4.27	5.2	7.23	8.54	10.4	14
	进出口管径 Inlet/outlet pipe caliber		1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2-1/2"	3"	3"
蒸发器 Evaporator	类型 Type		壳管式/不锈钢板换 Shell and Tube/Plate heat exchanger										
	冷冻水量(m³/h) Chilled water flow		0.77	1.33	1.56	2.01	2.77	3.28	4	5.56	6.57	8.01	10.75
	进出口管径 Inlet/outlet pipe caliber		0.93	1.59	1.88	1.73	3.32	3.94	4.8	6.65	7.89	9.62	12.3
水泵 Water pump	功率 Power(kw)		1"	1"	1"	1"	1-1/2"	1-1/2"	2"	2"	2-1/2"	2-1/2"	3"
	扬程 Lift(m)		0.75	0.75	0.75	0.75	1.1	1.1	1.5	2.2	2.2	4	4
安全保护 Safety protection			压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 轴承缺相保护, 排气过热保护, 防冻保护 Compressor overheating protection, over-current protection, high and low pressure protection, over-temperature protection, flow switch protection, phase sequence or missing phase protection, exhaust overheating protection, anti-freezing protection.										
机械尺寸 Dimension	长 Length(mm)		890	890	890	1170	1170	1170	1700	1700	1700	1880	2000
	宽 Width(mm)		500	500	500	710	710	710	810	810	810	910	980
	高 Height(mm)		840	840	840	1200	1200	1200	1620	1620	1620	1800	1960
机械重量 Weight	Kg		130	150	150	300	430	500	735	820	900	1150	1200

Note:

- Nominal cooling capacity is calculated according to: Inlet/outlet chilled fluid temperature -5 or -10 Degree Celsius. Inlet/Outlet cooling water temperature: 30 or 35 Degree Celsius.
- Working condition: The temperature range of chilled fluid is from -10 to 10 Degree Celsius. Temperature difference between inlet and outlet chilled fluid is from 3 to 8 Degree Celsius. The temperature range of cooling water from 18 to 35 Degree Celsius. Temperature difference between inlet and outlet cooling water is from 3.5 to 10 Degree Celsius.

PA-W SERIES (WATER-COOLED) LOW TEMPERATURE CHILLER (T=-25 DEGREE)

参数 Item		型号 Model									
		PAW-03L	PAW-05L	PAW-08L	PAW-10L	PAW-12L	PAW-15L	PAW-20L	PAW-25L	PAW-30L	PAW-40L
标准制冷量 Nominal cooling capacity	kcal/h 50Hz/60Hz	1521 1825	2295 2754	4849 5819	6586 7903	6880 8256	7102 8522	11452 13742	14367 17240	16877 20252	21323 25588
	kw 50Hz/60Hz	1.77 2.12	2.67 3.2	5.64 6.77	7.66 9.19	8.00 9.06	8.26 9.91	13.32 15.98	16.71 20.05	19.63 23.56	24.8 29.76
输入总功率 Total input power	kw	3	4.5	6.75	8.6	10.1	12.75	17.2	20.95	26.5	34
电源 Power		3PH-380V 50Hz(200V/220V/415V 460V 50Hz/60Hz)									
制冷剂 Refrigerant	名称 Type	R404A(R507)									
	控制方式 Control method	外平衡式热力膨胀阀 Expansion valve									
压缩机 Compressor	类型 Type	全封闭涡旋式 (活塞式) Hermetic scroll(piston type)									
	功率 Power(kw)	2.25	3.75	6	7.5	9	11.25	15	18.75	22.5	30
冷凝器 Condenser	类型 Type	壳管式 shell and tube									
	冷却水量 (m ³ /h) Cooling water flow(m ³ /h)	2.1 2.52	3.5 4.2	6.2 7.44	6.9 8.28	7.9 9.48	10.6 12.7	13.9 16.68	15.8 18.96	21.1 25.32	28.7 34.44
	进出水管径 Inlet/outlet pipe caliber	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2-1/2"	3"	3"
蒸发器 Evaporator	类型 Type	壳管式/不锈钢板换 Shell and Tube/Plate heat exchanger									
	冷冻水量 (m ³ /h) Chilled fluid flow(m ³ /h)	0.86 1.02	1.29 1.55	2.73 3.27	3.70 4.44	3.87 4.64	3.99 4.79	6.44 7.72	8.07 9.69	9.49 11.38	11.98 14.38
	进出水管径 Inlet/outlet pipe caliber	1"	1"	1-1/2"	1-1/2"	1-1/2"	2"	2-1/2"	2-1/2"	2-1/2"	3"
水泵 Water pump	功率 Power(kw)	0.75	0.75	0.75	1.1	1.1	1.5	2.2	2.2	4	4
	扬程 Lift (m)	18	18	18	20	20	20	20	20	25	20
安全保护 Safety protection	Safety protection	压缩机过热保护, 过流保护, 高低压力保护, 超温保护, 流量保护, 相序/缺相保护, 排气过热保护, 防冻保护, flow switch protection, phase sequence or missing phase protection, exhaust overheating protection, anti-freezing protection.									
机械尺寸 Dimension	长 Length(mm)	890	890	1170	1170	1170	1700	1700	1700	1880	2000
	宽 Width(mm)	500	500	710	710	710	710	710	710	810	910
	高 Height(mm)	840	840	1200	1200	1200	1800	1880	1880	1880	1950
机械重量 Weight	kg	130	150	300	430	500	735	820	900	1150	1200

Note:

- Nominal cooling capacity is calculated according to: Inlet/outlet chilled fluid temperature -20 or -25 Degree Celsius. Inlet/Outlet cooling water temperature: 30 or 35 Degree Celsius.
- Working condition: The temperature range of chilled fluid is from -25 to -5 Degree Celsius. Temperature difference between inlet and outlet chilled fluid is from 3 to 8 Degree Celsius. The temperature range of cooling water from 18 to 35 Degree Celsius. Temperature difference between inlet and outlet cooling water is from 3.5 to 10 Degree Celsius.

Configuration reference of common refrigerant medium for low temperature chillers

1、 Configuration table of ethylene glycol water solution

使用温度 °C Operating temperature	浓度 (%) Concentration	密度 × 10 ³ Kg/m ³ density	比热容 cp(KJ/(kg.k)) Specific heat capacity	热导率(w/(m.k)) Heat conductivity	粘度(Pa.s) Viscosity	凝固点(°C) Freezing point
0	25	1.03	3.834	0.511	3.8	-10.6
-10	35	1.063	3.661	0.4726	7.3	-17.6
-20	45	1.080	3.312	0.441	21	-26.6
-35	55	1.097	2.975	0.3725	90.0	-41.6

2、 Configuration table of calcium chloride water solution

使用温度 °C Operating temperature	浓度 (%) Concentration	密度 × 10 ³ Kg/m ³ density	比热容 cp(KJ/(kg.k)) Specific heat capacity	热导率(w/(m.k)) Heat conductivity	粘度(Pa.s) Viscosity	凝固点(°C) Freezing point
0	9.4	1080	3.626	0.556	2.16	-5.2
-5	14.7	1130	3.316	0.542	3.04	-10.2
-10	20.9	1190	3.014	0.527	5.07	-15
-20	23.8	1220	2.889	0.510	9.47	-25.7
-25	25.7	1240	2.805	0.501	12.9	-31.2
-30	27.5	1260	2.742	0.482	17.16	-36.6
-35	28.5	1270	2.700	0.484	24.52	-43.5
-45	28.4	1280	2.617	0.470	40.21	-50.1
-50	29.9	2286	2.617	0.483	50.99	-55

3、 Configuration table of sodium chloride water solution

使用温度 °C Operating temperature	浓度 (%) Concentration	密度 × 10 ³ Kg/m ³ density	比热容 cp(KJ/(kg.k)) Specific heat capacity	热导率(w/(m.k)) Heat conductivity	粘度(Pa.s) Viscosity	凝固点(°C) Freezing point
0	7	1050	3.827	0.599	1.78	-4.4
-5	13.6	1100	3.584	0.547	2.37	-9.6
-10	18.8	1140	3.429	0.533	3.40	-15.1
-15	23.1	1175	3.308	0.520	4.90	-21.2