

TOTAL COST OF OWNERSHIP

Optimizing your total cost of ownership requires a holistic approach to design and services. Trane's team of experts will help you explore your options and determine the most economical approach to your air systems design to sustain optimal performance over the life of your building, utilizing comparative system and component analysis, bringing a balance to both economics and technology.



One aspect of High Performance Buildings that is not always considered is energy efficiency. Lower environmental impact and improved productivity due to excellent **Indoor Air Quality** all add up to a lower total cost of ownership while exercising environmental responsibility.

As building owners and engineers plan new projects or prepare for renovations, it's important to consider more than just the cost of buying, installing and commissioning individual elements. At Trane, we go beyond recommending products and services to meet the immediate process or comfort requirements of your building; we supply systems geared towards lowering the total cost of ownership over the entire lifecycle of the building.

Our approach is comprehensive, and includes ensuring the air handlers, software tools and services, support this efficient approach to your building project-assisting in all ways to ensure an efficient, environmentally friendly and code compliant air-system.

With all of these opportunities to minimize resource usage while maximizing your investment, Trane can help you make high performance cost effective solutions for your HVAC project.

examples.....
Patented Trane Traq dampers, allow precise fresh air monitoring to ensure optimum energy use.

Working closely with the designers, Trane engineers can also play key roles in proposing optimized fan- motor VFD controlled systems with energy savings driving cash flow.



STANDARDS & CODES

The Trane CLCP_{EURO} is a EUROVENT certified Air Handler. Airflows and coil performances are guaranteed within Eurovent standards. This means, cooling, airflow, acoustic, thermal, strength, leakage rates are certified to EN 1886 and leaves the designer and owner confident without worries of surprises at site.



PERFORMANCE CERTIFIED

The CLCP_{EURO} is a performance and certified Air Handler. Tested and certified to EU 1886 EU 13053 of the Eurovent certification program. These CLCP_{EURO} AHUs are certified to stringent standards covering:



- Strength
- Leakage
- Thermal
- Acoustics
- Coil &
- Fan Performances

With airflows covering 0.5-30m³/s, this flexible, semi custom air handler, covers a wide spectrum of applications and offers accurate control and reliable performance, in this fast paced globally changing and environmentally challenged world.

With it's stringent performance certification standards, promises are realized, dollars saved and carbon footprints reduced.



Quantum Climate Changer CLCP_{EURO}

HIGH PERFORMANCE
BUILDINGS

INTEGRATED
Critical Control Solutions

INTEGRATED COMFORT
SOLUTIONS



COMMITTED
BUSINESS ADVANTAGES

EXPERT
experience

SYSTEMS
SERVICES



Trane

www.trane.com

For more information, contact your local district office

Literature Order Number CLCP-SLB001-EN

Date December 2013

Supersedes September 2012

Stocking location Malaysia

Trane has a policy of continuous product and product data improvement and reserve the right to change Design and specifications without notice. Only qualified technicians should perform the installation and servicing of equipment referred to in this publication.



ENGINEERING A PURPOSE DRIVEN BUILDING



TRANE HVAC SYSTEMS TRANE ICS:

INTEGRATION SYSTEM

Every building has a purpose, whether it's to nurture inventions, house masterpieces, cultivate learning or even to host birthday parties. A true high performance heating, ventilating and air conditioning (HVAC) system is one that makes your building work better for life.

Engineering an air system that ensures all round confidence, is what's entrusted to the Trane CLCP_{EURO}.

Coupled with Trane's immense system level experience and technology, the CLCP_{EURO} capability has today, spanned a wide spectrum of building applications globally.



Trane Air Systems looks at the complete solution - from component level, to unit level and finally to system level mechanical solutions that incorporate intelligent control. Trane's Integrated Comfort Solutions (ICS) meet the most challenging temperature, humidity and ventilation needs by applying Trane controls, system components, and applications engineering expertise to create the most effective and efficient system. ICS systems enable comprehensive monitoring **to ensure optimal operating performance.** We design our systems to enable communication and interaction between multiple types of building automation systems for optimized operation and maximum efficiency. Factory Engineered Control [FEC] options on the CLCP_{EURO} is essentially the brains that ensures a consistent environmentally controlled air system delivery at optimized energy levels, allowing full remote access, monitoring and data logging capability.

THE HEART OF AIR SYSTEMS: CLCP_{EURO} AHUs

Trane offers a full spectrum of air handling equipment and systems to meet your performance requirements. From 1500 cfm to 50,000 cfm [0.5-30 CMH], the CLCP_{EURO} is available with numerous custom options, to suite any HVAC air system application. Special energy-efficient tuned, environmentally responsible systems can also be delivered depending on what's best for the customer. All Trane CLCP_{EURO} AHUs are designed to be energy-efficient, with several energy recovery options available to minimize energy consumption. Alternative systems could be analyzed for the best economic returns.

Trane also offers several dehumidification options, including the patented CD QTM (Cool Dry Quiet) desiccant dehumidification system - the first to break the dew-point barrier using standard equipment.

ENERGY, INDOOR AIR QUALITY AND THE ENVIRONMENT

At Trane, our philosophy about creating the right comfort and critical control environment is deeply rooted in our commitment to offering systems and services that support energy efficiency, maximize indoor air quality, and take a sustainable approach to the environment. In other words, we believe in creating High Performance Buildings. A **High Performance Building** is certainly not just a static shelter from the elements; it's constructed to protect and support a wide range of pursuits. It is a building that, through the application of knowledge and technology, becomes an asset for your business. These buildings increase productivity by creating a healthy and comfortable indoor environment for the people & processes within the building. At the same time, a **High Performance Building** lowers your total cost of ownership by utilizing resources more effectively to minimize energy requirements and reduce environment impact throughout a its life cycle.

Trane has a long term commitment to addressing these issues. By developing, and installing IAQ technologies within energy-efficient and environmentally-responsible systems and services, we make the most of your investment by creating and sustaining your High Performance Buildings. for life.

The CLCP_{EURO} is the embodiment of these technologies which work to deliver a sustainable and reliable air-system delivery.

Tuning the AHU to ensure optimized coil, filtration, fan, motor, coupled with the Eurovent certified casing and performances, ensures an energy tuned AHU.

INDOOR AIR QUALITY

Temperature, humidity, cleanliness, freshness, odors and noise are all aspects of Indoor Air Quality that impact people, processes and productivity. Trane applications experts can help you create the best possible Indoor Air Quality utilizing the CLCP_{EURO}.



It's easy to take the air in your building for granted until an issue arises that draws attention to it. Acceptable indoor air quality (IA Q) is much more than providing a prescribed volume of outdoor air per person. Today's building owners are concerned about maintaining and documenting IA Q, not only to avoid problems with condensate, building sickness, or noise issues, but to provide a clean and healthy working environment in the building.

Trane believes that good air system selection and design, specification of equipment and furnishings, along with proper building operation and maintenance are the foundations of high quality indoor air.

Temperature, humidity, particulate count, fresh air volume and circulation, odors are all variables of IA Q that Trane can monitor and control for your specific building's purpose, whether your building is a community elementary school, 5 star resort, family restaurant or children's hospital.

Any of these criteria require effective management both at the equipment and the building control levels. **Air handler selection** has a direct impact on air cleanliness, the health of the people in the building, and insuring proper air movement. **High quality sensors and controls** are the nerve center of a good air handling system. They provide timely, accurate feedback; allow consistent monitoring of performance and facilitating service.

For example, Trane's patented Traq™ dampers with airflow monitoring stations can be coupled with a Tracer™ building management system to monitor, control and document ventilation airflow in compliance with ASHRAE 62 standard requirements. Integration with the chiller plant assures the precise amount of chilled water at exactly the right temperature. In these and many other ways, the **Trane's Inte-grated Comfort™ Systems (ICS)** concept facilitates building environmental quality and simplifies the task of system management and service.

Trane has the expertise to ensure that all essential aspects of your system support your IAQ requirements and help your building fulfill its purpose, however specialized it may be.

ENERGY & THE ENVIRONMENT

Energy use has a dramatic impact on operating expenses and the environment. Trane has spent decades developing technologies to help you make more efficient and effective use of scarce resources. An energy tuned CLCP_{EURO} coupled with FECs and air systems recovery devices will save energy and reduce your buildings carbon footprint... and reduce your energy budget.



Better Buildings Create Greener Communities™

Demand for environmentally responsible buildings grows as people realize that it's not a cost, it's an investment. Green buildings are designed with energy efficiency, **indoor air quality (IA Q)**, and sustainable materials in mind.

The right air systems coupled with efficient chiller systems is critical to green building. As a leading global supplier of HVAC systems and services, with more than 160 LEED Accredited Professionals, Trane can help you achieve your green building goals.

Building Green

Because more and more businesses recognize the importance of building green, Trane actively supports the Green Building Councils (GBC) around the world (such as USGBC, Canada GBC, Indian GBC, China GBC, Brazil GBC, Mexico GBC, etc) and Green Building conferences such as Greenbuild and Green Building Congress. We are advancing building technologies and solutions that accelerate the design and construction of green communities.

Here are just some of the ways Trane is helping buildings go green and attain LEED certification.

- Airside Energy Recovery Systems. Alternative comparisons can be generated to best meet application and budget needs.
- Energy Tuned AHUs, tuned to maximize performance with minimum power input.
- Sustainable and traceable Delivery with Trane controls and drives.