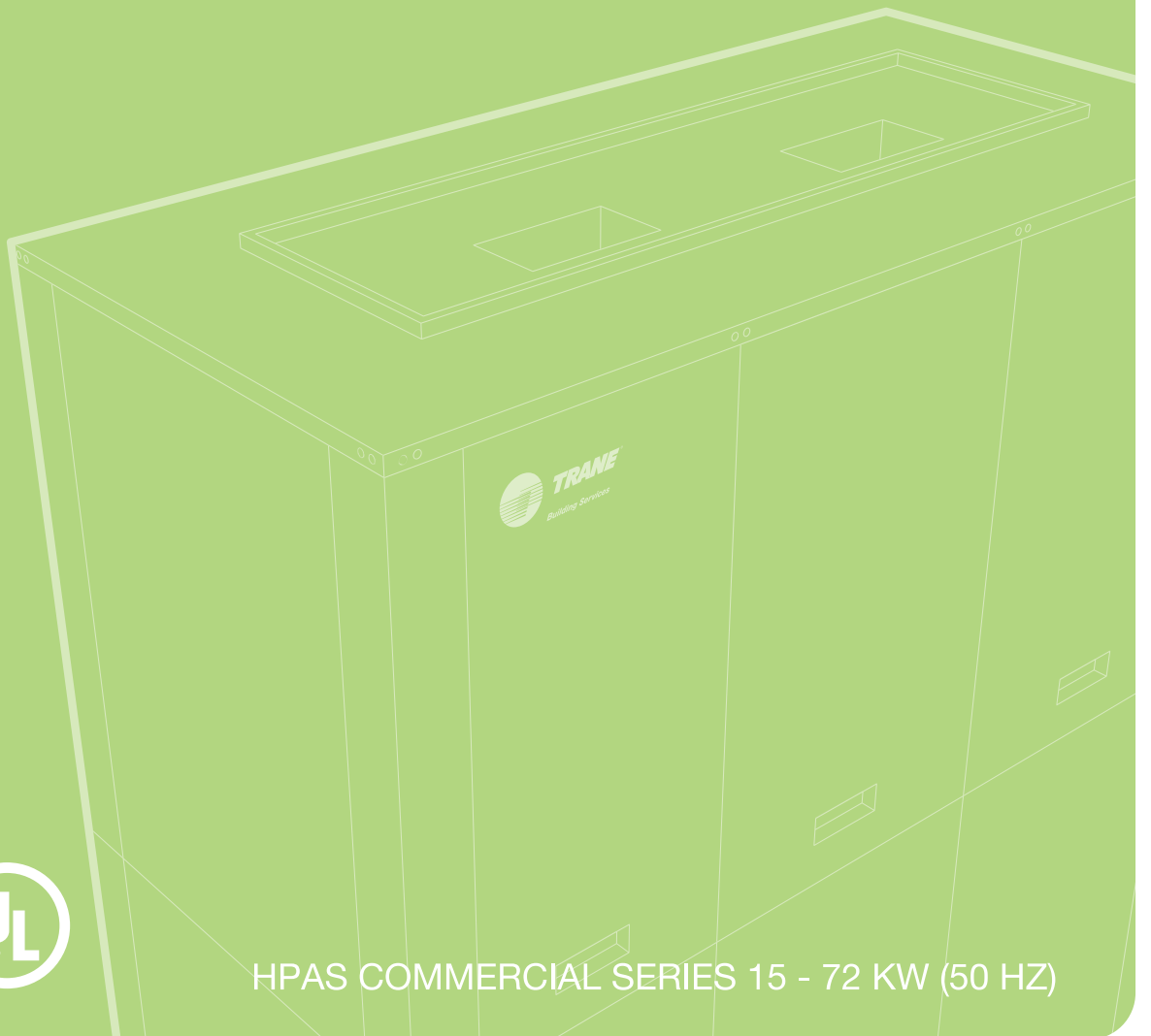




# AIR SOURCE HEAT PUMP

ENERGY SAVING HOT WATER FROM THE SUN



HPAS COMMERCIAL SERIES 15 - 72 KW (50 HZ)

# HPAS-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 15 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

HPAS 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 portable 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. (HPAS-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



“ 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



### (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

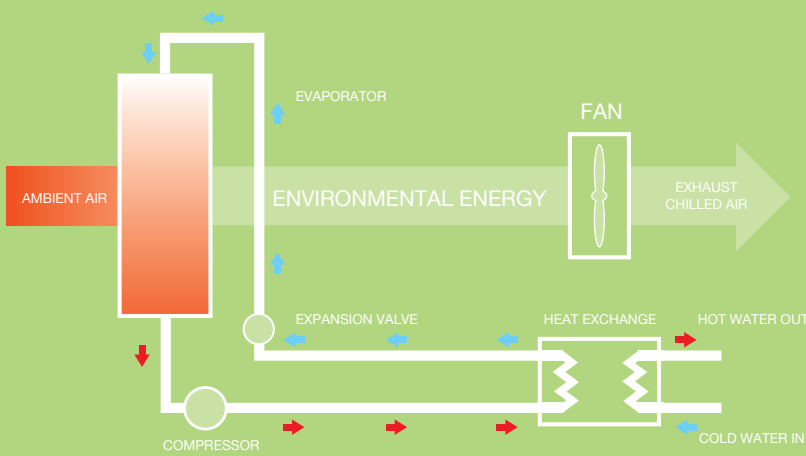
## TODAY'S TECHNOLOGY

With today's ever increasing energy costs, our nation is continually faced with utilizing our natural resources more efficiently. At Trane, we never stop challenging ourselves in serving our nation and customers by providing them with the right solutions!

Today's technology, Air to Water Heat Pump Water Heater, literally take energy from fresh outside air! A reliable and proven technology and innovative way of producing hot water at 60 °C (maximum at 70 °C). This is sufficient to be used in many applications; for the hotel industry, hot water for showering, food preparation, etc. Air to Water Heat Pump Water Heater is energy efficient and an environmentally friendly alternative to burning fossil fuels. It consumes much less energy than the conventional technologies, up to 70 to 85 % energy cost saving, comparing to Oil-Fired Boiler and Electric Heaters.

The Air to Water heat pump system is a reverse refrigeration cycle. Refrigerant runs through the air conditioning coil (evaporator) and because the refrigerant is colder than air; it literally collects heat energy from air passing through the coil and dissipates heat to the water at the condenser coil.

AIR TO WATER HEAT PUMP FOR COMMERCIAL & RESIDENTIAL BUILDING  
75% MORE EFFICIENT THAN CONVENTIONAL HOT WATERHEATERS.



AIR TO WATER HEAT PUMP SCHEMATIC

### MAJOR FEATURES AND BENEFITS

- Totally free energy source from the air
- A reverse refrigeration cycle technology
- Energy efficiency hot water production
- Potable drinking water approved
- Will save up to 70-85 % energy used to make hot water
- Lowest capital and operating cost!
- Cold air benefit – free cool air

### MAJOR APPLICATIONS

- Hotels , motels & hostels
- Villas , resorts
- Hospitals
- Condominiums , apartments
- Health club , spa jacuzzis
- Laundries and restaurants
- Schools

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For more information, contact your local Trane office.

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