



Water chiller



Pas Reform water chillers are designed for outdoor applications. They are constructed in accordance with the Dutch safety rules for refrigeration equipment

Control panel

The control panel is completely integrated into the steel frame and completely wired in accordance with the Dutch Normalization. The control panel will be delivered complete to include the following items:

3-Phase power supply section, consisting of:

- Unit disconnect switch
- Fuse group for compressor and condenser fan motors
- Part-winding starter for compressor
- Contactors and overloads for condenser fans.

All required control and safety equipment, such as:

- Multi-stage capacity reduction
- High and low pressure cut-outs
- Oil pressure failure switch
- Low limit thermostat
- Commanding thermostat





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Many extras, such as:

- Alarm with auxiliary contact for external double alarm
- Short-cycling relay
- Low ambient device for controlling fans on condensing pressure
- Low ambient thermostat control to prevent freezing damage

Semi-hermetic compressor

With multistage capacity reduction and crankcase heating, provided with stop valves on discharge and suction side, no-load starting device, thermistor protection in motor windings.

Air-cooled condensor

The coil is manufactured of copper tubing with aluminium fins. The condenser is placed on top of the water chiller. For low noise level requirement fan motors of 740 and 470 rpm are available.

Liquid Receiver

The units have a liquid receiver large enough to accumulate the total charge of refrigerant.

Liquid heat exchanger

The liquid heat exchanger consists of one or two refrigerant circuits. The outside of the heat exchanger is insulated. Liquid inlets and outlets are provided with flanges or water stop valves with internal thread.

Standard equipment

All units are provided with:

- Thermostatic expansion valve
- Solenoid valve
- Muffler
- Sightglass with moisture indicator
- Waterflow control
- Charging valve



Low capacity water chiller, installed on one frame, inside the building.

Options

- Load minder control for capacity reduction down to 10% of the nominal capacity
- Low ambient control with head masters ambient temperatures down to -18 °C
- Special voltages and frequencies
- Water chillers with open compressor
- Water chillers for special liquids
- Water chillers manufactured and designed according special demands
- Refrigerant filling other than R407C
- Pressure gauges for discharge-, suction-, oil- and/or water pressure





Water chiller, selection sample

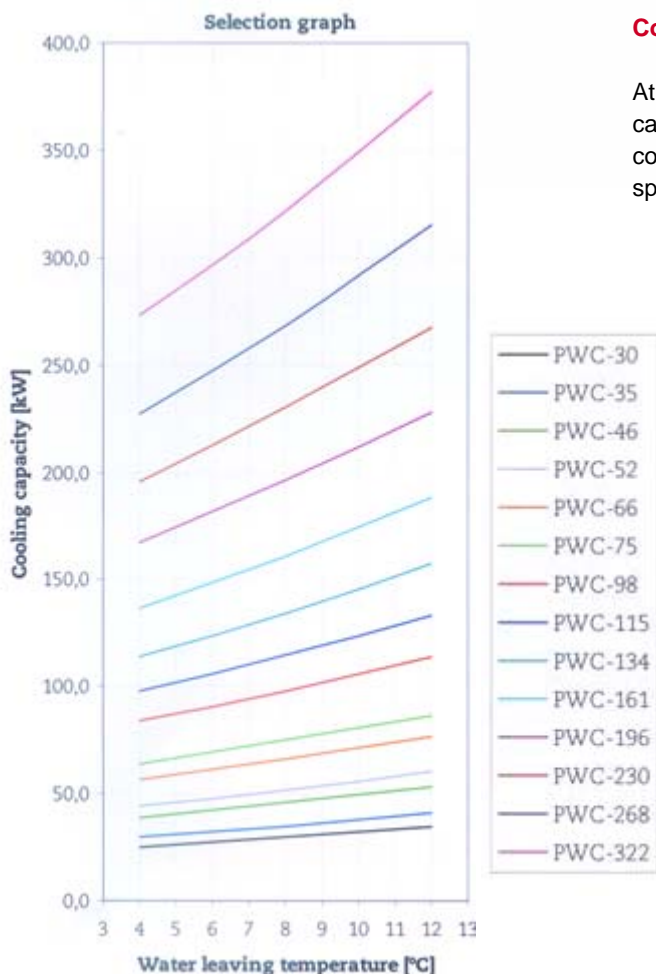
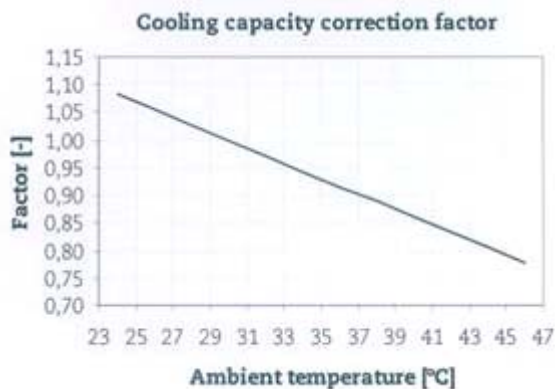
Selection sample

Requirements:

- Cooling capacity 230 kW
- Water leaving temperature 8°C
- Ambient temperature 30°C

Selection

Draw a horizontal line from required cooling capacity. Draw a vertical line from required leaving temperature. At intersection points the proper selection indicates waterchiller PWC-230



Correction factor

At different ambient temperatures the cooling capacity is also different. By using the cooling correction factor the right cooling capacity can be specified.





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Model		PWC-30	PWC-35	PWC-46	PWC-52	PWC-66	PWC-75	PWC-98	PWC-115	PWC-134	PWC-161	PWC-196	PWC-230	PWC-268	PWC-322
Nominal cooling capacity*	kW	30	35	46	52	66	75	98	115	134	161	196	230	268	322
Refrigerant		R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C
Power consumption	kW	9,0	10,2	15,5	16,5	20,1	26,8	30,4	38,3	42,0	54,5	60,8	76,6	84,0	98,6
Power supply	V-Ph-Hz	380-3-50													
Waterflow	m ³ /hr	5,2	6	7,9	9	11,4	12,9	16,9	19,8	23,1	27,7	33,8	39,6	46,2	55,5
Compressor															
No. of compressors		1	1	1	1	1	1	1	1	1	1	2	2	2	2
Compressor input	kW	6,4	7,6	10,3	11,3	14,9	19	22,6	27,9	31,6	38,9	45,2	55,8	63,2	77,8
Compressor current	A	12,5	14,4	19,2	22,2	28,4	35,6	42,6	53,7	63,8	77,7	85,2	107,4	127,6	155,4
C.O.P.		4,64	4,64	4,47	4,61	4,44	3,93	4,34	4,12	4,26	4,15	4,34	4,12	4,26	4,15
Capacity steps		2	2	2	2	2	2	2	3	3	3	4	4	4	4
Condensor															
Air-flow	m ³ /hr	21000	19450	28824	26658	42000	39987	63000	85600	77800	128400	126000	171200	168000	155600
No. of fans		1	1	2	2	2	3	3	4	4	6	6	8	8	8
fan motor input	kW	2,6	2,6	5,2	5,2	5,2	7,8	7,8	10,4	10,4	15,6	15,6	20,8	20,8	20,8
fan speed	rpm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Dimensions															
Length	mm	2218	2218	2920	2920	3720	3720	5122	5122	3720	3720	5122	5122	6524	6524
Width	mm	1116	1116	1116	1116	1116	1116	1116	1116	2165	2165	2165	2165	2165	2165
Height	mm	1700	1700	1700	1700	1700	1700	1700	1900	1900	1900	1900	1900	1900	1900

In our commitment to quality improvement through continuous research, we reserve the right to alter specifications of our products without notice

