

COMFORT APPLICATIONS

PRODUCT OVERVIEW

▶ CHILLERS AND FREE-COOLING CHILLERS

▶ HEAT PUMPS

▶ MULTIFUNCTION UNITS

▶ ROOFTOP UNITS

▶ AIR HANDLING UNITS

▶ HYDRONIC TERMINALS

▶ CONTROL, SUPERVISION AND OPTIMISATION SYSTEMS

▶ HEAT REJECTION PRODUCTS

NEW GREEN REFRIGERANT SERIES

G04
SERIES

R1234ze

G05
SERIES

R513A

G06
SERIES

R454B

G07
SERIES

R32

Climaveneta's mission is to provide energy efficient heating, air conditioning, and optimisation solutions that enhance everyone's comfort, improve the profitability of a building, and do not contribute to an increase in CO₂ levels.

Leadership in smart heat pumps for 4 and 6 pipe systems

Extensive Range of Hydronic units from 1 to 4.549 kW

Countless successful projects worldwide

Complete range of rooftop units up to 350kW and AHUs up to 100.000m³/h air flow

3 standard energy efficiency settings

Vast portfolio of Control, Monitoring and Optimisation systems

12 specialized manufacturing hubs

8 standard noise reduction configurations





As a European leader in the HVAC industry, Climaveneta has provided premium air conditioning and heating solutions for the most challenging and demanding projects worldwide for over 45 years. Building on this strong legacy, Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. has decided to turn Climaveneta into the Group's specialized brand for hydronic comfort applications.

The result is the most complete range of advanced solutions providing enhanced

usability, energy efficiency, and environmental sustainability to modern buildings, as well as for the health, and well-being of the people who spend their time there.

These solutions are backed by a business approach based on flexibility and capability to adapt the system to the requirements of each project, as well as on vast experience and on the strength of belonging to a large multinational group such as Mitsubishi Electric in terms of integrated R&D, operations and central functions.

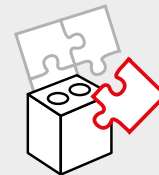
Climaveneta solutions for comfort applications are designed to provide even in the most challenging residential, office, hotel and retail projects:



**Perfect
Comfort and
Well-being**



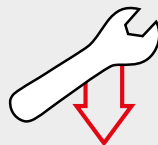
**Environmental
Respect**



**Specific
Solution for
each project**



**Lowest cost of
ownership**



**Simplified
on-site
operations**



**Enhanced value
of the real estate
development**

Advanced technologies for high efficiency and high quality air conditioning systems.

Climaveneta's leadership in air conditioning and heating is backed by over 45 years experience in the smart integration of premium technologies for the most challenging projects worldwide

Magnetic levitation



An extended range of chillers with magnetic levitation centrifugal compressors from 200kW to 4MW, both air source and water source, available also in free cooling and evaporative free cooling versions, to deliver highest efficiency in every application.

Smart Thermal Energy Management



An innovative heat recovery system that allows the smart use of rejection heat from the industrial process for comfort heating and other neighbouring applications.

Inverter Driven Compressor



The possibility to modulate cooling capacity results in increased efficiency as well as in the possibility to effectively implement smart management solutions such as active redundancy.

New G04, G05, G06 and G07 Series using green refrigerants



Following on vast experience in using green refrigerants, Climaveneta has already employed extensively green refrigerants such as HFO124ze, R32, R513A and R514B in many ranges, in order to continue to be at the forefront with green best practices.

V-AIR



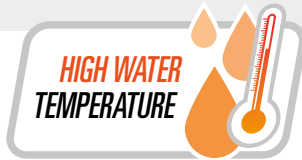
High efficiency EC technology fans are extensively adopted for their advantages with 15% energy reduction compared to traditional EC fans.

VPF



The VPF (Variable Primary Flow) dynamically optimizes the unit's thermoregulation for variable flow operation, thus ensuring both the highest pump energy savings and chiller stable operation.

High Water Temperature



Climaveneta vast experience in high leaving water temperature applications is proven by a complete range of technical solutions in these areas, to cope with any heating requirement, from 6 pipe applications to high temperature heating.

Proprietary Control Logics



The performance of Climaveneta units is enhanced also by their control logics, based on a proprietary logics and know-how, deployed in a vast range of solutions.

Leading Heat Recovery Technology



Climaveneta is a recognized leader in heat recovery applications and in its product employs in the most effective way all the most performing solutions such as thermodynamic, plate and rotary heat recovery as well as refrigerant booster.

Configurable Efficiency Set



The willingness to cope even with the most demanding energy efficiency projects is reflected by the availability of 3 energy efficiency standard configurations in most hydronic units.

- ▶ Highest energy efficiency
- ▶ Perfect indoor climate control
- ▶ Lowest noise emissions



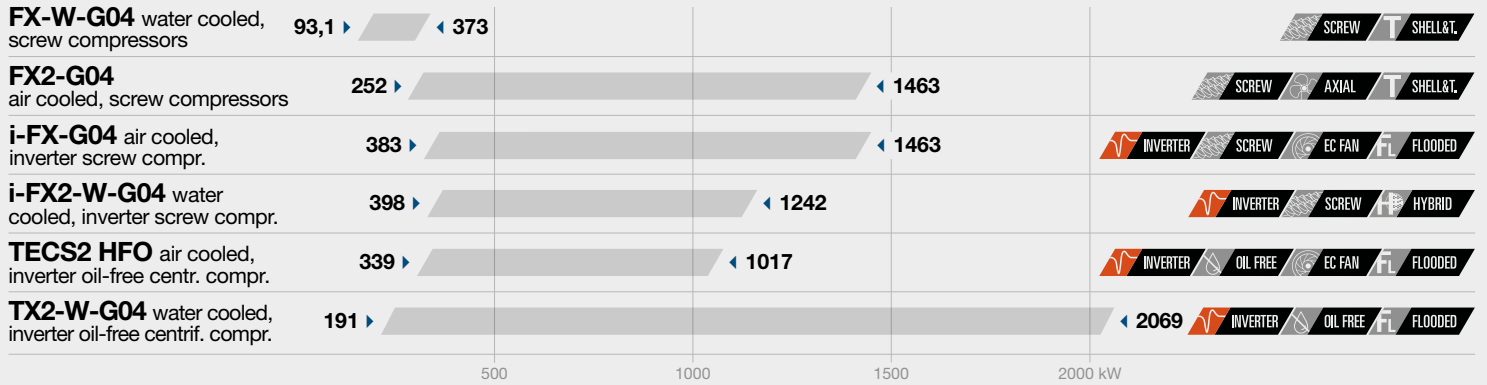
Air cooled chillers with R32 refrigerant

G07 SERIES ^DR32



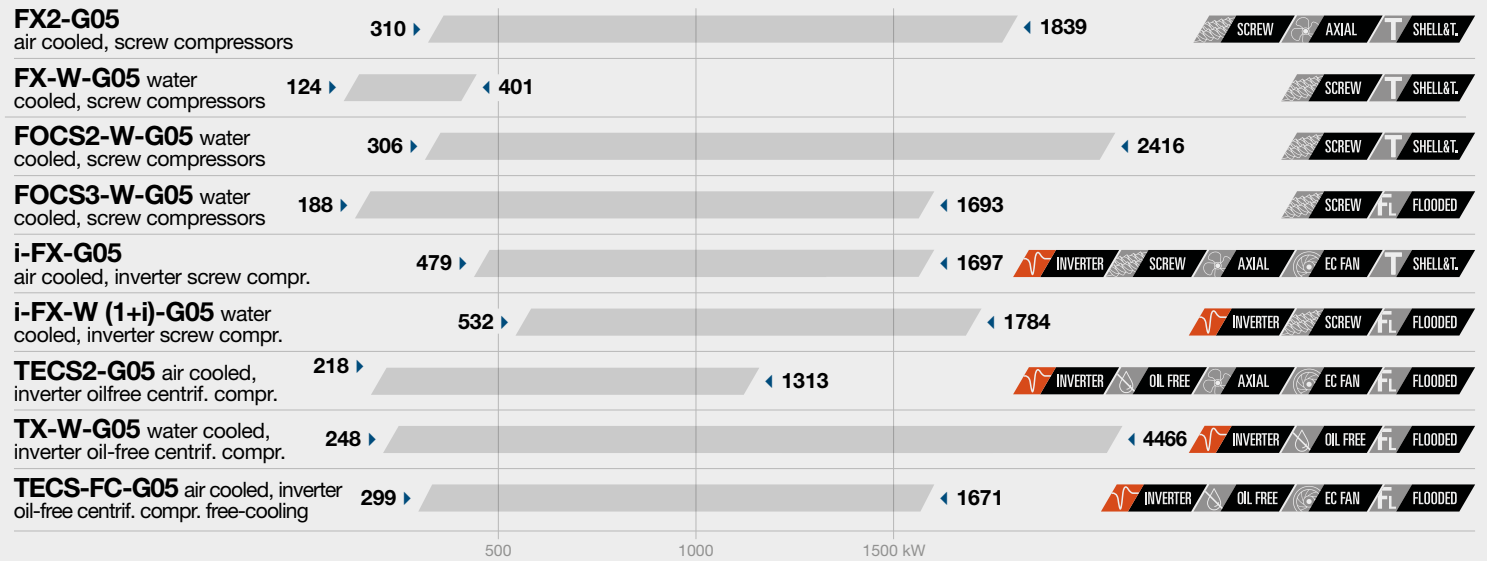
Air and water cooled chillers with HFO 1234ze

G04 SERIES ^D1234ze



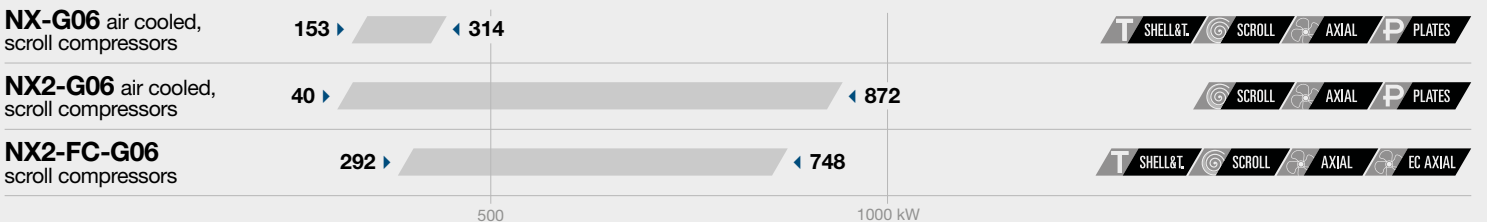
Air and water cooled chillers with R513A

G05 SERIES ^DR513A



Air cooled chillers and free-cooling chillers with R454B

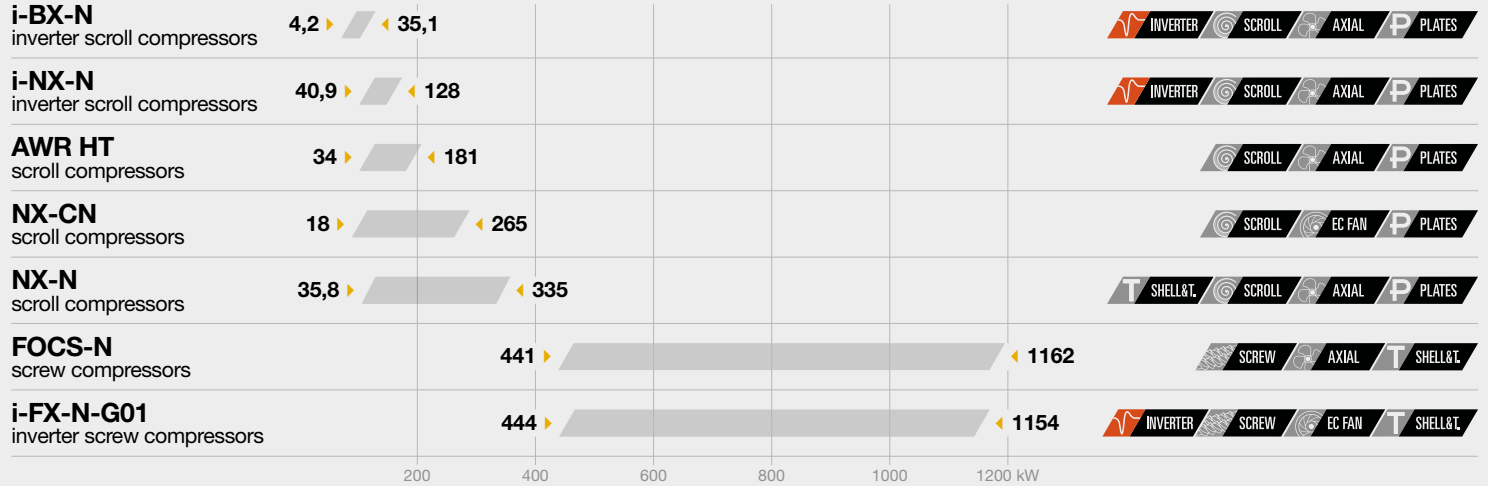
G06 SERIES ^DR454B



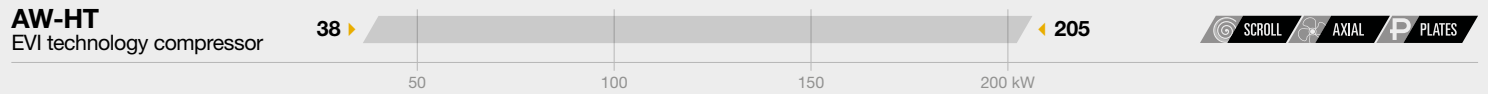
HEAT PUMPS



Air to water reversible heat pumps



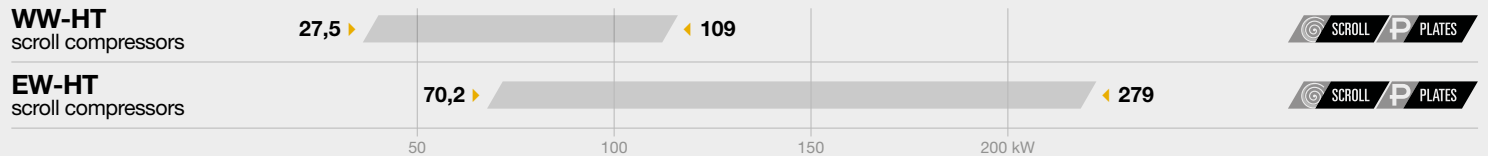
Air to water heat pumps (heating only)



Water to water reversible heat pumps



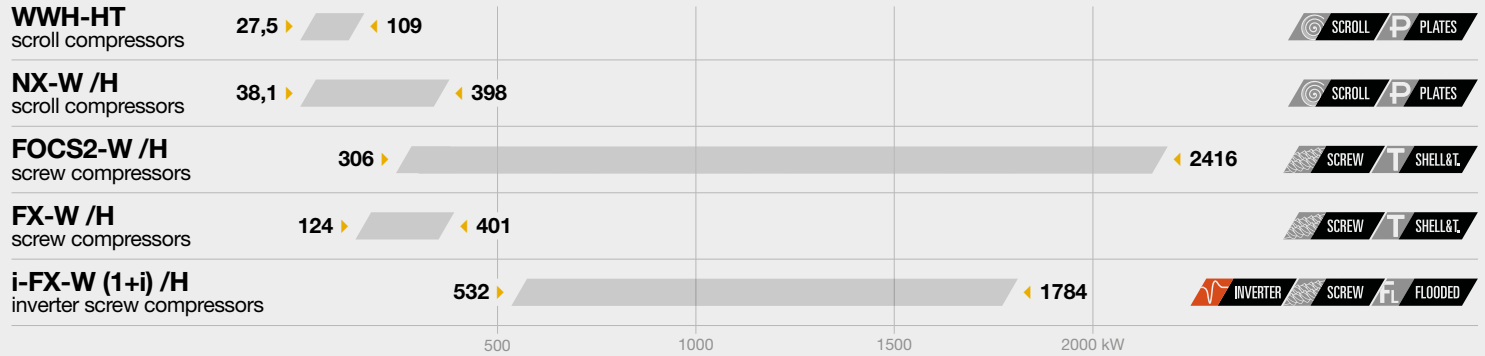
Water to water heat pumps (heating only)



- ▶ Operating limits up to -20°C
- ▶ Hot water production up to 78°C
- ▶ Highest energy efficiency



Water to water heat pumps reversible on the hydraulic side



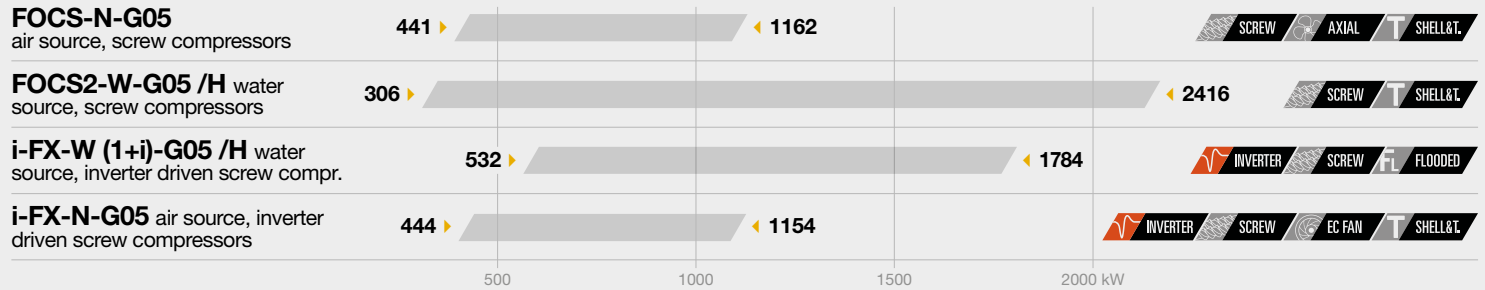
Air to water reversible heat pumps with R32

G07 SERIES R32



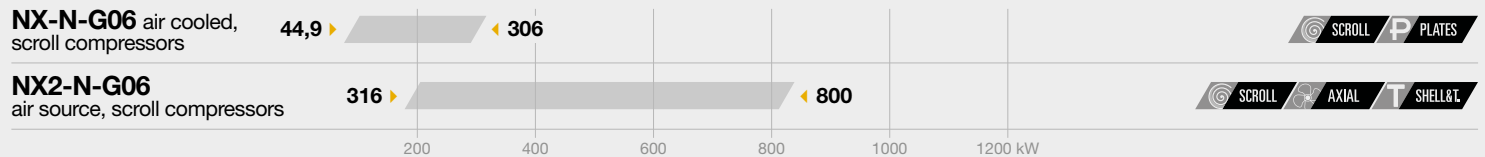
Air and water source heat pumps with R513A

G05 SERIES R513A



Air and water cooled heat pumps with R454B

G06 SERIES R454B



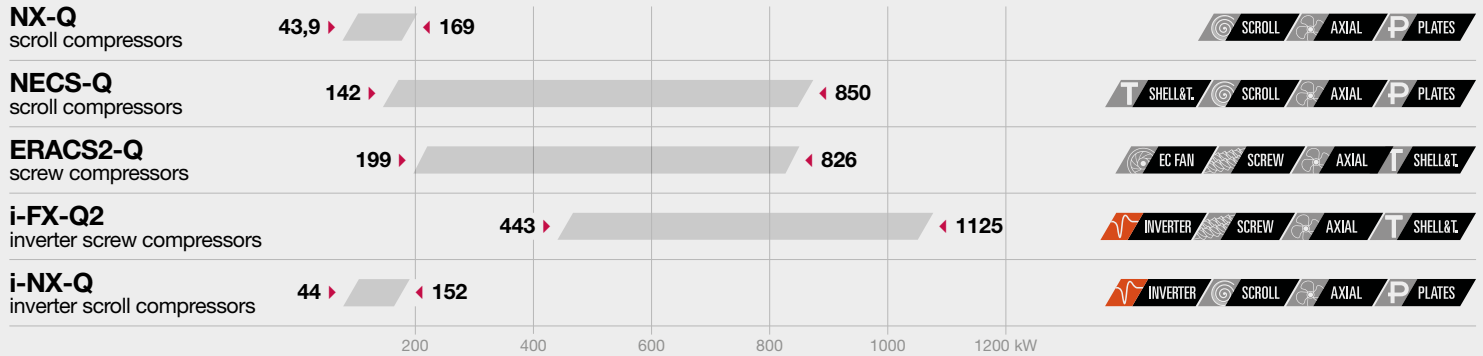
MULTIFUNCTION UNITS



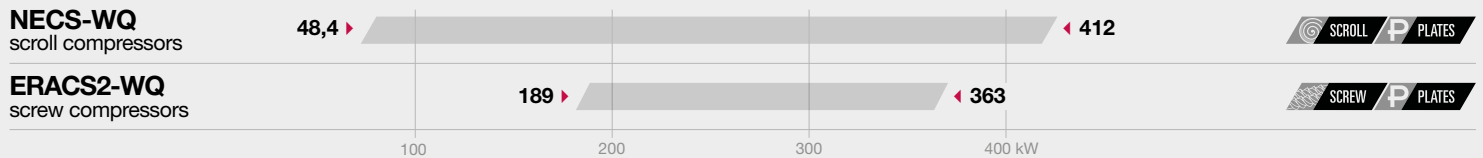
- ▶ Highest efficiency in combined hot and cold water production
- ▶ Rationalized system design and reduced footprint



Air cooled chillers

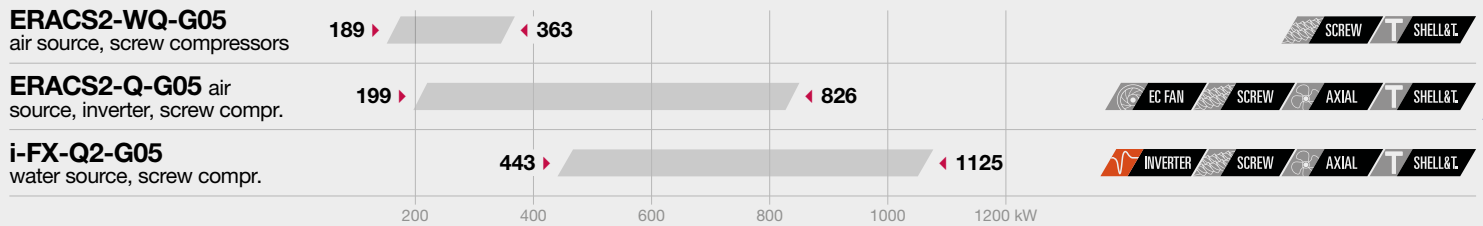


Water source heat pumps



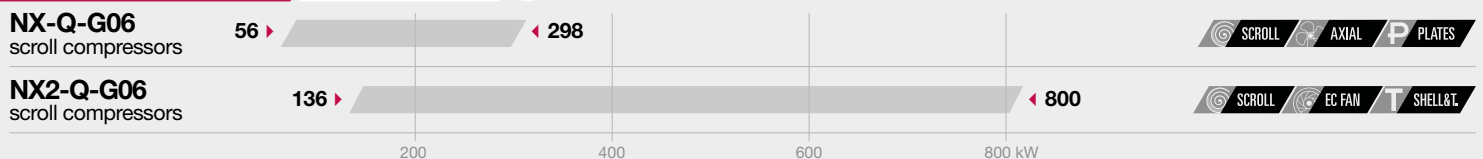
Air and water source 4-pipe heat pumps with R513A

G05 SERIES ^PR513A



Air cooled chillers

G06 SERIES ^PR454B



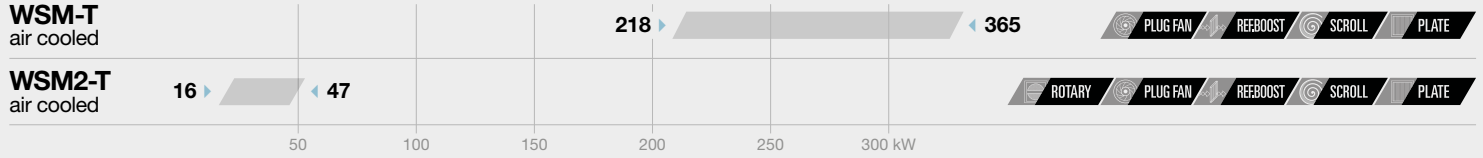
ROOFTOP UNITS



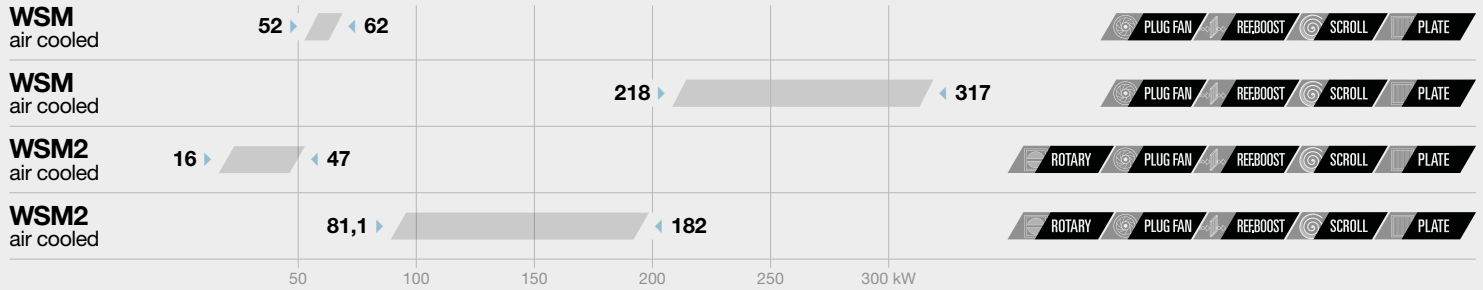
- ▶ **Widest range and complete configurability**
- ▶ **Perfect thermoigrometric control**
- ▶ **Maximum flexibility in the air flow management**



Air to air rooftop unit, cooling only



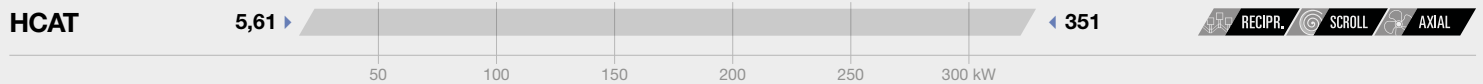
Reversible air cooled rooftop unit



HEAT REJECTION PRODUCTS



Reversible air cooled rooftop unit



Reversible air cooled rooftop unit

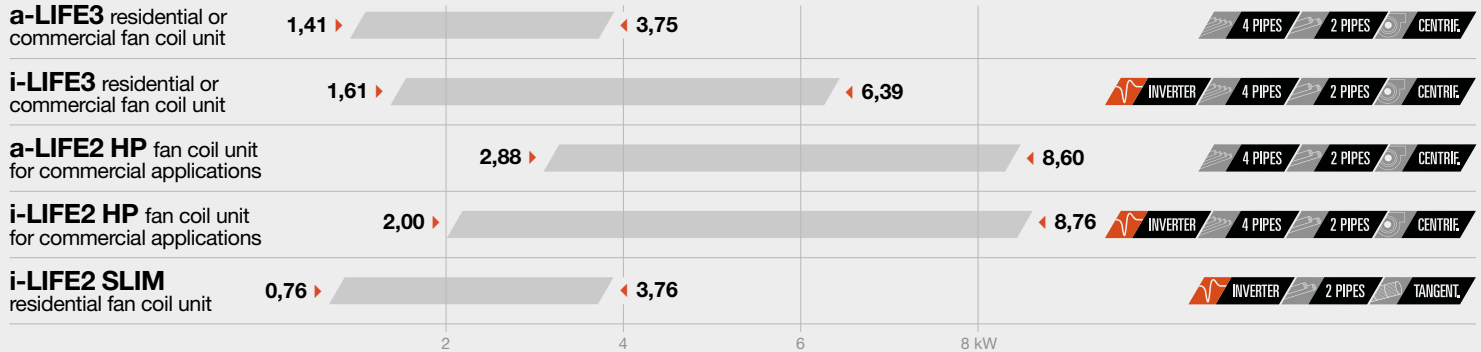


HYDRONIC TERMINALS

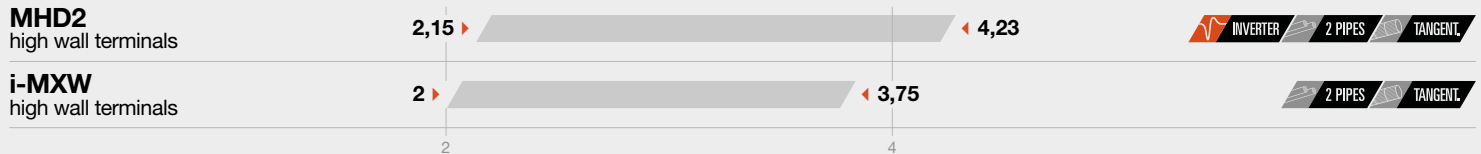


- ▶ Fan coil range for residential and commercial applications
- ▶ Complete range of accessories
- ▶ For exposed or concealed installation

Fan coils



Hi-wall type terminals



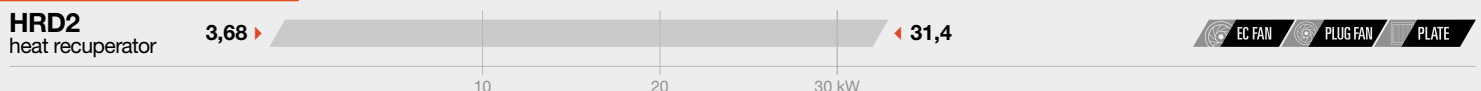
Cassette type terminals



Ducted type terminals



Heat recuperators

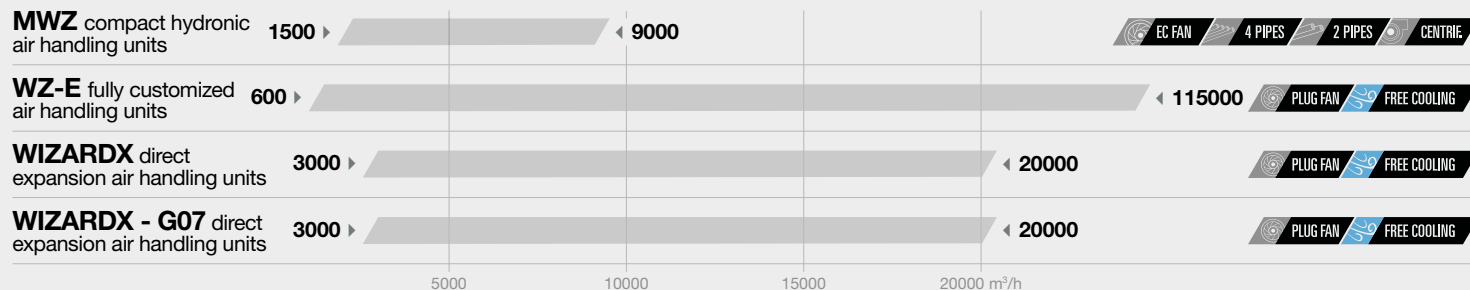


AIR HANDLING UNITS



- ▶ **Widest range with high versatility**
- ▶ **Perfect integration with MELCO products**
- ▶ **Plug&Play solution fully developed by MEHITS**

Air handling units



CONTROL, SUPERVISION AND OPTIMISATION SYSTEMS



Group devices



- ▶ **ClimaPRO+ Plant Room Optimisation System**
Plant Room Optimiser for smart management of energy single units and the entire plant room.
- ▶ **MANAGER 3000+**
Plant room control for chillers, heat pumps, units for simultaneous and independent production of hot and chilled water.
- ▶ **SEQUENCER**
Group regulation device for chillers and heat pumps.



Human Machine Interfaces

- ▶ **KIPLink**
KIPLink is the user interface that allows you to operate the unit directly from your mobile device (smartphone, tablet, or notebook).

Based on Wi-Fi technology, access the operational settings is possible by simply scanning the QR code positioned on the unit.

MORE THAN 1000 PROJECTS ALL OVER THE WORLD

COIMA HQS

Milan - Italy

Period: 2017-2019

Application: Office Buildings

Plant type: Hydronic System

Cooling capacity: 363 kW

Heating capacity: 393 kW

Installed machines:

1x ERACS 2WQ 1502



FONDACO DEI TEDESCHI

Venice - Italy

Period: 2014-2016

Investor: Lvmh

Application: Retail

Plant type: Hydronic System

Cooling capacity: 450 kW

Heating capacity: 104 kW

Installed machines:

1x NECS-CN/B/S 0612,

2x NECS-WQ/S 0512

Architect: Rem Koolhaas

Designer: Prisma



Every project is characterized by different usage conditions and system specifications for many different latitudes. All these projects share high energy efficiency, maximum integration, and total reliability due to the unique experience of Climaveneta branded solutions.

TORRE GALFA

Milan - Italy

Period: 2018-2020

Application: Mixed-Use
Development

Plant type: Hydronic System

Cooling capacity: 240 kW

Heating capacity: 260 kW

Installed machines:

1x NECS-WQ 0604,

1x NX-WN 0152,

1x WET RTF CE S 0124,

1x WET RTF CE 0264



VIRGIN ACTIVE ROMA VALLE AURELIA

Rome - Italy

Period: 2017-2019

Investor: Virgin Active

Application: Sport structures

Cooling capacity: 2000 kW

Heating capacity: 2200 kW

Installed machines:

2x FOCS-NR/XL-CA-E/S

Installer: Panzeri Como

Project managed by: Starching





mitsubishi electric hydronics & it cooling systems S.p.A.

Head Office: Via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

Tel (+39) 0424 509 500 - Fax (+39) 0424 509 509

www.climaveneta.com

www.melcohit.com