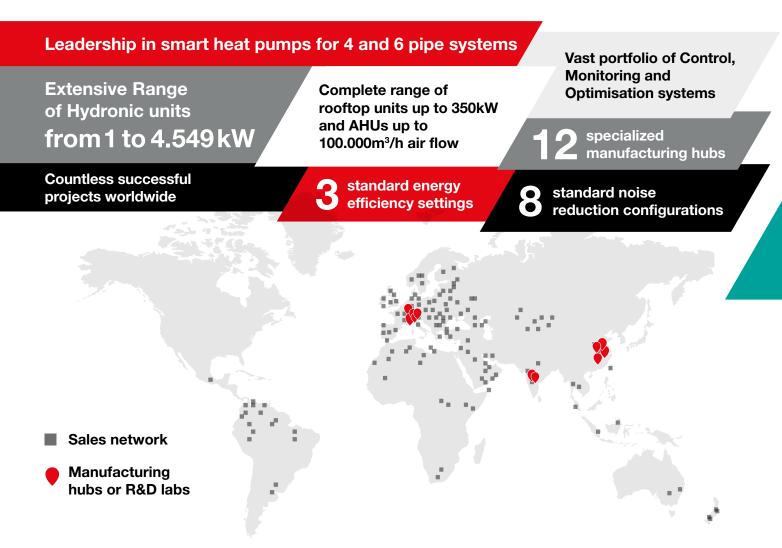
COMFORT APPLICATIONS PRODUCT OVERVIEW





melcohit.com

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 CO_2 levels.





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



234ze 513A

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 and G06

Following on vast experience in using green refrigerants, Climaveneta has already employed extensively green refrigerants such as HFO124ze, 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.

HIGH WATER

TEMPERATURE



The performance of Climaveneta units is enhanced also by their control logics, based on a proprietary logics and knowhow, 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.



CHILLERS AND FREE-COOLING CHILLERS

Air cooled chillers					
i-BX inverter scroll compressors	4,3 • • 35,1				INVERTER SCROLL AXIAL PLATES
i-NX inverter scroll compressors	43,9 • • 129				INVERTER SCROLL AXIAL PLATES
NX scroll compressors	39,2 •	352			SHELL&T. SCROLL AXIAL PLATES
FX screw compressors	140 •	396			SCREW SCREW AXIAL / T SHELL&T.
FX2-G01 screw compressors	310 >				▲ 1839 SCREW AXIAL PLATES T SHELL&T.
TECS2 inverter oil-free centrif. compr	220 >		▲ 1324		NVERTER 🚫 OIL FREE 💦 AXIAL 🌾 EC FAN FL FLOODED
i-FX-G01 inverter screw compressors	447 🕨			▲ 1697	INVERTER SCREW CALALING EC FAN
NX-C scroll compressors	17,4 > 4 29	1			SCROLL P PLATES
NX2-G02 scroll compressors	40 •		√ 926		T SHELL&T. SCROLL AXIAL P PLATES
P	5	00 1	000 15	00 kW	
Water cooled chillers					
NX-W 38 scroll compressors	,1 ▶				SCROLL PLATES
FX-W 12 screw compressors	4 • 401				SCREW T SHELL&T.
FOCS2-W screw compressors	306 ►		₹ 2416		SCREW SCREW SHELL&T.
FOCS3-W screw compressors	188 🕨	↓ 1693			SCREW FL FLOODED
i-FX-W (1+i) inverter screw compressors	532 🕨	1784			INVERTER SCREW FL FLOODED
TX-W inverter oil-free centrif. compr.	246 •				4549 INVERTER OIL FREE FL FLOODED
	10	000 2000	3000	400) kW
Condenserless chille	rs				
HE scroll compressors	4,7 • 32,4				SCROLL PLATES
NECS-ME scroll compressors	39,5 ►	432			SCROLL PLATES
FOCS-ME screw compressors	79,2 ►				2240 SCREW SCREW SHELL&I.
	5	00 1000	1500	2000 kW	
Air cooled chillers wi	th free-cooling	g technology	S		
TECS-FC inverter oil-free centrif. compr	302			•	1693 NVERTER OIL FREE C FAN L FLOODED
NX2-FC-G02 scroll compressors	292 ►	4 7	71		SCROLL AXIAL P PLATES T SHELL&T.
	5	 DO	1000	1500 kW	

 Highest energy eff Perfect indoor clin Lowest noise emistion 	nate control		P1234ze PR513			
Air cooled chillers with ev	aporative free-coolir	ng techno	ology / 🥄	20		
TECS-EFC inverter oil-free centrif. compr.	300 ▶				1682 INVER	TER 🚫 OIL FREE 🥳 EC FAN 📕 FLOODED
Air and water cooled chill	500 ers with HFO 1234ze			1500 kW		
FX2-G04	252 >					SCREW AXIAL T SHELL&T.
air cooled, screw compressors						
air cooled, inverter screw compr.	383 •		• 14	63		RTER SCREW CE EC FAN T SHELL&T.
TECS2 HFO air cooled, inverter oil-free centrif. compr.	339 >		∢ 1017			OIL FREE C FAN FL FLOODED
FX-W-G04 water 93,	(373					SCREW C EC FAN T SHELL&T
TECS2-W HFO water cooled, inverter oil-free centrif. compr.	340 •		∢ 1364	1		OIL FREE
i-FX2-W-G04 water cooled, screw compr.	398 >		1241			SCREW IT HID
TX2-W-G04 246	•				▲ 4549	INVERTER OIL FREE
Air and water cooled chill	500 ers with B513A		OO RIES ^{(R513A}	1500 kW		
FX2-G05 air cooled, screw compressors	310 ▶	1839				
i-FX-G05 air cooled, inverter screw compr.	479 ►	1 697			INVERTER SCR	W 🔗 AXIAL 🧖 EC FAN / 🕇 SHELL&T.
TECS2-G05 air cooled, inverter oilfree centrif. compr. 218	• 1323				INVERTER SO OIL FR	EE 🔗 AXIAL 🧖 EC FAN FL FLOODED
FX-W-G05 water cooled, screw compressors 124 •	∢ 401					SCREW/T/SHELL&T
FOCS2-W-G05 water cooled, screw compressors	306 •		4 2416			SCREW T SHELL&T.
FOCS3-W-G05 water cooled, screw compressors	•	∢ 1693				SCREW FL FLOODED
i-FX-W (1+i)-G05 water cooled, inverter screw compr.	532 >	∢ 1784				INVERTER SCREW FL FLOODED
TX-W-G05 water cooled, oil-free centrif. compr. 2	48 •				4466	INVERTER OIL FREE
TECS-FC-G05 air cooled, oil-free centrif. compr., free-cooling	299 >	▲ 1671			INVER	TER 🚫 OIL FREE 🥳 EC FAN 📕 FLOODED
Air Cooed chillers and fre	e-cooling chillers wit	2000 th R454B	300 G06 S	SERIES (R454B	loo kW	
NX-G06 air cooled, scroll compressors 153)	• 314				© SCRO	L AXIAL P PLATES T SHELL&T.
NX2-G06 air cooled, 40 >				∢ 926		SCROLL AXIAL PLATES
NX2-FC-G06 scroll compressors	292 >		∢ 771		SCRO	LL / AXIAL / P PLATES / T SHELL&T

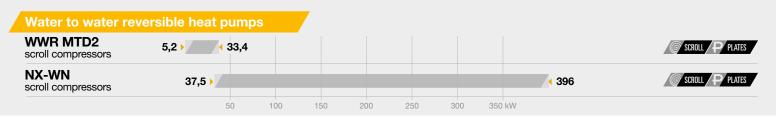
1000 kW

500

HEAT PUMPS



Air to water reversib	le heat pumps				
AWR MTD2 XE scroll compressors	5,2 > < 29,2				SCROLL AXIAL PLATES
i-BX-N inverter scroll compressors	4,2 , 35,1				VERTER SCROLL AXIAL PLATES
i-KIR-MTD inverter scroll compressors	15,6 > 4 30,5				VERTER SCROLL C EC AXIAL P PLATES
AWR HT scroll compressors	34 •	181			SCROLL AXIAL PLATES
MICS-N FFT scroll compressors	17,3 • 42,5				SCROLL AXIAL PLATES
NX-N scroll compressors	35,8 •	∢ 335		T s	HELL&T. O SCROLL AXIAL P PLATES
i-NX-N inverter scroll compressors	40,9 • 12	28			VERTER SCROLL AXIAL PLATES
NX2-N scroll compressors	48 •		4 833		SCROLL AXIAL T SHELL&T.
NX-N scroll compressors	148 ►	< 335			SCROLL AXIAL T SHELL&T.
FOCS-N screw compressors		441 •		1162	SCREW AXIAL T SHELL&T.
NX-CN scroll compressors	18 🕨	4 265			SCROLL C EC FAN PLATES
i-FX-N-G01 scroll compressors		444 >		1154	SCREW CE FAN SHELL&T.
	20	00 400 6	600 800 1000	kW	



• Operating limits up to -20°C

- Hot water production up to 78°C
- Highest energy efficiency



Water to water heat	t pumps (heatin	g only)			
WW-HT scroll compressors	27,5 >	1 109			SCROLL PLATES
EW-HT scroll compressors	70,2 🕨			279	SCROLL PLATES
	50	100 150	200 250 kW		
Water to water heat	t pumps reversi	ble on the hy	draulic side		
NX-W /H scroll compressors	38,1 •	398			SCROLL PLATES
FOCS2-W /H screw compressors	306 ►			•	2416 SCREW SHELL&I.
i-FX-W (1+i) /H inverter screw compressors	532	•		1784	INVERTER SCREW FL FLOODED
FX-W /H inverter screw compressors	₃ 124 ▶	401			INVERTER SCREW FL FLOODED
			00 1500	2000 kW	
Geothermal reversil	ble heat pumps				
BWR MTD2 scroll compressors	5,08 >		43,6		SCROLL PLATES
		20	40 kW		
Geothermal reversil	ble heat pumps	(heating only	/)		
BW-HT scroll compressors	20,3 >			• 79,1	SCROLL PLATES
Air and water sourc		with P513A	40 GO5 SEF	SIES PR513A	
FOCS-N-G05					
air source, screw compress	sors 441 >		1162		SCREW AXIAL SHELL&T.
FOCS2-W-G05 /H water source, screw compresent	essors 306 >			•	2416 SCREW SKRLL&T.
i-FX-W (1+i)-G05 /H water source, inverter driver	n screw compr. 532	•		√ 1784	INVERTER SCREW FL FLOODED
i-FX-N-G05 air source, screw compress	sors 444 >			1154	SCREW/T/SHELL&T.
		500 10		2000 kW	
Air and water coole	d heat pumps v	vith R454B	GO6 SEF	RIES [®] R454B	
NX-N-G06 air cooled, scroll compresso	ors 49,6 >		∢ 218		INVERTER SCREW FL PLOODED
NX2-N-G06 air source, screw compress	sors		316 🕨	< 800	SCROLL CF EC FAN T SHELL&T.
		100 200	400	600 800 kW	
Water to water heat	t pumps reversi	ble on the hy	draulic side	GO4 SERIES	01234ze
NX-N-G04 air cooled, scroll compresso	398 •	< 800			SCREW HYBRID
NX2-N-G04 air source, screw compresso	246				
	500	1000 15	00 2000	2500 3000	3500

MULTIFUNCTION UNITS

Highest efficiency in combined hot and cold water production

Rationalized system design and reduced footprint

Air cooled chillers					
NX-Q scroll compressors	43,9 •	∢ 169			SHELL&T. SCROLL AXIAL PLATES
NECS-Q scroll compressors	142)		4 850		SCROLL AXIAL PLATES
ERACS2-Q screw compressors	199 🕨		4 826		SCREW 🔗 AXIAL 🕼 EC FAN 🕂 SHELL&T.
i-FX-Q2 inverter screw compressors	i	443 •		1125	INVERTER SCREW C EC FAN T SHELL&T.
i-NX-Q inverter screw compressors	34 •	• 152			INVERTER SCREW CE FAN T SHELL&T.
	2	00 400	600 800 10	00 kW	

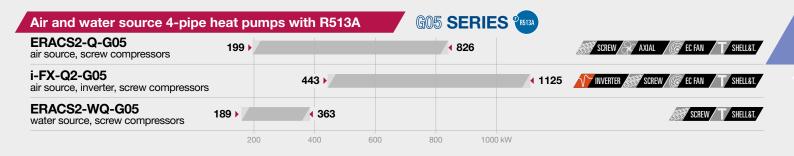
Smart

HIGH WATER TEMPERATURE CONFIGURABILE

VPF

INVERTER

Water source hea	t pumps		
NECS-WQ scroll compressors	48,4 >	412	SCROLL PLATES
ERACS2-WQ scroll compressors	189 🕨	4 363	SCREW/T/SHELL&T
	200	400	



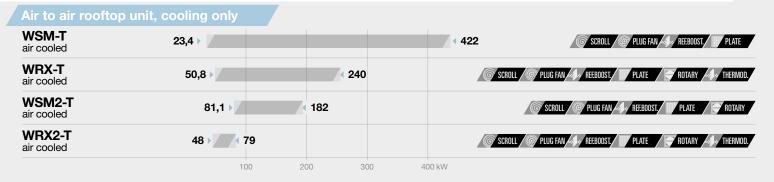
Air cooled chillers	GO6 SEF	RIES PRASAB		
NX-Q-G06 scroll compressors	56 •	4 298		SCROLL AXIAL PLATES
NX2-Q-G06 scroll compressors	136 🕨		4 800	SCROLL CFAN SHELL&T.
	200	400	600 800 1000 kW	

ROOFTOP UNITS



HEAT RECOVERY

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

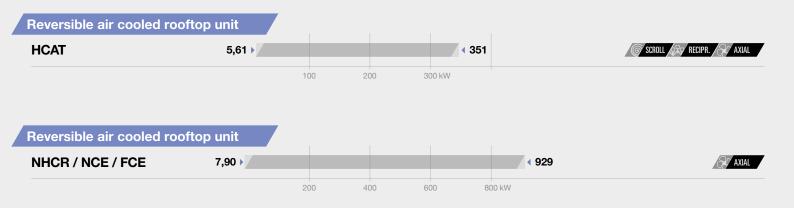


Reversible air cooled rooftop unit

WRX air cooled 50,8 > 240	SCROLL STAN
WSM2 air cooled 81,1 > 182	SCROLL / SPLUG FAN A REEBOOST / PLATE ROTARY
WRX2 air cooled 48 79	SCROLL STREAM

HEAT REJECTION PRODUCTS





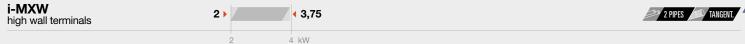


HYDRONIC TERMINALS

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

Fan coils						
a-LIFE3 residential or commercial fan coil unit	,41			€ 6,45		2 PIPES 4 PIPES CENTRIE
i-LIFE3 residential or commercial fan coil unit	1,7 ►			◀ 6,39		INVERTER 2 PIPES 4 PIPES CENTRIE
a-LIFE2 HP fan coil unit for commercial applications	2,8	8 •			∢ 8,60	2 PIPES 4 PIPES CENTRIE
i-LIFE2 HP fan coil unit for commercial applications	2,00 🕨				4 8,76	INVERTER 2 PIPES 4 PIPES TO CENTRIE
i-LIFE2 SLIM residential fan coil unit 0,76 •		•	3,76			INVERTER 2 PIPES TANGENT.
	2	2	4 6	6 8	kW	

Hi-wall type terminals



Cassette type terminals

a-CXW cassette terminal	3,20 🕨				∢ 11,3	2 PIPES 4 PIPES CENTRIE
i-CXW cassette terminal with inverter technology	4,50	6 🕨		•	9,42	INVERTER 2 PIPES 4 PIPES CENTRIE
		1	6	9 10	L/M/	

Ducted type terminals

a-HWD2 ducted type terminal	5,87 🕨		∢ 21,9	2 PIPES 4 PIPES CENTRIF.
i-HWD2 ducted type terminal with inverter technology	6,20 ►		∢ 22,3	INVERTER 2 PIPES 4 PIPES CENTRIE
		10 1	20 1/1/	

Heat recuperators				
HRD2 heat recuperator	3,68 >		<mark>∢</mark> 31,4	EC FAN S PLUG FAN PLATE
	10	20	30 kW	

AIR HANDLING UNITS



Air to air rooftop unit, coolin	g only			
MWZ 1500 compact air handling unit		● 9000		C FAN CENTRIE 2 PIPES 4 PIPES
WIZARDX fully configurable air handling units	3000 >		₹ 20000	Plug FAN
	50	1000	15000 20000 kW	

CONTROL, SUPERVISION AND OPTIMISATION SYSTEMS





Group devices

ClimaPRO+ Plant Room Optimisation System Plant Room Optimiser for real time, smart management of energy indecesfor the single units and the entireplant room.

- MANAGER 3000+ Specialized group control.
- **SEQUENCER**

The ultimate solutions for supervision, remote monitoring, service, andpreventive maintenance.



Human Machine Interfaces

• **KIPlink** Control interface for smart phones and tablets.



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 Heating capacity: 393

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 Heating capacity: 104

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 Heating capacity: 260

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 Heating capacity: 2200

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.

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