# **National Line Card**

## PRODUCTS & SYSTEMS SOLUTIONS









## **APPROACH**

Our goal is to deliver the outcomes that matter most to you—from more comfortable indoor environments to energy efficient operations. We take a consultative approach to understand your unique business objectives, gather data and information to make informed recommendations, and support you from implementation to validation.

## **SERVICE & SOLUTIONS**

Our capabilities include commercial systems, energy services & solutions, contracting, controls/building automation, rentals and service.



#### **BUILDING SERVICES**

Help reduce operating costs and extend the life of your equipment with planned, reliable, preventative and proactive scheduled maintenance and repair by Trane factory trained technicians.

- Service Agreements
  - Connected Mechanical Service Agreements
- Extended Warranty
- Quoted Repair Product



### **DIGITAL SERVICES**

Leverage your data and Trane's analytics to create simple dashboards that can help you to understand performance of your building and its assets. Dashboards can help to find opportunities for increasing efficiency, decreasing energy use, and increasing productivity through system optimization.

- Connected Building Service Agreements
- Intelligent Services Agreements



#### **INTELLIGENT SERVICES**

Harness the power of data and domain expertise to optimize your building management and maintenance with real-time data collection, analytics, and consulting services.



#### **ENERGY SERVICES**

We use deep expertise and a datadriven approach to support your business and sustainability goals. Through partnership, we work to understand how energy impacts your unique situation, and we optimize energy use with strategies to manage energy storage, consumption, and overall network efficiency to provide validated outcomes.



## RENTAL SERVICES

24/7/365 local service, engineering expertise and an expansive fleet of rental products. Promptly provides temporary, scalable HVAC and power from standard applications to complex solutions

 Water-Cooled Chillers, Air-Cooled Chillers, Temporary Power, Cooling Towers, Packaged A/C Units, Air Handlers, Portable A/C Units



## IAQ SERVICES

Today there are more ways than ever to assess and manage indoor air quality, while keeping your goals for cost and sustainability in sight. Trane offers a variety of services, innovative technologies, and proven solutions for measuring and monitoring IAQ. We can help you align with air quality guidelines and recommendations set by the CDC, EPA, and ASHRAE.



#### LIGHTING SOLUTIONS

Control more than half of your building energy use when you integrate Trane lighting solutions into your BAS.\* The Trane difference offers increased energy savings, improved comfort and flexibility, and a higher quality design—all within your budget. Utilizing lighting solutions can enhance productivity, performance, safety, and wellbeing—all while significantly contributing to energy and carbon reduction goals.



## TRANE CREATIVE SOLUTIONS

Customized Trane Equipment Modifications Including: Multizone Replacements, Water-Side Economizer Coils for Air-Cooled Chillers, Packaged Air-Cooled Ice Storage Systems, Acoustical Attenuation



### **ENGINEER AND CONTRACTOR RESOURCES**

Trane is here to support, enable and educate Engineers and Contractors through comprehensive tools and resources, design and analysis tools, professional education and training, BIM and CAD drawings, and preengineered system solutions.

traneengineer.com | tranecontractors.com



### **ENGINEERED SYSTEMS**

- · Comprehensive Chilled Water Systems
- Comprehensive Chiller- Heater Systems
- CoolSense® Integrated Outdoor Systems
- Intelligent Variable Air Systems
- Thermal Battery<sup>™</sup> Systems
- Variable Refrigerant Flow (VRF) Systems
- Zoned Rooftop Systems



## **Building Automation**



## Tracer® SC+ Scalable building automation system solution with standard, open



Tracer Concierge® Light commercial control system



## Pivot® Smart Thermostat

Wi-Fi & Ethernet thermostat for light commercial applications



## Symbio<sup>®</sup>

Application Specific and Programmable Unit Controllers, Integrates with BACnet MSTP, BACnet/IP, BACnet/Zigbee, Lontalk & Modbus Protocols



### Air-Fi® Zone Sensors

Flexible and reliable wireless sensors & system communications leveraging Air-Fi® Wireless (BACnet/ Zigbee) technology. Sensors include temperature, humidity, CO<sub>2</sub> & occupancy



## **Building Management Systems**



## Tracer® Ensemble®

Enterprise level building management software for facility professionals



## Tracer® Synchrony®

Tracer SC+'s built-in web based user interface software for building operators



## Tracer® Concierge®

Light commercial control system with set-up wizard for installers and simple user interface for nontechnical users



## **BAS Operator and Occupant Apps**

Providing mobile access to service providers, building operators, and occupants



### **IAQ Solutions**



## **Synexis**

Provides a continuous application of DHP that can reduce airborne and surface pathogens, fungi and VOCs



## **TCACS**

Trane Catalytic Air Cleaning System (TCACS) is an enhanced air filter containing 3 technologies: filtration, germ-killing ultraviolet light, and a photocatalytic oxidation (PCO) process



#### Awair Omni

An in-room air quality monitoring device that measures T, RH, VOCs, CO<sub>2</sub>, PM2.5, light and noise; can be integrated into Trane BAS systems

## Trane® / Mitsubishi **Electric VRF & Ductless**



#### N-Generation CITY MULTI®

Energy efficient air and water cooled, all electric VRF systems available in Standard, High Efficiency, and H2i® (Hyper-Heat); 6 - 36 Tons

#### **Nv Series**



Ductless system for maximum energy efficiency and quality control with precise zone control to distribute heating or cooling only to spaces in use; 0.5 - 5 Tons

## **P** Series



Light commercial ductless system for superior comfort, flexibility and reliability with precise 1:1 outdoor to indoor connections for efficient zone management; 1 - 3.5 Tons

### **Indoor Units**



A variety of indoor units available to meet any application and design requirements, including ceiling cassettes, wall mounted, concealed and more

## **LEV Kit**



The power to connect Trane® / Mitusbishi Electric CITY MULTI® Products to Trane Air Handlers: Allows for higher airflows, higher static pressure, larger capacity, customized products, and DOAS configurations

### **Trane Precision Cooling**



## Single Circuit

Single circuit DX or CW; vertical floor mounted; 2 - 10 Ton; tandem compressor options; EC fan technology



## **Dual Circuit DX**

Dual circuit DX or CW; vertical floor mounted; 5 - 80 Tons; EC fan technology



## **Ceiling Mounted**

Ceiling Mounted DX or CW; 1 - 10 Tons: Independently circuited scroll compressors

## **Water-Cooled Portfolio Centrifugal Chillers**



## **Model TACW**

Oil-free; Cooling operation; 60 - 1400 Tons; R-134a and R-513A



## Agility® Model HDWA

150 - 42550 Tons; Heating and Cooling capable: Up to 140°F HW; 60 Hz, 50 Hz; Symbio<sup>®</sup> 800 controller; uses either R-513A or R-134A



## CenTraVac® Model CVHE

3-Stage Compressor: Heating and Cooling capable; Free Cooling; Symbio® 800 controller; 150 - 500 Tons; R-514A



#### CenTraVac® Model CVHF

2-Stage Compressor; Heating and Cooling capable; Free Cooling; Heat recovery operation; Symbio® 800 controller; 325 -2000 Tons: R-514A



### CenTraVac® Model CVHH

Multi-stage; Dual Compressor; Heating and Cooling capable; Free Cooling; Heat recovery operation, Symbio® 800 controller; 900 - 2000 Tons; R-1233zd



## CenTraVac® Series S™ Model CVHM

Heating and Cooling capable; Free Cooling; Symbio<sup>®</sup> 800 controller; 170 - 390 Tons; R-514A



## CenTraVac® Model CDHF

Multi-Stage Dual Compressor; Heating and Cooling capable; Free Cooling; Symbio® 800 controller; 1450 - 3950 Tons; R-514A



#### CenTraVac® Model CDHH

Multi-stage; Dual Compressor; Heating and Cooling capable; Free Cooling; Symbio<sup>®</sup> 800 controller; 1800 - 4000 Tons; R-1233zd



## Water-Cooled Chillers

## Cold Generator™ Model CGWR Scroll Compressors;

20 - 75 Tons; R-410A



## Series R® Model RTWD

Helical Rotary Compressor; Heating and Cooling capable; Heat recovery operation-dual setpoint; Up to 140°F HW production60 - 250 Tons; R-134a or R-513a



## Optimus® Model RTHD

Optional Variable Speed Helical Rotary Compressor; Heating and Cooling capable; 150 - 430 Tons; R-134a; or R-513a for fixed speed only

#### Air-Cooled Chillers



## Ascend® Air-to-Water Heat **Pump Model ACX**

Energy efficient, all electric heating and cooling; Symbio® 800 controller; 140-230 tons cooling; 1500 - 2500 MBh heating; R-410A



## Ascend® Model ACS

Scroll Compressor; 140 - 230 Tons; R-410A; Symbio® 800 controller



#### Ascend® Model ACR

Variable Speed Helical Rotary Compressor; Free Cooling; Symbio® 800 controller; 150 - 550 Tons; R-134a



#### **Model CGAM**

Scroll Compressor; 20 - 130 Tons; R-410A; Heat recovery option



## **Model TACA**

Oil Free Centrifugal; 60 - 440 Tons; R-134a or R-513A



## Sintesis® Model RTAF

Variable Speed Helical Rotary Compressor; 115 - 520 Tons; R-134a or next gen R-513A; Symbio® 800 controller



## Cold Generator™ Model CCAR

Scroll Compressor with Air-Cooled Condenser: 20 - 70 Tons; R-410A



## **Modular Units**

## Thermafit™ Model AMC

Air-Cooled Chiller; Free cooling & Heat recovery; 15 - 80 Tons (800 Ton Banks); R-410A



### Thermafit™ Model AMT

High efficiency Air-Cooled Chiller; Variable speed compressor and fans; Free cooling & heat recovery; 20 - 40 Tons (400 Ton Banks); High efficiency; R-410A



## Thermafit<sup>™</sup> Model MWC

Water-Cooled Chiller; Heat recovery; 15 - 80 Tons (800 Ton Banks); R-410A



## Thermafit™ Model MWT

High efficiency water-cooled chiller; Variable speed compressor; 20 - 40 Tons (400 Ton Banks); R-410A



## Thermafit™ Model AXM

Air-to-water heat pump; Energy efficient; All electric cooling or heating; 30 Ton (300 Ton Banks); R-410A



## Thermafit™ Model WXM

Water-to-water heat pump; Energy efficient; All electric cooling or heating; 20 - 80 Tons (800 Ton Banks); R-410A



## Thermafit™ Model MWS

Water-cooled multipipe; Simultaneous heating and cooling; 30 - 60 Tons (90-480 Ton Banks); 450 MBh to 7,200 MBh; R-410A



## Minimod Model TACW

Water-cooled chiller; Oil-free centrifugal; 60 - 135 Tons (1000 Ton Banks); R-134a and R-513A



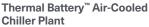
## Cold Generator™ Model CICD

Water-cooled: Heat Recovery: 20 - 85 Ton (600 ton Arrays)



## **Thermal Energy Storage Tanks**

Optimizes energy usage by storing renewable, excess or inexpensive energy; Reduces peak electric demand charges; Access to demand response programs; Buildings with chilled water systems above 100 cooling tons



Pre-Engineered, Factory Built Cooling System. Incl: Air-Cooled Chillers, CALMAC® Energy Storage Tanks, Customizable System



## Thermal Battery™ Storage Source **Heat Pump System**

Delivers Heating and Cooling, Supports Electrification. Incl: Waterto-Water and Air-to-Water Heat Pumps, CALMAC® Energy Storage Tanks, Trane Controls





## Impack®

Cooling, Gas/Electric, Heat Pump & Dual-Fuel; Multiple Efficiency Levels; Up to 16 SEER; 2 - 5 Tons



#### Foundation<sup>®</sup>

Cooling, Gas/Electric; Adapts to Competitors Roof Curbs; 3 - 5 Tons; 7.5 - 12.5 Tons; 15 - 25 Tons



## Precedent® 17 Plus

Cooling & Gas/Electric; Up to 17.5 SEER; 3 - 5 Tons



## Precedent® &



## Precedent® with eFlex™

Cooling, Gas/Electric, Heat Pump & Dual-Fuel; Multiple Efficiency Levels; eFlex Variable Speed Compressor; Up to 23.5 IEER; 3 - 25 Tons



## Voyager® 2 with eFlex

Cooling, Gas/Electric (Up to 20.1 IEER), eFlex Variable Speed Compressor



## **Zoned Rooftop Systems**

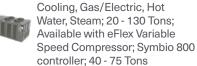
Pre-designed for small building comfort; Includes Precedent or Voyager rooftop unit, VAV terminal units, Tracer® Concierge™ system control & Air-Fi® wireless controls & sensors; 3 - 25 Tons



## Cooling, Gas/Electric; eStage™

Multi-Staged Compressors; Full & part load efficiencies; Symbio 700 controller; Up to 15.8 IEER; 27.5 - 50 Tons







Cooling, Gas/Electric, Hot Water, Steam; Air-Cooled and Evaporative Condenser; Available with eFlex Variable Speed Compressor; Symbio 800 controller; Tracer® SC+ controls; VariTrane™ VAV terminals; 90 -150 Tons;



Cooling, Gas/Electric, Hot Water, Steam; 20 - 75 Tons; Avail. with eFlex Variable Speed Compressor: Available connectivity; Symbio 800 controller; Up to 17.8 IEER

### **Self-Contained Units**



transport & installation; Factoryinstalled digital controls; Up to 13.9 EER, 17.9 IEER; Water Cooled 20 - 35 Tons; Remote Air Cooled - 32 Tons

## IntelliPak® Signature Series

Up to 14.1 EER, 19.3 IEER; Floor by floor system; Factory-installed digital controls; Air-Cooled 20-60 Tons; Water-cooled 20 - 110 Tons

## **Modular Self Contained System**

Smallest Footprint on the Market; Water-Cooled System; Variable speed compressors and fans; Full and part load efficiencies; Industry-leading Part Load Efficiency - Up to 20.8 IEER; 40 -80 Tons, cassette construction

## **Water-Source Heat Pumps**

## Axiom™ Standard Efficiency **GEH/GEV Models**

Horizontal (0.5 - 15T) or vertical (0.5 - 25T); Quiet operation; Multiple airflow configurations; 0.5 - 25 Tons



## Axiom High Efficiency Single-Stage EXH/EXV Models Horizontal or vertical;

**Electronically Commuted** Motor (ECM); Rotary or scroll compressor; 0.5 - 6 Tons



## **Axiom High Efficiency** Two-Stage DXH/DXV Models

Horizontal or vertical; 2-Stage compressor; Deluxe sound option for quiet operation; Meets LEED EAc4 requirement; 2 - 6 Tons



## Axiom Variable Speed VSH/VSV Models

Horizontal or vertical; eFlex™ Variable Speed compressors and fans; Single and three phase voltage; 2 - 5 Tons



### **Axiom High Efficiency Console GEC Model**

ASHRAE 62 indoor air quality compliant; Quiet operation; 0.5 - 1.5 Tons



## **Axiom Vertical Stack GET Model**

Multiple capacities & cabinet sizes; Available in PSC or ECM motors; Flexible air supply options; Integrated controls; 0.75 - 3 Tons



## **Axiom Water-to-Water EXW Model**

Co-axial heat exchanger; Rackable modular design; 5, 10, 20 Tons



## **Axiom Rooftop GWS Model**

Boiler/Tower or Geothermal applications; Multiple configuration options: Microprocessor controls; 3 - 20 Tons



## **Air Handling Units**

## **Performance Climate** Changer® - Catalog

Cost Effective Performance; Compact Footprint; Factory-Engineered, Mounted & Tested Controls; Indoor/Outdoor; Up to 15000 CFM; 2" R-13 Construction



## **Performance Climate** Changer® - Semi-custom

Leading Efficiency and Casing Performance: Dimensional Flexibility enabling Easy Installation: Indoor/Outdoor; Up to 60000 CFM; up to +/-10 in w.g.; 2", R-13 or 3", R-19 Construction; Factory Engineered, Mounted & Tested Controls



## **Performance Climate Changer** Custom (TCFS/TCPA)

Indoor or Outdoor; Up to 200,000 CFM; Up to +/- 12 inches w.g.; Full dimensional flexibility and thermal performance up to R-25



#### **Trane Air Rotation Unit**

Indoor or Outdoor: Up to 300 tons and 120,000+ CFM; CW or DX; 2" Foam Insulated panels, factory engineered & mounted controls



#### **Terminal Units**

### **Blower Coil**

Blower Coil Model BCXE; Indoor; Up to 4000 CFM; Horizontal and Vertical Configurations: ECM Motors. Multiple Filter Options, Factory-Engineered & Mounted Controls.



## CoolSense® Terminal Unit

Up to 1300 CFM; Variable speed ECM or constant-fan speed: Tracer® UC400 controller (available with Air-Fi wireless)



### VariTrane® Model VC\*F

Single Duct Variable Air Volume Boxes; 25 - 8000 CFM



## VariTrane® Model VDDF

Dual Duct Variable Air Volume Boxes; 80 - 8000 CFM



## VariTrane® Model V\*\*F

Fan-Powered Variable Air Volume Boxes; 200 - 3300 CFM; Parallel or Series Configuration



## VariTrane® Model L\*\*F

Low Height Fan-Powered Variable Air Volume Boxes; 100 - 1800 CFM; Parallel or Series Configuration



### VariTrane® Model VRRF

Round Inlet/Round Outlet RetroFit Variable Air Volume Boxes; 25 - 4000 CFM



## UniTrane® Model FC\*B

Horizontal or Vertical Fan Coil; Cabinet, Recessed or Compact Configurations; 200 - 1200 CFM



## UniTrane® Model FCV

Vertical High Rise Fan Coil Units Vertical stack fan coil; 300 - 1200 CFM



## Force-Flo™ Model FF\*B

Horizontal or Vertical Cabinet Heater; Concealed or Recessed Configurations; 200-1200 CFM



## **Model VUVE**

Vertical Unit Ventilators; 750 - 1500 CFM



## Model HUVC

Horizontal Unit Ventilators: 750 - 2000 CFM



#### Model UHS/UHP

Propeller Unit Heaters: Hydronic & Steam



## Model UHWA/UHAA/UHRA/UHXA/ **UHEC/UHCA**

**Electric Unit Heaters** 



### **Indoor Gas Heating Units**

Unit Heaters & Duct Furnaces; High Efficiency >95%



## **Split Systems**

## **Split Systems**

Cooling & Heat Pump; Gas, Electric, or Hot Water Heat; 1.5 - 5 Tons



### Odyssey™

Symbio 700 controller; Full & part load efficiencies; Up to 13.1 IEER; 6 - 25



## RAUJ

Air-Cooled Condensing Units; Available with Remote Chiller Evaporators; 20 - 120 Tons



Air-Cooled Condensers; 20 - 120 Tons



## Horizon™ DOAS

DOAS; Packaged product (DX, Air and Water Cooled); Heat Pump, Gas, and Hot Water; <51F Dew Point capability; ERV; AHRI 920 rated

## **HOXX**



Up to 100% outdoor air; Packaged product (DX - Gas Heating); >51F Dew Point capability; ERV; AHRI 340/360 certified; ASHRAE 90.1 compliant

## Make-Up Air Gas Heating Units

## **Model GSAA**

Indoor Gas-Fired Make-Up Air Handlers; Standard & High Efficiency; 100 - 1200 MBH



## Model GRAA

Outdoor Gas-Fired Make-Up Air Handlers; 100 - 1200 MBH



## Model AHOA

Packaged Air Handlers: Cooling. Make-Up Air, & Ventilation



Trane TR150/TR200 Variable Frequency Drives; 6, 12, 18 Pulse



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.