





# OPTIMISING THE WELLBEING OF YOUR STAFF

Construction standards are constantly being updated to better meet the needs of individuals in terms of wellbeing in their living areas and places of work. Increasingly stringent, they are designed with the comfort of occupants in mind, and also aim to protect their health, lower energy consumption, and reduce the impact to the environment.

CIAT is making a long-term commitment to offering solutions which add value to your customers' living spaces. Our solutions meet the strictest requirements for comfort and air quality by optimising the indoor environment and working conditions for occupants.

## **CIAT'S EXPERTISE**

#### **GREATER COMFORT**

Adapted to every application, CIAT solutions are more effective at ensuring the wellbeing of occupants, particularly thanks to Coanda diffusion, their ease of integration, and their very low energy consumption level.

CIAT is renowned for the high quality of its products, their thermal and acoustic comfort and the efficiency of its indoor air quality management systems, thereby ensuring the comfort and productivity of the building's occupants.

## **GREATER SIMPLICITY**

CIAT solutions facilitate the installation and integration of products and save you time. They fit into the life of the building in a sustainable way, thanks to our smart centralised building management system.

### **GREATER ENERGY EFFICIENCY**

With energy optimisation constantly in mind, CIAT offers global solutions with a low carbon footprint which go beyond energy savings per product, and the notion of kWh consumed.

The intelligence of the global system enables us to support you in your projects which present very demanding requirements in terms of energy and low consumption.

We offer a full range of equipment optimised to work together: water chillers and heat pumps with a high coefficient of performance, dual-flow heat recovery air handling units, High Energy Efficiency (HEE) comfort units and centralised building management.







## CIAT, EXPERT IN COMFORT AND IAQ IN OFFICES

### FOR OCCUPANT COMFORT



## **CLIMACIAT AIRACCESS**

An air handling unit which is accessible and efficient, while remaining simple to install and easy to use.



## COADIS LINE

Cassette with Coanda effect for enhanced occupant comfort. Highefficiency **Epure** filtration on PM<sub>25</sub> fine particles for optimal indoor air quality.



#### COMFORT LINE

Ductable comfort units offerina excellent acoustic comfort. Highefficiency Epure filtration on PM<sub>25</sub> fine particles for optimal indoor air quality.



## EPURE DYNAMICS®

HYSYS® system featuring a smart particulate air pollution control function for improved indoor air quality, particularly via purification of fine particles according to WHO guidelines.

## ENERGY OPTIMISATION



## AQUACIAT AQUACIAT POWE

Water chiller and heat pump with air cooled condenser. High efficiency Scroll compressor with low noise level.



## **DYNACIAT**POWER

Water chiller with water cooled condenser offering high energy performance levels with an optimal footprint.



#### ITEX

Gasketed plate heat exchanger with a high thermal transfer capacity.



## SMART CIAT

Energy management system enabling data centralisation, remote management of equipment, automatic changeover and enhanced energy optimisation.



## EXCELLENT INDOOR AIR QUALITY FOR ENHANCED PRODUCTIVITY

CIAT is committed to researching and developing innovative solutions aimed at improving indoor air quality, a major health issue of critical importance in the design of buildings. By integrating dynamic purification systems, particulate sensors and highly efficient filters into its equipment, CIAT helps control and treat the concentration of  ${\bf CO_2}$  and fine particles, achieving an indoor air quality as close as possible to the recommended thresholds defined by the World Health Organisation.

## **IMPROVED COGNITIVE PERFORMANCE & LONGER SERVICE LIFE**

Numerous studies have shown improved cognitive performance in occupants benefiting from high quality indoor air experience (better concentration, increased efficiency) in addition to protection of health\*.

Occupants will be less subject to absences, sickness and chronic fatigue and could even live longer than they might in a polluted environment, so there are also improved socio-economic results.

\*According to the REHVA Guidebook - Indoor Climate and Productivity in Offices: when pollutants are halved, we notice a 10% reduction in short-term sick leave in offices and an 1.5% increase in work performance.



## CIAT AT THE HEART OF THE OFFICE



#### **SIMPLICITY**

- Plug and play system
- Rapid system start-up and installation
- Easy integration in building system management



#### OCCUPANT COMFORT

- Thermal comfort
- Acoustic comfort
- Indoor air quality



## **ENERGY OPTIMISATION**

- Energy savings
- Reduction in installation, system start-up and maintenance costs

## **GUIDING YOU RIGHT FROM THE START**

CIAT makes a long-term commitment as a partner by your side: from the specifications stage right through to installing the equipment, CIAT experts analyse your requirements to provide you with the best possible solution.

We are able to adapt to your specific requirements thanks to our integrated engineering and design department, ultramodern research and development centre and state-of-the-art industrial installations, from which we manage all our production processes.



## AT CIAT, OUR R-32 RANGE IS EQUIPPED WITH HEAT RECOVERY AND FREE COOLING OPTIONS



## **HEAT RECOVERY SYSTEMS**

IS ENABLE TO PROVIDE HOT WATER UP TO 80°C WHILE SUPPLYING COOLING.



## **FREE-COOLING OPTION**

TAKES AMBIENT AIR TO COOL THE WATER LOOP WITHOUT THE USE OF COMPRESSORS, WHICH ALLOWS TO REDUCE COSTS AND ENERGY CONSUMPTION.



## R-32: THE SUSTAINABLE AND GREEN SOLUTION

#### **CHOOSING R-32 MEANS REDUCING YOUR CARBON FOOTPRINT**

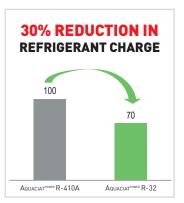
## Reduction in the refrigerant's GWP (Global Warming Potential):

- Reduced environmental impact
- Anticipation of the HFC phase-down

## Refrigerant charge reduction due to:

- R-32 thermodynamic properties
- Optimised component selection for R-32





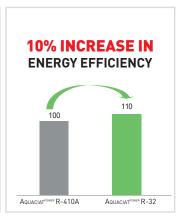
## 77% LESS CO, EQUIVALENT THAN R-410A

## CHOOSING R-32 MEANS BENEFITING FROM AN INCREASE IN ENERGY EFFICIENCY OF UP TO 10%

AQUACIAT & AQUACIAT \*\*R-32 chillers exceed the SEER requirements of the 2021 Ecodesign regulations thanks to:

- The optimisation of all components for R-32 refrigerant (multiple scroll compressors and asymmetrical brazed-plate heat exchangers).
- A smart energy monitoring function.





## **CHOOSING R-32 ALSO MEANS:**



## **EASE OF USE**

R-32 IS A RELIABLE, TRIED-AND-TESTED SOLUTION WHICH IS AVAILABLE FROM ALL REFRIGERANT DISTRIBUTORS.



### **COMPLETE SAFETY**

EASY INSTALLATION, SYSTEM START-UP AND MAINTENANCE\*.

\* Special safety requirements may apply to the transportation, use and maintenance of the equipment.



## AQUACIAT & AQUACIAT POWER R-32: PERFECTLY ADAPTED TO WORK SPACES

The new **AQUACIAT & AQUACIAT** ranges offer you high levels of energy efficiency, in both the cooling only version and the reversible heat pump version.

Now available with R-32 refrigerant, they enable their carbon footprint to be reduced by up to 77% while preserving their acoustic comfort and their ease of installation.

In addition to their commitment to environmental sustainability, the **AQUACIAT & AQUACIAT** ranges also fully meet the specific requirements of work spaces:

## **OCCUPANT COMFORT**



THANKS TO OUR VARIOUS
CONFIGURATIONS, NUMEROUS ACOUSTIC
LEVELS ARE AVAILABLE FOR MAXIMUM
OCCUPANT COMFORT.



## **EASY INTEGRATION**

TO SAVE YOU TIME, WE GUARANTEE EASE OF INSTALLATION AND INTEGRATION INTO THE BUILDING MANAGEMENT SYSTEM.

## **PLUG AND PLAY SYSTEM**



ALL-IN-ONE FLEXIBLE SOLUTION. VARIOUS OPTIONS AVAILABLE

- INTEGRATED HYDRAULIC MODULE WITH OR WITHOUT BUFFER TANK
- WIDE CHOICE OF PUMPS
- BROAD RANGE OF HYDRAULIC CON-NECTIONS TO ADAPT TO THE SITE CON-FIGURATION.



## **ENERGY SAVINGS**

ENERGY-EFFICIENT SOLUTIONS
ENABLING SIGNIFICANT COST SAVINGS
WITHOUT COMPROMISING THE COMFORT
OF YOUR CUSTOMERS OR YOUR
ENVIRONMENTAL IMPACT.



### **GLOBAL SYSTEM SOLUTION**

WE OFFER A FULL RANGE OF EQUIPMENT DESIGNED TO WORK TOGETHER FOR THE BEST POSSIBLE RESULTS OFFERING OPTIMISED ENERGY EFFICIENCY AND COMFORT FOR YOUR CUSTOMERS.



## AQUACIAT & AQUACIAT POWER R-32: OVERVIEW OF THE RANGE





## **AQUACIAT**



- 12 models
- Hydraulic module across the full range with or without buffer tank
- 2 sound levels (very low noise level and ultra low noise level) + night mode



## WATER CHILLER

COOLING ONLY LD VERSION



40kW 160kW

Variable-speed **EC** motor fans option

Very low noise level option (LS fans + drive)

All-season option (AC motor fans + drive)

Fixed-speed scroll compressors,
Fixed-speed **AC** motor fans with low sound level

## **AQUACIAT**POWER



- 19 models
- Hydraulic module across the full range with or without buffer tank
- 3 sound levels (Low noise level, very low noise level, ultra low noise level) + night mode



## WATER CHILLER

COOLING ONLY LD VERSION

170kW 940kW

Variable-speed **EC** motor fans option ( Seasonal performance levels)

Variable-speed AC motor fans + drive option
(

✓ Seasonal performance levels)

High performance/high temperature option: HS fans [7] Full load performance and operating range]

Fixed-speed scroll compressors, fixed-speed **AC** fans with low noise level



## **HEAT PUMP**

REVERSIBLE ILD VERSION

170kW 530kW 1040kW

Variable-speed AC motor fans option
+ drive (

→ Seasonal performance levels)

High performance/high temperature option: HS fans [7] Full load performance and operating range]

Fixed-speed scroll compressors, fixed-speed **AC** fans with low noise level

Fixed-speed scroll compressors, Variable-speed **AC** motors fans + Drive



## THE BLUEDGE® SERVICE PLATFORM IS AT YOUR SERVICE FOR YOUR COMFORT, AIR QUALITY & ENERGY OPTIMISATION

As key European player for HVAC systems, our objective is to provide high quality service and develop partnerships with you throughout the lifecycle of your installations. We understand your changing needs, develop smart services and energy solutions for all types of applications that optimise performance and enable savings.

Committed to improve life quality, we provide the support you need to get the most out of your solution and develop strong partnerships with our customers, from project analysis to commissioning and operation for long-term satisfaction.





#CIAT4life

**4 FOUNDATIONAL PILLARS** 









