



TRANE®

HPAT

Heat Pump

20 - 100 kW

HPAT Series 50 Hz





HPAT-COMMERCIAL SERIES

A new standard for the heat pump water heating industry, Trane sets a new appearance and new standard for Serviceability... Installability... Reliability... and Flexibility for all applications in heat pump systems.

DESIGN FOR YOU

Trane consulted its customers during the heat pump design phase to bring a product to the marketplace which would meet your job needs every time.

QUALITY AND RELIABILITY

- Scroll compressors are available from 20 kW to 100 kW with excellent reliability and high efficiency.
- All units are 100 percent run tested prior to leaving the production line.

SAFETY AND SANITARY HOT WATER GUARANTEE

HPAT commercial series come with double wall-open vented condenser coil. It is a patented design for sanitary hot water used in hotel, restaurant, hospital and etc. Where preventing cross contamination of potable water is crucial to your business, our solution guarantee sanitary water supply event in the event of pipe rupture or cracked casings.

FLEXIBILITY

Trane's heat pump family offers single and dual compressor configurations allowing the right equipment to be matched to the job application and save on operating cost.

COOL AIR RECOVERY

Trane heat pump units are designed for ducted applications allowing for free cool air recovery whenever the system is in operation.

EASE OF SERVICE

Reduction of service time and cost through

- Single side access on condenser.
 - Multiple removable panels on all system components.
 - Colored and numbered wiring.
 - Service valves.
 - Dual compressor units allow for potable hot water even during service time. (HPAT-60-72-100)
- *Cam Lock Key on access panels eliminates need for screws

SYSTEM PERFORMANCE MATRIX MAXIMUM EFFICIENCY

- Lower noise operation and higher efficiency with higher EER Scroll Compressor.
- Single rotating assembly minimizes the friction and mechanical losses.
- Smooth operation, similar to a centrifugal compressor, give low torque variation and extend motor life, and minimal vibration reducing wear.
- Solid mount with no internal suspension to be worn out.

TRANE NEXT GENERATION HEAT PUMP UNITS

- A reputation for quality and reliability.
- Improvements in efficiency, flexibility and installation
- * Industry leading Efficiency resulting in very high COP values.

DIGITAL LED DISPLAY THERMOSTAT (WITH OPTIONAL MICRO PROCESSOR CONTROLLERS)

Using Carel Series Controller with Trane Digital Thermostat provide easy water temp. adjustment with LED water temp. display.

MICRO PROCESSOR CONTROLLERS ALLOW :

- Remote monitoring from control room
- Error codes display on digital thermostat help save service time
- Programmable setting (PI) Offset temperature setting of water temp required
- Showing compressor status
- Autostart when power loss

FEATURES AND BENEFITS



HPAT 020-030

(A) CASING*

Powder paint finished covering all edges and uniform paint finish for a smooth, attractive and long lasting casing with innovative design. Well insulated casing with fire retardant 20 mm. Closed Cell Polyethylene foam with an aluminum foil vapor barrier.

(B) COMPRESSOR

Hermetic Scroll Compressor with high efficiency suitable for high working temperature and suitable for R-134a.

(C) CONDENSER COIL

Patented high efficiency double wall condenser coil with very high approach temperatures (1°C), suitable for sanitary hot water use, CE & UL listed.

(D) EVAPORATOR*

Aluminum Fin with seamless Copper Tube. Special designed to provide corrosion resistant with Aeris Coating for salt spray protection on sea coast applications.

(E) FAN

Direct drive fans require no belt adjustments running at 1,400 rpm, with 4 poles motor and protection class F IP 55 to fully recover cool airflow for further cost savings.

(F) UNIT INSTALLATION

Designed to easily fit into motor rooms or building rooftop / other flat surfaces.

(G) SERVICEABILITY

Large service access panels for maintenance with specially designed stainless steel drain pan and built in U Trap with a deep pitch to catch and drain water safely away.

(H) REFRIGERANT COMPONENT*

Standard refrigerant accessories with service valves, hi- low pressure controls and liquid line filter drier.

(I) OPTIONAL

- * (A) Marine Series: Stainless or Zincaluminum Casing with Copper Fin and Brass End Plates.
- * (D) Designed to provide corrosion Blue fin with Aeris coating protection on sea coast applications.
- * (I) Micro processor controller with the troubleshooting status display to help reduce service time

(J) All materials and components sourced from industry leading suppliers in Europe, Japan and North America for highest product quality, durability and maintenance free operation for many years to come

“ Heat exchangers intended for connection to a potable water system shall be of double wall construction. ”



Underwriters Laboratories, Inc. UL 1995
HEATING AND COOLING EQUIPMENT

“ ”

HPAT SERIES

COMMERCIAL SANITARY HOT WATER HEAT PUMPS

Model		HPAT-020	HPAT-030	HPAT-060	HPAT-072	HPAT-100
Heating Capacity	kW	22	34.5	67	72	100
Cooling Capacity	Btu/hr	56,000	90,300	174,000	200,000	340,000
COP Heating*		4.1	4.1	4.2	4.0	4.0
Power Input	kW	5.4	8.41	16.05	18.0	25.0
Electrical Supply	V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
MCA (MCA with pump option)	A	29	36.2	66.2 (71.2)	75.5 (80.5)	126.1 (133.0)
Refrigerant Type		R134A for all models				
Compressor Type		Hemetic Scroll				
Qty of Compressor per Unit		1	1	2	2	4
Low / High Pressure Switch	Bar	0.5 / 28	0.5 / 28	0.5 / 28	0.5 / 28	0.5 / 28
Condenser Coil		Double Wall Plate HX		Double Wall Tube-in-Tube HX	Double Wall Tube-in-Tube HX	Double Wall Tube-in-Tube HX
Evaporator Fan		Double Inlet Forward Curve - Centrifugal Fan				
Qty		2	2	4	2	8
Airflow @0.25 in.wg. ESP	m ³ /sec	1.41	1.41	2.83	3.77	4.71
Evaporator Fan Motor		3-Step Motor : Off / Low / High Direct Drive (DD)			1-Speed Motor Belt Drive	3-Step Motor : Off / Low / High - DD
Watt Output	kW	1 x 0.873	1 x 0.873	2 x 0.873	1 x 3.73	4 x 0.873
No. of fan step		3-Step Motor : Off / Low / High Direct Drive (DD)			1-Speed Motor Belt Drive	3-Step Motor : Off / Low / High - DD
Hydraulic Circuit		Carel - Programmable Set Point / Diff				
Condenser Water Pressure Drop	kPa	50	50	80	85	116
Water Flow Rate	l/sec	1.1	1.6	3.2	3.6	4.7
Diameter of Pipe Connection	in	1 1/2	1 1/2	2	2	2
Condenser Pump (Option)		Carel - Programmable Set Point / Diff				
Watt Output	kW	N/A	N/A	1 x 2.23	1 x 2.23	1 x 2.98
Housing Dimensions		Carel - Programmable Set Point / Diff				
Height	mm	685	685	1,648	1,780	1,780
Width	mm	1,820	1,820	1,670	1,670	2,134
Depth	mm	970	970	1,067	1,067	1,680
Temperature Control Unit		Carel - Programmable Set Point / Diff				
Operating Temperature (Rec/Max)	YC	60 / 70	60 / 70	60 / 70	60 / 70	60 / 70
Sound Level		Carel - Programmable Set Point / Diff				
@ 1 m with Duct Work	dB(A)	62	62	65	67	68
Weight		Carel - Programmable Set Point / Diff				
Dry (weight with pump option)	kg	212	216	515 (550)	710 (745)	1210 (1254)
Operate (weight with pump option)	kg	236	240	545 (580)	740 (775)	1260 (1304)

* Rating at 30 YC ambient air, 30 YC inlet water and 60 YC outlet hot water
Specifications are subject to change without notice



Trane optimizes the performance of home and buildings around the world. A business of Ingersoll Rand, the leader in creating and sustaining safe, comfortable, and energy efficient environments, Trane offers a broad portfolio of advance controls and HVAC systems, comprehensive building services, and parts. For more information, visit www.tranethailand.com

ทราน (ประเทศไทย)

เลขที่ 1126/2 ชั้น 30-31 อาคารวานิช 2 ถนนเพชรบุรีตัดใหม่ แขวงมักกะสัน เขตราชเทวี กรุงเทพฯ 10400

☎ 0-2704-9999

©2013 Trane All rights reserved
MS-SLB-MCD1-2 TH December 18, 2013

