

# XT LINE

DEDICATED PRODUCT RANGE  
FOR HIGH TEMPERATURE  
ENVIRONMENTS

**XT**  
UP TO  
52°C

**50**  
Hz

**60**  
Hz

**AIR CONDITIONING  
& WATER HEATING**

  
**CLINT**  
CLIMATIZZAZIONE INTEGRATA

## THE GROUP

### A WIDE SALES NETWORK

#### WE ARE CLOSE TO OUR CUSTOMERS

Domestic and international sales are supported by a network of **30 Italian Sales Representatives** and over **70 worldwide Distributors** coordinated by **4 Sales Offices** based in Italy, Russia, United Arab Emirates and Malaysia.





## A GLOBAL GROUP ANSWERING TO ANY SPECIFIC MARKET NEED

**2019**

New Climatic Chamber

**2018**

New sales office in Russia

**2017**

New G.I. HOLDING headquarters and manufacturing plant

**2017**

Strategic Collaboration with FUJITSU GENERAL LIMITED

**2016**

GIMEK new plant start-up

**2015**

**G.I. MIDDLE EAST start-up**

**2013**

G.I. INDUSTRIAL ASIA HOLDING start-up

**2009**

MONTAIR acquisition

**2009**

GIMEK acquisition

**2004**

CLINT brand launch

**2003**

NOVAIR acquisition

**2002**

KTK KLIMATECHNIK acquisition

**2000**

G.I. HOLDING Group start-up

**1976**

Oldest acquired Company start-up

### The key hystorical milestones

The international Company G.I. INDUSTRIAL HOLDING SpA, part of **G.I. HOLDING Group**, is present all around the World with its wide manufacturing and distributive network.

G.I. INDUSTRIAL HOLDING's production is in four European plants: Latisana (Italy), Rivignano Teor (Italy), Piove di Sacco (Italy) and Biatorbágy (Gimek Zrt - Hungary).

Domestic and international sales are supported by a network of 30 Italian Sales Representatives and over 70 worldwide Distributors coordinated by 4 Sales Offices based in Italy, Russia, United Arab Emirates and Malaysia.

#### SALES OFFICES:

- ① Latisana – ITALY. Group Headquarters, Europe and North & South Africa Regional Office.
- ② Moscow – RUSSIA. Russia & other C.I.S. Countries Regional Office.
- ③ Dubai – UNITED ARAB EMIRATES (G.I. MIDDLE EAST Fze). Middle-East & Central Africa Regional Office.
- ④ Klang – MALAYSIA (G.I. INDUSTRIAL ASIA HOLDING Sdn Bhd). Asia Pacific Regional Office.
- International Distributors Network

**G.I. HOLDING Headquarters** are located in a new facility in Latisana (Italy) with a 1.500 m<sup>2</sup> **Showroom** with exhibition of units manufactured in all the Group's plants and the **Cooling Academy**: a training room equipped for technical coaching of consultants, business professionals, engineers, designers and contractors, with rooms for units functioning simulation.

The Latisana facility also hosts a newly built manufacturing plant dedicated to small & medium liquid Chillers and the Sales & Marketing Depts.



The network of G.I. HOLDING SpA also includes the Hungarian manufacturing Company **GIMEK Zrt**, **G.I. INDUSTRIAL ASIA HOLDING Sdn Bhd**, manufacturing and trading Company based in Malaysia and **G.I. MIDDLE EAST Fze**, the trading Company based in the United Arab Emirates.

#### CLIMATIC CHAMBER:

In Rivignano Teor (Italy), in addition to the production plant for large liquid Chillers, is located the newly born Climatic Chamber that allows the Company to perform **witness tests** in the presence of the Customer to prove the perfect functionality and performance of its Units under a huge variety of operating conditions. This allows a wide array of tests that can be carried out from -20°C to +50°C outdoor air temperature.





## HIGH AMBIENT TEMPERATURE AREAS

### ONE PARTNER, MULTIPLE HIGH EFFICIENCY AND FLEXIBLE SOLUTIONS

#### ITALIAN GENIUS, GLOBAL COMFORT

Among our core guiding principles there is the strong belief that all our customers deserve personalized attention.

Precisely for this reason we believe that closeness is a key point to be able to qualify us as a partner, rather than a supplier, who knows the market in which it operates, who provides the best solutions for that area, who has a consultant approach, who knows how to catch needs simply by listening.





## 40 YEARS OF EXPERIENCE IN AIR CONDITIONING, PROCESS COOLING, CLOSE CONTROL AND AIR TREATMENT.

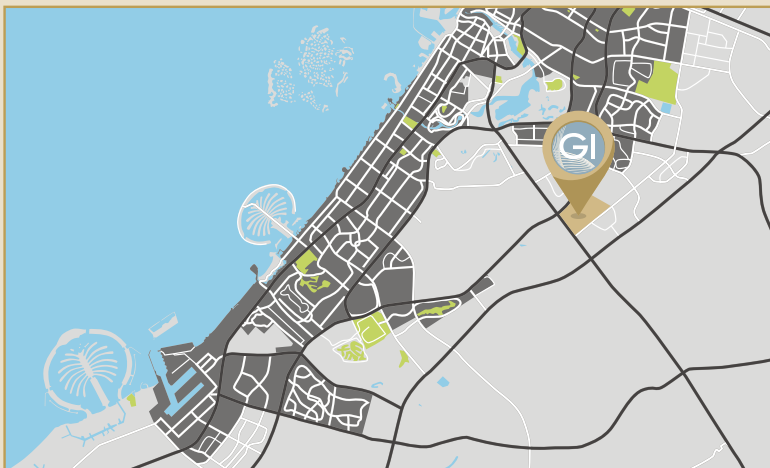
With more than 40 years of experience in HVAC sector, **G.I. HOLDING Group** manufactures a whole range of solution for comfort and industrial cooling, highly customized and focused on specific Customer's wishes and needs.

Thanks to its dynamic structure, which ensures a quick response to the market, and to its widespread sales network, able to transform necessities into business opportunities, the Company has specialised over the years in exclusive product ranges for different markets and applications.

It is precisely with this in mind that for many years it has developed the **XT LINE**, a dedicate product range for high temperature, up to 52°C, designing ad hoc every single component to bring this technology to the maximum levels possible of reliability. It brings together the paramount characteristics of durability, efficiency and versatility, all this to create tangible added value to all those who chose it.

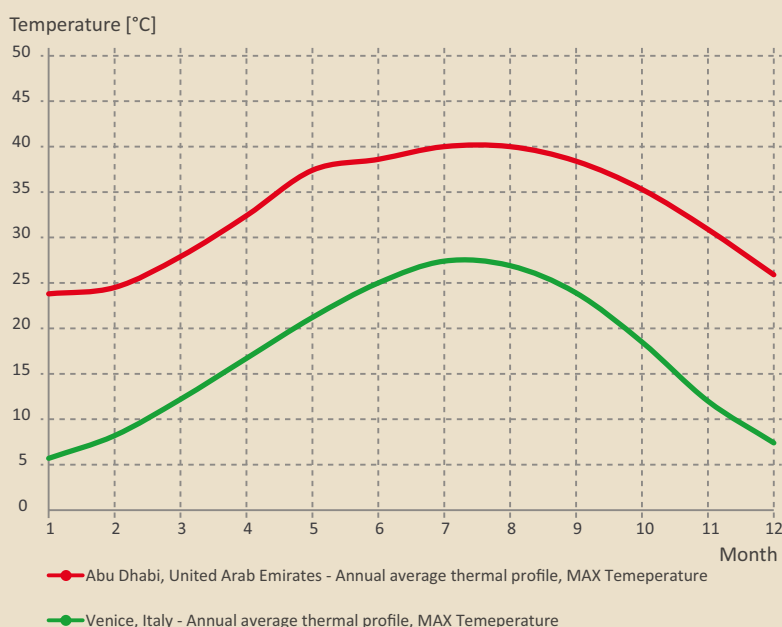
Two are the key applications: **AIR CONDITIONING** and **WATER HEATING & COOLING**, both for sanitary use and swimming pools.

The Customer focus is an integral part of **G.I. HOLDING's** strategy. For this reason one of the main sales offices of the Group is in Dubai, with highly skilled technical-sales personnel with a careful eye on the specific needs of this area.



### DUBAI SILICON OASIS

Dubai Silicon Oasis (DSO) was established with the Mission to "facilitate and promote modern technology based industries" thus supporting the region's demand for business expansion.



### XT RANGE

A dedicate product range for high temperature, up to 52°C, designing ad hoc every single component to bring this technology to the maximum levels possible of reliability.



## XT LINE

### FEATURES AND RANGE STRUCTURE

#### TOTAL QUALITY

Total Quality is the philosophy which drives all our activities, monitoring all phases in product life cycle, from product development, supplying, assembly and service. This is why the whole production process is subject to severe checks, both at intermediate and final steps. Each unit must go through strict tests, simulating the operational conditions at the Customer's site, even the most demanding.

Our dedicated After Sales Service, with its highly skilled technicians present in the area, is ready to carry out units start-up at Customers premises to ensure their perfect functioning and to immediately assist whenever necessary.





## MAIN APPLICATIONS



### UNITS DESIGN FOR AIR CONDITIONING APPLICATION:

- Liquid chillers
- Multifunctional units
- Roof Top units
- Fan coil units



### UNITS DESIGN FOR WATER HEATING & COOLING APPLICATION:

- High Temperature Heat Pumps for sanitary hot water
- Reversible Heat Pumps for swimming pool heating & cooling

## KEY FEATURES

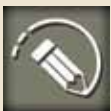


### DEDICATED PRODUCT RANGE FOR HIGH AMBIENT TEMPERATURE:

- 46°C – Design temperature
- 52°C – Maximum working temperature



Many models available **BOTH AT 50 Hz AND 60 Hz FREQUENCY** to satisfy the needs of the different markets.



### DEDICATED DESIGN ON:

- Components and structures
- Cooling circuits
- Electrical board & components

# AIR CONDITIONING AND WATER HEATING & COOLING

## RANGE STRUCTURE

### THE SOLUTION FOR ALL COMMERCIAL AND LEISURE AREAS

**G.I. HOLDING** dedicates special attention to the **XT Line**, in order to satisfy the requests of a geographical area strongly characterized by high temperature.

The Air Conditioning Units, together with the ones dedicated to Water Heating & Cooling, are perfectly suitable for all commercial environments like hotels, offices, shopping centers, food areas and even for leisure time areas like gym and swimming pools, indoor and outdoor.

## AIR CONDITIONING

### LIQUID CHILLERS

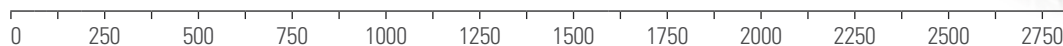
**AIRCOOLED:**

255-1596 kW (73-454 TON)



**WATERCOOLED:**

95-2560 kW (27-728 TON)



### MULTIFUNCTIONAL UNITS

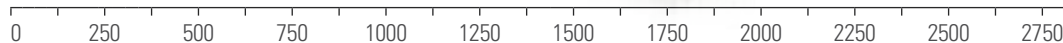
**AIRCOOLED:**

272-1153 kW (77-328 TON)



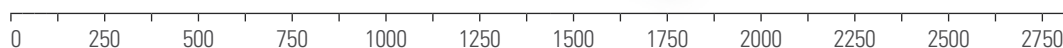
### DOUBLE SKIN PACKAGED ROOF TOP UNITS

53-283 kW (15-80 TON)



### FAN COIL UNITS

1,8-44 kW (0,5-13 TON)







## WATER HEATING & COOLING

### HIGH TEMPERATURE HEAT PUMPS FOR SANITARY HOT WATER

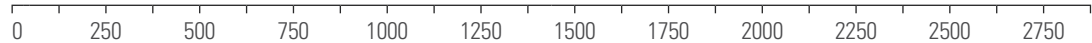
#### AIRCOOLED:

16-1392 kW (4,6-396 TON)



#### WATERCOOLED:

49-1420 kW (14-404 TON)



### REVERSIBLE HEAT PUMPS FOR SWIMMING POOL HEATING & COOLING

#### AIRCOOLED:

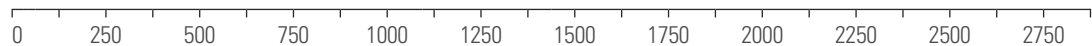
53-1080 kW (15-307 TON)

73-1260 kW (21-358 TON)



#### WATERCOOLED:

72-1380 kW (20-392 TON)



## AIR CONDITIONING

### LIQUID CHILLERS

The XT Clint aircooled and watercooled liquid Chillers ensure high operating efficiency with a considerable reduction in energy consumption thanks to the latest Screw compressors generation and a number of specific devices they are equipped with. Designed and produced to optimize the layout of each component so as to make any necessary maintenance operations more convenient, these units have an essential compact structure and a user friendly interface.





## OVERVIEW

## KEY FEATURES



**R134a AND R513A REFRIGERANTS**



**SCREW COMPRESSOR**



**SHELL AND TUBE EXCHANGER**



**50 Hz OR 60 Hz FREQUENCY**



**HEAT RECOVERY OPTION AVAILABLE**



**DIFFERENT NOISE LEVELS: STANDARD - SILENT - SUPER SILENT**



## KEY FEATURES AND BENEFITS

### RANGE PLUS



#### HIGH AMBIENT TEMPERATURE

##### **DEDICATED PRODUCT RANGE FOR HIGH AMBIENT TEMPERATURE:**

- 46°C – Design temperature
- 52°C – Maximum working temperature



#### 50 Hz AND 60 Hz FREQUENCY

Many models available **BOTH AT 50 Hz AND 60 Hz FREQUENCY** to satisfy the needs of the different markets.



#### DEDICATED DESIGN

##### **DEDICATED DESIGN ON:**

- Components and structures
- Cooling circuits



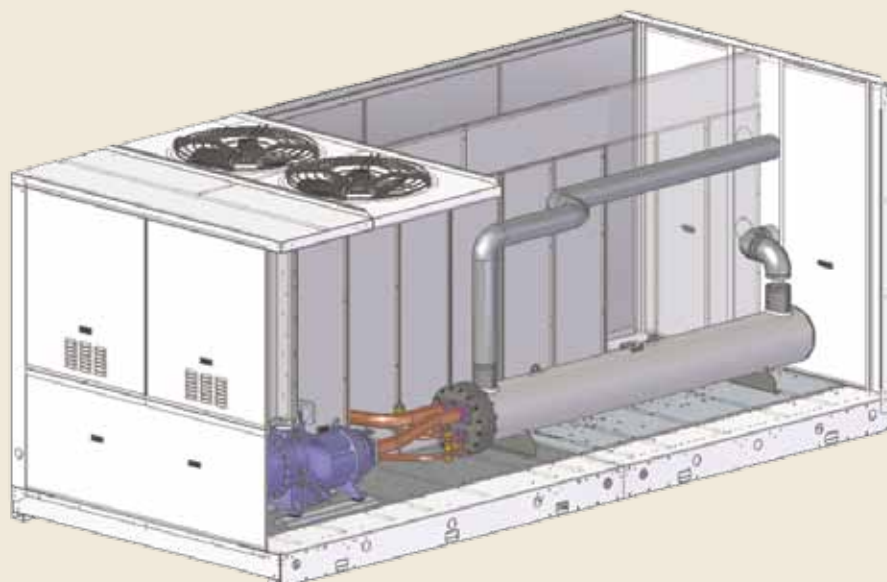
### LAYOUT

##### **DEDICATED STRUCTURE ON BIG CAPACITY AIRCOOLED MODELS:**

- Internal section divider.

##### **BENEFITS**

- High reliability levels which help reduce the emergency operations of the system or its components.
- Easier maintenance with 2 independent circuits.
- Inbuilt redundancy which significantly increases the efficiency of the whole system compared with the single circuit proposal.
- Independent both at refrigerant and air side.
- Possibility of separate maintenance, keeping the system working.





## KEY FEATURES AND BENEFITS

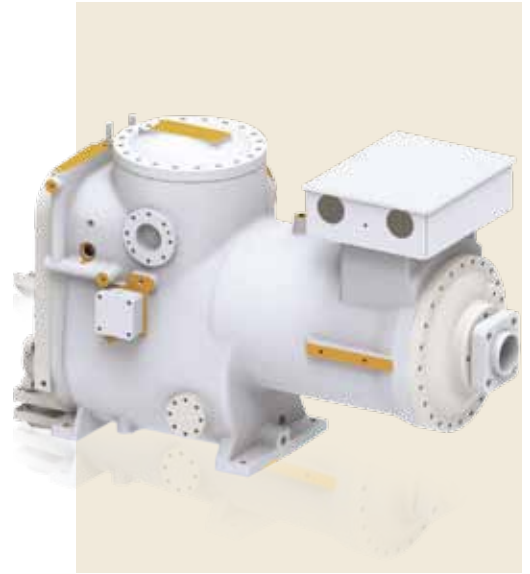


### SCREW SEMI-HERMETIC COMPRESSORS

**DESIGNED FOR HIGH TEMPERATURE APPLICATIONS:  
HIGH POWER AND EFFICIENCY.**

#### FEATURES:

- High efficiency SCREW ROTOR PROFILE - hyper volumetric efficiency.
- High efficiency motor with OPTIMAL DESIGN for refrigerant flow inside motor casing and efficient motor cooling.
- Capacity control with STEPLESS REGULATION: built-in sliding valve for HIGH EFFICIENCY AT FULL AND PART LOAD.
- Oversized bearings and motor cooled by suction gas.
- Built-in ECONOMIZER:
  - Enhance cooling capacity as well as energy efficiency.
  - Sustain optimum medium pressure by vapor injection through specially-designed slots in slide valve and compression casing.
- Low friction components: HIGH RELIABILITY AND EFFICIENCY.



### DIFFERENT NOISE LEVELS: STANDARD - SILENT - SUPER SILENT

**MOST OF THE MODELS ARE ALSO AVAILABLE ON SILENT  
OR SUPER SILENT CONFIGURATION.**

#### SILENT

≈ 2-3 dB(A) IMPROVEMENT

- Insulated compartment for compressors.
- Insulation on side walls made of soundproof polyurethane foam sheets.

#### SUPER SILENT

≈ 4-8 dB(A) IMPROVEMENT

- Insulated compartment for compressors/dedicated closed box on water cooled models.
- Insulation on side walls and base made of high performance soundproof polyurethane foam sheets & polyethylene layers.
- Lower fans speed and coils enlargement: SSL units may feature, depending on the model, wider fans diameters and/or bigger unit dimensions.



**MAXIMUM SILENCE**



## KEY FEATURES AND BENEFITS

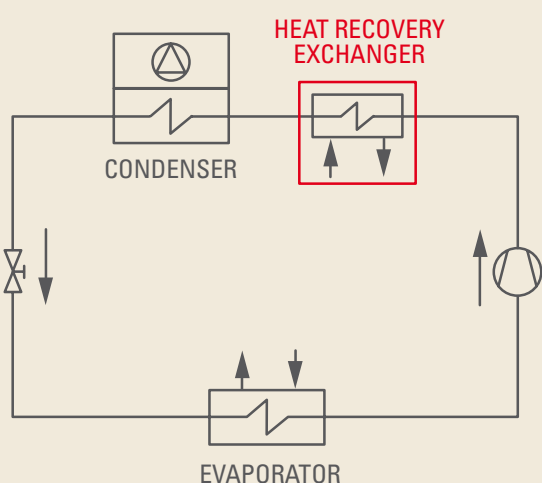


### HEAT RECOVERY OPTION

#### PARTIAL HEAT RECOVERY:

- Heat recovery exchanger **in series** with the compressor and before the condenser.
- The recovered capacity is **between 10% and 30% cooling load** of the compressor.

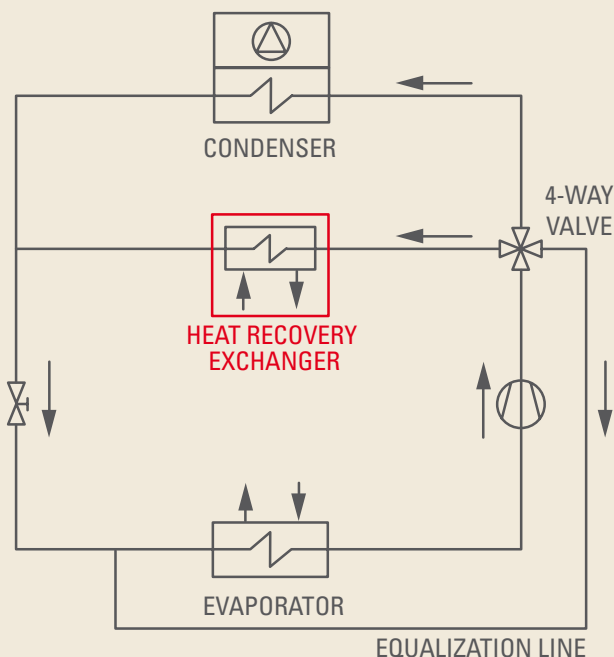
#### REFRIGERANT CIRCUIT



#### TOTAL HEAT RECOVERY:

- Heat recovery exchanger **in parallel** to the condenser.
- The recovered capacity is the **total cooling load** of the compressor.

#### REFRIGERANT CIRCUIT



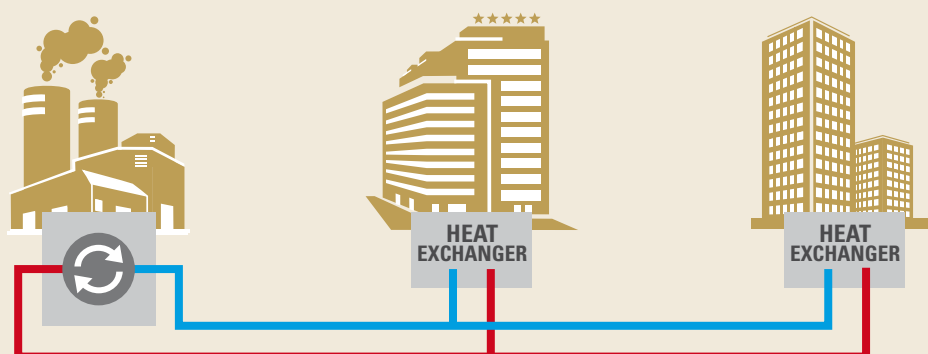
### DISTRICT COOLING APPLICATION

All liquid Chillers of the XT range represent the right solution for District Cooling systems to serve various types of buildings like hotels, arenas, retail stores, schools, hospitals, offices, residential.

This centralized solution offers a number of benefits: superior comfort, convenience, flexibility, reliability and cost effectiveness. In line with the growing interest in strong actions on climate change, it helps environment thanks to a drastic reduction of electricity consumption and consequent emissions of air pollution and CO<sub>2</sub>.

#### COOLING PLANT

#### CUSTOMER BUILDING





# AIR CONDITIONING

## LIQUID CHILLER UNITS

### AIRCOOLED



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	CHAXT/Y/A 1302÷6002	<b>INVERTER SCREW</b> *		260÷1518 / 74÷432	
60 Hz	CHAXT/SZ/Y/A 1302÷6002	<b>INVERTER SCREW</b> *		273÷1596 / 78÷454	
50 Hz	CHAXT/J/A 1302÷6002	<b>INVERTER SCREW</b> *		255÷1550 / 73÷441	
60 Hz	CHAXT/SZ/J/A 1302÷6002	<b>INVERTER SCREW</b> *		267÷1588 / 76÷452	

\* Option

### WATERCOOLED



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	CWWXT/Y/A 1302÷4802	<b>INVERTER SCREW</b> *		280÷1289 / 80÷367	
50 Hz	CWWXT/Y/A 261-T÷2751-T	<b>INVERTER SCREW</b> *		96÷1170 / 27÷333	
50 Hz	CWWXT/Y/A 1002-T÷7202-T	<b>INVERTER SCREW</b> *		250÷2143 / 71÷611	
50 Hz	CWWXT/Y 1302-B÷9002-B			267÷2473 / 76÷703	
60 Hz	CWWXT/SZ/Y/A 1302÷4802	<b>INVERTER SCREW</b> *		322÷1480 / 92÷421	
60 Hz	CWWXT/SZ/Y/A 261-T÷2751-T	<b>INVERTER SCREW</b> *		101÷1229 / 29÷350	
60 Hz	CWWXT/SZ/Y/A 1002-T÷7202-T	<b>INVERTER SCREW</b> *		263÷2250 / 75÷641	
60 Hz	CWWXT/SZ/Y 1302-B÷9002-B			276÷2560 / 79÷728	
50 Hz	CWWXT/J/A 1302÷4802	<b>INVERTER SCREW</b> *		274÷1260 / 72÷313	
50 Hz	CWWXT/J/A 261-T÷2751-T	<b>INVERTER SCREW</b> *		95÷1150 / 27÷328	
50 Hz	CWWXT/J/A 1002-T÷7202-T	<b>INVERTER SCREW</b> *		245÷2100 / 70÷599	
50 Hz	CWWXT/J 1302-B÷9002-B			261÷2417 / 74÷687	
60 Hz	CWWXT/SZ/J/A 1302÷4802	<b>INVERTER SCREW</b> *		322÷1480 / 92÷421	
60 Hz	CWWXT/SZ/J/A 261-T÷2751-T	<b>INVERTER SCREW</b> *		100÷1208 / 29÷344	
60 Hz	CWWXT/SZ/J/A 1002-T÷7202-T	<b>INVERTER SCREW</b> *		257÷2205 / 73÷628	
60 Hz	CWWXT/SZ/J 1302-B÷9002-B			270÷2502 / 77÷712	

\* Option

### LEGENDA

COMPRESSOR	EXCHANGER	REFRIGERANT
Inverter Screw	Shell and Tube	R134a
Screw	Flooded Shell and Tube	R513A

## AIR CONDITIONING

### MULTIFUNCTIONAL UNITS

On complex buildings where there is simultaneous need of cooling and heating, this range of Multifunctional units is capable to provide them at the same time with the maximum efficiency in every season of the year. They allow to combine the three contemporary functioning modes – cooling, heating and domestic hot water production – to reach several working configurations.





## OVERVIEW

## KEY FEATURES



**R134a AND R513A REFRIGERANTS**



**SCREW COMPRESSOR**



**SHELL AND TUBE EXCHANGER**



**50 Hz OR 60 Hz FREQUENCY**



**HOT WATER UP TO 50°C**



**4-PIPES SYSTEMS**



**MORE COMPACT SYSTEMS, EASIER INSTALLATION**



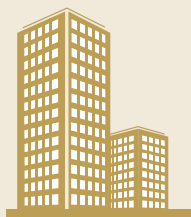
**WEB MONITORING**



## KEY FEATURES AND BENEFITS



### MULTIFUNCTIONAL OPERATION



#### MULTI-FUNCTIONAL AND OFFICE BUILDINGS



#### HOTELS



#### INDUSTRIAL APPLICATIONS

#### MORE COMPACT SYSTEMS, EASIER INSTALLATION:

Despite traditional systems, where cooling and heating are provided by two independent units (liquid Chiller and Heat Pump, or liquid Chiller and Boiler) and dedicated piping, EnergyPower centres both sources on one single unit. The result is a noticeable gain on occupied space on service areas and simplification of system configuration, with reduced on-site operations for installation and maintenance.



### WORKING CONFIGURATIONS

			COOLING ONLY
			HEATING ONLY
			DOMESTIC HOT WATER PRODUCTION ONLY
			COOLING + HEATING
			COOLING + DOMESTIC HOT WATER PRODUCTION
			HEATING + DOMESTIC HOT WATER PRODUCTION
			COOLING + HEATING + DOMESTIC HOT WATER PRODUCTION



## KEY FEATURES AND BENEFITS



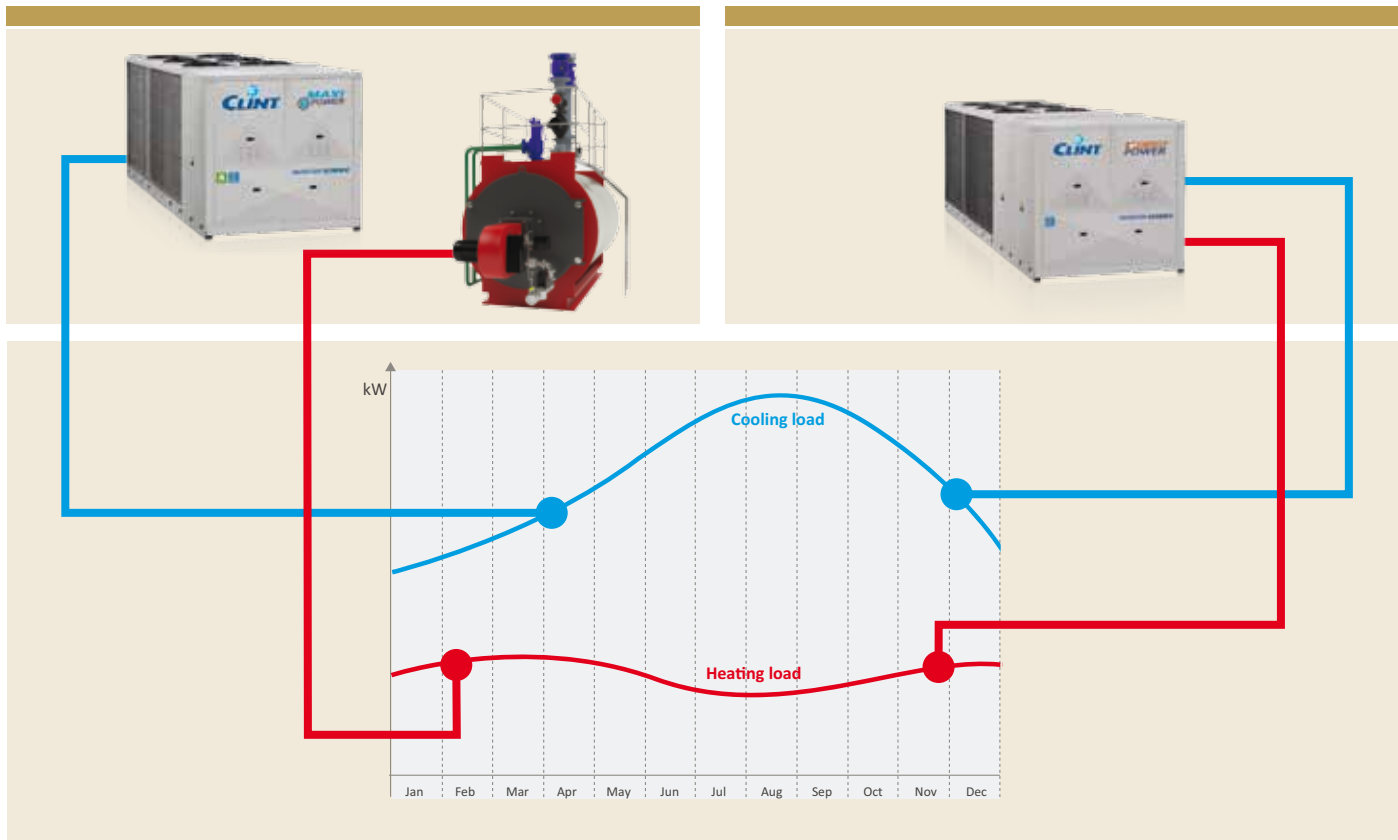
### MULTIFUNCTIONAL OPERATION

#### TRADITIONAL SOLUTION:

Two different systems, one for the cooling load (CHILLER) and one for the thermal load (BOILER).

#### MULTIFUNCTIONAL APPLICATION:

A single unit capable to provide Cooling and Heating at the same time.



### TER: TOTAL EFFICIENCY RATIO

When hot water and chilled water are produced simultaneously, **the real efficiency of the unit is the sum of hot and cold performances.** TER reaches its maximum value in load balancing conditions.

**EER, COP are overcome by the**

$$\text{TER} = \frac{\text{Cooling capacity} + \text{Heating capacity}}{\text{Power input}}$$

**EER**  
UP TO  
**3,22**

**COP**  
UP TO  
**3,69**

**TER**  
UP TO  
**8,66**

## KEY FEATURES AND BENEFITS

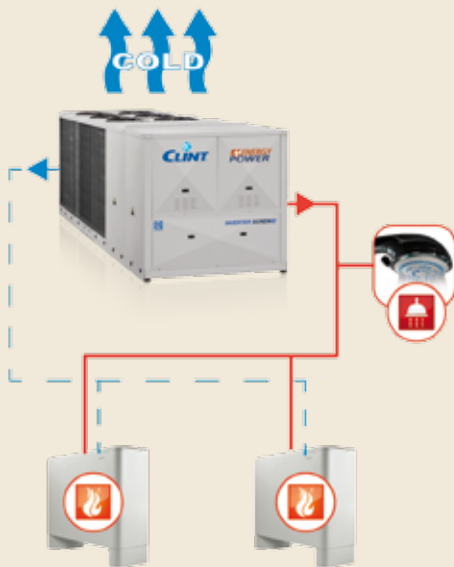
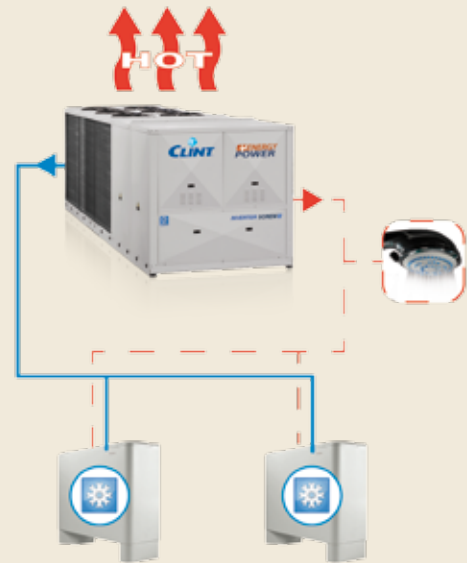


### MULTIFUNCTIONAL OPERATION



#### COOLING ONLY:

The solenoid valve diverts the condensing part into the finned coil that dissipates warm air to external ambient.



#### HEATING AND DOMESTIC HOT WATER PRODUCTION:

The solenoid valve diverts the evaporation into the finned coil that dissipates cold air to external ambient.



#### COOLING, HEATING AND DOMESTIC HOT WATER PRODUCTION:

Evaporation and condensation are diverted by the solenoid valve to the two shell and tube exchangers, excluding the external finned coil. The unit evaporates into the cold side of the exchanger and condenses into the hot side of the exchanger. This way the unit behaves like a watercooled liquid Chiller, allowing to recover the energy produced and using it for the air conditioning of the building, for the production of domestic hot water and for the ambient heating.





# AIR CONDITIONING

## MULTIFUNCTIONAL UNITS

### AIRCOOLED

**ENERGY  
POWER**



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	CHAXT/Y/EP 1352÷4402	<b>INVERTER SCREW</b> *		278÷1133 / 79÷322	
60 Hz	CHAXT/SZ/Y/EP 1352÷4402	<b>INVERTER SCREW</b> *		283÷1153 / 81÷328	
50 Hz	CHAXT/J/EP 1352÷4402	<b>INVERTER SCREW</b> *		272÷1108 / 77÷315	
60 Hz	CHAXT/SZ/J/EP 1352÷4402	<b>INVERTER SCREW</b> *		277÷1127 / 79÷321	

\* Option

### LEGENDA

COMPRESSOR	EXCHANGER	SOLUTION	REFRIGERANT
Inverter Screw	Shell and Tube	Shell and Tube	R134a
Screw		Flooded Shell and Tube	R513A

## AIR CONDITIONING

### DOUBLE SKIN PACKAGED ROOF TOP UNITS

The double skin packaged Roof Top units of AIRMAXI and FRESHAIR series are the ideal solution for the conditioning of wide surfaces such as shopping malls and restaurants, canteen and industrial areas, thus guaranteeing the highest air hygiene standards. These units feature Scroll compressors and radial fans or EC Inverter Plug-Fans managed by an electronic control which adjusts fans rotation speed, to adapt the air flow to the system capacity.





## OVERVIEW



**R410A REFRIGERANT**



**SCROLL COMPRESSOR**



**EC INVERTER PLUG-FANS**



**EASY INSTALLATION AND CONFIGURATION**



**MORE COMPACT SYSTEMS, EASIER INSTALLATION**



## KEY FEATURES AND BENEFITS



### HIGH FLEXIBILITY: 50MM-THICK SANDWICH STRUCTURE

#### PANELLING:

- **Type of panels.** Sandwich double skin in galvanised and pre-painted sheet (0,6 mm-thick sheet).
- **Insulation.**
  - Air treatment side: rigid foam polyurethane (40 kg/m³).
  - Condensing side: foam polyurethane with ashlar profile for sound absorption (10 + 10 mm).
- **Panel thickness.** 50 mm.
- **Profiles.** Profiles in extruded aluminium alloy (62 x 50 mm). SNAP-IN fastening.
- **Doors.** Units are provided with doors on inspection side.



### HIGH EFFICIENCY

#### MAXIMUM FLEXIBILITY:

- Several configurations in air delivery are available.
- The **Constant available static pressure regulation control** (AT/P accessory) can be supplied for an easier installation and high performances. The accessory controls the available static pressure of the unit, balancing the pressure drops caused by the dirtying of the **filters** (units fitted with EC INVERTER PLUG-FANS).
- The **Constant air flow regulation control** (AT accessory) can be supplied to regulate the work load of the unit based on the demanded variables of air flow inside the plant (units fitted with EC INVERTER PLUG-FANS).



### EC INVERTER PLUG-FANS

#### EC INVERTER PLUG-FANS:

- On fans, both in intake and in delivery, of air treatment section.
- The EC Inverter control modulates the air flow electronically.
- The operating air flow is set during the installation.



**SOFT START:**  
**REDUCES THE**  
**INRUSH CURRENT**



**MAXIMUM SILENCE**






# AIR CONDITIONING

## DOUBLE SKIN PACKAGED ROOF TOP UNITS

**AIRMAXI**















	UNITS NAME	TECHNOLOGY	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	RTAXT/K 182÷804	<b>EC INVERTER PLUG FANS</b> *	57÷276 / 16÷79	     
60 Hz	RTAXT/SZ/K 182÷804	<b>EC INVERTER PLUG FANS</b> *	58÷283 / 17÷80	     

\* Option








**FRESHAIR**



	UNITS NAME	TECHNOLOGY	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	RTAXT/K/FA 182÷604	<b>EC INVERTER PLUG FANS</b> *	53÷197 / 15÷56	     
60 Hz	RTAXT/SZ/K/FA 182÷604	<b>EC INVERTER PLUG FANS</b> *	54÷202 / 15÷57	     

\* Option

### LEGENDA

COMPRESSOR	FAN	SOLUTION	REFRIGERANT
 Scroll	 Radial	 Double Skin	 R410A
	 EC Inverter Plug-Fan	 Mixing Box	
		 Fresh Air	



## AIR CONDITIONING

### FAN COIL UNITS

The hydronic Fan Coil units, designed for built-in installation, vertical floor mounted, horizontal ceiling-mounted, or ductable, as well as the Water Cassettes, can easily be installed in domestic environments or service sectors including offices, hotels, restaurants, gyms and shops. They are available in different configurations to match any space requirements and to meet a wide variety of sound and efficiency needs.





## OVERVIEW



**HYDRONIC SYSTEM**



**50 Hz OR 60 Hz FREQUENCY**



**EC INVERTER FANS**



**HIGH AVAILABLE STATIC PRESSURE**



**EASY INSTALLATION AND CONFIGURATION**



**DEDICATED RANGE FOR DISTRICT COOLING**



**CENTRALIZED MULTI-UNIT CONTROL (MASTER-SLAVE)**



## KEY FEATURES AND BENEFITS



### EC INVERTER FANS

Units can be equipped with EC INVERTER fans with BLDC brushless motor with permanent magnet technology controlled by a built-in Inverter board.

#### HIGH EFFICIENCY

- Up to 50% lower energy consumption than comparable on-off 3-Speed models.
- Fan speed modulation allows to minimize power consumption.
- Lower starting current.

#### MORE COMFORT

- Immediate and precise modulation of the airflow to the cooling/heating load.
- Stable temperature.
- No temperature fluctuations.

#### SILENT OPERATION

- Fans at minimum speed ensure the lowest noise.

#### HIGH AVAILABLE STATIC PRESSURE

- The new models FIW/AP 23-74 feature radial fans with Available Static Pressure up to 60 Pa, making the unit suitable for ductable installation.



#### HIGH EFFICIENCY



#### MORE COMFORT



#### MAXIMUM SILENCE



## EASY INSTALLATION AND CONFIGURATION

The units have been designed to simplify installation and configuration procedures. All of them are equipped with a filter which absorbs and retains dust in suspension. It allows to keep the air quality at a suitable level and its easy removal enables continuous cleaning cycles to guarantee suitable hygiene standards in highly frequented rooms.

The Fan Coil units can be installed horizontally or vertically, with front, bottom or rear intake. A series of accessories can be supplied, including a wall mounted automatic electronic control panel.

The ductable version can be completed with outdoor air intake plenum, mixing section with dampers room, delivery plenum for flexible ducts and electrical hating section.

The Water Cassettes are available with a set of accessories to complete the configuration, as well as an attractive intake grid and adjustable deflectors to perfectly distribute the air in the room. They include also auxiliary moisture drain pan.



#### EASY INSTALLATION AND CONFIGURATION



## DEDICATED RANGE FOR DISTRICT COOLING

The HDT line of fan coil units is specifically engineered for centralized cooling production systems thanks to their enhanced water coil units, suitable for the necessary different working temperatures. This way, the outlet temperature is the same as it would be in the traditional way, even with a higher inlet temperature given by this special configuration.



## CENTRALIZED MULTI-UNIT CONTROL (MASTER-SLAVE)

Multiple units can be controlled with the same controller with Master-Slave control logic, through RS485 serial interface.

- TCW water cassette: serial interfaces already included for control up to 32 units.
- FIW/AP fan coils & UTW ductable units: optional serial interfaces for control up to 24 units.



# AIR CONDITIONING

## FAN COIL UNITS

### BUILT-IN INSTALLATION



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	FIW/AP 23÷74	<b>EC INVERTER FAN</b> * <b>HIGH STATIC PRESSURE</b> ❄️		2,0÷9,4 / 0,6÷2,7	
50 Hz	FIW/AP/HDT 23÷74	<b>EC INVERTER FAN</b> * <b>HIGH STATIC PRESSURE</b> ❄️		1,8÷7,5 / 0,5÷2,1	
60 Hz	FIW/AP/SZ 23÷74	<b>EC INVERTER FAN</b> * <b>HIGH STATIC PRESSURE</b> ❄️		2,1÷9,7 / 0,6÷2,8	
60 Hz	FIW/AP/SZ/HDT 23÷74	<b>EC INVERTER FAN</b> * <b>HIGH STATIC PRESSURE</b> ❄️		2,2÷7,5 / 0,6÷2,1	

\* Option

### WATER CASSETTE



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	TCW 22÷122	<b>EC INVERTER FAN</b> *		2,4÷11 / 0,7÷3,1	
60 Hz	TCW/SZ 22÷122	<b>EC INVERTER FAN</b> *		2,5÷11 / 0,7÷3,2	

\* Option

### DUCTABLE



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	FEATURES
50 Hz	UTW 63÷544	<b>EC INVERTER FAN</b> *		4,6÷43 / 1,3÷12	
50 Hz	UTW/HDT 63÷274	<b>EC INVERTER FAN</b> *		3,6÷18 / 1,0÷5,0	
60 Hz	UTW/SZ 63÷544	<b>EC INVERTER FAN</b> *		4,7÷44 / 1,3÷13	
60 Hz	UTW/SZ/HDT 63÷274	<b>EC INVERTER FAN</b> *		3,7÷18 / 1,1÷5,2	

\* Option

### LEGENDA

FAN	SOLUTION	REFRIGERANT
EC Inverter Radial	High Delta Water Temperature	H <sub>2</sub> O
Radial		

## WATER HEATING & COOLING

### HIGH TEMPERATURE HEAT PUMPS FOR DOMESTIC HOT WATER PRODUCTION

Flexibility is the main characteristic of this range of products, air-cooled or water-cooled versions: they recover most of the energy needed from external environment. Based on Heat Pump logic, they exploit the thermal exchange between external area and water in the system, to provide to the water itself the heat for domestic hot water up to 65°C.



## OVERVIEW



**R134a AND R513A REFRIGERANTS**



**SCROLL AND SCREW COMPRESSORS**



**PLATE AND SHELL AND TUBE EXCHANGER**



**HOT WATER UP TO 65°C**



**DIFFERENT NOISE LEVELS: STANDARD - SILENT - SUPER SILENT**



## KEY FEATURES AND BENEFITS



### HEAT PUMPS (HEATING ONLY) FOR DOMESTIC HOT WATER PRODUCTION

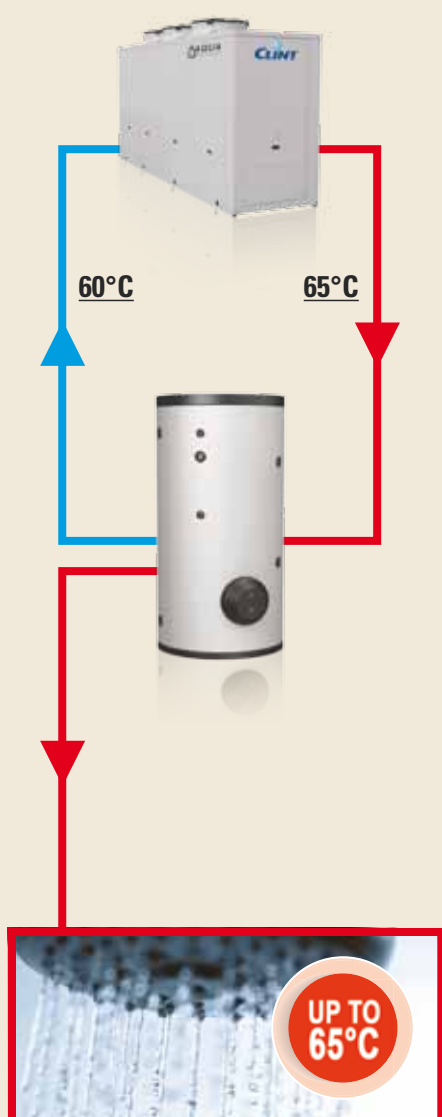
#### COMPACT DESIGN, OPTIMIZED LAYOUT:

- Compact design, reduced footprint.
- Full accessibility of all components.
- Frontal electrical board and control panel.
- All hydraulic components for the unit installation are already included with no increase in dimensions.
- Operation with reduced system water content.
- Rear side water connections.

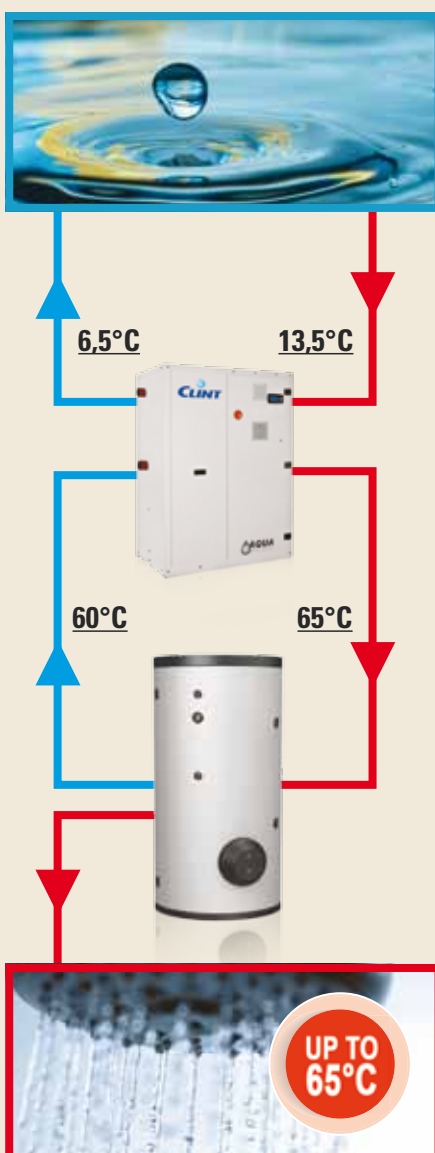


#### EASY INSTALLATION & SERVICE

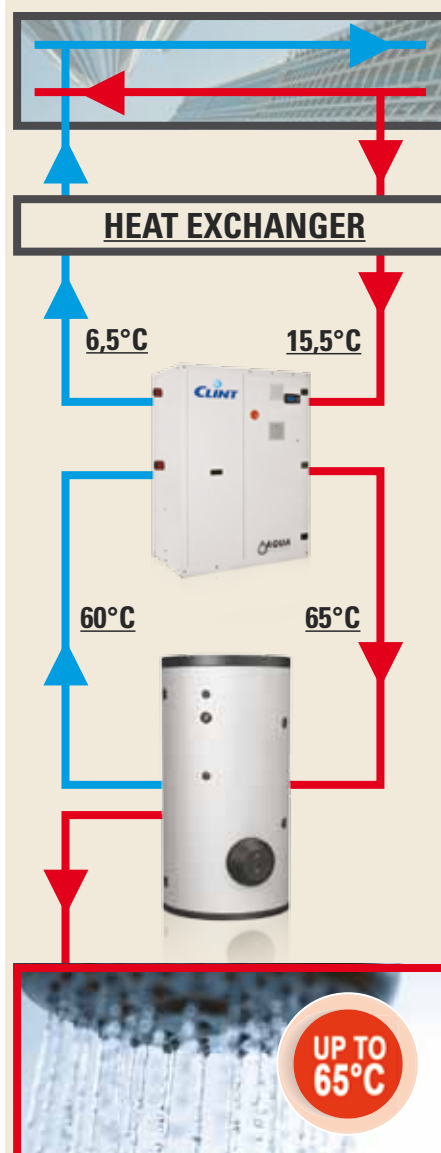
#### AIRCOOLED HEAT PUMPS:



#### WATER COOLED HEAT PUMPS FOR TRADITIONAL APPLICATION:



#### WATER COOLED HEAT PUMPS FOR DISTRICT COOLING APPLICATION:





# WATER HEATING & COOLING

## HIGH TEMPERATURE HEAT PUMPS FOR DOMESTIC HOT WATER PRODUCTION

### AIRCOOLED



	UNITS NAME	TECHNOLOGY	CERTIFICATION	HEATING CAPACITY (kW/TON)	FEATURES
50 Hz	CHAXT/Y/HT 91÷231			16÷46 / 4,6÷13	
50 Hz	CHAXT/Y/HT 252-P÷924-P			48÷193 / 14÷55	
50 Hz	CHAXT/Y/HT 252÷924			48÷193 / 14÷55	
50 Hz	CHAXT/Y/HT 1254-P÷2206-P			242÷447 / 69÷127	
50 Hz	CHAXT/Y/HT 1254÷2206			242÷447 / 69÷127	
50 Hz	CHAXT/Y/HT 902÷5502	<b>INVERTER SCREW</b> *		191÷1392 / 54÷396	
50 Hz	CHAXT/J/HT 902÷5502	<b>INVERTER SCREW</b> *		187÷1361 / 53÷387	

\* Option

### WATERCOOLED



	UNITS NAME	TECHNOLOGY	CERTIFICATION	HEATING CAPACITY (kW/TON)	FEATURES
50 Hz	CWWXT/Y/HT 252-P÷924-P			49÷197 / 14÷56	
50 Hz	CWWXT/Y/HT 252÷924			49÷197 / 14÷56	
50 Hz	CWWXT/Y/HT 1254-P÷2206-P			247÷456 / 70÷130	
50 Hz	CWWXT/Y/HT 1254÷2206			247÷456 / 70÷130	
50 Hz	CWWXT/Y/HT 902÷5502	<b>INVERTER SCREW</b> *		195÷1420 / 55÷404	
50 Hz	CWWXT/J/HT 902÷5502	<b>INVERTER SCREW</b> *		191÷1388 / 54÷395	

\* Option

### LEGENDA

COMPRESSOR	EXCHANGER	REFRIGERANT
Scroll	Plate	R134a
Inverter Screw	Shell and Tube	R513A
Screw		

## WATER HEATING & COOLING

### REVERSIBLE HEAT PUMPS FOR SWIMMING POOL HEATING & COOLING

This range is the best answer to extend the swimming season by cooling the pools during the summer and heating the water in the spring and fall, thus keeping a comfortable water temperature along the whole year time. Aircooled or watercooled, these reversible Heat Pumps are equipped with the utmost best Screw or Scroll compressors and Shell and Tube evaporators to offer outstanding reliability and savings.





## OVERVIEW



**R410A AND R134a REFRIGERANTS**



**SCROLL AND SCREW COMPRESSORS**



**SHELL AND TUBE EXCHANGER**



**29°C WATER SET POINT (SWIMMING POOL)**



**TITANIUM EXCHANGER**



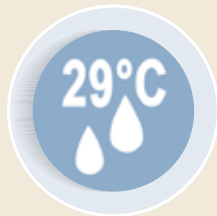
## KEY FEATURES AND BENEFITS



### REVERSIBLE HEAT PUMPS FOR SWIMMING POOL HEATING & COOLING

#### COMFORT WATER TEMPERATURE IN ALL SEASONS FOR ALL APPLICATIONS:

- AIRCOOLED HEAT PUMPS - REVERSIBLE.
- WATERCOOLED HEAT PUMPS - HEATING ONLY.
- WATERCOOLED HEAT PUMPS – DISTRICT COOLING APPLICATION - HEATING ONLY.



**SWIMMING POOLS SET POINT  
WATER TEMPERATURE 29°C**



**EASY INSTALLATION  
& SERVICE**



### SPECIAL OPTION: TITANIUM HEAT EXCHANGER

#### SPECIAL OPTION: TITANIUM HEAT EXCHANGERS:

The main features of titanium are:

- Low density
- High resistance to corrosion, abrasion, impact, cutting, UV rays
- High thermal inertia and good heat resistance
- Good workmanship and weldability
- Antistatic and non-magnetic
- Non-polluting and non-toxic
- Recyclable.

The high resistance to corrosion of titanium in oxidizing environments, as pool water, is due to the natural formation of a very stable and adherent oxidized layer on the surface.

In case of scratches or abrasions, the protective layer spontaneously recovers in a very short time.

This condition makes the corrosion potential of titanium below that of the metals of greater resistance used today (e.g. stainless steel, aluminum, etc.).





# WATER HEATING & COOLING

## REVERSIBLE HEAT PUMPS FOR SWIMMING POOL HEATING & COOLING

### AIRCOOLED HEATING & COOLING



	UNITS NAME	TECHNOLOGY	CERTIFICATION	COOLING CAPACITY (kW/TON)	HEATING CAPACITY (kW/TON)	FEATURES
50 Hz	CHAXT/K/WP 182÷604			53÷175 / 15÷50	73÷240 / 21÷68	
50 Hz	CHAXT/K/WP 726÷18012			212÷540 / 60÷154	270÷710 / 77÷202	
50 Hz	CHAXT/Y/A/WP 1202÷6303	<b>INVERTER SCREW</b> *		195÷1080 / 55÷307	240÷1260 / 68÷358	
50 Hz	CHAXT/J/A/WP 1202÷6303	<b>INVERTER SCREW</b> *		191÷1056 / 54÷300	235÷1231 / 67÷350	

\* Option

### WATERCOOLED HEATING ONLY



	UNITS NAME	TECHNOLOGY	CERTIFICATION	HEATING CAPACITY (kW/TON)	FEATURES
50 Hz	CWWXT/K/WP 182÷604			72÷240 / 20÷68	
50 Hz	CWWXT/K/WP 726÷18012			280÷710 / 80÷202	
50 Hz	CWWXT/Y/A/WP 1202÷6303	<b>INVERTER SCREW</b> *		200÷1380 / 57÷392	
50 Hz	CWWXT/J/A/WP 1202÷6303	<b>INVERTER SCREW</b> *		196÷1349 / 56÷384	

\* Option

### LEGENDA

COMPRESSOR	EXCHANGER	REFRIGERANT
Scroll	Shell and Tube	R410A
Inverter Screw		R134a
Screw		R513A

## SPECIAL TREATMENTS

### PROTECTIONS FOR MARINE ENVIRONMENTS

Coils are among the fundamental components in Chillers and Heat Pumps and for this reason, different treatments made available by **G.I. HOLDING Group**, preserve their integrity even in particularly critical environments, such as marine ones. Coastal areas near the sea are characterized by an abundance of sodium chloride which normally leads to the corrosion process, with alteration or destruction of metals and consequent loss of efficiency and increase in energy consumption. The options offered by G.I. HOLDING Group guarantee longer components life and therefore better overall machine operation.



#### TX - COIL WITH PRE-COATED FINS (Cu/Al ONLY)

Additional protection against corrosion applied on Cu/Al condensing coils to be used on aggressive environments. It consists of a polyurethane single layer film on coil fins applied with spray method. Frame and components are excluded. The pre-coated treatment doesn't cause any thermal capacity loss. Anti-corrosion performances: 1.000 hours on neutral salt spray test (ASTM B117) / 200 hours on acetic salt spray test (ASTM B287).



#### TXK - COIL WITH BLACK EPOXY TREATMENT

The Black Epoxy coatings provide a long lasting and resilient corrosion protection for Round Tube Plate Fin heat exchangers (CuAl). The treatment is made of two layers, one transparent and the top laquer made of polyurethane black coating. The treatment is applied with chemical degreasing (first layer) followed by an application of overspray of epoxy, then an additional coating layer of epoxy on whole coil, including fins, frame and all components.

They finely seal off the heat exchanger from the environment, without affecting heat transfer and pressure drop. Anti-corrosion performances: 1.500 hours on neutral salt spray test (ASTM B117) / 300 hours on acetic salt spray test (ASTM B287).



#### TXG - COIL WITH BLYGOLD TREATMENT

Blygold coatings provide a remarkable long lasting and resilient corrosion protection for Round Tube Plate Fin heat exchangers (CuAl). It consists of a polyurethane film on coil fins applied with spray method on double layer on whole coil, including fins, frame and all components. They finely seal off the heat exchanger from environment, without affecting heat transfer and pressure drop. The treatment is made of PoluAl XT, an aluminium pigmented polyurethane coating developed for the protection of aircooled heat exchangers. It has an excellent chemical and UV resistance. It offers flexibility, excellent adhesion with negligible effect on the heat transfer.

Plus it can be applied in a very thin layer, to prevent pressure drop. The special application technique ensures accurate application of the coating until the fins at the inside of the coil, not only on the surface fins. Anti-corrosion performances: 4.000+ hours on neutral salt spray test (ASTM B117) / 4.000+ hours on acetic salt spray test (ASTM B287).





## SPECIAL TREATMENTS

### PROTECTIONS FOR MARINE ENVIRONMENTS



**CERTIFIED**

**C5-M**

ANTICORROSION LEVEL

### COPPER/COPPER (Cu/Cu) COILS WITH ELECTROFIN® AND E-COATING UV TREATMENTS

The Copper/Copper condensing coils have high thermal exchange properties and at the same time are more resistant to weathering than traditional Copper/Aluminium coils. For longer durability in marine environments, an additional ELECTROFIN® treatment is applied on the surface.

This is electrodeposition of epoxy polymer specially developed to protect thermal exchange coils placed in coastal area, as it guarantees complete protection of the entire finned surface with less than 1% loss of the thermal exchange. A further E-Coat UV treatment against damage caused by sunlight UV rays is applied to the coils. ELECTROFIN® and E-Coat UV treated coils are certified for more than 6.000 hours on neutral salt spray test (ASTM B117).



### STEEL BASE AND PANELLING COATED WITH PROTECTIVE ZINC-MAGNESIUM (ZnMn) TREATMENT

It's the most resistant material on the market and also certified for marine environments, where sodium chloride dissolved in the air leads to a significant deterioration of traditional materials. The treatment is applied by means of a molten metal bath chemically composed of an alloy of zinc, aluminium and magnesium. This creates a stable and resistant layer that covers the entire surface, offering protection against corrosion that is much more effective than traditional treatments. Moreover, Zinc-Magnesium is self-regenerating: in the event of damage to the protective superficial layer, the material reacts chemically by self-restoring the protection in a short period of time.



### SPECIAL COMPONENTS AND PROTECTIVE TREATMENTS

Even the smallest components, such as fixing screws, can be made of AISI 316 steel, to withstand all any kind of corrosion. The fan diffusers can be made of polyurethane material for maximum resistance to salt air. The cooling and hydraulic circuits can be further protected by an anti-corrosion coating applied on the welded areas.





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**03.2020**

G.I. INDUSTRIAL HOLDING S.p.A.  
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in all specifications without notice.