



# AquaStream 3G 60-470 kW

*The quietest, high efficiency chiller and heat pump ever*



# Shhh – it's quiet... and efficient

## Best of both worlds

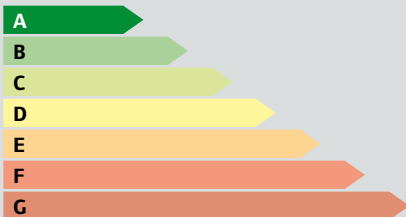
With most air-cooled chillers and heat pumps you have to choose between high-efficiency and low-sound levels. Until now it has not been possible to have both, because a smaller fan produces less air flow, reducing efficiency. But with the AquaStream 3G range, for the first time ever you can have the best of both worlds – high energy efficiency and low-sound levels. The new AquaStream3G gives you Energy Efficiency Ratings higher than 3.1 in cooling operation (EER) and 3.2 in heating (COP) and an operating sound level of as low as 76 dB(A). What's more, it meets all global green initiatives and ASHRAE energy efficiency standards.

## And reliable too

At Trane we know that energy efficiency and quiet operation are powerful attributes, but they are nothing without reliability – what's the point of having innovative technology if it breaks down all the time? That's why the AquaStream 3G is built on our knowledge and experience – tens of thousands of Trane Scroll units have been successfully deployed across the globe and our field service engineers have helped us to constantly identify, fine-tune and improve reliability in genuine realistic conditions.

## Trane's excellence shows

### Class A



The AquaStream3G chiller and heat pump are certified "Class A".

### All year round operation



Cooling from 52°C down to -18°C ambient, with leaving water temperature down to -12°C.  
Heating down to -10°C ambient, with leaving water temperature up to 55°C.

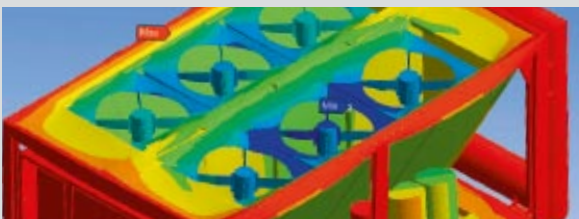
### Low life-cycle costs

Trane engineers, using the best analytic approaches and tools in the industry, can find ways to reduce your energy usage by optimizing energy efficiency and performance at every point within your system. We design systems tailored for your specific application.



- *High efficiency*
- *Low-sound levels*
- *High reliability*

### Durability



Advanced FEA (Finished Element Analysis) and vibration testing guarantee robust design which is built-to-last.

### Ideal serviceability



All main service points are located within only 30 cm from the outer edge of the unit. The equipment can be serviced in a faster and safer way.

# AquaStream 3G

## All essentials from one manufacturer

Unlike other chiller suppliers, who assemble systems from a range of manufacturers, Trane designs and manufactures all of the essential components itself: compressor, exchanger, fans and controls. This ensures that Trane's rigorous quality control procedures are applied at every stage, and that these crucial components work perfectly as a complete system.

- 1 High-efficiency:** Thanks to the industry-leading scroll compressor. And importantly, this high efficiency is available at full- and part-load.
- 2 Low-sound levels:** Quiet fan design is standard, with attenuation options for ultra-quiet operation.
- 3 Certainty:** The pump package and buffer tank are pre-wired and rigorously tested in the factory.
- 4 Energy saving options:** The heat recovery exchanger can provide 70°C water for use in dehumidification or other applications, such as domestic water.
- 5 High-reliability:** Each unit undergoes a final run test before leaving our factory. Trane ensures high reliability of each and every component by verifying them at the design phase following a rigorous qualification process.
- 6 Advanced controls:** CH530 improved fan staging logic for low ambient starting capability. Adaptive Control™ maintains operation in adverse conditions. Temperatures are controlled within a precise +/- 0.5°C.
- 7 Durability:** Powder coated components and optional coated coils minimize corrosion.
- 8 "Everything in the box"** for easy installation: With the buffer tank, pump, filter and flow switch inside the unit, you save space and time on the jobsite.







- 9 Safe and easy servicing:** Hinged fans can be propped open for safe and easy coil cleaning and servicing. Open unit structure gives full and simple access to all components.
- 10 Patented refrigerant circuit on heat pumps:** Circuiting concept and design allowing to meet the highest reliability standards yet reaching superior efficiency.

- 11 Innovative defrost on heat pumps:** Trane's advanced controller allows for smart defrost, drastically reducing unit downtime and energy consumption. By carefully looking at the operating conditions, an adaptive logic prevents unnecessary defrost cycles, and when they are necessary, reduces them to the minimum downtime. During the defrost cycle, to maintain heating capacity and comfort, the circuits will defrost alternatively.



## *Expertise to design and optimize HVAC systems*

Whether you need one unit or several working as a system, you have full visibility of performance at a glance, right from your desk.

When you specify Trane equipment, you don't just get a top-class product, you also get the expertise to optimize your whole HVAC system and keep your total building operating cost to a minimum while maintaining the utmost level of comfort.

### **Multiple chiller systems**

Trane Chiller Plant Control is powerful software with a pre-engineered set of functions. It only requires the input of your installation's specific parameters to pilot the system with high level of optimization.

### **Heating, ventilating and air conditioning systems**

Trane fan coil and air handling equipment comes with factory-mounted controllers for integration within a Trane Building Management System.

### **Building management systems**

**Tracer Summit™** building management system provides supervision and control through a single, integrated system. Its user-friendly graphical interface, associated with its pre-engineered functions, and standard communication protocols allows you to efficiently pilot your building performances.

**Tracer Summit™** can help you meet your building's temperature, humidity, ventilation and energy management needs, no matter how challenging. High quality, easy-to-use, integrated and reliable controls are the key to maximizing efficiency and to prolonging the life of your building comfort system.



# Systems

Peace of mind with service and parts  
 At Trane, we are committed to providing full service solutions that are efficient and reliable, just like our equipment.

### Elite Start™

Trane equipment is commissioned by technically competent factory trained technicians. Trane commissioning confirms that the system has been not only accurately installed, but also configured and fine-tuned to operate according to your requirements.

### Operate and Maintain

To keep your Trane equipment operating at peak efficiency, Trane offers technical expertise to maintain or repair your system. Our full range of HVAC spare parts, both Trane-specific and generic, coupled with our advanced logistics network ensures a quick and reliable service. The result? Even in the rare event of equipment failure, downtime is kept to an absolute minimum.

### Upgrade and Improve

To help you conserve energy while maximizing cost saving in your building systems and operations, Trane offers:

Trane Select Contracts tailored to your needs, your business, and your application. They are comprised of several levels of services, ranging from a 24/7 duty to full 'all parts and labor' coverage, including life cycle management and maintenance.

Trane Care Services to offer a wide range of upgrade products to answer your needs in terms of reliability, energy conservation, and respect of the environment.



*Make certain your HVAC systems are fully optimized and integrated – with our expert services.*



### **How do you choose?**

There are hundreds of possible system designs, and chiller configurations, impacting chiller system efficiency levels. How do you possibly narrow the choices and definitively determine the right HVAC system design for your building?

Amazingly, it's quite easy... with Trane's help.

Our System Analyzer™ helps estimate building loads and performs preliminary energy and cost analyses of virtually any building, system and equipment combination. For LEED certification, TRACE™ 700 (Trane Air Conditioning Economics) software helps analyze the energy and economic effects of virtually any system configuration. It allows you to manipulate a wide range of variables to create a detailed energy usage profile for your specific building. Unlike overly simplified spreadsheet-based energy analyses, TRACE 700 software

accurately compares the impact of building alternatives. You can test the effects and consequences of different architectural features, HVAC systems, and building utilization or scheduling scenarios.

And you can see the different economic options for each scenario. This enables you to make genuine life-cycle, cost-based system decisions with absolute confidence.

### **Contact us – we're here to help**

We can help you plan, install and manage your next HVAC system – so you can concentrate on your core business. Our experience and expertise in designing, commissioning and maintaining HVAC systems not only guarantees a solution that best answers your needs, it also gives you complete efficiency and peace of mind.

Call us, let's talk.



Ingersoll Rand (NYSE:IR) is a world leader in creating and sustaining safe, comfortable and efficient environments in commercial, residential and industrial markets. Our people and our family of brands—including Club Car®, Hussmann®, Ingersoll Rand®, Schlage®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings, transport and protect food and perishables, secure homes and commercial properties, and increase industrial productivity and efficiency. We are a \$13 billion global business committed to sustainable business practices within our company and for our customers.

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.  
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