



**TRANE®**

**Water Cooled Screw Chillers And  
Water/Water Heat Pumps**

**RTWD**





YOUR EXPECTATIONS IN ONE PRODUCT



**Sustainability**



**Capacity**



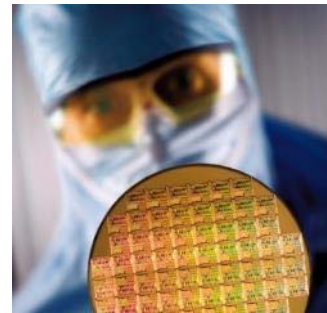
**Efficiency**



**Versatility**



**Reliability**





ENVIRONMENTALLY RESPONSIBLE

READY FOR A SUSTAINABLE FUTURE



R1234ze

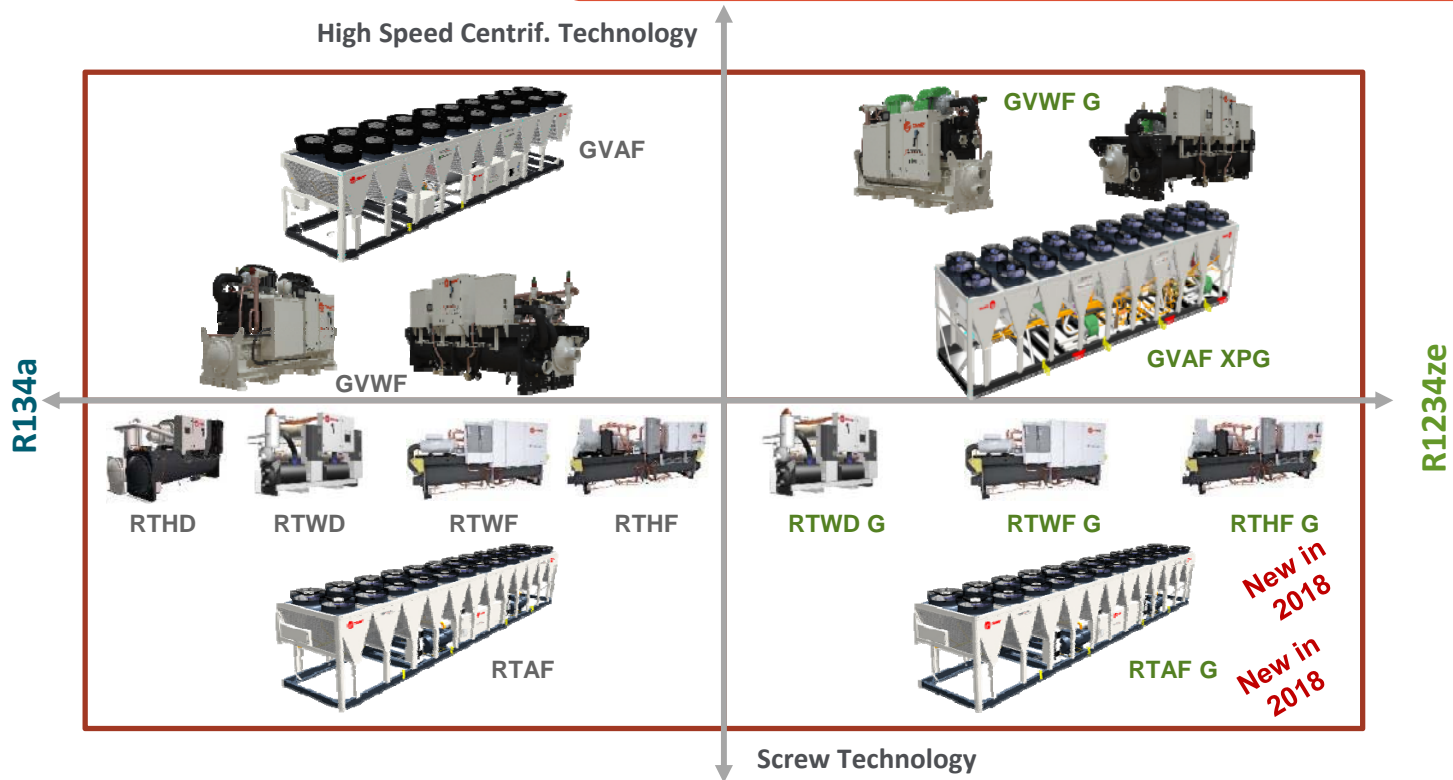
0 ODP  
Near Zero GWP (<1)

**EcoWise**<sup>TM</sup>

RTWDchillers with near zero GWP refrigerants are part of the Ingersoll Rand EcoWise<sup>TM</sup> portfolio of products that are designed to lower their environmental impact with next-generation, low global warming potential (GWP) refrigerants and high-efficiency operation.



# A UNIQUE PORTFOLIO FOR YOUR NEEDS








## CAPACITY RANGE



### Cooling Capacity (kW)

350	400	450	500	550	600	650	700	350	800	
365	RTWD HE G						640			
365	RTWD HSE G								815	

Cooling capacities: 12/7° C Entering/Leaving evaporator - 30/35° C Entering/Leaving Condenser



## FEATURES

Leading Controls

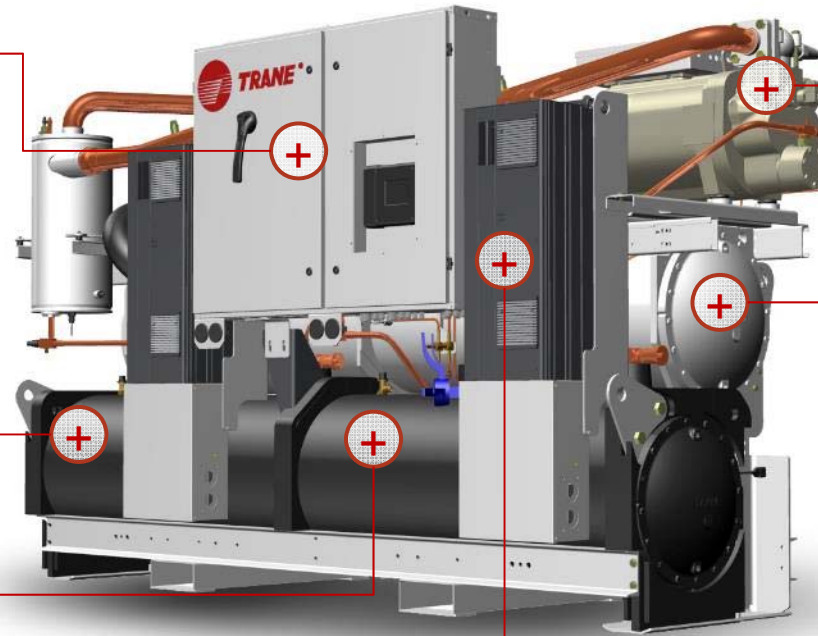
Maximum Efficiency

Environmentally Responsible

Proven Trane Reliability

Easy to install

Increased savings



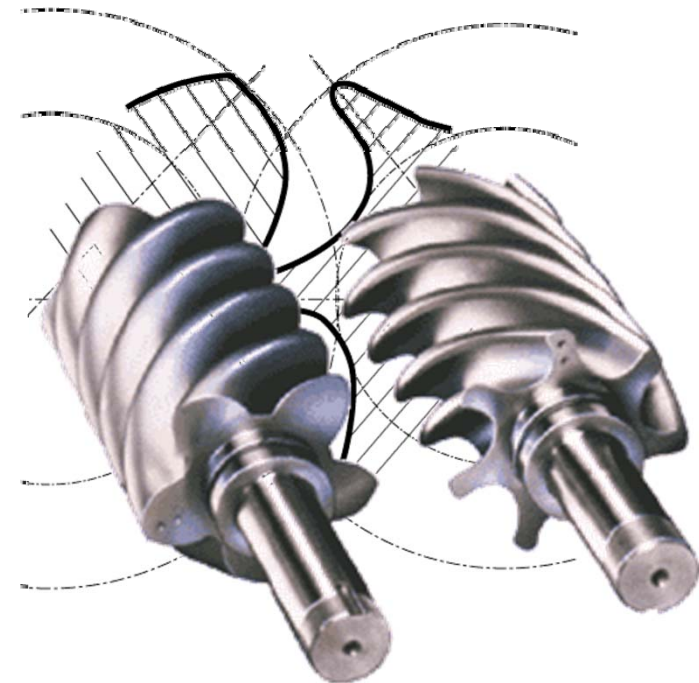


PROVEN TRANE RELIABILITY

## TRANE SCREW COMPRESSOR

### More than 28 years of experience

- Designed, built and tested according to the highest demanding and rugged standards
- Proven track record
  - ➔ More than 300 000 compressors worldwide
  - ➔ Industry leading reliability: rate greater than **99.5%**
- Fewer moving parts
- Direct drive low speed
- Suction gas cooled
- No oil pump needed
- Resistance to liquid slugging
- Field serviceable
- Wider operating map in the industry





EASY TO INSTALL

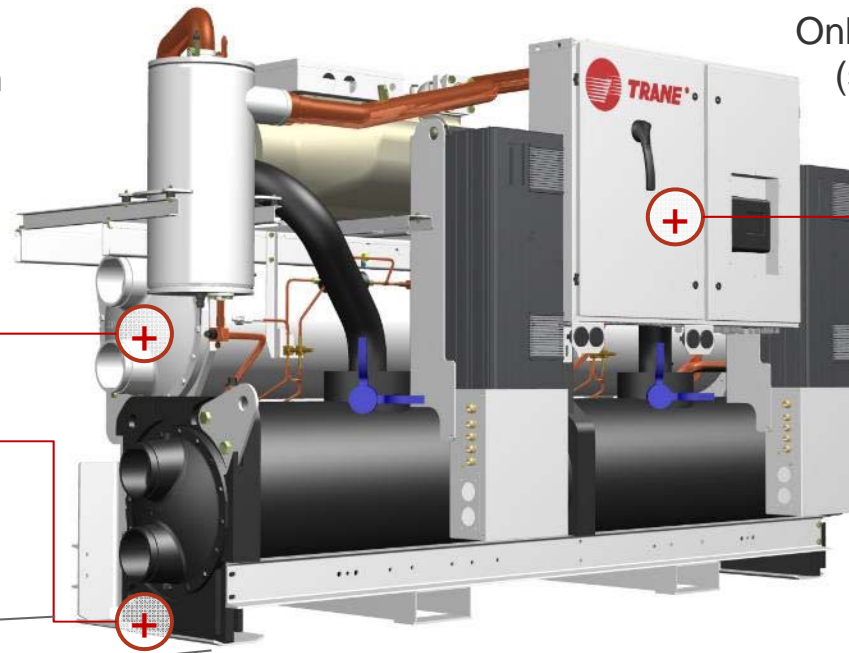
## SAVING TIME FOR COST SAVINGS

Only one water connection on the condenser (inlet/outlet)

Only one electrical connection (single point) as standard

All versions and sizes fit through standard 2m wide doors

1070 to 1370 mm max

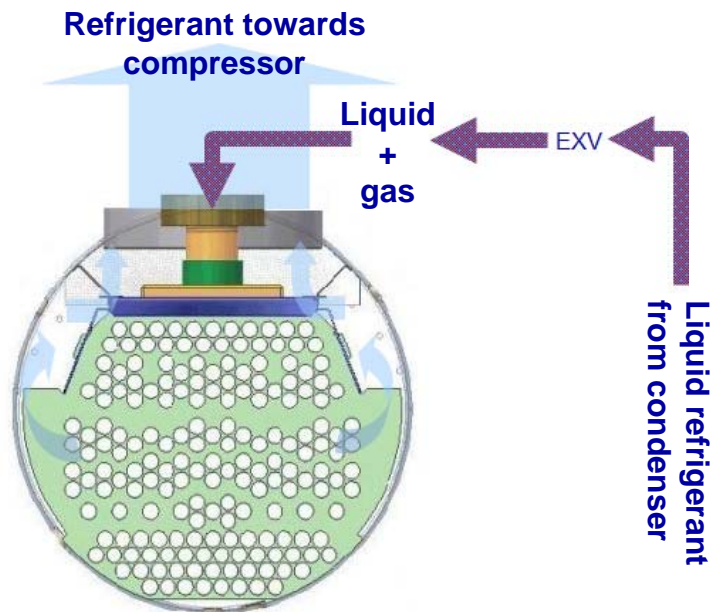






MAXIMUM EFFICIENCY

## PATENTED TRANE FALLING FILM



- Unique design
- Industry leading efficiency
- Reduces energy bills

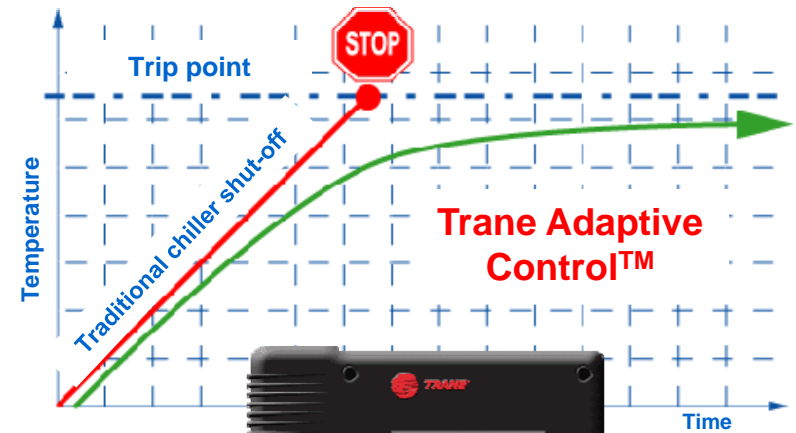


## LEADING CONTROLS

# TRANE ADAPTIVE CONTROL™

### Tracer® CH530

- Patented control algorithms
- Easy to use interface
- Optimized energy consumption
- On-site or remote monitoring
- Native Modbus, Lon or BACnet capabilities





## TESTING

### EXTENSIVE TESTING

- Operation in extreme operating conditions leading to World Class reliability
- Pressure vessels resistance
- Electro-Magnetic compatibility (CE compliance)
- Finite element analysis for structure and components design resistance and robustness
- Acoustics and vibrations testing





## QUALITY STANDARDS

### COMPLYING WITH THE HIGHEST STANDARDS



#### CE compliance

- Pressure Equipment Directive (PED) 97/23/CE
- Machinery Directive (MD) 2006/42/CE
- Low Voltage Directive (LV) 2006/95/CE
- Electromagnetic Compatibility Directive (EMC) 2004/108/CE
- Electrical Machinery Safety Standard EN 60204-1
- Electromagnetic Emission and Immunity Standard EN 61800-3 category C3

#### Quality Insurance processes

- ISO9001
- ISO14001

#### 3<sup>rd</sup> Party certifications

- Eurovent for units up to 1500 kW
- AHRI for units above 700 kW

**Guaranteed performance of the investment**



DESIGNED FOR MULTIPLE APPLICATIONS  
IN COOLING OR HEATING

## FLEXIBILITY AND VERSATILITY



Office buildings



Healthcare



Data Centers



Automotive Industry



Pharmaceutical Industry



Food and Beverage  
Industry



Hospitality Industry



District Cooling  
District Heating

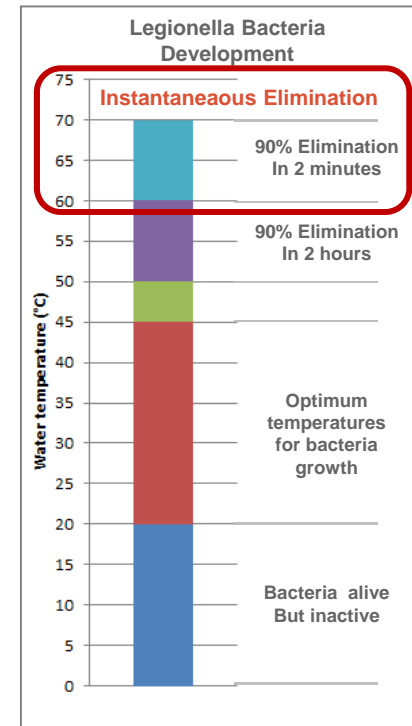
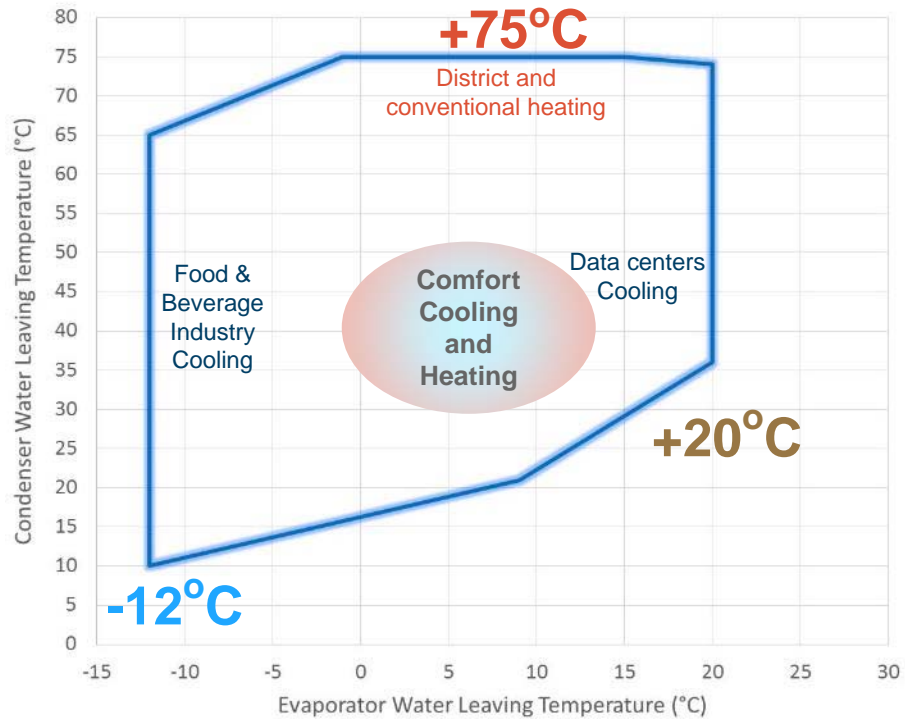




DESIGNED FOR MULTIPLE APPLICATIONS  
IN COOLING OR HEATING



## UNMATCHED OPERATING RANGE





DESIGNED FOR MULTIPLE APPLICATIONS  
IN COOLING OR HEATING

## HEAT PUMP OPERATION

### RTWD

- High leaving water temperature
  - Up to **75°C**
- High capacity water/water heat pump
  - Up to **905 kW** at 40/45°C\*
  - Up to **860 kW** at 47/55°C\*
- High COP\*\*
  - Up to **4.7** at 40/45°C\*
  - Up to **4.1** at 47/55°C\*
- Dedicated and optimized compressor for heating applications



\* Entering/Leaving evaporator : 10/7°C

\*\* Net COP Calculated according to EN14511-2013 standard



DESIGNED FOR MULTIPLE APPLICATIONS  
IN COOLING OR HEATING

## BRINE PROCESS APPLICATIONS



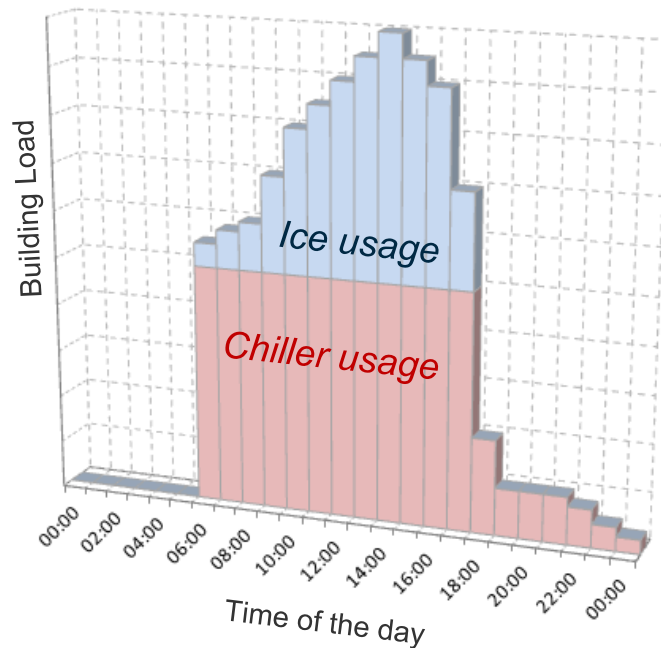
- Compliant with Med Temp industrial process application minimum efficiency requirements (SEPR)
  - European regulation (EU) 2015/1095
  - Entry into force on 2016, July 1<sup>st</sup>
- Operation from 4 down to -12°C leaving water temp
- Dedicated compressor for efficiency and reliability
- Operation with various brines:
  - Ethylene Glycol
  - Propylene Glycol
  - Ethanol
- Value of standardized design, capable to meet special requirements



DESIGNED FOR MULTIPLE APPLICATIONS  
IN COOLING OR HEATING

## ICE STORAGE

Typical ice storage application

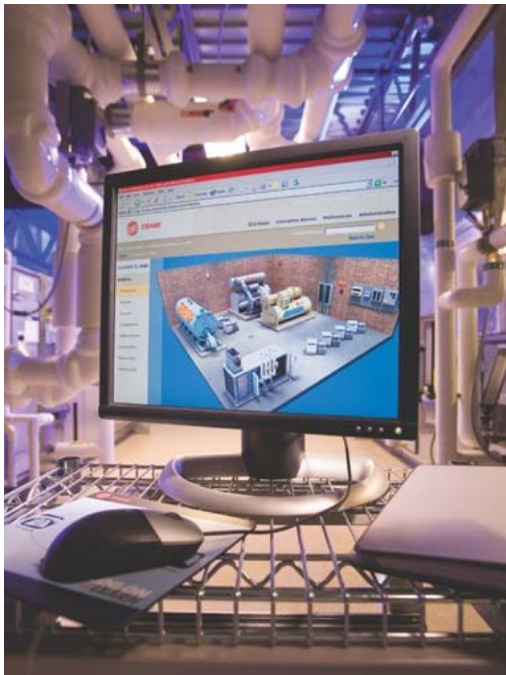


- Energy storage application
- Chiller builds ice when utility rates are lower, or when heating requirement overtakes cooling requirement
- Chiller smartly balances the contribution of ice melting and chiller operation to meet the cooling load with the best system efficiency
- Controls takes charge of:
  - controlling set points,
  - actuating chiller and or ice pump and other accessories



DESIGNED FOR MULTIPLE APPLICATIONS  
IN COOLING OR HEATING

## COMMUNICATION



- Compatible with all Trane Building Management Systems and chiller plant controls
- Communication interfaces
  - BACnet™ MSTP
  - ModBus™ RTU
  - LonTalk™ (LCI-C)







YOUR EXPECTATIONS IN ONE PRODUCT



Capacity



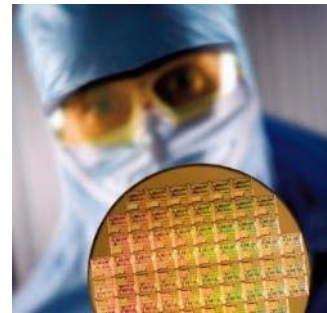
Efficiency



Versatility

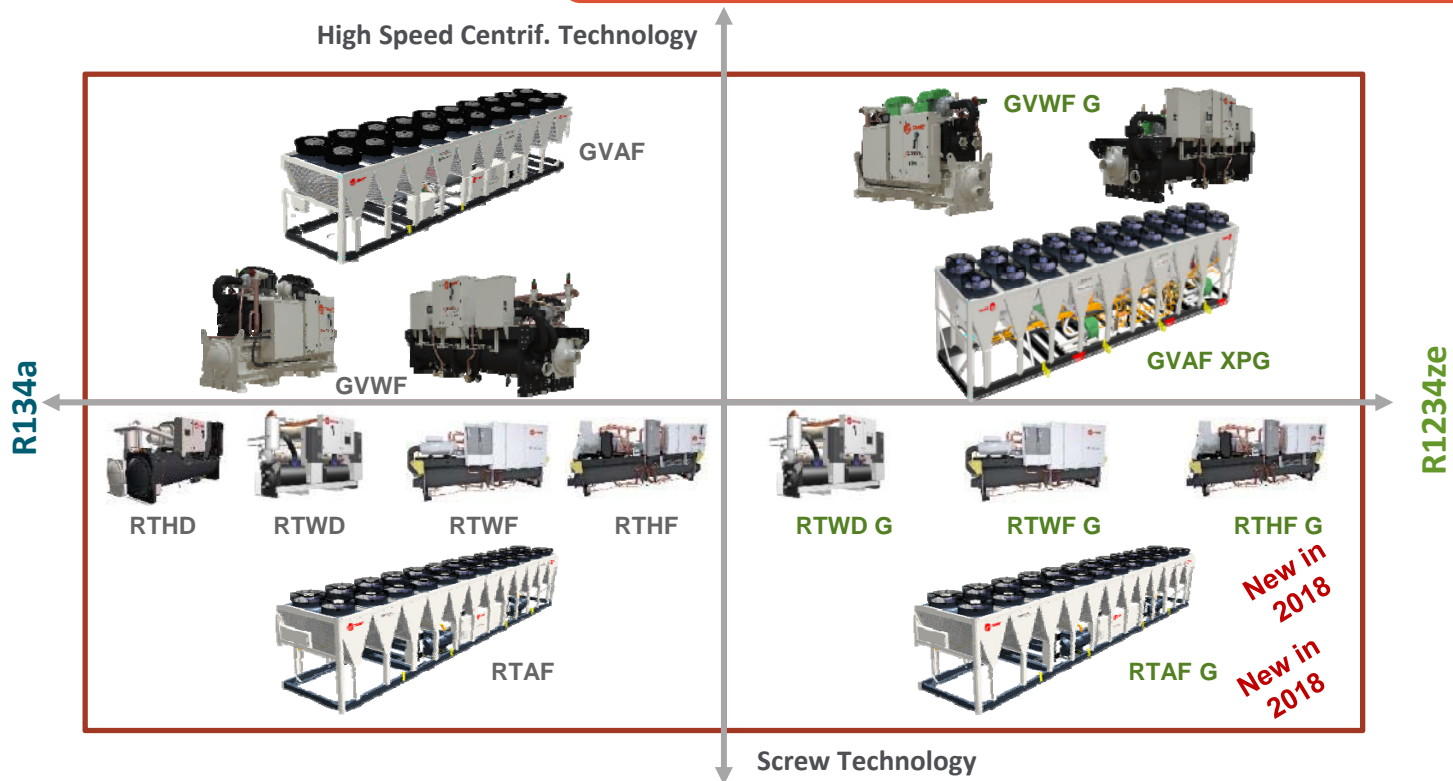


Reliability





# A UNIQUE PORTFOLIO FOR YOUR NEEDS





***TRANE***<sup>®</sup>

Copyright ©Ingersoll Rand, 2018, all rights reserved.