

Decarbonization Solutions Line Card

Solutions to help reduce your building's carbon footprint



Electrification Solutions

We can help you launch your building's energy shift—and achieve your sustainability goals.

At Trane, energy intensity reduction is the guiding principle in everything we do. Electrifying the built environment so that buildings are powered by electricity drawn from renewable energy sources matters more as the grid becomes cleaner. A successful transformation to building electrification requires experience and hands-on expertise. Trane is ready to help you reach sustainable goals and make a smooth transition without compromising comfort and control.



Mid to Small Energy Applications: Direct Expansion Heat Pumps

Trane provides a variety of solutions to help you decarbonize—from heating to heat recovery options.

Heat Pumps and VRF Systems

Trane® / Mitsubishi VRF & Ductless

- Heat Pump/Heat Recovery
- Guaranteed heating capacity down to (-22°F)
- LEV expansion valve kits integrate Trane split AHUs or DOAS air handlers for VRF heat pump operation

LEV Kit

- The power to connect Trane® / Mitsubishi Electric CITY MULTI® Products to Trane Air Handlers

Heat pump Roof Top Units (RTUs)

- Backup and supplemental electric heat

Horizon Dedicated Outdoor Air Systems (DOAS)

- DX Packaged (Air and Water Cooled)
- Backup and supplemental electric heat

Water-Source Heat Pumps

Axiom™ Model GEH/GEV

- ½ - 15 Tons (Horizontal)
- ½ - 25 Tons (Vertical)

Axiom Model DXH/DXV

- High-Efficiency 2-Stage
- ECM Motors
- 2-Stage Compressor
- 2 - 6 Tons

Axiom Model GEC

- High-Efficiency Console
- ½ - 5 Tons

Axiom Model EXW

- Water to Water
- 5 - 20 Tons

Axiom Model EXH/EXV

- High-Efficiency
- ECM Motors
- 1½ - 6 Tons

Axiom Model VSH/VSV

- High-Efficiency Variable Speed
- ECM Motors
- Variable Speed Compressor
- 2 - 5 Tons

Axiom Model GET

- High-Efficiency Vertical Stack
- ¾ - 3 Tons

Axiom Model GWS

- Rooftop
- 3 - 20 Tons



Large Energy Applications: Hot Water Space Heating

Trane has you covered with air-source or water-source chiller-heaters and new storage source heat pumps to develop a roadmap to decarbonize your comfort system.

Centrifugal Chillers

Agility® Model HDWA

- Magnetic Bearing Compressor
- 175 to 425 ton – 60 Hz, 50 Hz
- Up to 140°F HW

CenTraVac® Model CVHF Chiller

- 2-Stage Compressor
- 325 - 2000 Tons
- R-514A
- Heat recovery operation

CenTraVac® Model CVHH

- Multi-stage, Dual Compressor
- 900 - 2000 Tons
 - (simplex up to 2,000 tons)
 - (duplex up to 4,000 tons)
- R-1233zd
- Heat recovery operation

Helical Rotary Chiller

Series R® Model RTWD

- Helical Rotary Compressor (screw chiller)
- 80 – 250 tons
- Dual refrigerant, R-134a or next gen R-513a
- Up to 140°F HW production
- Heat recovery – dual setpoint

Scroll Chiller

CGAM

- Scroll Compressor
- 20 – 130 tons
- Partial heat recovery
- ~25% heat recovered and temperatures up to 158°F

Modular Chillers

Trane Modular Chillers Available for air-cooled and water-cooled applications

- Scalable capacity from 15 – 800 tons
- Heat recovery – dual setpoint
- Domestic HW dual wall HX

PolyTherm™

- Multipipe Energy Recovery Chillers
- Three operation modes – Heat, Cool, Energy Recovery
- Independent fluid loops

Air to Water Heat Pump

Ascend® Model ACX

- 140 - 230 Tons
- Up to 140°F max HW temperature
- Ambient operation down to 0°F
- Factory installed: pump packages, sound-reduction



Mid, Small, and Large Energy Applications: Domestic Water Heating Applications

Improve energy efficiency throughout your facility with Domestic Hot Water Heat Pumps which are ideal for hot water purposes other than space heating (i.e. washrooms, kitchens, laundry, etc.).

Domestic Hot Water Heat Pumps

HEAT₂O™ Model QAHV

- Natural Refrigerant – CO₂ (GWP =1)
- Operation down to -13°F ambient
- 176°F maximum HW temperature
- 136 kBtu Output

Controls/Energy Solutions

Our web-based building automation and management systems provide simple, convenient control.

Trane building controls and services can help you avoid higher utility bills or equipment inefficiencies. We can monitor your building, pinpoint problems and track energy markets to raise your sustainability profile and identify opportunities to improve.



Unit & System Controls

Trane Tracer® Building Management Systems are web based and available for the enterprise level, or individual building level.

Trane Building Automation Systems

Tracer® SC+

Scalable web-based building automation system solution

Factory & Field

Mounted BACnet® & LonTalk® Unit Controllers, Integrates with BACnet MSTP, LonTalk Certified, BACnet/IP, Modbus® Protocols

Wireless Solutions

Wireless comms, Air-Fi® Wireless (BACnet/Zigbee®), temperature & humidity sensors

Trane Building Management Systems

Tracer® Ensemble®

Enterprise level building management software

Tracer® Synchrony®

Web-based facility management software

Tracer Mobile Apps

Concierge, Building Operator Suite



Dedicated Lighting

Control more than half of your building energy use when you integrate Trane lighting solutions into your BAS.*



Digital and Energy Services

Includes emissions tracking, usage, building and energy performance.

Energy Services

Analyze and review building performance. Work with Trane energy engineers to reduce energy and fossil fuel consumption through consultative approach. We partner with our clients to understand how energy impacts their business and sustainability goals. Leveraging deep expertise and cutting-edge technology, we help optimize energy purchasing strategies, energy sourcing, energy storage, consumption, and overall network efficiency with validated results.

Trane Intelligent Services

Aggregates data collected in a building. Provides analytic tools to make real-time, near term, and long term decisions that maximize the way buildings are managed and maintained.

Trane Design Tools

TRACE® 3D Plus

Model HVAC systems and controls with building design and analysis software

First Pass™

Lifecycle analysis tool for thermal energy storage systems

Control Devices

Pressure Independent Control Valves

- Chilled water and hot water valves
- Guaranteed delta T at all load conditions, self balancing
- Drives efficiency and reduced load in pumping and chiller/boiler systems
- Connected option for BMS monitoring

All Electrified Systems



Controls and Equipment

- Geothermal Systems
- Air-source Heat Pump Systems
- Thermal Battery® Heating and Cooling



Renewable Energy and Power Solutions

Trane can help implement a wide array of distributed energy resource solutions including:

- Cogeneration
- Solar Photovoltaic
- Microgrid
- Integrated Energy Storage
- Biomass
- Biogas
- Wind Power

Contact your local Trane team for more information at www.trane.com



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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