Enhance your equipment reliability and efficiency

Trane Care™ customized service solutions for building owners address operating performance, energy efficiency and environmental concerns. Adiabatic cooling reduces the temperature of the air entering the coil, facilitating improvement of equipment reliability and efficiency.

Operating equipment outside design parameters may significantly reduce reliability and efficiency. Reasons for such exposure may include:

- Units located in places of higher ambient air temperatures.
- Non-conformity with installation clearances between units, leading to air recirculation.
- Units retrofitted with R404a facing ambient air limitations.
- Aggressive outdoor conditions such as sand and dust storms.

Consequences include:

- Frequent nuisance equipment trips or breakdowns.
- Increase in your electricity bills.
- Drop in equipment efficiency.

Benefits include:

- Reduction of system power input: a 10°C temperature drop delivers a 13% reduction in power consumption, bringing immediate cost savings.
- Delivery of design capacity without interruptions when ambient air temperature reaches summer peaks above design.
- Enhanced compressor life due to reduced discharge temperature.
- Permits R404 refrigerant retrofit where ambient temperatures are high.
- The mesh placed in front of the coils provides shading which overcomes the solar radiation effect on coils.
- The mesh also acts as a self cleaning filter protecting the coils.

**Trane Adiabatic Cooling – the simple, reliable solution**

Turn to Adiabatic Cooling from Trane and the problems are solved. It’s a unique system that improves the performance of all air cooled equipment operating in adverse conditions. Without requiring energy use to provide its cooling effect, Trane Adiabatic Cooling improves reliability and efficiency.
How the system works
The Trane Adiabatic Cooling concept is based on the natural thermodynamic properties of water.

Water is sprayed intermittently onto large non-metallic mesh panels installed in front of the heat rejection coils of chillers, remote condensers, rooftops, etc. The evaporating water creates the cooling effect, lowering the air temperature before it reaches the condenser coil.

The air temperature reduction can reach as much as 20°C depending on the ambient air enthalpy conditions.

System features
The Trane Adiabatic Cooling system has been designed for versatility, simple installation and economical operation.

• Flexible design: Sectional mesh panels and coil clip suit every model from mini-split to large water chiller.
• Water system: Comprising pressure regulating valve, solenoid valve, and nozzles suitable for filtered water with a minimum of 2.5 bars. Soft water is required to avoid scaling on mesh.
• Controller: Initiates the solenoid valve according to pre-set ambient conditions. The frequency and duration of cycles are carefully determined to match system requirements while minimizing water consumption.
Trane Care Services
Trane Care™ offers an extensive array of upgrade products to answer our customers’ top business priorities. Because Trane service experts will analyze your objectives, you can trust they will make the best recommendations to meet your building needs.

With Trane Care, let us show you how to enhance your cooling and heating system to like-new performance. Trane Care reliability services reduce the risk of breakdowns, improve operation and extend equipment life.

Trane Care proposes cost effective ways to optimize the energy efficiency of your existing system and generate immediate savings.

Trane Care service experts can advise building owners and managers on how to manage complex issues such as building carbon footprint, occupational health, comfort, safety and compliance with national and local legislation.

Call on Trane
Call on Trane today and get the expertise of a global leader and its experienced service professionals and resources. With more than 120 locations in Europe, Middle East, India and Africa, Trane has one of the most extensive service networks in the industry.

Our local technicians have:
• Knowledge on the history of your equipment and controls
• In-depth expertise in servicing your equipment and controls
• Access to the latest technology and support

Contact your local Trane sales office to discuss your energy saving opportunities.