



Product Guide 2024



PROCESS COOLING
SOLUTIONS



AIR CONDITIONING
SYSTEMS

Experience the
Best in **Heating & Cooling** Solutions

PSTHVAC.COM

WELCOME

Pars Sanat Tahviah co.

Welcome to PST HVAC Solutions

At PST, we take pride in providing the best HVAC solutions for industrial, commercial, and residential environments. With years of experience and the use of cutting-edge technology, our products are designed to deliver the best performance, efficiency, and comfort for you.

Our Products:

Residential and Commercial Chillers:

- ▶ High efficiency and optimized energy consumption
- ▶ Robust design and long lifespan
- ▶ Silent and reliable operation

Process Cooling System :

- Ideal for large and commercial buildings
- Smart systems with temperature and humidity control
- Easy installation and maintenance.

Fan Coil Units and Air Handlers:

- Suitable for residential and office environments
- Elegant and quiet design
- Precise temperature control capabilities

Our Mission:

At PST, our mission is to provide the best HVAC solutions to create comfortable, healthy, and efficient environments for all our customers. By focusing on innovation, quality, and customer satisfaction, we strive to be your top choice always.

Why Choose PST?

● **Expertise and Experience:** With over 20 years in the HVAC industry, we lead the way in offering innovative and efficient solutions for our customers.

● **Superior Quality:** Our products are manufactured using the best materials and the latest technologies to ensure the highest level of quality and durability.

● **Excellent Support:** Our support team is ready to provide consultation, installation, and maintenance services, ensuring we are always by your side.

COMMERCIAL AND INDUSTRIAL CHILLERS

Pars Sanat Tahviah co.

Our chillers are designed to meet the diverse cooling needs of industrial, commercial, and residential environments. Explore our range of chillers and discover how they can benefit your operations.



Industrial Chillers

High-Capacity Industrial Chillers:

Our industrial chillers are engineered for heavy-duty applications, providing robust performance and reliability. They are ideal for manufacturing plants, refineries, and other industrial processes where consistent and efficient cooling is critical.

Compact Industrial Chillers:

These chillers offer powerful cooling in a compact design, making them perfect for environments with limited space. They are suited for data centers, industrial cooling processes, and large commercial buildings, ensuring quiet and efficient operation.



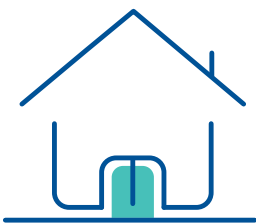
Commercial Chillers

Energy-Efficient Commercial Chillers:

Our commercial chillers are designed to deliver high efficiency, reducing operational costs while maintaining optimal performance. They are perfect for shopping malls, hospitals, and office buildings, providing reliable and precise temperature control.

Versatile Commercial Chillers:

These chillers offer flexible installation options and are easy to maintain, making them an excellent choice for hotels, schools, and commercial complexes. They combine quiet operation with smart energy management features to ensure comfort and efficiency.



Residential Chillers

Compact Residential Chillers:

Designed for residential use, these chillers provide efficient and quiet cooling for large homes, small apartment buildings, and villas. They offer a compact design that is easy to install and maintain, ensuring a comfortable living environment.

Ultra-Quiet Residential Chillers:

Ideal for small homes, individual apartments, and duplexes, these chillers are known for their ultra-quiet operation and energy efficiency. They are perfect for residential settings where noise and energy consumption are important considerations.



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AIR CONDITIONING
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AQUARIUS PLUS

- High efficiency water cooled chillers and evaporating units with screw compressors and R134a refrigerant gas.
- Cooling capacity 358-1544 kW
- Cooling capacity evaporating units 328 - 1429 kW



Benefits

- 21 base models that perfectly match each specific system requirements
- High energy efficiency both at full load and at partial load
- Stepless cooling capacity regulation with self-adaptive control
- High precision and adaptability in cooling capacity regulation
- Compressors minimum partialization step 25%
- Heat exchangers with low water side pressure drops in order to save pumping costs
- Low sound levels, thanks also to the availability of two different acoustic versions
- Easy access to all components
- Fully bundled heat recovery solutions
- Condenser outlet water temperature up to 60°C



Main options

- Partial or total heat recovery
- Compressors acoustical enclosure (super silent acoustic configuration)
- Shut-off valves on suction line
- Soft starter device allows a reduction in start-up current reducing the mechanical stress for compressors
- Capacitors for compressors
- Condensing control kit (with servo-driven modulating valves or pressure control valves)
- Flanges kit on evaporator
- Flanges kit or Victaulic kit on condenser and total heat recovery
- Anti-vibration dampers kit
- Remote control with LCD display VGIP
- xWEB300D supervisor kit
- Cooling tower or dry cooler available on request
- Remote condenser available on request for condenserless

Acoustic configurations

- **Basic acoustic configuration:** compressors directly accessible.
- **Super silent acoustic configuration:** this configuration is optimised for very low noise operation: compressors are housed in a metal compartment insulated with a sound absorbing layer of open-cell expanded polyurethane and a sheet of sound deadening material (noise reduction - 6 db(A) in comparison with basic).

Standard Features

- Environmentally friendly refrigerant R134a with zero ozone depletion potential
- High efficiency screw compressors with stepless regulation optimized for R134a refrigerant gas
- Automatic circuit breakers for compressors
- Compressor crankcase heaters
- Check valve and shut-off valve on discharge line
- Electronic expansion valves
- Single pass shell & tubes heat exchangers optimized for R134a refrigerant gas
- Electrical panel with numbered wires, forced ventilation and IP54 protection class
- Phase monitor which provides protection against phase loss and phase reversal
- Microprocessor electronic control DRIVE with high computing capacity and user friendly interface, suitable for connection with supervisor system
- RS485 interface for connection to ModBus supervisor systems
- Ethernet connection featuring pre-programmed HTML supervision pages, allowing local or internet based visualization and modification of the operating parameters.

Versions:

- **CH** - Cooling only version
- **ME** - Condenserless version
- **LWT** - Low Water Temperature (down to -8°C)

The Aquarius Plus water cooled screw chillers are the best solution for commercial and industrial applications when requirements are reliability and performances. They are designed to meet market requirements in terms of versatility and energy efficiency. Stepless cooling capacity regulation, electronic expansion valves and high efficiency heat exchangers with integrated heat recovery systems, contributes to obtain high performance both at full load and at partial load with exceptional ESEER value.

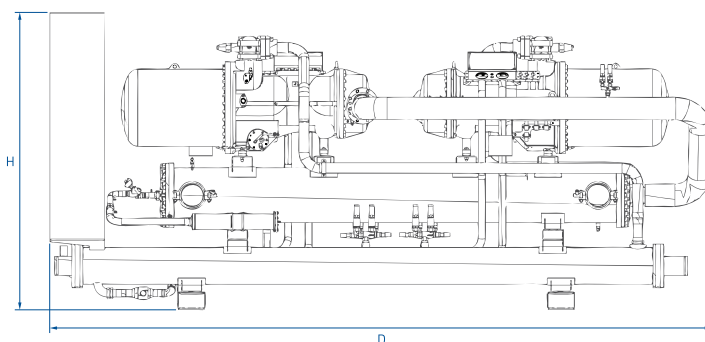
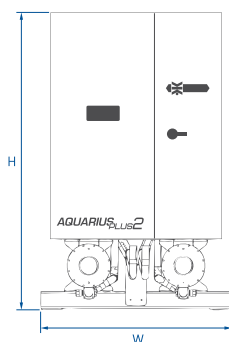
Model AQP

		1402	1502	1602	1702	1802	2002	2202	2352	2502	2652	2802
Cooling capacity	kW	343.4	372.7	412	441	476	513	562	587	620	656	704
Cooling capacity	TR	97.64	106	117.15	125.4	135.34	145.86	159.8	166.9	176.3	186.52	200.17
Total absorbed power	kW	70	77.4	85.2	91.1	97.2	103.6	110.4	117.1	124.2	132.5	141.6
EER	-	4.91	4.82	4.84	4.84	4.90	4.95	5.09	5.01	5	4.95	4.97
EXCHANGERS												
Evaporator pressure drops	kPa	31	37	32	44	41	47	43	43	37	24	29
Water flow	m ³ /h	58.94	63.97	70.72	75.7	81.71	88.06	96.47	100.76	106.42	112.6	120.84
GENERAL DATA												
Refrigerant	-	R134A										
Circuits / Compressors	N°	2 / 2										
Capacity control	%	12.5 ~ 100										
Power supply	V/Ph/Hz	400 ± 10% / 3 - PE / 50										
Protection class	-	IP54										
NOISE LEVEL												
Noise pressure	dB(A)	68	68	69	69	69	70	70	70	70	70.5	70.5
Noise power	dB(A)	62	62	63	63	63	64	64	64	64	64.5	64.5
SIZE AND WEIGHT												
Depth	mm	4150	4150	4300	4300	4300	4300	4300	4300	4300	4300	4300
Width	mm	1460	1460	1460	1460	1460	1460	1460	1460	1460	1390	1390
Height	mm	1640	1640	1640	1725	1725	1725	1725	1770	1770	2132	2132
Weight	kg	2110	2489	2918	2928	3018	3028	3048	3204	3380	3480	3490

(1) Evaporator IN/OUT: 12/7°C; condenser IN/OUT : 35/30°C;

(2) Sound pressure at 10 m: average value obtained in free field on a reflective surface at a distance of 10 m from the side of the condenser coils and at a height of 1.6 m from the unit support base. Values with tolerance t 2 dB. The sound levels refer to operation of the unit under full load in nominal conditions and with circulation pump.

The listed noise levels, weights and dimensions refer to base chillers with no options fitted.(NB:dimensions for lower noise and / or higher efficiency versions may differ.)



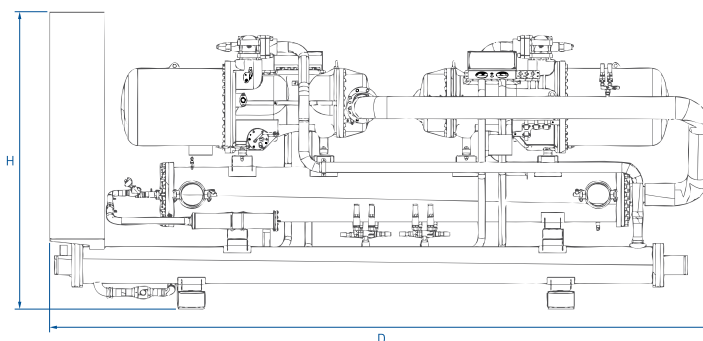
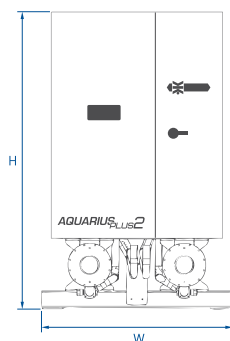
Model AQP

		3002	3202	3402	3602	3902	4202	4502	4802	5602	6402
Cooling capacity	kW	761	838	895	970	1030	1100	1167	1272	1362	1528
Cooling capacity	TR	216.4	238.27	254.48	275.8	292.86	312.8	331.8	361.7	387.26	434.46
Total absorbed power	kW	153.2	165.4	176.4	188.4	201.2	215.2	229.8	242.8	281.2	300.4
EER	-	4.97	5.07	5.07	5.15	5.12	5.11	5.08	5.24	4.84	5.09
EXCHANGERS											
Evaporator pressure drops	kPa	51	37	45	42	47	38	41	44	49	41
Water flow	m ³ /h	130.63	143.84	153.63	166.5	176.8	188.81	200.32	218.34	233.79	262.28
GENERAL DATA											
Refrigerant	-	R134A									
Circuits / Compressors	N°	2 / 2									
Capacity control	%	12.5 ~ 100									
Power supply	V/Ph/Hz	400 ± 10% / 3 - PE / 50									
Protection class	-	IP54									
NOISE LEVEL											
Noise pressure	dB(A)	70.5	71	71	71	71.5	72	72	72.5	72.5	73
Noise power	dB(A)	64.5	65	65	65	65.5	66	66	66.5	66.5	67
SIZE AND WEIGHT											
Depth	mm	4920	4920	4920	4920	4920	4920	4920	4920	4970	4970
Width	mm	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390
Height	mm	2132	2132	2165	2165	2278	2278	2287	2287	2287	2287
Weight	kg	3870	4420	4440	4645	4795	4945	5010	5710	5945	6265

(1) Evaporator IN/OUT: 12/7°C; condenser IN/OUT : 35/30°C;

(2) Sound pressure at 10 m: average value obtained in free field on a reflective surface at a distance of 10 m from the side of the condenser coils and at a height of 1.6 m from the unit support base. Values with tolerance t 2 dB. The sound levels refer to operation of the unit under full load in nominal conditions and with circulation pump.

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