



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.



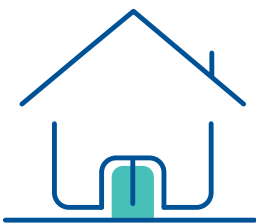
Commercial Chillers

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
SYSTEMS

GALAXY TECH

- Air cooled water chillers with R410A featuring hermetic scroll compressors.
- Cooling capacity 352 - 872 Kw



Benefits



- Reduced noise levels, thanks also to the availability of differing acoustic versions
- High EER/COP levels, especially at partial loads
- Ideal for large hydronic air conditioning installations in public and private surroundings
- Allows start-up and operation in even the most severe conditions
- Easy installation with direct access to the water connections and the applications of victaulic connections;
- Simple to install and maintain, easily accessible components
- User friendly controller with multifunctional buttons and dynamic display icons

Main options

- 1 or 2 pumps and water pressure gauge;
- Storage tank
- Condenser coils designed for aggressive atmospheres
- Metal mesh filters for condenser coil protection
- High efficiency EC axial fans with inverter technology and integrated speed regulation; or fan speed controller
- Antifreeze heater on evaporator, pumps and tank
- Antivibration dampers
- Serial connection to supervisor systems
- MTA CONNECT supervision based on internal web pages
- Modularity / web interconnection hub
- Replicated remote user terminal
- Soft starter: are installed on each compressor and allow a reduction from 10 to 20% (depending by the model) of the start up current compared to the direct start
- Victaulic connections
- Simple remote control
- Special execution with partial or total heat recovery exchangers
- Special execution for water temperatures down to -10°C

Standard Features

- Multiple scroll compressors (4 to 8 depending on the model) connected in parallel (tandem or trio] on 2 or 4 independent refrigeration circuits
 - Shut-off valve and solenoid valve on the liquid line in each refrigeration circuit
 - xDRIVE is a microprocessor electronic controller with high computing capacity and user friendly graphic interlace:
 - Compressor suction and discharge valves
- XORIVE features the ModBUS-RTU communication protocol as standard, allowing connection with the most widely utilised Building Management Systems (BMS). It also features an Ethernet port as standard, with HTML supervision pages preloaded for connection to a company intranet or the Internet
- The DRIVE can manage in master/slave mode up to 8 units
 - Phase monitor against phase loss and phase reversal and checks the operating voltage limits
 - AC axial fans with die-cast aluminum blades, developed on the basis of bionie principles with progressive starting for condensing pressure control
 - Electronic expansion valve
 - High and low pressure transducer
 - Water differential pressure switch, air bleed valve and water drain valve
 - Factory tested and supplied with refrigerant charge and antifreeze oil
 - Environmentally friendly refrigerant R410A with zero ozone depletion potential
 - All the compressors are equipped with crankcase heaters
 - Compressor housings for acoustic insulation
 - Special execution with shell and tube evaporator

Versions:

- **Low ambient air temperature** - down to -20°C in cooling mode
- High energy efficiency versions
- **HE**-High energy efficiency and basic acoustic configuration
- **SHE**-High energy efficiency and low noise acoustic configuration

The energy efficiency and the reliability.

Operation at partial loads corresponds to the largest portion of the working life of a unit dedicated to air conditioning applications: typically thermal loads vary widely both during the year and throughout each 24 hour period. The subdivision of the total cooling capacity over a large number of capacity steps, rendered possible thanks to the implementation of multi-scroll technology and environmentally friendly refrigerant R410A, ensure maximised performance at partial loads, resulting in seasonal energy savings of more than 16% with respect to conventional solutions. The multi-scroll configuration offers a lightweight solution, and permits the volume reduction of the storage tank with the associated dispersal of cooling energy, thus further reducing the static loading on the unit supports. Progressive stopping of the compressors and fans means that Galaxy Tech is extremely quiet in operation, rendering it ideal for installation in noise-sensitive surroundings.

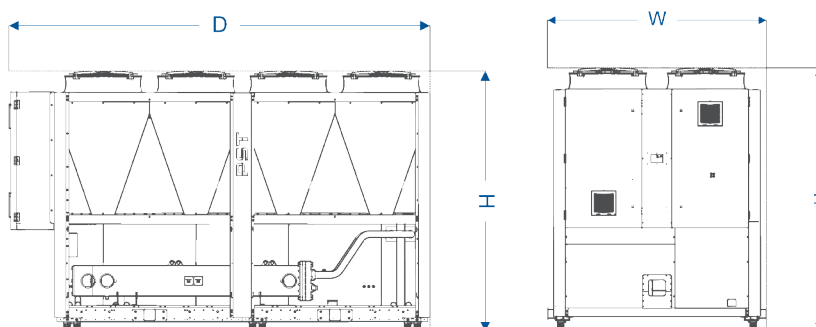
Model GLT (HE)

		120	140	160	170	180	200	220	230	240	260	280	300	320
Cooling capacity	kW	352	396	438	477	522	565	617	634	654	735	792	826	872
Cooling capacity	TR	100	112.6	124.5	135.6	148.4	160.6	175.4	180.27	185.9	208.98	225.2	234.8	247.9
Total absorbed power	kW	107.14	120.2	135.4	148	160.1	176.1	187.9	195.5	203.1	229.47	240.4	255.6	270.8
EER	-	3.29	3.29	3.23	3.22	3.26	3.21	3.28	3.24	3.22	3.20	3.29	3.23	3.22
Max external air temperature	℃	51	50	49	49	51	50	50	49	49	50	50	49	49
EXCHANGERS														
Evaporator pressure drops	kPa	35	22	45	50	53	43	45	47	48	39	35	37	41
Water flow	m³/h	60.42	67.97	75.18	81.88	89.6	96.98	105.91	108.83	112.26	126.16	135.95	141.78	149.68
GENERAL DATA														
Refrigerant	-	R410A												
Circuits / Compressors	N°	2 / 4			2 / 5		2 / 6					4 / 8		
Refrigerant	V/Ph/Hz	400 ± 10% / 3 - PE / 50												
Circuits / Compressors	-	IP54												
NOISE LEVEL														
Noise pressure	dB(A)	65	65	65	65	65	65	66	66	66	66	67	67	67
Noise power	dB(A)	97	97	97	97	98	98	99	99	99	99	100	100	100
SIZE AND WEIGHT														
Depth	mm	4490	4490	4490	5490	6490	6490	6490	6490	6490	8490	8490	8490	8490
Width	mm	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194
Height	mm	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670
Weight	kg	3802	3982	4006	4765	5523	5607	5865	5877	5889	7529	7865	8149	8173

(1) External ambient temperature: 35° C; evaporator IN/OUT: 7/12°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 ± 2 dB. The sound levels refer to operation of the 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. INB: dimensions for lower noise or higher efficiency versions may differ .)



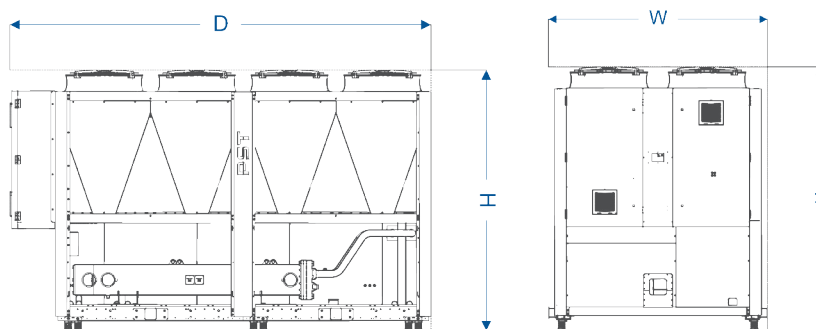
Model GLT (SHE)

		120	140	160	170	180	200	220	230	240	260	280	300	320
Cooling capacity	kW	342	384	424	463	507	556	597	613.5	633	726	770	803	848
Cooling capacity	TR	97.24	109.20	120.56	131.6	144.2	158	169.7	174.4	179.9	206.4	218.9	228.3	241.1
Total absorbed power	kW	106.57	120.5	137.5	148.6	159.3	172.6	189	197.3	206.2	224.3	240.5	257.3	274.9
EER	-	3.21	3.19	3.08	3.12	3.18	3.22	3.16	3.11	3.07	3.24	3.20	3.12	3.06
Max external air temperature	℃	49	47	46	46	49	48	47	46	46	47	47	46	46
EXCHANGERS														
Evaporator pressure drops	kPa	33	20	42	47	50	42	42	44	45	38	33	35	38
Water flow	m³/h	58.7	65.91	72.78	79.47	87.03	95.44	102.47	105.31	108.65	124.62	132.17	137.83	144.19
GENERAL DATA														
Refrigerant	-	R410A												
Circuits / Compressors	N°	2/4			2/5	2/6					4/8			
Refrigerant	V/Ph/Hz	400 ± 10% / 3 - PE / 50												
Circuits / Compressors	-	IP54												
NOISE LEVEL														
Noise pressure	dB(A)	57	57	57	57	57	57	58	58	58	58	59	59	59
Noise power	dB(A)	89	89	89	89	90	90	91	91	91	91	92	92	92
SIZE AND WEIGHT														
Depth	mm	4490	4490	4490	5490	6490	6490	6490	6490	6490	8490	8490	8490	8490
Width	mm	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194	2194
Height	mm	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670	2670
Weight	kg	3802	3982	4006	4765	5523	5607	5865	5877	5889	7840	7865	8149	8173

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PST

Pars Sanat Tahviah co.



Website: www.psthvac.com

Email: info@psthvac.com



Phone: 021 26 76 37 10

Fax: 021 26 76 37 22



Flat NO.1, NO 36, Moqaddas st, (11 West) South Shahr-dari
Blvd Gheysar Amin pour, Sq Saadat Abad, Tehran-Iran



Kar Blvd., Soleman Sabahi Industrial Town, Kashan-Iran