

# YOUR HVAC PARTNER

**COMMERCIAL  
HVAC  
PRODUCT &  
SYSTEM  
SOLUTIONS**



A Carrier Company



# CARRIER



Carrier is the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions with a world-class, diverse workforce. From the beginning, we've led in inventing new technologies and entirely new industries. Today, we continue to lead because we keep customers at the center of every product and service we offer and we act quickly to exceed their expectations. Through our performance-driven culture, we are driving shareowner value by growing sales and investing strategically to strengthen our position in the markets we serve.



## Creating solutions that matter for people and our planet



### Innovation is in our DNA

At Carrier, we have a proud history of pioneering industries through innovation. Our leading world-class brands are the legacy of our founders, who invented technologies to meet real needs, turned them into businesses, and then innovated to lead entire industries.

### A Leading Legacy

Carrier was built on a legacy of innovation – beginning with our founders. We are innovators at heart and inventors by heritage. From the start, we've led in pioneering new technologies and in enabling entirely new industries that have changed the world. Today, building on our history of firsts, we're boldly advancing the industries we created to make a difference in people's lives.

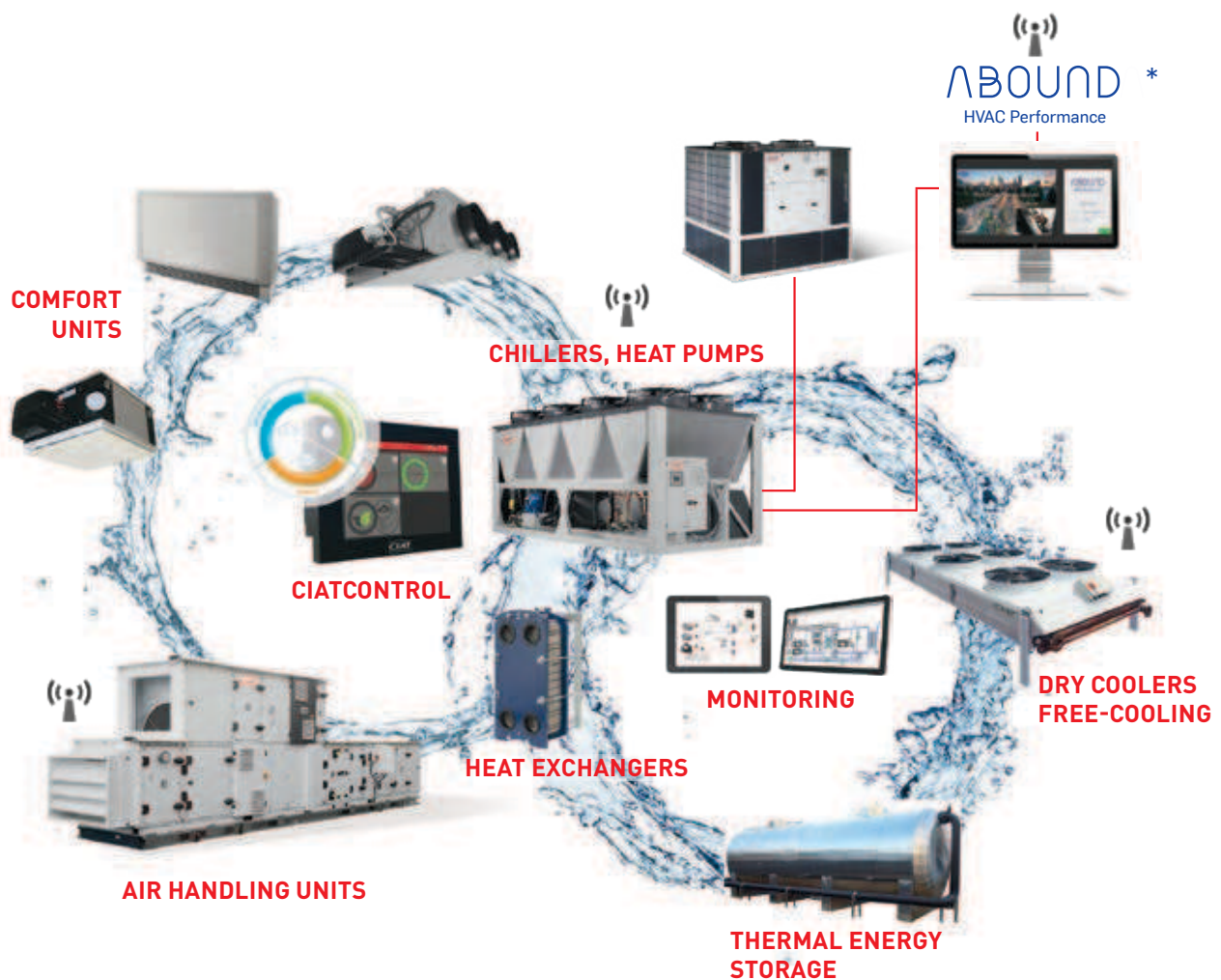
## CARRIER COMMERCIAL HVAC IN EUROPE





# CIAT A GLOBAL SYSTEM PROVIDER

CIAT is a part of Carrier, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions. With over 90 years of experience, CIAT is one of Europe's leading brands in heating, ventilation, air conditioning and air handling solutions for commercial sectors such as healthcare, offices, hospitality and retail. Renowned for our capacity to create innovative, durable and high-performing products, we offer a complete range of equipment that is tailor-made and designed to work together. Our latest innovations have been specially designed to meet your most demanding requirements and provide you with the best-in-class technology.



\*available with a BluEdge Service agreement





# CIAT EXPERT IN INDOOR CLIMATE SYSTEMS

As a pioneer of customised HVAC solutions, CIAT understands the importance of increasing the well-being of individuals in their living areas and places of work. Aware of the thermal, energy and air quality issues faced today by every sector of activity, we have responded by developing global systems based on an adapted and efficient combination of products.

## WATER-BASED GLOBAL ENERGY SYSTEMS FOR HEATING, COOLING AND INDOOR AIR QUALITY

To comply effectively with today's thermal and environmental regulations, CIAT designs optimised water-loop energy systems comprised of comfort units, heat pumps and dual-flow air handling units. As a renewable resource and a highly effective heat transfer fluid, water not only represents an excellent alternative to direct expansion systems it also meets F-Gas regulations in terms of confinement and limitation of refrigerants within buildings.

## Smart CIATControl: THE ENERGY MANAGEMENT SYSTEM

Connected to all HVAC components (refrigeration, comfort units, air handling units) and using a patented algorithm that can be programmed according to building occupancy and weather conditions, Smart CIATControl adapts the efficiency of the thermodynamic producer to the needs of the emitters in real-time.

**In addition to automatic system changeover based on calculation requirements, features include:**

- **Optimal Stop & Start:** predictive function which anticipates the stop and start times of the HVAC system.
- **Optimal Water®:** allows the temperature of the chiller or heat pump to be controlled according to the demand from the emitters.



## BENEFITS OF THE WATER LOOP

- ⊕ **More efficient:** equipment that is more cost effective and requires less maintenance than direct expansion systems
- ⊕ **Greater comfort:** flexible, precise control of comfort for the occupants
- ⊕ **Increased energy efficiency:** homogenous and thermally stable, water reduces the energy requirements for heat transfer
- ⊕ **Environmentally sustainable:** no refrigerant is required on the premises and only a small amount is used in the heat pump installed outside the building's occupied areas
- ⊕ **Easy to install:** no refrigerant specialists are required during installation
- ⊕ **Flexibility:** a water-loop energy system adapts easily to the design of buildings and the changes that may be made to its layout over time

The optimisations offered by Smart CIATControl allow **energy savings for the building.**



# CIAT COMMITMENT FOR SAFER INDOOR AIR QUALITY :#CIAT4LIFE

Indoor air quality has now become a key challenge for building owners and managers. Our indoor environment must be preserved, protected, and made reliable. Together, we share the same ambition, helping to support the health and well-being of others. We call our approach #CIAT4life.

## #CIAT4life 4 FOUNDATIONAL PILLARS



### Trust

At the centre of our relationship, to guarantee that your result is optimal and lasting.



### Tailored

Expert solutions that meet the demands specific to your sites.



### Advice

Providing effective help at each stage, whatever your project.



### Efficiency

Reliable and efficient technology and commissioning that have repeatedly proven themselves.

## THE IMPORTANCE OF INDOOR AIR QUALITY

**80%**

of our time is spent inside (workplace, school, residence, transport) <sup>1</sup>



**8 times**

more pollution indoors compared to outside<sup>1</sup>

**€20 bn**

is the estimated cost of caring for issues related to poor indoor air quality (headaches, allergies, asthma...)<sup>1</sup>

**40%**

of buildings face indoor air quality issues<sup>2</sup>

<sup>1</sup> France Public Health

<sup>2</sup> Interior Air Quality Observatory

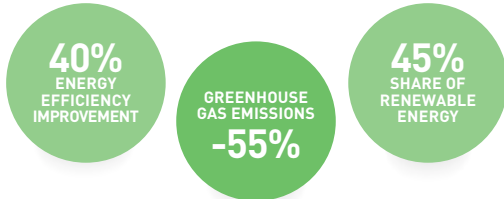


# COMPLIANCE WITH STANDARDS AND RESPECT FOR THE ENVIRONMENT

CIAT pursues an exemplary quality approach to developing sustainable and efficient systems which conform to the standards of today and anticipate those of tomorrow. We ensure that our developments conform to the various environmental directives and regulations and, as a real driving force in our sector, also participate in their implementation.

## THE ENERGY-RELATED PRODUCTS (ERP) EUROPEAN DIRECTIVE

The European Directive 2009/125/EC ErP outlines the conditions and criteria relating to the eco-design of products that affect energy consumption throughout their life cycle, from the manufacture, to use and until disposal at end of life. It encourages manufacturers to design products that improve energy efficiency while reducing their overall impact on the environment, in particular the resources consumed throughout their service life. CIAT's commitment to limit its impact on environment is in line with the targets of the European climate and energy package for 2030.



## F-GAS REGULATIONS\*

By 2014 the regulation introduced bans for certain equipment using HFCs and a phase down scheme for HFCs placed on the European market.

In 2023, a revision of the current regulation is upon to be implemented with target to accelerate further the decrease of CO<sub>2</sub> emissions and lowering the global warming potential to achieve 95% reduction by 2030 and 0 emission by 2050. The new F-Gas revision is intended to be voted in 2024, for entry into force by January 2025. As a consequence, new bans shall be implemented to limit GWP with threshold 150 on CML and industrial heat pumps by 2027, and 750 for chillers above 12kW by 2030.

These new GWP limits are subject to derogation in order to comply with European and National / Local specific building codes and safety requirements. No specific bans related to stationary equipment air conditioning, heat pumps and

chillers for service, maintenance, and repairs under certain conditions ( GWP < 2500, use of reclaimed and / or recycled refrigerants, ...). Carrier already anticipates more stringent regulations to phase down high GWP refrigerant.

## ECO-DESIGN

At CIAT we strive to reduce the ecological impact of our equipment throughout its life cycle, from creation to final decommissioning. We confirm this strong environmental policy in our commitment to respecting ISO 14001 and ISO 45001 certifications, and undertake:

- To integrate environmental aspects as early as possible in the product design process;
- To take into account and make available the results of the life cycle analyses (LCA) for products (complete system for heating, ventilation and cooling);
- To provide environmental reports related to the equipment.

This approach benefits from an internationally recognised standard ISO 14062 "Environmental Management - integrating environmental aspects into product design and product development".

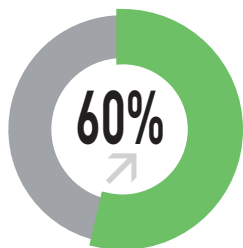


\* At time catalogue is released, the new F-Gas revision may be subject to adjustments until it is finally voted by Council of EU and EU parliament and the local country implementation.



# CIAT COMMITMENT FOR SUSTAINABLE WORLD

EcoVadis is a collaborative platform which that enable large companies to assess their corporate social responsibility commitment. The objective of this assessment is to enhance an environmentally respectful business collaboration with our partners, all committed to social, economic and ethic matters. CIAT through Carrier global corporation is proud to obtain the silver medal 2022. A distinction that allows us to be in the top 25% of the evaluated companies. It is a significant recognition of its values and commitment to more quality and social responsibility.



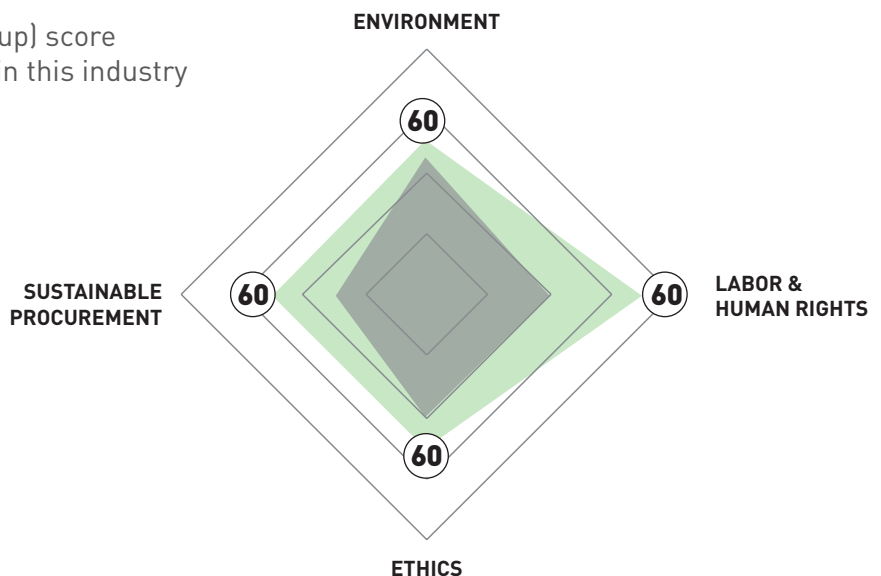
OVERALL SCORE  
SILVER MEDAL 2022

The overall Ecovadis engagement Score for Carrier global corporation's sustainability measures are industry's general scores, with a growing 60% completion.

## OUR OBJECTIVE IS TO KEEP PROGRESSING AND TO ENGAGE IN GREEN, ETHIC AND SOCIAL ACTIONS

### Carrier global corporation EcoVadis RATING PROGRESS

- Carrier global corporation SA (Group) score
- All companies rated by EcoVadis in this industry





# DECARBONISING HEATING

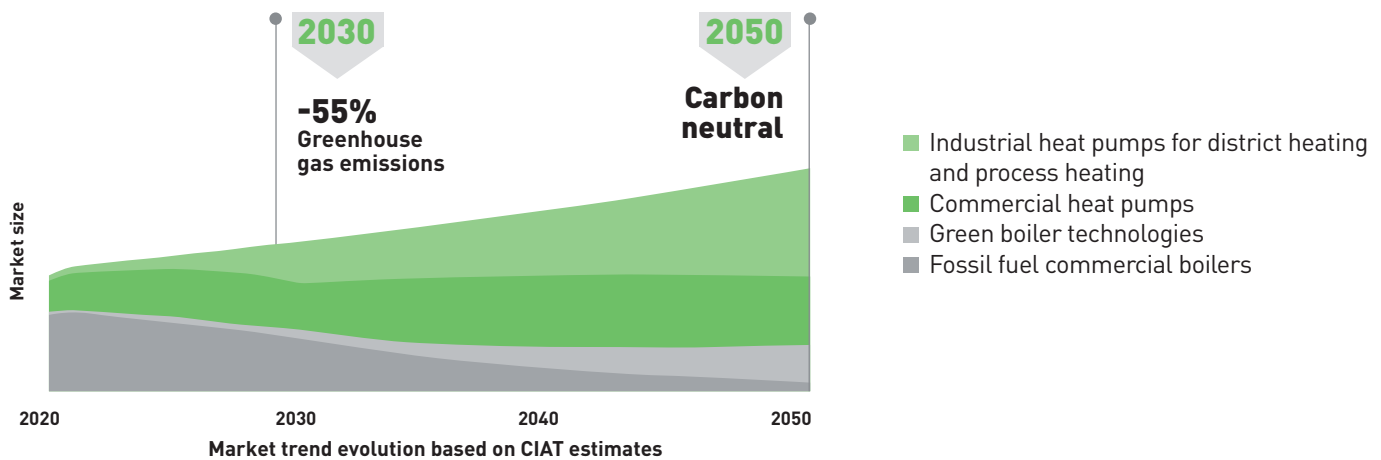
## EUROPE TO END FOSSIL FUEL HEATING BY 2050

Heating is one of the EU's most energy-intensive sectors: 64% of the total energy consumed in the EU is used for heating space and water\*. If Ecodesign and energy labelling is set to deliver a third of the EU's 2050 climate-neutral target, the European Commission must also put heating on the right path by phasing out fossil fuel boilers beyond 2030.

\*<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20190620-1>

## MARKET TREND EVOLUTION

In order to support the EU 2030 target of a 55% reduction in greenhouse gas emissions and the EU 2050 carbon neutral target, the commercial heating industry in Europe will need to make a major technology transition from fossil fuel boilers to more sustainable heating systems.



### FOSSIL FUEL

As at 2020\*, over 60% of the European building sector was still heated with fossil fuel commercial boilers using natural gas or oil.

In addition to their high carbon footprint, fossil fuel technologies will have to face increasing EU and local regulations, as well as uncertainty over prices and availability in the future. Some countries have already banned fossil fuel boilers in residential and collective housing\*\*. These technologies are coming to an end and the transition needs to start immediately

\* IEA: <https://www.iea.org/articles/are-renewable-heating-options-cost-competitive-with-fossil-fuels-in-the-residential-sector>. Published on 1 December 2021.

\*\* EHPA: [https://www.ehpa.org/2023/04/17/ehpa\\_news/which-countries-are-ending-fossil-fuel-heaters/](https://www.ehpa.org/2023/04/17/ehpa_news/which-countries-are-ending-fossil-fuel-heaters/)

### GREEN BOILER

«Green» boiler technologies will replace a percentage of fossil fuel boilers. Nevertheless, they will need to overcome several technical challenges over the coming years:

**Hydrogen boilers** are still in development and construction of 'hydrogen-ready' distribution networks in cities will take decades.

**Biomass boilers** might be a shorter-term solution, but they can be complex to operate and maintain. They need to be cleaned weekly and continuously supplied with pellets or chips. Soot also needs to be removed and the fuel stored.





DECARBO-  
NISATION

CIAT  
AT YOUR  
SIDE

ENERGY  
TRANSITION

## COMMERCIAL HEAT PUMPS

Heat pumps are one of the most efficient devices on the market for heating buildings. Reversible air source heat pumps are the right solution to provide sustainable cooling and heating in buildings. CIAT is already offering a complete range of heat pumps for commercial applications up to 65°C.



65°C

### AQUACIAT<sup>CALEO™</sup> TD

**High temperature air to water heat pump for large residential, hotel and healthcare.**

Heating capacity from 25 to 103 kW  
Hot water up to 65°C.



R-32

### AQUACIAT<sup>™</sup> ILD R-32

**Water chillers and heat pump for medium size of offices, hotels and healthcare.**

Available in 11 models for an heating capacity from 40 to 150 kW.



R-32

### AQUACIAT POWER<sup>™</sup> ILD R-32

**Water chillers and heat pump for big offices, hotels and healthcare.**

Available in 19 models for an cooling capacity from 170 to 1050 kW and a heating capacity from 160 to 1000 kW.

## IN THE UK, CIAT HEAT PUMPS ARE KEY FOR INNOVATIVE SCHOOL DECARBONISATION PROJECT.

A pioneering decarbonisation project funded by the UK government's Public Sector Decarbonisation Scheme is using high-performance CIAT heat pumps:

Yorkshire-based Abbey Multi-Academy Trust (Abbey MAT) is installing 38 AQUACIAT<sup>CALEO™</sup> TD air-source heat pumps in five of its schools to reduce carbon emissions produced by the heating with more than 9,000 tonnes over the lifetime of the scheme, saving £84,000 a year in energy costs.

"The heat pumps harvest low grade 'free' energy from the environment and upgrade it to a useful temperature, replacing the need for high carbon-emitting gas boilers in the majority of school buildings," said David Ryder, Head of IT and infrastructure at Abbey MAT. "For our 5,000 students, it is a practical, living demonstration of what can be achieved by rising to the climate challenge, and by using the latest technology to reduce costs and protect the environment, while maintaining a high-quality indoor environment."



Copyright : AbbeyMAT



# WORLD-CLASS OPERATIONS TO BRING BEST-IN-CLASS SOLUTIONS

---

Our European Centers of Excellence and production sites are all world-class facilities in their own right. Each center focuses on a specific field of expertise to support our customers in meeting the challenges they face today.



## **CULOZ CENTER OF EXCELLENCE FOR AIRSIDE TECHNOLOGIES**

The research and design center and laboratory have fourteen innovation platforms, equipped with state-of-the-art test and measurement tools, fully dedicated to airside applications.



## **MONTILLA CENTER OF EXCELLENCE FOR ROOFTOPS AND PACKAGED SOLUTIONS**

Our teams in Montilla, southern Spain have in-depth expertise in rooftop, packaged, preconditioned air (PCA) for aircraft and dehumidifier units. The center houses the largest HVAC factory in Spain and offers specialized laboratories, as well as Europe's biggest aircraft preconditioner air units laboratory.



## **MONTLUEL CENTER OF EXCELLENCE FOR CHILLER AND HEAT PUMP TECHNOLOGIES**

Our Montluel site is Carrier' European Center of Excellence for chillers and heat pumps. Located close to Lyon, France, the research and design center and laboratory are able to draw on fifty-plus years of world-class expertise.




## **VENCE CENTER OF EXCELLENCE FOR IOT, DIGITAL AND CONTROLS**

Developing IoT, Digital and customised Control Solutions for HVAC systems and plant room is the key activity at the Vence Center of Excellence.




**A**

**MONTLUEL**  
Commercial Chillers



**B**

**CULOZ**  
Airside products



**C**

**VENCE**  
Control systems &  
Connected services



**D**

**MONTILLA**  
Rooftop & Light  
commercial Chillers



**R&D CENTER & LABORATORY**



**PRODUCTION SITES**



# SERVICE SOLUTIONS

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

As a 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, and 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.



## A WHOLE WORLD OF SERVICES

### MAINTENANCE:

- Warranties and extensions
- Preventive and corrective
- Service contracts

### CONTROL AND MONITORING:

- Data collection, alerts and reports
- Monitoring and optimizing performance
- Prognosis and expert analysis

### MODERNIZATION:

- Upgraded installation
- Performance improved
- Turnkey projects

### REPAIRS:

- Efficient diagnostics
- Quick on-site interventions
- Technical assistance

### SPARE PARTS:

- Universal and Factory Authorized Parts
- Consultancy and kit solutions
- Dedicated on-line shop

### IAQ OFFERINGS:

- Monitor various air quality parameters
- Adjustments to get indoor quality to healthy level

## A TIER FOR EVERY BUSINESS

Our BluEdge tiered service model offers you a range of options\* to meet the particular needs of your business.



### CORE

An economical solution for customers with IoT-enabled equipment that collects real-time data to improve staff efficiency and reduce unplanned downtime.



### ENHANCE

Complete preventive maintenance and technical expertise including proactive monitoring of health, efficiency and performance with actionable insights to identify opportunities for reducing operating costs and avoiding failures.

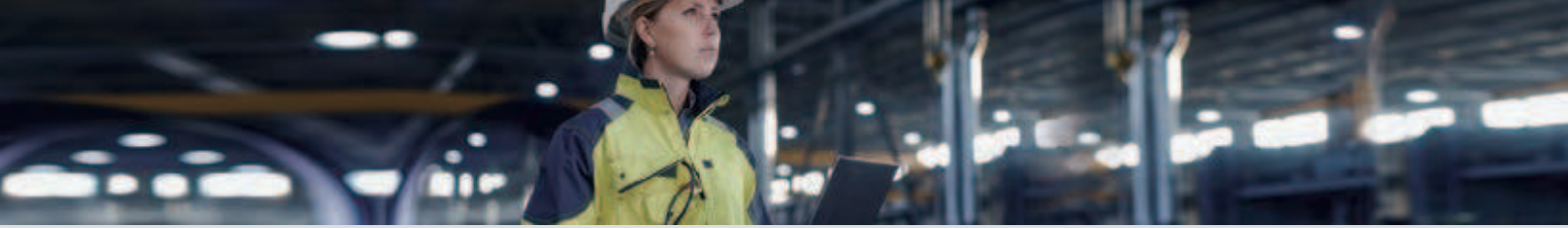


### ELITE

Our Elite plan is the ultimate worry-free, peace of mind program for clients. Realizing building comfort, efficiency and operational goals with Carrier turn-key solutions powered by predictive analytics and OEM expertise.

\* Contact your local Carrier company for more details on each contract offer.





**+60**  
SERVICE  
TECHNICIANS

A LARGE  
RANGE OF UNITS  
UNDER SERVICE  
CONTRACTS

CONTINUOUS  
TRAINING  
FOR TEAMS &  
CUSTOMERS

## HVAC EXPERTS CLOSE AT HAND

### A COMBINATION OF KNOWLEDGE AND EXPERIENCE FOR BETTER TECHNICAL SUPPORT

Our qualified and responsive BluEdge teams of technicians are available to implement actions on site and ensure optimal operation of your equipment. Thanks to our expertise and experience in the fields of maintenance and technical service, our BluEdge service platform offers a wide range of services from pre-sales technical support and diagnostics right through to energy audits.

Our dedicated hotline for off-site support with our engineers and technicians on the field, work hand in hand to meet your expectations in terms of energy efficiency. Our priority, 24/7: to allow you to focus on your business whilst our BluEdge service platform provides you with the best possible level of service.



## HVAC EUROPE PARTS CENTER

### BUILDING SERVICE EXCELLENCE FOR CUSTOMERS

Thanks to our dedicated parts team and our factories located throughout Europe, HVAC Europe Parts Center is able to deliver 300 orders daily and ship efficiently around the world. We propose a comprehensive parts offer including compressors, universal parts and manufactured components. Our purchasing power ensures optimised pricing and leadtimes. Thanks to our manufacturing expertise, we provide advice to help you find the best service solution to meet your specific needs.

- State-of-the art logistics with reliable next day delivery for Europe
- Storage permanently adjusted according to customer demand
- Dedicated, accessible and reactive teams
- Dedicated online shop to facilitate parts selection
- Stock online, order tracking, parts selection: numerous specific online tools to ease and fasten your business

**+90.000**  
MANAGED PARTS  
NUMBER

**store-eu.  
carrier.com**

**+12.000**  
ITEMS  
IN STOCK

## REMOTE CONNECTIVITY SERVICES - ABOUT HVAC PERFORMANCE

**OPTIMIZE YOUR HVAC OPERATIONS & MAINTENANCE BY USING REAL-TIME DATA AND ANALYTICS, WITH THE CONTINUOUS SUPPORT OF REMOTE TEAMS OF EXPERTS.**

In the current context of increasingly efficient building requirements, CIAT offers monitored services that help customers to improve the efficiency of their HVAC installations.

About HVAC performance helps facilitate improved asset management and by enabling smarter, more predictive service and using data to track and optimize equipment health and performance.

Powered by IoT and cloud analytics, we provide customers better visibility into their assets, resulting in better advice on how to manage their CIAT equipment and system optimizations to achieve key outcomes like uptime and comfort.

Depending on your contract:

- Real-time data and access to your assets on a visualization dashboard
- Email alert at any event on the equipment
- Monthly trends reports
- Annual reports with analysis and recommendations from CIAT experts



- ⊕ Better profitability
- ⊕ Equipment availability
- ⊕ Steady indoor air quality
- ⊕ Optimal equipment control
- ⊕ Fully secured connection

## EUROPEAN SERVICE DIGITAL CENTER / VENCE

**Expert in Digital, IoT & Connected Services Solutions for HVAC equipment and in Controls Solutions for Plant Room and HVAC Systems.**

At the European Service Digital Center (ESDC), our engineers focus on developing and deploying Connected Services and Controls solutions for HVAC equipment & systems. They provide technical support on smart service solutions to our customers and our service organizations in Europe.

The team has a unique multi-disciplinary expertise in Digital/IoT/Controls and Cooling/Heating for HVAC systems.

Located in the south of France, ESDC is close to Sophia Antipolis, the first technopole in Europe. The Team has participated in major European research and innovation projects.

### CONNECTED SERVICES, CONTROLS AND ENERGY OPTIMIZATION

- Monitoring of HVAC equipment
- Plant Room control system
- Thermal Energy Storage for HVAC applications
- HVAC system management
- Energy Optimization



**+ 7,000**  
PIECES OF CONNECTED EQUIPMENT



**+500**  
CONTROLS SYSTEMS FOR PLANT ROOM







# HEALTHCARE SOLUTIONS



## CONTROL OF AIRBORNE CONTAMINATION AND NOISE LEVELS IN RISK ZONES

In healthcare premises (hospitals, EPHAD, clinics, doctor's offices, etc.) hygiene and air quality are the core requisits for choosing air treatment installations. The different actors in the health sector are also concerned about the comfort of public reception and the energy performance of their installations.

The CIAT product ranges actively participate in reducing and controlling the risk of contamination, especially in risk areas by controlling air contamination and providing a high level filtering. Thanks to the Epure® filtration solutions outstanding capabilities, CIAT adapts to various demanding environments and goes beyond the industry hygienic standards (VDI 6022, DIN 1946, NFS 90 351...).

The CIAT solutions, while ensuring comfort, hygiene and better indoor air quality in the accommodation or reception areas, also allow optimal energy consumption and environmental sustainability, growing concern.

Thanks to the complementarity of its products, CIAT responds quickly to the needs of its customers to all types of installations, and provide as well all the customer services to guarantee a reliable response in line with the healthcare sector expectations.

CIAT solutions are Eurovent regulation certified.



**AIRBORNE CONTAMINATION CONTROL**

**COMFORT AND INDOOR AIR QUALITY**

**HIGH ENVIRONMENTAL EFFICIENCY**

**HEAT RECOVERY**



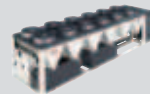
**CLIMACIAT AIRCLEAN™**  
Air handling unit designed for the specific characteristics of controlled environments  
Certified Eurovent  
DIN 1946-4 / VDI 6022.



**COADIS LINE™**  
*Epure*  
Cassette comfort unit with Coanda effect for increased occupants' comfort.



**COMFORT LINE™**  
Ductable comfort units with excellent acoustic comfort and technologies for air purification.



**AQUACIATPOWER™**  
High efficiency air-cooled chiller & heat pump with noise reduction technologies and integrated hydraulic module.



**PowerCTRL**  
Plant system management designed to control a complete thermal energy production system (heating wand cooling).

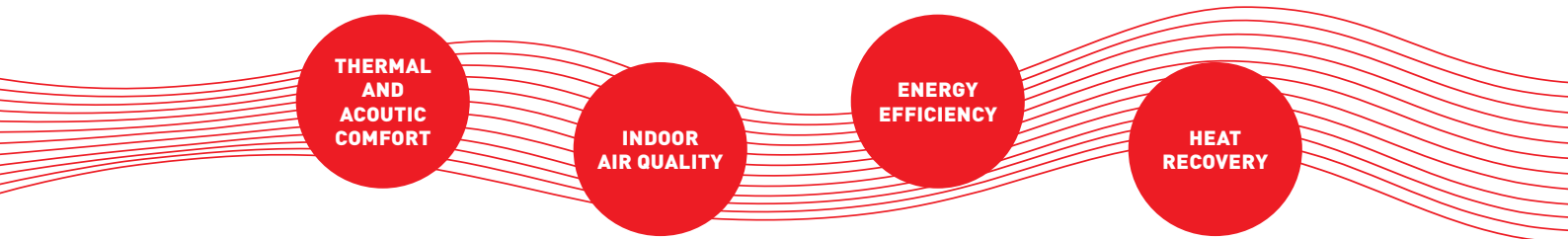




# HOSPITALITY SOLUTIONS

## BENEFIT FROM COMFORT, SILENCE AND DISCRETION TO SATISFY YOUR CUSTOMERS

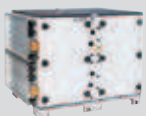
The hospitality sector faces three major challenges in air management: thermal and acoustic comfort, air quality and energy optimization. CIAT offers solutions to meet these challenges but also to go beyond the regulation's requirements of tomorrow.



The CIAT ranges provide the thermal and acoustic comfort which hotel professionals are demanding for. They guarantee comfort, especially the temperature management as well as they provide solutions like the COANDA effect diffusers that maintain a constant, noise-free air flow. But they also manage the Indoor air quality appreciable by customers, thanks to advanced air filtration solutions in living spaces, which is particularly important device in urban areas.

CIAT gives to professionals of the hotel industry optimal comfort solutions for their buildings, and at the same time the benefit of energy optimization, a constant development effort at CIAT to reduce your costs, such as the «free cooling» feature which allows the use of outside air to cool down hydraulic air conditioning circuit.

Finally, the various CIAT service contracts ensure serenity over time with a complete customer support offer: warranty extensions, proximity to expert teams, remote supervision with Abound HVAC Performance, in order to guarantee the installations controls and their long-term benefits.



**FLOWAY®**  
Compact air handling unit leading in its category in terms of ease of use, Ecodesign and energy efficiency



**MAJOR LINE™**  
Versatile and highly efficient comfort unit providing improved comfort and very low sound level.



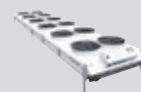
**COMFORT LINE**  
Comfort unit with high available static pressure, modular air discharge configurations, flexible installation and excellent acoustic comfort.



**AQUACIAT™**  
High efficiency air-cooled chiller with scroll compressor.



**DYNACIAT™**  
Compact heat pump with high energy-efficiency scroll compressors with excellent acoustic comfort.



**OPERA™**  
Dry Cooler range compatible with Dynaciat range for favourable all-round performance levels.



**CLIMACIAT® AIRACCESS**  
Accessible and efficient air handling unit that is simple to install and use.



# SHOPPING CENTER SOLUTIONS



SHOPPING CENTERS

## FULL MODULARITY WITH PLUG AND PLAY SYSTEM AND OPTIMIZED OPERATING COSTS

Customer comfort is a key priority to guarantee an ideal welcome. CIAT offers a tailor-made range of heating ventilation and air conditioning solutions able to provide an optimal comfort while minimizing operating costs and energy consumption.

In order to guarantee the best occupant comfort, CIAT offers a wide range of customisable solutions with dedicated options especially designed to the retail market. With the most flexible offer in terms of Air Handling Units and particularly with Rooftops, the CIAT HVAC solutions can adapt to small, large, complex and variable shopping center configurations.

In large and multiple spaces environments, the CIAT multi-zone control system helps the shopping centers managing the temperature by zone while the CO<sub>2</sub> sensors adapt the temperature according to human traffic.

These complete solutions, fitted with the adapted controls can also be supported by remote supervision which ensure greater peace of mind and supports the complete installation optimization and the best way to capitalize onto the energy efficiency devices.



**CUSTOMISABLE SOLUTIONS**

**MANAGING BY ZONE REMOTE SUPERVISION**

**ENERGY EFFICIENCY**



**VECTIOS™**  
Rooftop unit. All-in-one air conditioning solution, with flexible configuration, designed offer to both high levels of indoor air quality and high efficiency reducing total cost of ownership during its lifetime. R-410A or R-454B versions available.



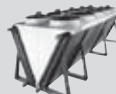
**VECTIOS POWER™**  
New generation of rooftop air conditioning packaged units, designed to provide efficiency and high indoor air quality and reduce the total cost depreciation cost during its lifetime. R-410A or R-454B versions available.



**AQUACIAT POWER™**  
High efficiency air-cooled chiller & heat pump with noise reduction technologies and integrated hydraulic module.



**HYDROCIAT™ LW**  
Compact and reliable water-cooled chiller.



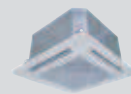
**VEXTRA™**  
Compact Dry Cooler unit working with Hydrociat for an optimised global solution.



**CLIMACIAT® AIRACCESS**  
Accessible and efficient air handling unit that is simple to install and use.



**COADIS LINE**  
Cassette comfort unit with Coanda effect for increased occupants' comfort.



**MELODY 2™**  
Optimum heating and cooling performance cassette, designed for perfect integration in suspended ceiling.



**ISPV**  
Air to air heat pump for ducted installations, in split and monobloc versions. High flexibility and optimized performance.



# LIGHT COMMERCIAL SOLUTIONS



LIGHT  
COMMERCIAL

## COMPREHENSIVE AND SIMPLE SOLUTIONS

CIAT offers comprehensive solutions and guaranteed services for building managers peace of mind.

The alliance of simplicity and ideal comfort for building occupants.



### AQUACIAT

Compact and silent heat pump with integrated hydraulic module.



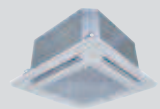
### FLOWAY

Compact air handling unit leading in its category in terms of ease of use, Ecodesign and energy efficiency.



### MAJOR LINE

Versatile and highly efficient comfort unit providing improved comfort and very low sound level.



### MELODY2

Optimum heating and cooling performance cassette, designed for perfect integration in suspended ceiling.

# OFFICE SOLUTIONS



OFFICES

## COMFORT AND INDOOR AIR QUALITY FOR BETTER PRODUCTIVITY

The CIAT ranges meet the various regulations and certifications related to buildings.

The complete offer ensures thermal and acoustic comfort as well as excellent indoor air quality for better productivity.



### AQUACIATPOWER

High efficiency air-cooled chiller with scroll compressor.



### DYNACIATPOWER™

High energy performance water-cooled chiller with optimised footprint.



### CLIMACIAT® AIRACCESS

Accessible and efficient air handling unit that is simple to install and use.



### CODIS LINE

Cassette comfort unit with Coanda effect for increased occupants' comfort.



### COMFORT LINE

Ductable comfort units with excellent acoustic comfort and technologies for air purification.



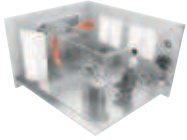
### SMART CIATCONTROL

Energy management system allowing for centralization of the information, remote management of equipment, automatic changeover and enhanced energy optimization.



# COMFORT UNITS

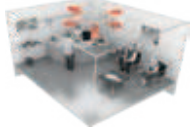
## COADIS LINE™ 600



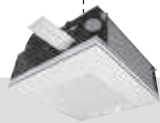
1.2 to 5.1 kW  
1.3 to 4.8 kW



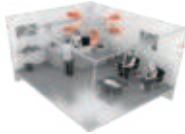
## COADIS LINE™ 900



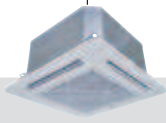
3.6 to 9.4 kW  
2.4 to 8.4 kW



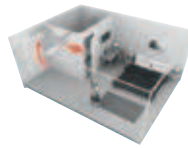
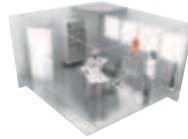
## MELODY 2™



1.5 to 9.5 kW  
1.3 to 11.3 kW



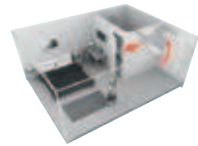
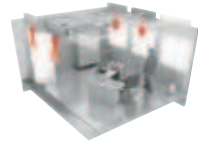
## MAJOR LINE™



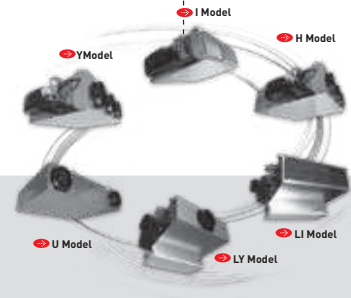
0.7 to 7.9 kW  
1 to 8.5 kW



## COMFORT LINE™



1.5 to 16.7 kW  
3.5 to 15.4 kW



■ Cooling

■ Heating

The performances indicated are at EUROVENT conditions





## CONTROL FOR COMFORT UNITS

**V6**  
New

Design at minimum cost.  
Electronic air or water management thermostat.

Electronic control V6



**V30**

Customized performance at minimum cost.  
Electronic air or water management thermostat.

Electronic control V30



**V300**

Simplified access with the Master/Slave function.  
4 operating modes: complies with RE 2020.  
Quick and easy to upgrade on site.  
Centralised timer for managing multiple zones.  
CIAT concept and design.  
EuBac certification.

Electronic control V300



**V3000 KNX**

CIAT Concept & Design. EuBac certification.

Electronic control V3000 KNX



**FRESH AIR CONTROL**

Energy savings and optimal air quality in office buildings.

Fresh air control



# AIR TREATMENT SOLUTIONS

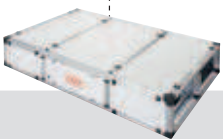
## AIR HANDLING UNITS

**New**  
**DFU**



AHU for ventilation with cross flow high efficiency heat exchanger  
Plug&play unit

550 to 3,200 m<sup>3</sup>/h

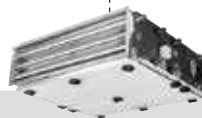


**AIR COMPACT™**



Ultra-slim AHU Ideal for a compact installations. Available in single and dual flow, horizontal ceiling, Horizontal floor mounter or vertical configurations.

up to 6,000 m<sup>3</sup>/h



**FLOWAY®**





All range class A+ High-efficiency heat recovery unit  
High performance direct drive EC fan motor assembly  
Plug & play unit (built-in control)

500 to 18,000 m<sup>3</sup>/h



 Cooling

  F = Air flow in m<sup>3</sup>/h

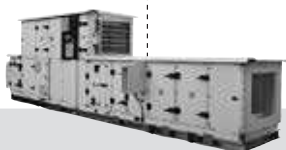


### CLIMACIAT®



AHU for all applications  
Designed to meet the  
EN 13053  
and EN 1886 standards  
The effective solution for  
service sector, industry  
and healthcare  
applications

1,000 to 30,000 m³/h



### AIRTECH™



AHU designed for all  
types of applications  
Thanks to the  
extraordinary  
modularity, it allows  
multiple configurations  
and installations,  
both indoor and outdoor

25,000 to 66,000 m³/h




### AIRCLEAN™



AHU designed for  
specifically controlled  
environments  
This range incorporates  
latest hygienic  
technological solutions

25,000 to 66,000 m³/h



 Dehumidification capacity

-   
LIGHT  
COMMERCIAL
-   
OFFICES
-   
ADMINISTRATION
-   
SHOPPING  
CENTRES
-   
HEALTHCARE
-   
INDUSTRIES
-   
HOTELS

# AIR TREATMENT SOLUTIONS

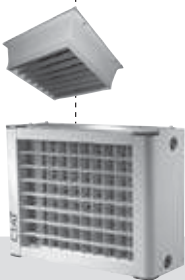
## AIR HEATER

### HELIO THERME® 4000



The most competitively priced technical solution for heating large spaces  
 Ensures ultra-fast warm-up of buildings  
 Excellent diffusion thanks to the double deflection diffuser with its patented ET+ technology  
 New low energy consumption  
 HEE motor version  
 New 3-speed thermostat for HEE motor

1,400 to 11,000 m<sup>3</sup>/h



## CLOSE CONTROL UNITS

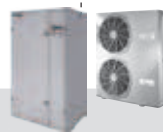
### EXPAIR™



Reduced footprint  
 Dual-wall construction  
 PLC control  
 Variable speed condenser fan

5 to 50 kW

800 to 12,000 m<sup>3</sup>/h



### MAGISTER®



Extensive range of chilled water or direct expansion systems  
 Compact and attractive design  
 Energy savings with EC motor and self-regulating control  
 Easy to install

10 to 116 kW

3 000 to 27,500 m<sup>3</sup>/h



Cooling

F = Air flow in m<sup>3</sup>/h





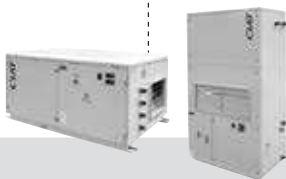
## SWIMMING POOL DEHUMIDIFIERS

### JUNIOR BCP™



Excellent functions/price ratio  
 Low energy consumption  
 Energy recovery  
 Control as standard  
 Double-walled conception

4 to 15 kg water/h



### AQUAIR® BCP



Single or dual flow  
 Optimised energy consumption  
 Energy recovery  
 Electronic control as standard. Modular and double-walled conception

22 to 74 kg water/h



### AQUAIR® PREMIUM BCP



Electronic control.  
 Optimised energy consumption.  
 Scroll and R-410A compressors.  
 EC plug fan with HE motor.  
 Heating and dehumidification of covered pools.

56 to 74 kg water/h



Dehumidification capacity

LIGHT COMMERCIAL

OFFICES

ADMINISTRATION

SHOPPING CENTRES

HEALTHCARE

INDUSTRIES

HOTELS

# ROOFTOP REVERSIBLE AIR-TO-AIR

## ROOFTOP UNITS

### New VECTIOS™ R-454B



Integrated "plug&play" system  
 Eco-Design ready ErP 2021  
 High seasonal efficiency & environmental responsibility  
 Reliability with superior quality  
 R-454B refrigerant  
 R-410A refrigerant is also available  
 Optimized dimensions and weights  
 Active and passive recovery  
 Air zoning option (up to 4 different zones)



R-454B   
 R-410A

### VECTIOS<sup>POWER</sup>™ R-454B



Integrated "plug&play" system  
 Large capacity range  
 Eco-Design ready ErP 2021  
 High seasonal efficiency & environmental responsibility  
 Reliability with superior quality  
 R-454B refrigerant  
 R-410A refrigerant is also available  
 High levels of indoor air quality  
 Airflow extended  
 Optimized dimensions and weights  
 Aluminum panels  
 Active and passive recovery  
 New functionalities



R-454B   
 R-410A

Cooling    Heating    F = Air flow in m³/h



## CIAT SYSTEM CONTROL AND SUPERVISION

### BOSS / BOSS MINI SUPERVISION

Remote control, managing up to 300 units (3500 variables) in BOSS or 50 units (500 variables) in BOSS MINI Alarm management, planner and event management, diagrams and reports. Installation drawing with units located, energy management, analysis of risks and critical control points, notes and integrated WiFi. For rooftop units (VECTIOS and VECTIOS<sup>POWER</sup>), and package (ISPV).



## PACKAGED UNITS

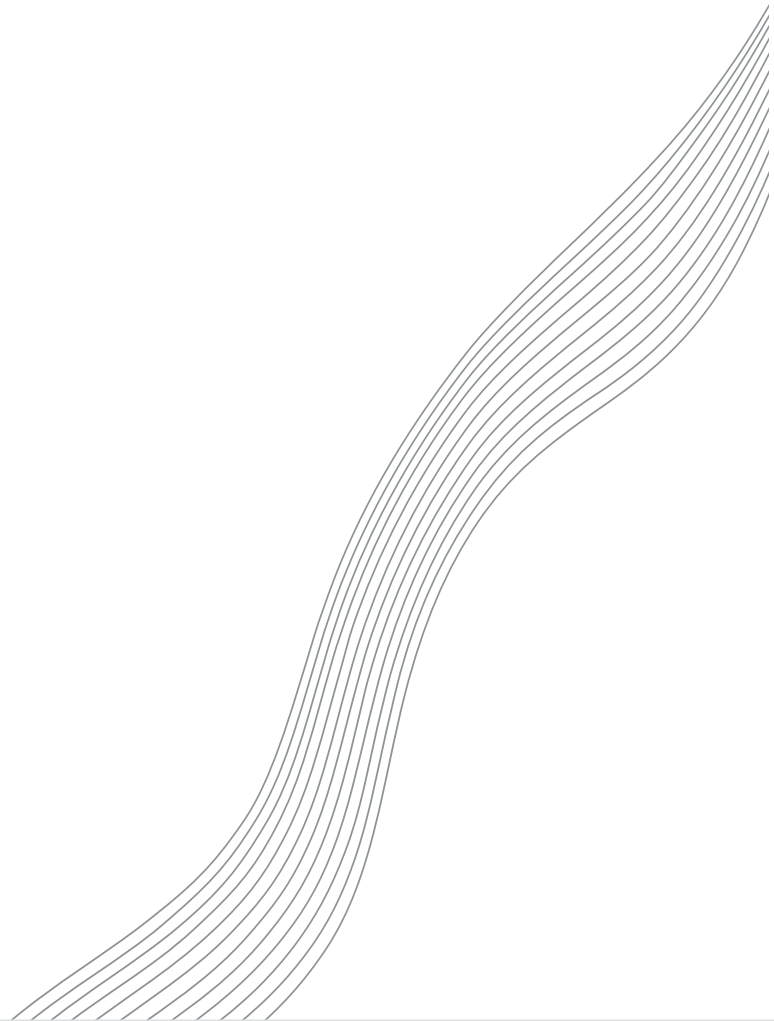
### New ISPV



Reversible heat pumps  
Package and split versions  
High adaptability  
Energy savings  
Indoor air quality  
Designed for indoor installation  
Extensive scope

4,000 to 21,000 m<sup>3</sup>/h

19 to 115 kW  
19 to 120 kW



# HEAT PUMPS & WATER CHILLERS

## AIR-COOLED UNITS

### EREBA ACCESS™ 17-21



Cooling only and reversible units  
Integrated hydraulic module

16 to 21 kW

18 to 22 kW



### EREBA ACCESS™ 26-40



Easy and fast installation  
Hydraulic module available  
Compact, reliable and efficient

27 to 39 kW

29 to 39 kW



### AQUACIAT<sup>CALEO</sup>™ TD



Designed to replace conventional boilers  
High temperature hot water (+65°C)  
Winter operation (-20°C)  
High energy efficiency  
Compact and acoustic comfort  
Condenserless unit

26 to 101 kW



### AQUACIAT™ LD / ILD R-32



High energy efficiency  
Acoustic comfort  
Easy installation  
R-32 refrigerant

40 to 160 kW

40 to 150 kW



R-32

Cooling

Heating



## CONTROL AND SUPERVISION

### POWER'CONTROL

Plant system management. Designed to control a complete thermal energy production system (heating and cooling).



Energy optimization for HVAC systems

New

### TRUVU PLANT SEQUENCER

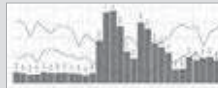
Regulation, control and optimization of your cooling and heating plant rooms. A turnkey solution with an advanced program, easily commissioned by CIAT Service technicians.



Control solution for cooling & heating plants

### ABOUND HVAC PERFORMANCE

To track, monitor hvac system performance & take preventive and corrective actions remotely.



Monitoring solution for CIAT equipment

## AQUACIAT<sup>POWER</sup>™ LD/ILD R-32



### DYNACIAT™ LGN



High energy efficiency  
Compact and acoustic comfort  
Scroll compressors  
Braze-plate heat exchangers  
Self-adjusting electronic control  
Condenserless unit

23 to 175 kW



High energy efficiency  
Acoustic comfort.  
Easy installation  
R-32 refrigerant

170 to 940 kW

160 to 1,040 kW



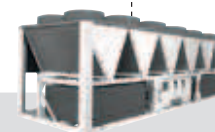
R-32

### POWERCIAT™ LX



Compact and reliable  
2 efficiency versions  
Screw compressors  
All-aluminum micro-channel condenser  
Self-adjusting electronic control  
Touch screen control interface

277 to 1,512 kW



# HEAT PUMPS & WATER CHILLERS

## WATER-COOLED UNITS

### DYNACIAT™ LG



Compact and acoustic comfort  
High energy efficiency  
Scroll compressors  
High-efficiency brazed-plate heat exchangers  
Self-adjusting electronic control

25 to 190 kW  
29 to 230 kW



### DYNACIAT<sup>POWER</sup>™ LG



High energy efficiency  
Compact and acoustic comfort  
Scroll compressors  
High-efficiency brazed-plate heat exchangers  
CIAT self-adjusting electronic control

200 to 700 kW  
230 to 800 kW



### HYDROCIAT™ LW



Compact and reliable  
Standard and High Efficiency versions  
Screw compressors  
Flooded shell and tubes evaporator  
Self-adjusting electronic control  
Touch screen control interface

269 to 1,736 kW  
317 to 2,019 kW



Cooling Heating



# DRY COOLERS - CONDENSERS - HEAT EXCHANGERS - THERMAL ENERGY STORAGE

## ENERGY OPTIMISATION SOLUTIONS™

Optimised energy management. Information in multilingual clear text.



## THERMAL ENERGY STORAGE



Shift your electricity consumption from peak to off peak hours:

- Turnkey solution
- Proven technology
- Unique expertise
- Reduced operating cost
- Non-stop support to
- Smart grid ready secure cooling production.

## DRY COOLERS & CONDENSERS

## HEAT EXCHANGERS

### OPERA™



up to 1,100 kW

**MORE**  
More efficient  
More flexible  
More intelligent

**FOR**

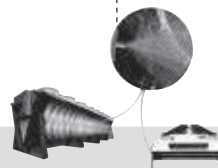
**LESS**  
Less energy  
Less time  
Less noise



### AEROFRESH™



Adiabatic cooling system  
Alternative to cooling towers  
Smaller units



### ITEX



Liquid / Liquid heat exchangers  
Benefit from a high thermal transfer capacity  
Particularly well suited to low temperature differences between the two fluids



### VEXTRA™



up to 1,900 kW

Slim design and acoustic comfort  
Saves up to 40% floor space





[www.ciat.com](http://www.ciat.com)