



Trane® Horizon® Outdoor Air Units

Dedicated Outdoor Air Solutions Water-Source Heat Pumps Air-Source Heat Pumps



Horizon Heat Pump Solutions

Trane® Horizon® Dedicated Outdoor Air System Units, or DOAS Units, are a comprehensive line of dedicated outdoor air system products for year-round dew point design applications. Water-Source Heat Pumps (WSHP) and Air-Source Heat Pumps (ASHP) are now available on Horizon models, providing the opportunity for buildings to have a fully integrated and automated system comprised of the most sustainable, highest efficiency comfort technology available.



Moisture Removal

Dedicated Outdoor Air System (DOAS) Units dehumidify outdoor air before it is introduced to a building's air delivery system. This results in tightly controlled humidity, a reduced latent load and improved overall energy efficiency. This piece of the HVAC puzzle isn't about temperature control, it's about moisture removal.

Performance Standards

Removing water from the air is referred to as dehumidification. With development of AHRI 920, there is now a certification program for DX DOAS equipment. AHRI 920 performance ratings include Integrated Moisture Removal Efficiency, ISMRE2 (no reheat required) and ISMRE2₇₀ (reheat to 70°F included). ISMRE2 is a detailed moisture removal efficiency calculation, at standard and part load rating conditions, of how well a DX DOAS performs at various conditions. Horizon® Outdoor Air Units were proactively designed to exceed the AHRI 920 performance benchmark.

Broader Horizons

The introduction of WSHP and ASHP options expands the capabilities of the Horizon series, making it compatible with existing high performance Trane heat pump technologies. Cost effective renewable energy makes it the natural choice, whether you're planning a new building or upgrading a dated system.

- Renovations choose the heat pump option appropriate for integration with your facility's existing heat pump system.
- New construction design a fullyintegrated heat pump system from the ground up.

Personal Comfort

Horizon® units with heat pumps are designed to condition up to 100% Outdoor Air and can be fully integrated with building heat pump or terminal unit systems, and work well in a wide range of building types. WSHP and ASHP are ideal solutions for:

- 1. Schools
- 2. Dormitories
- 3. Hotels/Lodging
- 4. Apartments
- 5. Condominiums
- 6. Assisted Living
- 7. Nursing Homes
- 8. Military Barracks
- 9. Commercial Food Service



Heat Pump Systems

Air and Water Source Heat Pump systems are two of the most sustainable, environmentally responsible ways to heat and cool buildings. WSHP offer the added ability to design an outdoor air load using the building water loop to carry away condenser heat and maximize the benefits of the heat pump system's outstanding efficiencies and lower overall operating costs.

All Horizon Air and Water Source Heat Pump Units are available with an Energy Recovery Ventilator option to further enhance unit efficiency and maximize energy savings.

Horizon Outdoor Air Units

The Horizon series of Outdoor Air Units offers a complete range of solutions.

MODEL	TONNAGE	AIRFLOW
OAB	3 to 9 Tons	500 to 3,000 CFM
OAD	10 to 20 Tons	1,150 to 8,000 CFM
OAK	12 to 30 Tons	1,500 to 9,000 CFM
OAN	30 to 54 Tons	3,750 to 13,500 CFM

Installation Options

WSHP coil systems are a versatile technology with a number of installation applications, including:

- 1. Boiler/cooling tower
- 2. Ground loop (geothermal)
- 3. Adjacent body of water

Peerless Performance

Horizon DOAS Units with the WSHP option are the perfect companion for your Trane Axiom™ Variable Speed Water-Source Heat Pump, featuring highly efficient eFlex™ variable speed technology. An Axiom™ WSHP system with a ground loop installation can achieve up to 40 EER and deliver up to 60% energy savings.

Comfort Zone

Horizon DOAS Units are often paired with Axiom WSHP systems in multi-tenant buildings to provide fresh supply air for comfort system zones.



Streamlined Installation

Trane Horizon components are assembled, piped, wired and tested at the factory. This makes job site installation a straightforward process, ensuring faster setup, increased reliability and optimal performance.

Service Agreement

Planned maintenance with Trane service agreements can keep your systems operating at peak efficiencies, conserving operating costs and supporting budget goals.

Virtual Configurations

Trane has the Building Information Modeling (BIM) objects to support your building design. Pre-populated physical and performance data unique to each product configuration save time, increase accuracy and simplify the construction process.





Learn More at Trane.com/doas



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit *trane.com or tranetechnologies.com*.

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