

#### **Product Guide 2024**





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

**PSTHVAC.COM** 

## WELCOME

Pars Sanat Tahvieh 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.

#### 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.

### 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

- **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.

#### **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.

# COMMERCIAL AND INDUSTRIAL CHILLERS

Pars Sanat Tahvieh 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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## TAURUS TECH



TAURUS



#### **Benefits**



- Refrigerant R410A is an environmentally friendly fluid (zero ozone depletion potential) and provides high performances thanks its outstanding heat conductivity
- 8 base models that perlectly

match each specific system requiremeNs

- 2 acoustic versions (HE, SHE) with high efficiency
- Scroll compressors ensure high efficiency, excellent performance and elevated energy savings
- Plug-in solution with integrated pump and tank allows a simple installation
- Extended operating limits: Taurus Tech standardly accepts inlet water temperatures up to 25°C and outlet water temperature down to 0°C HTaurus Tech working with ambient temperature up to 47°C in cooling mode; outlet water to match the specific temperature up to 55°C and ambient temperature down to -10°C in heating mode

- thanks to hot gas injection and the DDS defrosting system
- Comprehensive safety equipment, including phase monitor, pressure switches, differential pressure switch, crankcase heaters
- Extensive range of accessories and kits, allow each unit to match the specific customer requirements. down to -10 °C in heating mode
- Optimisation of performance also in heating mode thanks to hot gas injection and the DDS defrosting system
- Comprehensive safety equipment, including phase monitor, pressure switches, differential pressure switch, crankcase heaters
- Extensive range of accessories and kits, allow each unit to match the specific customer requirements
- Optimisation of performance also in heating mode thanks to hot gas injection and the DDS defrosting system

#### **Main options**

- Protection of the hydraulic group by means of panels or metallic mesh
- Coils protection by means of filters or metallic mesh
- Soft starter: are installed on each compressor and allow an average reduction of 30% of the start-up current compared to the direct start
- Shut-off valves on suction side and discharge line of each pair of compressors
- Total heat recovery lavailable for TAT on
- Partial heat recovery (available for TAT and HTAT only)
- Pump options: P15, P2, double P15+P13 or P2+P2 with or without sto-rage tank
- Anti-freeze heater on heat exchangers and hydraulic kit (if present)
- High efficiency EC axial fans with inverter
- Technalogy and integrated speed regulationor fan speed controller 15 Electronic expansion valve
- Condenser coils designed for aggressive atmosphere
- -20 °C option: it allows the units to operate in cooling mode down tole -20 °C ambient temperature
- Anti-vibration mounts
- Thermostatic valves kit for condensing units;
- Remote control kit: VICX620 display LED, VC | 890 display LCD semi-graphic (max 150 m)
- Gateway Modbus/Trend Kit
- Supervisor kits: R5485 ModBus, xWEBSD0D

#### **Standard Features**

- Reirigerant R410A
- 2 Hermelic Scroll compressors in 1 circuit configuration
- shell & tube evaporalor
- AC Axial fans with die-cast aluminum blades, developed on the basis of bionic principles
- Air-cooled condensers (copper tubes/aluminium fins) with longitudinal "V" formation
- High and low refrigerant pressure switches
- Refrigerant pressure gauges
- Parametric microprocessor control IC208CX
- 1P5& protection class
- Phase monitor against phase loss and phase reversal
- Compressor crankcase heater

#### **Versions:**

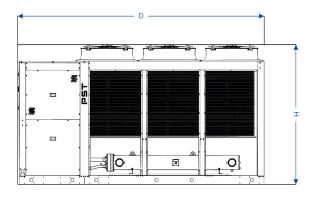
- Taurus Tech cooling only version
- **HTaurus Tech** reversible heat pumps with outlet water temperature up to 55 °C
- MCTaurus Tech condensing units
- **HE** High energy efficiency and basic acoustic configuration
- **SHE** High energy efficiency and low noise acoustic configuration

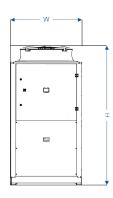


Taurus Tech chillers and heat pumps represent the optimal solution for centralised hydronic conditioning of medium sized applications and with the wide range of accessories it is possible to satisfy the installation and start-up unit needs. The parametric microprocessor control, through an user friendly interface allows to modify the unit operating parameters in a simple way. In the heat pumps, the defrosting cycles are automatically and continuously manages with DDS logic (Dynamic Defrosting System) that, unlike commonly adopted solutions, operates only when effectively necessary, optimising defrosting duration and frequency, to the benefit of ambient comfort and operating economy.

Model TAT (HE)									
Wiodel IAI (IIL)		301	351	401	451	501	551	601	701
Cooling capacity	kW	84	94	106.2	130	139.8	154.8	171	189
Cooling capacity	TR	23.9	26.7	30.2	37	39.8	44	48.6	53.8
Total absorbed power	kW	26	29.4	32.3	40	43.2	46.6	53.8	62.3
EER	-	3.23	3.20	3.29	3.25	3.23	3.32	3.18	3.06
Max external air temperature	°C	52	50	49	51	50	50	49	47
EXCHANGERS									
Evaporator pressure drops (plate)	kPa	20	23	24	26	31	29	35	40
Evaporator pressure drops (Shell Tube	) kPa	32	39	39	36	42	34	42	48
Water flow	m³/h	14.42	16.14	18-23	22.31	24	26.57	29.35	32.44
GENERAL DATA									
Refrigerant	-	R410A							
Circuits / Compressors	N°	1/2							
Refrigerant	V/Ph/Hz	400 ± 10% / 3 - PE / 50							
Circuits / Compressors	-	IP54							
NOISE LEVEL									
Noise pressure	dB(A)	56	56	58	58	58	59	59	60
Noise power	dB(A)	88	88	90	90	90	91	91	92
SIZE AND WEIGHT									
Depth	mm	2800	2800	2800	3810	3810	3810	3810	3810
Width	mm	1100	1100	1100	1100	1100	1100	1100	1100
Height	mm	2170	2170	2170	2170	2170	2170	2170	2170
Weight	kg	913	988	1120	1322	1396	1472	1510	1522

- (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 unit under full load in nominal conditions and with circulation pump.
- (3) Dimensions and operating weights are referred to Taurus Tech cooling only version without options.

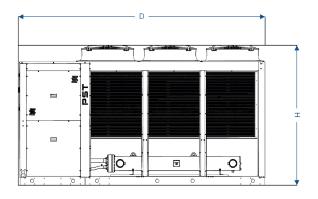


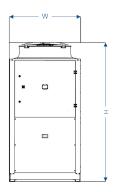




Model TAT (SHE)											
		301	351	401	451	501	551	601	701		
Cooling capacity	kW	81	92.9	107.4	128.5	138-1	149.8	164	-		
Cooling capacity	TR	23	26.4	30.5	36.55	39.28	42.6	46.64	-		
Total absorbed power	kW	25.85	28.87	31.67	38.8	42.35	46.9	54.8	-		
EER	-	3.13	3.22	3.39	3.31	3.26	3.19	3	-		
Max external air temperature	°C	50	48	51	49	48	47	45	-		
EXCHANGERS											
Evaporator pressure drops (plate)	kPa	24	23	24	25	30	28	35	-		
Evaporator pressure drops (Shell Tube	) kPa	30	39	40	36	41	33	39	-		
Water flow	m³/h	13.90	15.95	18.44	22.06	23.7	25.71	28.15	-		
GENERAL DATA											
Refrigerant	-	R410A									
Circuits / Compressors	N°	1/2									
Refrigerant	V/Ph/Hz	400 ± 10% / 3 - PE / 50									
Circuits / Compressors	-	IP54									
NOISE LEVEL											
Noise pressure	dB(A)	48	48	50	50	50	51	51	-		
Noise power	dB(A)	80	80	82	82	82	83	83	-		
SIZE AND WEIGHT											
Depth	mm	2800	2800	2800	3810	3810	3810	3810	-		
Width	mm	1100	1100	1100	1100	1100	1100	1100	-		
Height	mm	2170	2170	2170	2170	2170	2170	2170	-		
Weight	kg	913	1026	1353	1378	1452	1472	1510	-		

- (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  $\pm$  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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