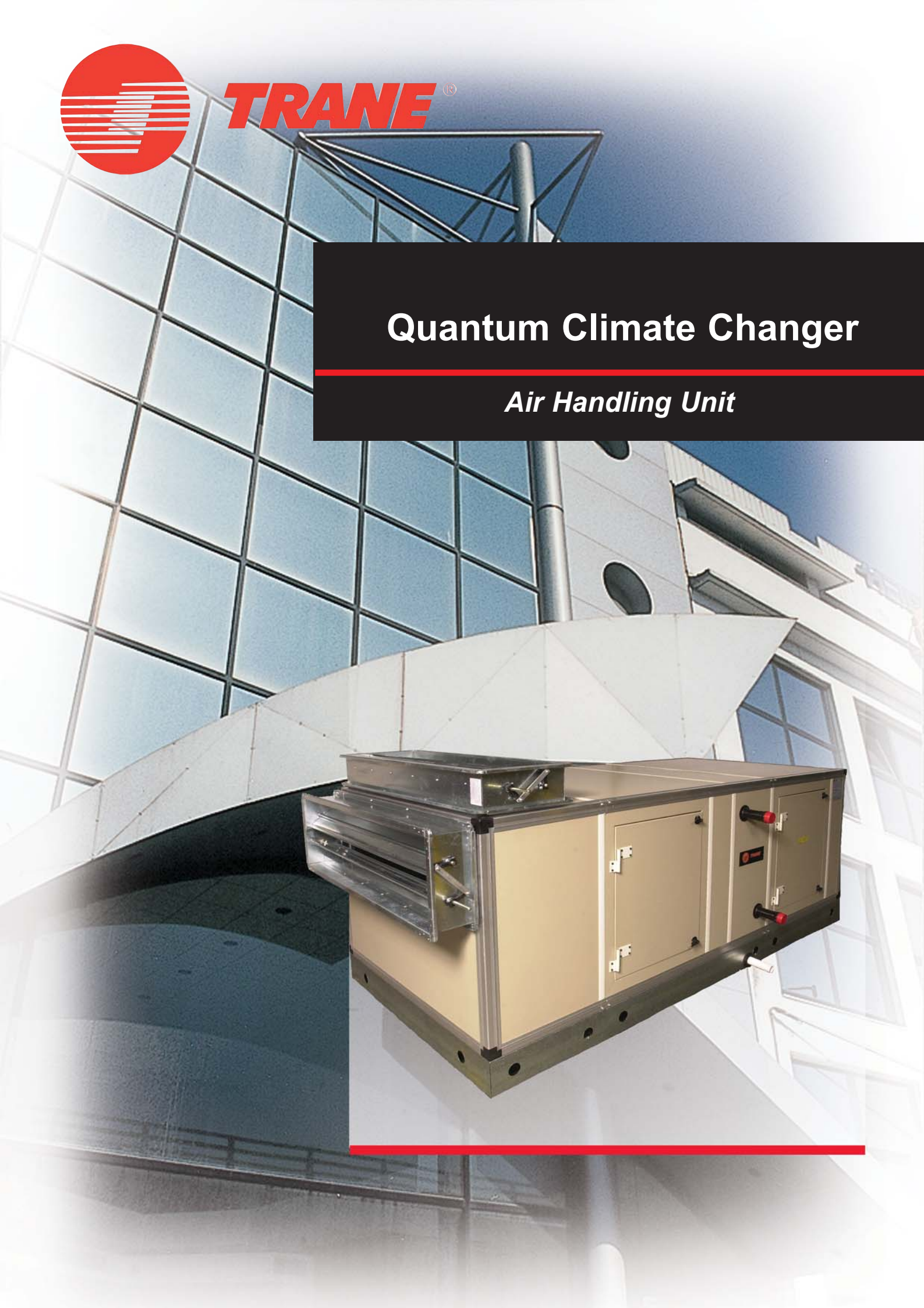
TRANE®

Quantum Climate Changer

Air Handling Unit



Trane has been manufacturing Air Handling Units throughout the world for the past forty years and over this period has successful supplied and installed more than one million units. This proven worldwide experience allows us to develop our products to meet customer needs where other suppliers cannot.

Air Handling Units have been manufactured by Trane in the UK at our Colchester plant since 1988, and have been installed in sites throughout the UK as well as Europe, Russia, Asia and the Middle East.

The new range of Quantum Climate Changer units have been primarily designed to be a cost effective, fast build alternative to welded steel framed units, whilst offering significant reductions in overall unit weight but without losing inherent strength, coupled with a sleek clean-lined aesthetic appearance / finish.

Units are constructed from an innovative closed box extruded aluminium section framework, with double wall CFC free polyurethane foam insulated panels, offering excellent thermal properties and maximum sound reduction through the unit casing.

Key features of this design and construction are:

- Unique rigid framework
- Low casing leakage
- Cold bridge free
- Flexible modular construction providing easy on-site build option

The range covers over 30 standard unit sizes from 0.25m3/s to 30.0m3/s. Unit size selection is normally dependent on coil velocity. A unit capacity chart providing basic unit sizes at a velocity range of 2-3.5 m/s for comfort cooling and general ventilation applications is located on the back page of this brochure. Non standard unit sizes are also available to suit sites where access or space is limited.

Quantum Climate Changer units can be tailored to suit most internal and external applications and are manufactured to meet the specific customer requirements. They have also been designed to operate in particularly demanding environments such as Hospitals, pharmaceutical laboratories, coastal and swimming pools.

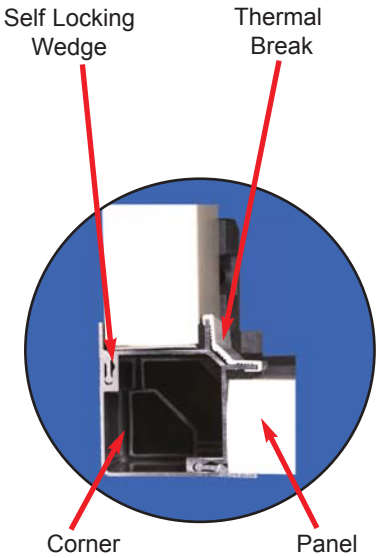
Other typical applications would include commercial buildings, Leisure Centres, Shopping Centres, Hotels and many more.

The Quantum Climate Changer can also be supplied with various energy efficient and heat recovery packages for different building applications.

All the major types of air to air or fluid to air heat recovery systems such as Coil Loops, Plate Heat Exchangers, Thermal Wheels and Heat Pipes can be incorporated into the unit selection, design and manufacture.

As with all Trane products, Quantum Climate Changer Air Handling Units are serviced throughout the UK by the regional Service Solutions network. Offering services ranging from on-site installation to annual maintenance contracts.

The Colchester plant for manufacturing the Q



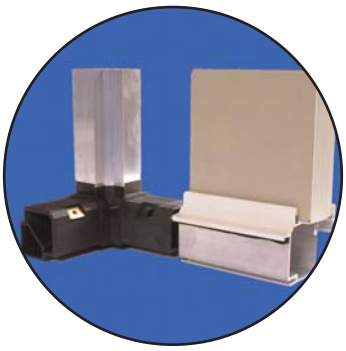
The unit framework is assembled with 3D injection moulded Nylon corner pieces, providing an extremely rigid structure onto which all internal components and casing panels are mounted.

Casing panels are held firmly in place onto the framework by the means of a self-locking wedge mechanism, which exerts pressure evenly onto the panel and sealing gasket.

Our unique integral thermal break, not only on the unit framework, but also on the casing panel, provides a cold bridge free construction.

Quantum Climate Changer Air Handling Units

As part of the innovative casing design, hinged access doors are mounted into a purposely designed double skinned and insulated door frame, in which the door itself closes onto compression rubber seals, providing an air tight casing.
The hinged door design also incorporates a lift off facility within the hinge, so that the door can be easily removed where access is limited.



Each Quantum Climate Changer is available with factory engineered controls that are designed to lower installation costs and risk while dramatically improving the quality of the application. The advantage is strict quality control provided in a world-class manufacturing environment. The entire air handler control system is engineered, mounted, wired and tested before the unit leaves the factory.

Typically the controls components included in our controls packages are:

- starters
- frequency inverters
- direct digital controllers
- coil valves
- damper actuators
- temperature, humidity and pressure sensors
- frost protection switches
- fan air-flow proving
- fan/filter status switches

The control package can be stand-alone air handler operation or can be tied to other Trane products through Trane Integrated Comfort System (ICS), a powerful system architecture that unifies Trane HVAC equipment, direct digital control and building management into a coherent whole with an assured source of support.

Benefits to the owners, facilities managers, designers and contractors are:

- single source responsibilties
- comprehensive monitoring and diagnostic capabilities
- system optimisation resulting in effective operation of entire HVAC system
- allows integration and interoperability through most of the industry standard open communication protocols.

LONUSERS ukosa

That means:

- Control components are properly sized, selected and laboratory-tested for optimal system performance.

- Trained technicians install the controls under ideal conditions using state-of-the-art equipment and wiring practices, eliminating costly conduit and reducing installation time.

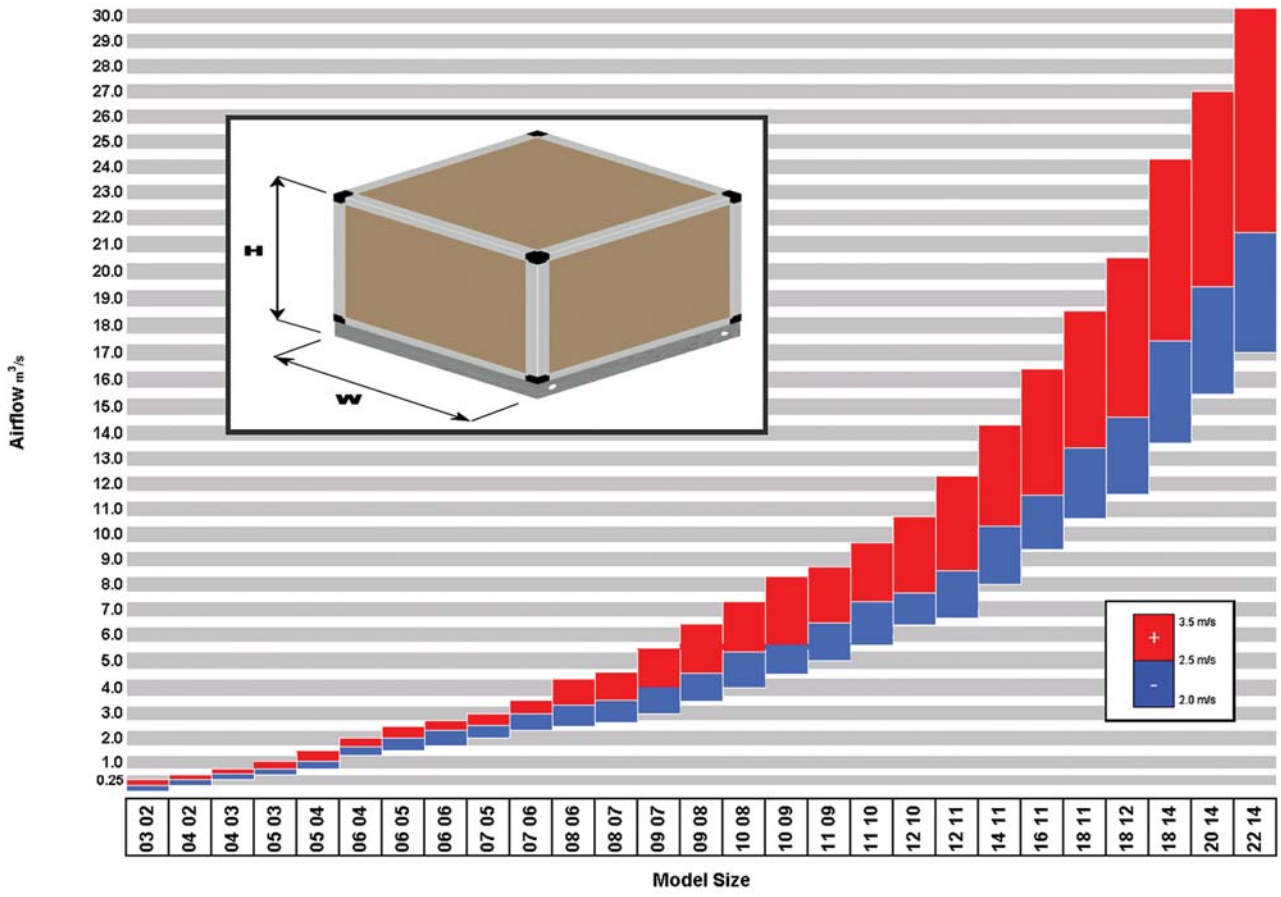
- Each air handling unit control system is fully run-tested before it leaves the factory. A computer-based test station simulates actual operating conditions, supervises the unit controller, drives the actuators and surveys the input and output devices . . . all to help assure trouble free installation and reliable operation when the Quantum Climate Changer reaches the job site.

Factory Engineered Controls, including Tracer MP581 controllers, provide either stand-alone air handler operation or allows integration into a Trane Tracer Summit Building Management System or any LonWorks controls network.
Tracer MP581 controllers communicate by means of the LonTalk protocol. The controllers can be configured to conform to the LonMark Space Comfort Controller (SCC) profile or the Discharge Air Controller (DAC) profile.

An optional operator-display touch screen provides an intuitive operator interface for monitoring and changing building control functions. The operator-display touch screen has a common look and feel across Tracer controllers. This similarity simplifies training and enhances operator efficiency in buildings with multiple Tracer controllers.

Technical and Selection Data

UNIT SIZES - CAPACITIES



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Height "H"	588	588	763	763	938	938	1113	1288	1113	1288	1288	1463	1463	1638	1638	1813	1813	1988	1988	2163	2163	2163	2163	2688	2688	2688
Unit Size	03 02	04 02	04 03	05 03	05 04	06 04	06 05	06 06	07 05	07 06	08 06	08 07	09 07	09 08	10 08	10 09	11 09	11 10	12 10	12 11	14 11	16 11	18 11	18 14	20 14	22 14

All dimensions in mm based on 25mm (1") panels, for 50mm (2") panels please add 50mm to the above dimensions, unit baseframe height is included in the "H" values and is 160mm

CE

TRANE

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File Number SLB-RF-CLCP-SLB012-GB 1102

Supersedes None

Stocking Location UK

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