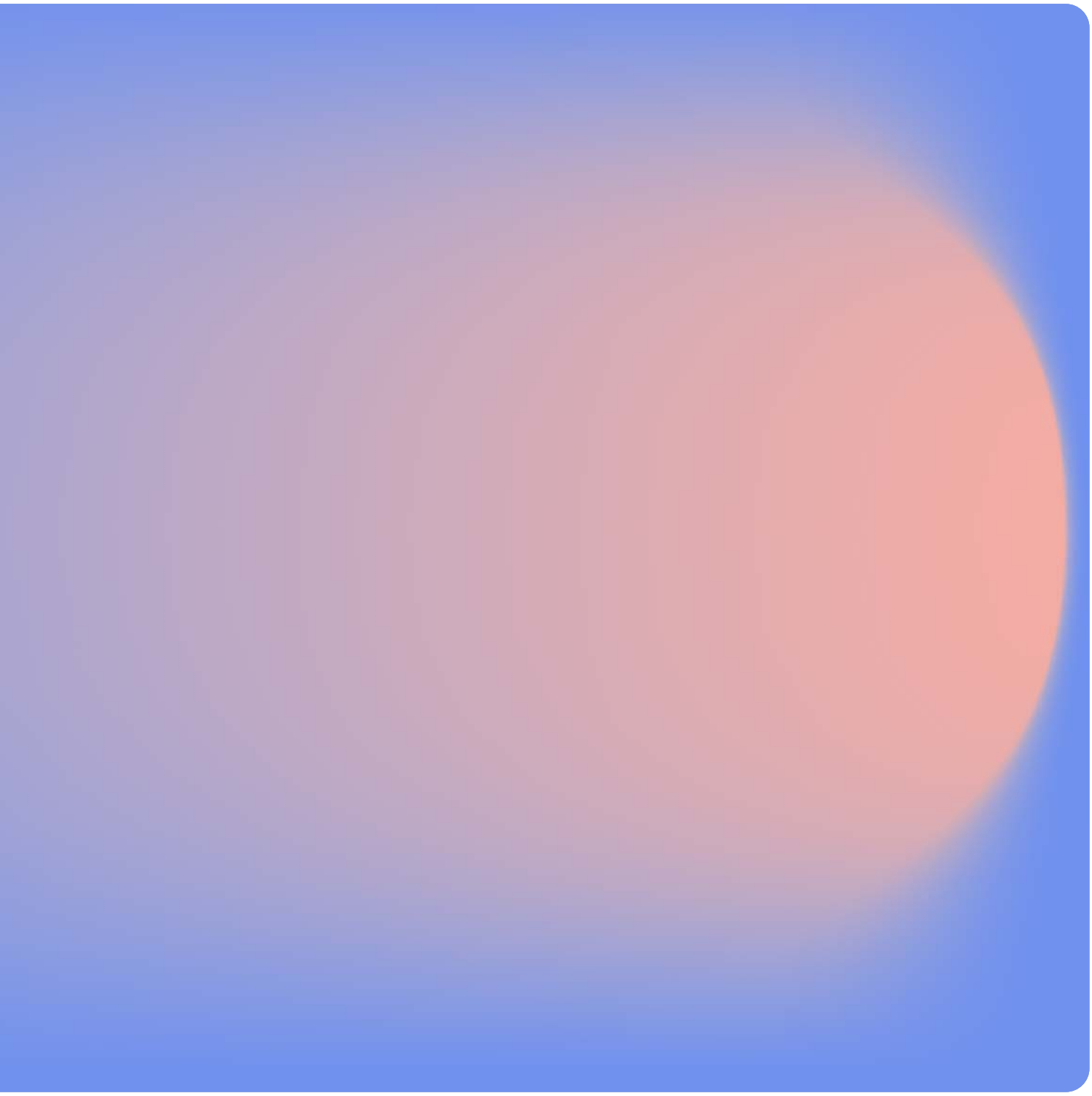
CLIVET
Natural Comfort



APPLIED

Guide 2026
Products and Systems

Contents

This document is printed every year and presents all Clivet's products with the aim of providing a basis for decisions and evaluations.

More detailed information, updated regularly, is available in the "PRODUCTS" area at www.clivet.com and on Clivet Apps, where they can be downloaded free of charge.

Clivet

53.500 m^2
of plants between Feltre (Belluno) and Verona (AHU production)

8
Branches: Great Britain, Germany, India, Russia, UAE, China, Balkans and France

1000+
employees in Italy and abroad

2023
The first sustainability report

Sales

100+
countries we export to

700+
Professionals worldwide

- Sales network
- Distributors and wholesalers
- Installers
- Service Centres

Midea

2016
STRATEGIC ALLIANCE WITH MIDEA GROUP

2024
Midea Group
53,12 BN € of Midea Turnover
277 Fortune Global 500

MBT Climate

2025
MBT Climate, the European umbrella organisation of Midea Building Technologies (MBT), is born

Everything we do, we do because we believe that a comfortable world is a free world.

We create spaces where people can truly feel free at home, at work, everywhere.

Our HVAC solutions deliver seamless comfort, so natural it disappears. You're left free to focus, create, and simply be.

Because comfort is freedom.
And freedom is everything.

Our vision

Comfort for the planet
and people.

Our mission

Blending natural comfort
into life through innovation.

How do our solutions create natural comfort?

They respect the environment, being designed for purity and minimal impact.

They fit everywhere, integrating easily into any context.

They are simple by nature, combining intuitive comfort and maximum ease of use.

They are designed for maximum efficiency, optimising performance and reducing consumption.

The values that guide us

We're life-friendly above all else.

We listen, collaborate, and design thoughtful solutions that generate value and meet people's needs across our entire ecosystem.

We honour our roots and lead by example.

We view our origins and local values as unique strengths that we will always uphold.

Led by ambition, anchored in integrity.

A strong ambition for innovation and growth drives us without compromising our values.

Strive for efficiency to provide simplicity.

We believe that efficiency is key to _x000B_making life easier and more viable.

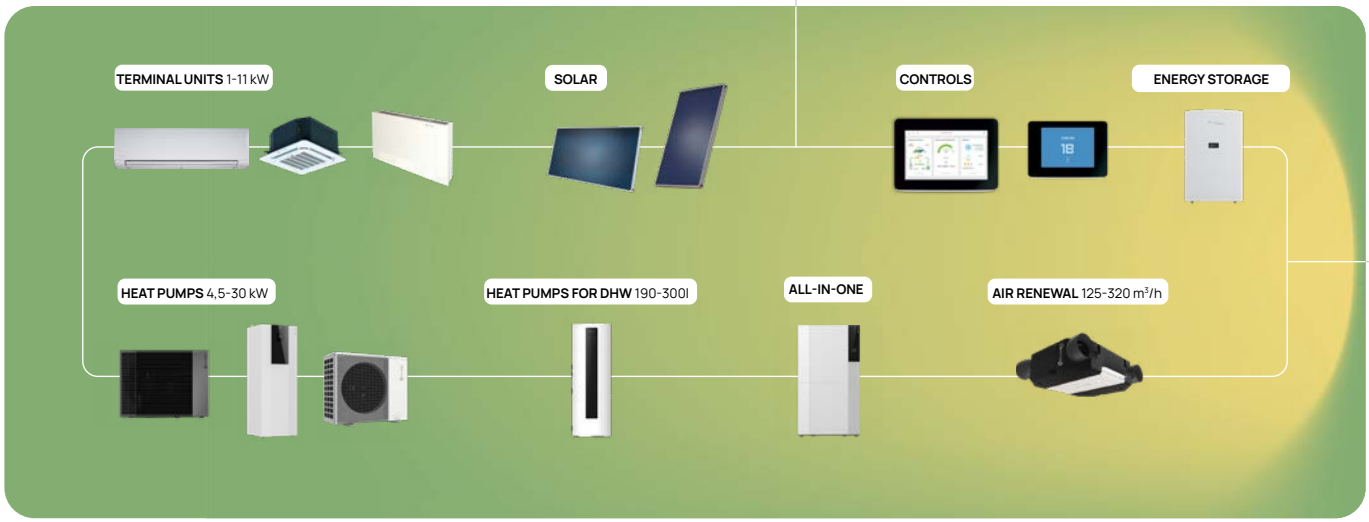
Technologies for a complete proposal

Heating, cooling, air renewal and domestic hot water production

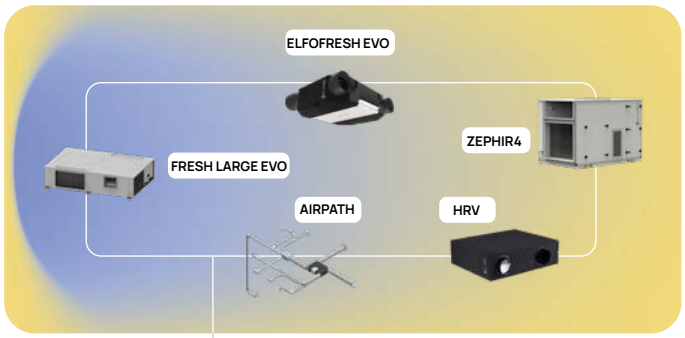
APPLIED

Hydronic

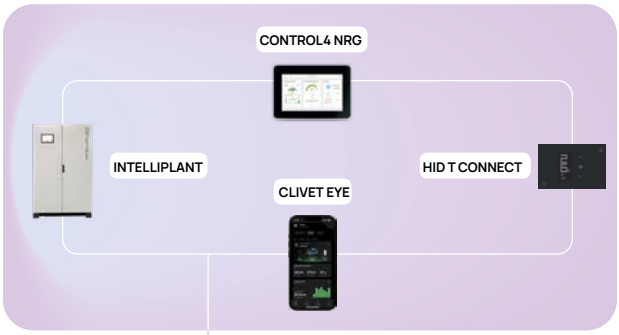
HOME



AIR RENEWAL



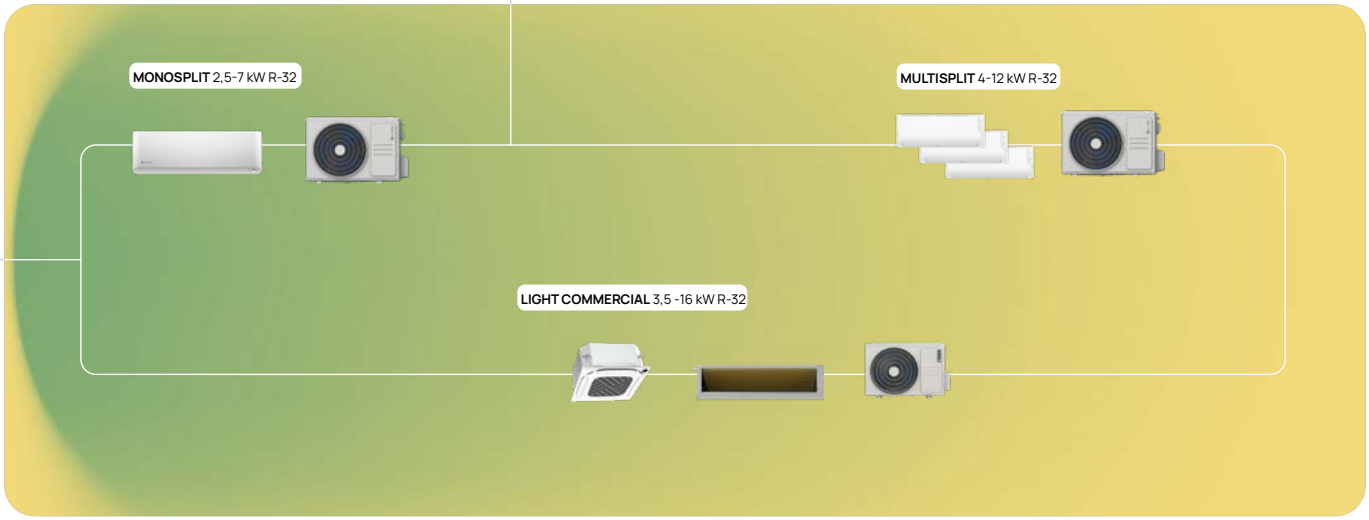
DIGITAL SOLUTION



VRF

Direct expansion

SPLIT



Available only in some countries: please check with our sales team if Clivet VRF and SPLIT direct expansion systems are available in your country.

1.5 Certifications

They optimise the solution based on the needs of the various applications and integrate it in specialised products and in complete dedicated systems:

With the aim of providing Customer satisfaction, Clivet S.p.A. has supplemented and certified its Quality, Environment and Safety Management Systems, in accordance with the ISO 9001, ISO 14001 and ISO 45001 International Standards.

Clivet is committed in promoting the green building principles and has become a member of GBC Italia. This organization collaborates with USGBC, the U.S. nonprofit organization that promotes worldwide the LEED® system of independent certification.

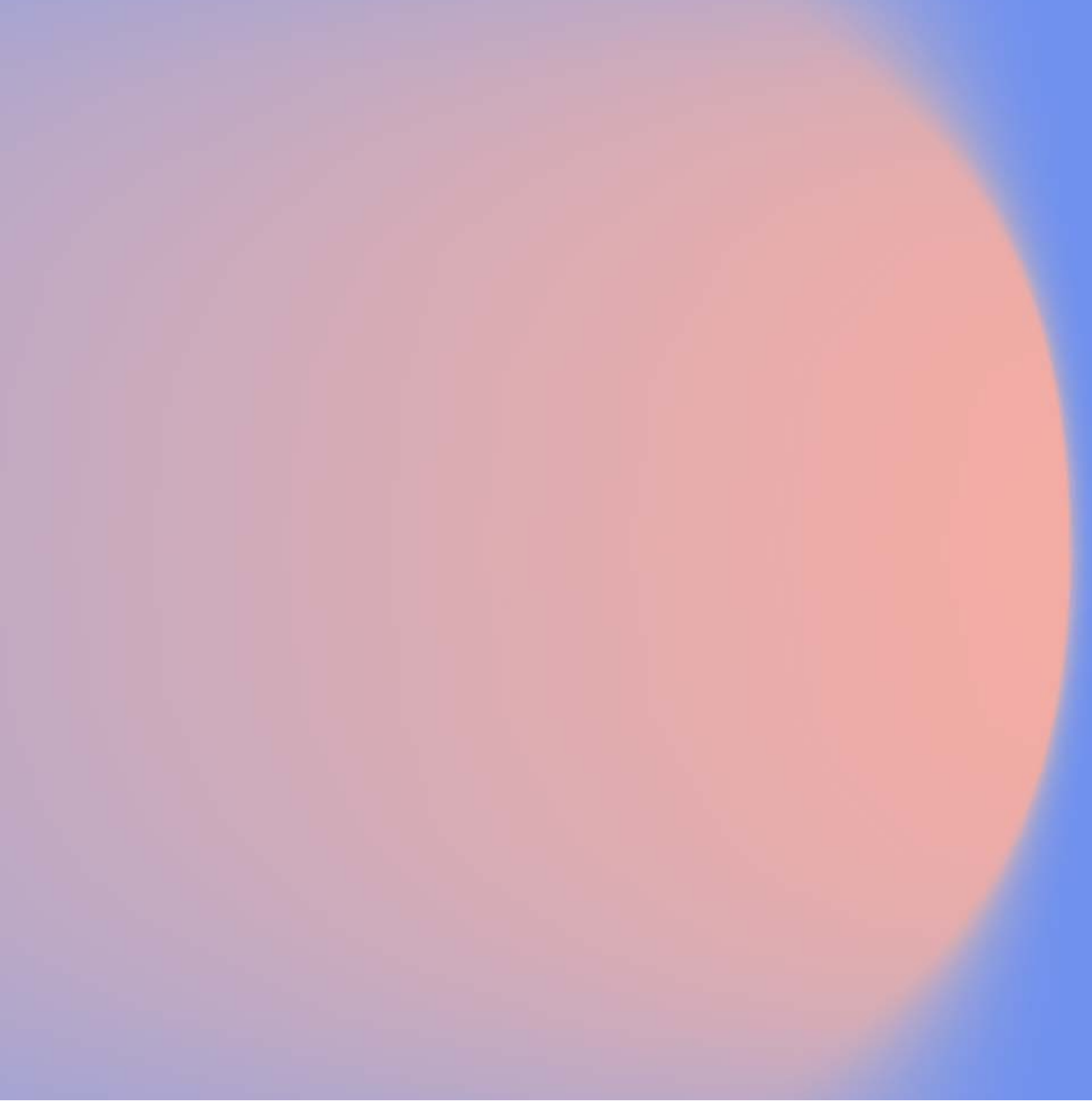
In 2015, Clivet became a partner of CasaClima, as a result, Clivet is now part of a network of companies renowned for their technical expertise and constant focus on sustainable home management.
Where applicable.

KEYMARK is a mark recognized in many European countries for the provision of incentives for the installation of heat pumps for room heating and the production of domestic hot water.
The countries that recognize the mark and the Certified Products are available on
https://keymark.eu/en/products/heatpumps/heat-pumps
Where applicable.

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps", "Rooftops", "Air Handling Units", "Fan Coil Units" and "VRF" Certification programmes. The products concerned feature in the EUROVENT guide to certified products and on the website www.eurovent-certification.com. The programmes cover up to the limits set by the purpose of each programme.
Where applicable.

The wide range of Clivet products and complete systems comply with the requirements of the implementing measures for ErP (Energy related Products) Directives 2009/125/EC (Eco-design) and 2010/30/EU (Energy labelling), whose purpose is to reduce the energy consumption of products for heating, cooling, ventilation and hot water production, encouraging the user towards energy-efficient choices.
Directives 2009/125/EC and 2010/30/EU include the following Regulations: (EU) 206/2012, (EU) 626/2011; (EU) 811/2013, (EU) 812/2013, (EU) 813/2013, (EU) 814/2013; (EU) 1253/2014, (EU) 1254/2014; (EU) 2016/2281.

Clivet is involved in the BEYOND GREEN project to promote sustainability and the circular economy together with the other members of SAFE, the consortium system for the circular economy which works to raise public awareness regarding environmental issues, management and valorisation waste, education and training on environmental protection, research on environmental protection.



Applied

Electric heat pump

The electric heat pump is the most efficient, strategic, and sustainable technology for space and process heating.

✓ Efficient because it moves heat instead of creating it by irreversibly burning fossil fuel.

✓ Strategic for the electrification of consumption and the energy security of citizens.

✓ Sustainable because it uses renewable thermal and electrical energy, reducing the main emissions responsible for global warming.

✓ It reduces Primary Energy consumption, CO_2 Emissions, and Operating Costs by over 50%.

Thanks to the use of the heat pump, Clivet systems guarantee:

✓ A single system for heating, domestic hot water production, and cooling

✓ Controlled mechanical ventilation with innovative thermodynamic energy recovery

✓ Simultaneous production of heating and cooling for all applications with opposite simultaneous requirements

✓ Free domestic hot water production in summer

✓ Simultaneous production of heating and cooling to satisfy simultaneous loads

Importance of air renewal

The quality of air inside modern airtight buildings is undermined by a number of pollutants.
The controlled mechanical ventilation system is essential to creating a more liveable environment.
Clivet's stand-alone system with thermodynamic energy recovery dedicated to ventilation has the following benefits:

✓ It recovers energy both in winter and in summer

✓ Reduces the load of outdoor air with a more efficient system and provides more energy for the rooms

✓ Reduces the capacity of the main generators by limiting their operation to seasonal peaks

✓ Dehumidifies in summer

High efficiency throughout the entire life cycle

The search for the most advantageous seasonal efficiency across different operating modes leads to overall performance excellence. Every application has different and variable requirements, based on multiple factors including varying internal and external climatic conditions, occupancy, and thermal loads.
Clivet creates systems dedicated to the specific needs of every single application, optimizing the use of system resources to achieve the best levels of seasonal efficiency, thanks to:

✓ A systemic solution

✓ The utilization of the most favorable resources

✓ The continuous modulation of capacity

✓ The complete management of the system

Multifunctional

Clivet's multifunction systems include all the functions to ensure year-round comfort. They optimise the solution based on the needs of the various applications and integrate it in specialised products and in complete dedicated systems:

✓ Heating

✓ Cooling

✓ Domestic hot water

✓ Air renewal and purification

✓ Dehumidification

Decentralization

In developing Clivet products and systems one aspect that was given great attention was how to rationalise the choices in terms of design and construction, which could affect the system's running costs and environmental impact for its entire life cycle.

Many years ago, Clivet successfully developed the principle of generating energy as close as possible to where it needs to be used:

✓ Modular systems that are active only where and when required

✓ Reduction or complete elimination of auxiliary consumption (for instance, pumping energy)

✓ Stand-alone system

✓ Easy to maintain and handle

✓ Adapts to the needs of the system

Integrated systems

Clivet designs its systems by integrating all the services required for each application.

The system's elements, optimised and industrially processed to work together, guarantee the highest efficiency and reliability.

✓ Simplified design and installation

✓ Lower investment costs

✓ Quality of the systems

✓ Guaranteed performance

Digital Solutions

In residential, commercial and industrial buildings, the air conditioning system is the main source of energy consumption, accounting for almost half of the building's total consumption. There is an increasing need for an energy transition as the effect of climate change is growing.

Clivet has decided to play a key role by designing and promoting new technological solutions to improve the efficiency of buildings and significantly reduce its carbon footprint for increasingly sustainable installations.

The optimisation system for the commercial and industrial sector

Optimising the operation of HVAC systems allows the efficiency of the plants to be maximised in the various working conditions, guaranteeing the reduction of energy consumption and ensuring continuity of operation in the production and distribution of thermo-cooling energy.

Clivet's INTELLIPLANT solution manages all the elements of medium and large hydronic systems, guaranteeing the best operating conditions for the lowest possible energy consumption.

Developed entirely by Clivet specialists, Intelliplant makes it possible to achieve the maximum efficiency of the system and the units it interfaces with, thanks to algorithms derived from Clivet know-how that make better use of the machine control logics than the most common generalist solutions on the market.

The control system for the residential sector

A comfortable living environment is important to ensure your health and wellbeing.

CONTROL4 NRG coordinates all the components of your system, optimising the performance and operation of the units and generating the right amount of energy only where and when needed... to ensure that everyone is happy.

CONTROL4 NRG is designed to integrate with the most advanced technologies used for the production of renewable energy, acquiring the energy produced by the photovoltaic system and the energy used by the air conditioning system and organising the display of energy profiles and self-consumption levels.

CONTROL4 NRG ensures Class A operation according to the most stringent requirements concerning the energy rating of buildings under European standard EN 15232.

The cloud-based remote monitoring and management system for all Clivet systems

CLIVET EYE is the Cloud-based monitoring system for remote management from smartphones, tablets and PCs of air conditioning, heating, air renewal and domestic hot water production units and systems.

The CLIVET EYE interface allows you to access your system remotely. It combines the immediacy and ease of use of an app with advanced "data analytics" functions that can be used with a PC and are typical of a control environment designed for professional use.

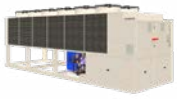
CLIVET EYE's map allows you to identify where Systems are and access them in real time, easily and intuitively highlighting the related operating conditions.

Event notifications promptly warn of any System malfunctions.

Small and Medium Commercial

	THUNDER	WISAN-P		34,9 ÷ 72,7 kW	R-290	HW
	SHEEN EVO 2.0	WISAN-YSE1	EXC / PRM	24,1 ÷ 128 kW	R-32	HW (Only EXC)
	ELFOENERGY SHEEN EVO	WSAT-YSI		43,0 ÷ 130 kW	R-32	HA
	LARGE EVO	WISAN-YEE1		115 ÷ 233 kW	R-32	HW
	LARGE EVO	WISAN-YEE1	EXC / PRM	110 ÷ 252 kW	R-32	HA
	LARGE EVO PL	WISAN-YEE1 PL		51,7 ÷ 238 kW	R-32	MF
	LARGE EVO FC	WISAN-YEE1 FC		104 ÷232 kW	R-32	FC
	ELFOENERGY STORM EVO	WSAN-YES		53,3 ÷ 85 kW	R-32	
	ELFOENERGY STORM EVO	WSAT-YES		53,1 ÷ 85,1 kW	R-32	HA
	ELFOENERGY STORM EVO FC	WSAT-YES FC		50,4 ÷ 80,8 kW	R-32	FC
	ELFOENERGY MAGNUM HW	WSAN-XEM HW		86,0 ÷ 150 kW	R-410A	HW
	ELFOENERGY DUCT MEDIUM	WSN-XEE		34,0 ÷ 99,1 kW	R-410A	DUCT

Large Commercial and Industry

	SPINCHILLER4	WSAN-YSC4	EXC PRM	215 ÷ 655 kW	R-32		
	SPINCHILLER4	WSAT-YSC4	EXC PRM	222 ÷ 675 kW	R-32		Only EXC
	SPINCHILLER4 PL	WSAN-YSC4 PL	EXC	225 ÷ 664 kW	R-32	MF	
	SPINCHILLER4	WSAN-YSC4	EXC PRM	670 ÷ 1260 kW	R-32		
	SPINCHILLER4	WSAT-YSC4	EXC PRM	720 ÷ 939 kW	R-32		Only EXC
	SPINCHILLER3 FC	WSAT-XSC3 FC	EXC	260 ÷ 445 kW	R-410A	FC	
	SCREWLINE4-I MF	WDAN-IK4 MF	EXC	522 ÷ 989 kW	R-513A	MF	
	SCREWLINE4-I	WDAT-IZ4	EXC	204 ÷ 1055 kW	R-1234ze		
	SCREWLINE4-I	WDAT-IK4	EXC PRM	281 ÷ 1422 kW	R-513A		Only EXC
	SCREWLINE3 FC	WDAT-SL3 FC	EXC	520 ÷ 1523 kW	R-134a	FC	

Small and Medium Commercial

	ELFOENERGY GROUND	WSHN-EE	6,13 ÷ 30,9 kW	R-410A
	ELFOENERGY GROUND MEDIUM2	WSHN-XEE2	34,5 ÷ 241 kW	R-410A
	ELFOENERGY GROUND MEDIUM2	WSH-XEE2	35,6 ÷ 250 kW	R-410A
	ELFOENERGY GROUND MEDIUM2 HW	WSHH-LEE1	33,8 ÷ 134 kW	R-134A
	ELFOENERGY GROUND MEDIUM2 MF	WSHN-XEE2 MF	34,3 ÷ 241 kW	R-410A

Large Commercial and Industry

	SPINCHILLER3	WSHN-XSC3	217 ÷ 394 kW	R-410A
	SPINCHILLER3	WSH-XSC3	211 ÷ 390 kW	R-410A
	SCREWLINE4- PL	WIDHN-KLS1 PL	440 ÷ 945 kW	R-513A
	SCREWLINE4-I	WDH-IK4	340 ÷ 1440 kW	R-513A
	SCREWLINE4	WDH-SB4	572 ÷ 1499 kW	R-134a
	CHILLER CENTRIFUGO HFO	WCH-IZ	808 ÷ 1599 kW	R-1234ze
	CHILLER CENTRIFUGO	WCH-I	878 ÷ 1933 kW	R-134A
	SCREWLINE3	MDE-SL3	300 ÷ 1427 kW	R-134a

THUNDER

Air-cooled reversible heat pump for outdoor installation
Capacity from 34,9 to 72,7 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump · Air cooled · Outdoor installation · R-290 · Hermetic Scroll · Full inverter · Electronic expansion valve · CONTROL4 NRG management · INTELLIPLANT · compliant ErP

- ✓Full inverter technology with scroll compressors
- ✓High-temperature solution with modular approach
- ✓Natural and environmentally friendly refrigerant R290 - GWP = 3
- ✓High full load and seasonal efficiency with compact dimensions
- ✓Hot water up to 75°C and wide operating range down to -20°C
- ✓Three acoustic configurations: standard, silent and super-silent
- ✓Modular design for up to 16 units in parallel (reduced installation space, enhanced system efficiency)

Versions and configurations

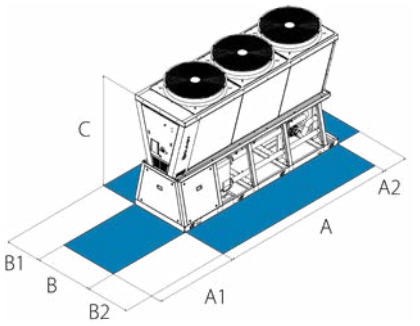
TYPE OF FANS:

VENDC	DC high efficiency fan (Standard)

ACOUSTIC CONFIGURATION:

SC	Acoustic configuration with compressor soundproofing (Standard)
LN	Silenced acoustic configuration
EN	Supersilenced acoustic configuration

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WiSAN-P	14.1	16.1	18.1	19.1	20.1	25.2	30.2
A - Length	mm	2384	2384	2384	2384	2384	3402	3402
B - Width	mm	1094	1094	1094	1094	1094	1094	1094
C - Height	mm	2240	2240	2240	2240	2240	2240	2240
A1	mm	1200	1200	1200	1200	1200	1200	1200
A2	mm	500	500	500	500	500	500	500
B1	mm	500	500	500	500	500	500	500
B2	mm	500	500	500	500	500	500	500
Operating weight	kg	709	709	757	757	757	1021	1021

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		WiSAN-P	14.1	16.1	18.1	19.1	20.1	25.2	30.2
Cooling capacity (EN 14511:2022)	(1)	kW	34,9	38,5	49,9	54,0	58,2	67,8	72,7
Total power input (EN 14511:2022)	(1)	kW	12,3	13,7	19,4	22,0	24,8	23,7	27,5
EER (EN 14511:2022)	(1)	-	2,84	2,81	2,58	2,46	2,35	2,86	2,64
SEER		-	5,36	5,20	4,73	4,58	4,36	5,47	5,30
$\eta_{s,c}$		%	211,0	205,0	186,0	180,0	171,0	216,0	209,0
Heating capacity (EN 14511:2022)	(2)	kW	39,9	45,2	55,1	61,5	68,5	78,6	85,9
Total power input (EN 14511:2022)	(2)	kW	12,8	14,7	17,2	19,7	23,4	25,0	28,5
COP (EN 14511:2022)	(2)	-	3,11	3,08	3,19	3,13	2,92	3,14	3,01
Refrigeration circuits		Nr	1						
No. of compressors		Nr	1					2	
Type of compressors		-	SCROLL INVERTER						
Refrigerant		-	R-290						
Standard airflow		l/s	10556	10556	10556	10556	10556	14722	14722
Standard power supply		V	400/3/50						
Sound power level (SC)	(3)	dB(A)	75	75	77	77	78	78	79
Sound power level (LN)	(3)	dB(A)	73	73	74	74	74	74	75
Sound power level (EN)	(3)	dB(A)	69	69	69	69	69	69	69
Directive ErP (Energy Related Products)									
ErP Energy Class - AVERAGE Climate - W35		-	A+++	A+++	A++	A++	A++	A+++	A+++
ErP Energy Class - AVERAGE Climate - W35		-	A++	A++	A++	A++	A++	A++	A++
SCOP - AVERAGE Climate - W35	(4)	-	4,51	4,45	4,36	3,29	4,22	4,70	4,54
$\eta_{s,H}$	(4)	%	177	175	169	166	163	185	179
SCOP - AVERAGE Climate - W55	(4)	-	3,54	3,51	3,51	3,47	3,41	3,63	3,60
$\eta_{s,H}$	(4)	%	139	137	133	132	131	142	141

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

HYGU1V	User side hydronic assembly with 1 inverter pump
1+1HYGU1V	Hydronic unit on user side with 1+1 inverter pump
ACIMP	Steel inertial storage tank
IFWX	Steel mesh filter on the water side
IFWI	Steel mesh strainer on the water side include in the packaging
AMODX	Water fittings for modular unit
CCKMUX	Pipe plug kit for modular units
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
3DHW	Three-way valve for domestic hot water
3DHWX	Three-way valve for domestic hot water
VSAX	automatic vent valve
TRAMBX	Remote user keypad to control the main functions of the unit
AVIBX	Anti-vibration mount support
AVIBI	Advanced remote control module for auxiliary controls of sheen/storm units
AMMSX	Spring anti-seismic antivibration mounts
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SHEEN EVO 2.0

Air-cooled reversible heat pump for outdoor installation
Capacity from 24,1 to 128 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump · Air cooled · Outdoor installation · R-32 · Hermetic rotary · Hermetic Scroll · Full inverter · Electronic expansion valve · CONTROL4 NRG management · Hybrid system · compliant ErP

- ✓Full inverter technology with scroll or rotary compressors
- ✓High temperature solution for harsh climates
- ✓Refrigerant R32 - GWP = 675
- ✓Excellence version with very high seasonal efficiency, Premium version with high seasonal efficiency, with extremely compact dimensions
- ✓Hot water up to 60°C and wide operating range down to -20°C
- ✓Two acoustic configurations: standard and super-silenced
- ✓Compatible with CONTROL4 NRG, photovoltaic system, solar thermal system and Smart Grid
- ✓Available in the Hybrid version in combination with a condensing boiler for instant DHW production

Versions and configurations

TYPE OF FANS:

VENDC DC high efficiency fan (Standard)

ENERGY RECOVERY:

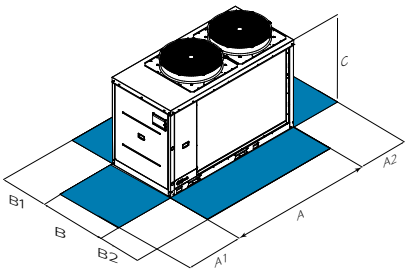
D Partial or total energy recovery (Size 43.2÷55.2)

ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)

EN Supersilenced acoustic configuration

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

Size		WiSAN-YSE1	10.1	12.1	14.1	16.2	18.2	22.2	30.2	35.2	43.2	45.2
SC-EXC	A - Length	mm	1960	1960	1960	2304	2304	2304	3330	3330	4004	4004
SC-EXC	B - Width	mm	1005	1005	1005	1060	1060	1060	1100	1100	1200	1200
SC-EXC	C - Height	mm	1340	1340	1340	1480	1480	1480	1510	1510	1750	1750
SC-EXC	A1	mm	800	800	800	800	800	800	800	800	800	800
SC-EXC	A2	mm	800	800	800	800	800	800	800	800	800	800
SC-EXC	B1	mm	800	800	800	800	800	800	800	800	1300	1300
SC-EXC	B2	mm	800	800	800	800	800	800	800	800	1300	1300
SC-EXC	Operating weight	kg	323	323	323	500	500	500	830	830	1143	1143

Size		WiSAN-YSE1	10.1	12.1	14.1	16.2	18.2	22.2	30.2	35.2	40.2	45.2	50.2	55.2
SC-PRM	A - Length	mm	1960	1960	1960	2304	2304	2304	3330	3330	3330	2930	2930	2930
SC-PRM	B - Width	mm	1005	1005	1005	1060	1060	1060	1100	1100	1100	1200	1200	1200
SC-PRM	C - Height	mm	1340	1340	1340	1480	1480	1480	1510	1510	1510	1750	1750	1750
SC-PRM	A1	mm	800	800	800	800	800	800	800	800	800	800	800	800
SC-PRM	A2	mm	800	800	800	800	800	800	800	800	800	800	800	800
SC-PRM	B1	mm	800	800	800	800	800	800	800	800	800	1300	1300	1300
SC-PRM	B2	mm	800	800	800	800	800	800	800	800	800	1300	1300	1300
SC-PRM	Operating weight	kg	323	323	323	500	500	500	830	830	830	862	862	862

Technical data

Size			WiSAN-YSE1	10.1	12.1	14.1	16.2	18.2	22.2	30.2	35.2	43.2	45.2
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	24,1	26,6	30,3	43,8	49,7	56,8	70,1	80,2	94,6	107
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	7,50	9,11	10,6	14,1	16,4	19,9	22,9	28,0	30,4	34,8
SC-EXC	EER (EN 14511:2022)	(1)	-	3,21	2,93	2,87	3,10	3,03	2,85	3,06	2,86	3,12	3,06
SC-EXC	SEER	(4)	-	4,81	4,65	4,53	4,32	4,32	4,25	4,24	4,23	4,95	4,93
SC-EXC	$\eta_{s,c}$	(4)	%	189,4	183,0	178,2	169,8	169,8	167,0	166,6	166,2	195,0	194,2
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW	24,3	28,8	34,2	50,5	54,7	63,4	74,9	85,2	98,2	107
SC-EXC	Total power input (EN 14511:2022)	(2)	kW	7,29	8,81	10,7	14,2	15,6	19,1	21,5	26,4	29,1	32,1
SC-EXC	COP (EN 14511:2022)	(2)	-	3,33	3,27	3,20	3,55	3,51	3,32	3,48	3,23	3,37	3,34
SC-EXC	Refrigeration circuits		Nr	1									
SC-EXC	No. of compressors		Nr	1						2			
SC-EXC	Type of compressors		-	ROTARY INVERTER						SCROLL INVERTER			
SC-EXC	Refrigerant		-	R-32									
SC-EXC	Standard power supply		V	400/3~/50									
SC-EXC	Sound power level	(3)	dB(A)	73	74	75	75	76	78	78	81	82	83
EN-EXC	Sound power level	(3)	dB(A)	69	71	72	71	71	72	73	75	77	78
Directive ErP (Energy Related Products)													
ErP Energy Class - AVERAGE Climate - W35			-	A+++	A+++	A+++	A+++	A+++	A++	A++	A++	-	-
ErP Energy Class - AVERAGE Climate - W35			-	A++	A++	A++	A++	A++	A++	A++	A++	-	-
SCOP - AVERAGE Climate - W35		(4)	-	4,54	4,49	4,44	4,46	4,46	4,41	4,33	4,29	4,65	4,60
$\eta_{s,H}$		(4)	%	179,0	177,0	175,0	175,0	175,0	173,0	170,0	169,0	183,0	181,0
SCOP - AVERAGE Climate - W55		(4)	-	3,24	3,23	3,19	3,24	3,21	3,19	3,20	3,19	3,42	3,38
$\eta_{s,H}$		(4)	%	127,0	126,0	125,0	127,0	125,0	125,0	125,0	125,0	134,0	132,0

Size			WiSAN-YSE1	10.1	12.1	14.1	16.2	18.2	22.2	30.2	35.2	40.2	45.2	50.2	55.2
SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	25,2	27,6	32,2	45,7	52,1	60,7	74,3	86,2	94,2	111	121	128
SC-PRM	Total power input (EN 14511:2022)	(1)	kW	8,35	10,1	11,8	15,4	18,1	22,0	25,6	31,5	35,8	40,8	46,4	51,1
SC-PRM	EER (EN 14511:2022)	(1)	-	3,03	2,74	2,73	2,96	2,88	2,75	2,91	2,73	2,63	2,71	2,61	2,51
SC-PRM	SEER	(4)	-	4,50	4,40	4,24	4,04	4,09	4,07	3,96	3,91	3,87	4,67	4,54	4,42
SC-PRM	$\eta_{s,c}$	(4)	%	177,0	173,0	166,6	158,5	160,6	159,8	155,4	153,4	151,8	183,8	178,6	173,8
SC-PRM	Heating capacity (EN 14511:2022)	(2)	kW	27,0	29,8	35,7	52,5	57,9	66,6	78,5	91,2	102	117	129	138
SC-PRM	Total power input (EN 14511:2022)	(2)	kW	8,41	9,32	11,3	15,8	17,6	21,2	23,5	29,9	35,5	36,6	40,6	43,9
SC-PRM	COP (EN 14511:2022)	(2)	-	3,21	3,20	3,15	3,33	3,29	3,14	3,34	3,05	2,88	3,21	3,18	3,15
SC-PRM	Refrigeration circuits		Nr	1											
SC-PRM	No. of compressors		Nr	1						2					
SC-PRM	Type of compressors		-	ROTARY INVERTER						SCROLL INVERTER					
SC-PRM	Refrigerant		-	R-32											
SC-PRM	Standard power supply		V	400/3~/50											
SC-PRM	Sound power level	(3)	dB(A)	75	76	77	77	78	80	80	83	83	84	85	85
EN-PRM	Sound power level	(3)	dB(A)	72	73	73	73	73	74	76	77	78	79	80	80
Directive ErP (Energy Related Products)															
ErP Energy Class - AVERAGE Climate - W35			-	A++	A++	A++	A++	A++	A++	A++	A++	A++	-	-	-
SCOP - AVERAGE Climate - W35		(4)	-	4,29	4,22	4,11	4,22	4,19	4,17	4,12	4,08	4,13	4,11	4,07	4,04
$\eta_{s,H}$		(4)	%	169,0	166,0	161,0	166,0	165,0	164,0	162,0	160,0	162,0	161,0	160,0	159,0

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

HYGU1	User side hydronic assembly with 1 ON/OFF pump
HYGU1VI	Hydronic unit on user side with an integrated inverter pump (sizes 10.1 to 40.2)
HYGU1V	Hydronic unit on user side with one inverter pump (sizes 43.2 to 55.2)
HYGU2	Hydronic unit on user side with 2 on-off pumps (sizes 43.2 to 55.2)
HYGU2V	Hydronic unit on user side with 2 inverter pumps (sizes 43.2 to 55.2)
ACC	Storage tank
IFWX	Steel mesh filter on the water side
IFWI	Steel mesh strainer on the water side include in the packaging
REMAU	Additional board for advanced function management
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
TCDC	Condensate collection pan with electric heater
CMSC13X	Serial communication module for Modbus TCP/IP, BACnet IP, BACnet MSTP superviso
VACS	DHW switching valve
VACSX	Switching valve for DHW production
AVIBX	Anti-vibration mount support
AVIBI	Advanced remote control module for auxiliary controls of sheen/storm units
AMMSX	Spring anti-seismic antivibration mounts
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

ELFOENERGY SHEEN EVO

Air-cooled liquid chiller for outdoor installation
Capacity from 43,0 to 130 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | Electronic expansion valve | CONTROL4 NRG management | compliant ErP

- ✓Full inverter technology with scroll or rotary compressors
- ✓First investment driven and refurbishment applications
- ✓Refrigerant R32 - GWP = 675
- ✓High seasonal efficiency
- ✓Operation up to 48°C outdoor air temperature, chilled water down to -8°C
- ✓Three acoustic levels: standard, silenced and super-silenced
- ✓Modular design for up to 16 units in parallel (reduced installation space, enhanced system efficiency)

Versions and configurations

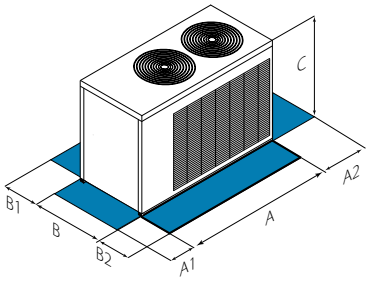
TYPE OF FANS:

VEND DC high efficiency fan (Standard)

ENERGY RECOVERY:

D Partial energy recovery (sizes 45.2 to 55.2)

Dimensions and connections



Size	WSAT-YSi	16.2	20.2	24.2	30.2	35.2	40.2	45.2	50.2	55.2
A - Length	mm	2280	2280	2280	3300	3300	3300	2832	2832	2832
B - Width	mm	1060	1060	1060	1100	1100	1100	1184	1184	1184
C - Height	mm	1320	1320	1320	1510	1510	1510	1750	1750	1750
A1	mm	800	800	800	800	800	800	800	800	800
A2	mm	800	800	800	800	800	800	800	800	800
B1	mm	800	800	800	800	800	800	1300	1300	1300
B2	mm	800	800	800	800	800	800	1300	1300	1300
Operating weight	kg	470	470	470	680	680	680	771	771	771

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

HYDRONIC

Technical data

Size		WSAT-YSi	16.2	20.2	24.2	30.2	35.2	40.2	45.2	50.2	55.2
Cooling capacity (EN 14511:2022)	(1)	kW	43,0	54,0	64,9	76,0	86,8	97,7	110	120	130
Total power input (EN 14511:2022)	(1)	kW	13,0	17,2	23,8	23,4	28,7	35,7	36,7	41,3	46,4
EER (EN 14511:2022)	(1)	-	3,31	3,14	2,72	3,25	3,02	2,74	3,00	2,90	2,80
SEER	(3)	-	4,97	4,81	4,65	5,37	5,15	4,95	5,10	5,02	4,97
$\eta_{s,c}$	(3)	%	195,8	189,5	182,9	212,0	203,2	195,2	201,4	198,2	196,0
Refrigeration circuits		Nr	1								
No. of compressors		Nr	2								
Type of compressors		-	ROTARY INVERTER					SCROLL INVERTER			
Refrigerant		-	R-32								
Standard airflow		l/s	6944	6944	6944	10417	10417	10417	13900	13900	13900
Standard power supply		V	400/3N~/50								
Sound power level	(2)	dB(A)	80	81	82	82	83	84	84	84	85

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013
(3) Data calculated according to the EN 14825:2022 Regulation
The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

HYGU1	Hydronic unit on user side with an on-off pump
HYGU1V	Hydronic unit on user side with one inverter pump (sizes 45.2 to 55.2)
HYGU1VI	Hydronic unit on user side with an integrated inverter pump (sizes 16.2 to 40.2)
HYGU2	Hydronic unit on user side with 2 on-off pumps (sizes 45.2 to 55.2)
HYGU2V	Hydronic unit on user side with 2 inverter pumps (sizes 45.2 to 55.2)
ACC	Storage tank
IFWX	Steel mesh filter on the water side
IFWI	Steel mesh strainer on the water side include in the packaging
REMAU	Additional board for advanced function management (sizes 45.2 to 55.2)
REMAUX	Advanced remote control module for auxiliary controls of sheen/storm units
SNATEX	Non-ATEX disconnector switch for outdoor assembly in a remote position (sizes 16.2 to 40.2)
SNB	Main disconnecting switch on the unit (standard on sizes 45.2 to 55.2)
AVIBI	Advanced remote control module for auxiliary controls of sheen/storm units
AVIBX	Anti-vibration mount support
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
CCME	Microchannel e-coated coil
IOTX	IoT industrial module for cloud based interoperability & services
FEMC	EMC filtering for residential, commercial and light industrial environments for reduced emissions (sizes 30.2 to 40.2)

Accessories whose code ends with "X" are supplied separately

LARGE EVO

Air-cooled liquid chiller for outdoor installation.
Capacity from 110 to 252 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | Electronic expansion valve | CONTROL4 NRG management | INTELLIPLANT | compliant ErP

- ✓Full inverter technology with scroll or rotary compressors
- ✓High temperature solution for harsh climates
- ✓Excellence version for greater efficiency, Premium version for reduced initial investment
- ✓Refrigerant R32 - GWP = 675
- ✓Operation at 48°C outdoor air temperature, chilled water down to -8°C
- ✓Three acoustic configurations: standard, silent and super-silent
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly, system tank and partial heat recovery

Versions and configurations

VERSION:

EXC	Excellence (standard)
PRM	Premium

TYPE OF FANS:

VENDC	DC high efficiency fan (Standard)

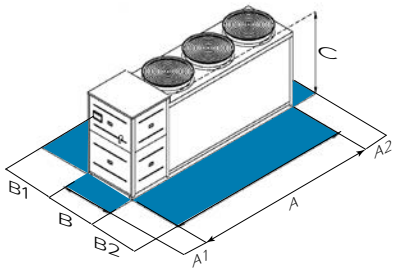
ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

ACOUSTIC CONFIGURATION:

SC	Acoustic configuration with compressor soundproofing (Standard)
LN	Silenced acoustic configuration
EN	Supersilenced acoustic configuration

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

Size		WiSAT-YEE1	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
SC-EXC	A - Length	mm	3310	3310	3310	3310	4300	4300	4300	4300	4300	4300
SC-EXC	B - Width	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	C - Height	mm	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
SC-EXC	A1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
SC-EXC	A2	mm	800	800	800	800	800	800	800	800	800	800
SC-EXC	B1	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
SC-EXC	B2	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
SC-EXC	Operating weight	kg	894	894	904	904	1154	1154	1180	1180	1180	1180

Size		WiSAT-YEE1	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
SC-PRM	A - Length	mm	3310	3310	3310	3310	4300	4300	4300	4300	4300	4300
SC-PRM	B - Width	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-PRM	C - Height	mm	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
SC-PRM	A1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
SC-PRM	A2	mm	800	800	800	800	800	800	800	800	800	800
SC-PRM	B1	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
SC-PRM	B2	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
SC-PRM	Operating weight	kg	894	894	894	904	1154	1154	1180	1180	1180	1180

Technical data

Size			WiSAT-YEE1	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	110	118	133	142	156	169	183	196	209	226
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	34,2	38,5	46,1	50,3	50,0	54,6	64,0	59,4	65,5	74,2
SC-EXC	EER (EN 14511:2022)	(1)	-	3,22	3,08	2,89	2,82	3,12	3,09	2,86	3,31	3,19	3,04
SC-EXC	SEER	(3)	-	5,07	5,05	4,94	4,93	5,25	5,24	5,19	5,34	5,31	5,28
SC-EXC	$\eta_{s,c}$	(3)	%	200,0	199,0	194,0	194,0	207,0	207,0	205,0	211,0	210,0	208,0
SC-EXC	Refrigeration circuits		Nr	2									
SC-EXC	No. of compressors		Nr	4									
SC-EXC	Type of compressors		-	ROTARY INVERTER			*	SCROLL INVERTER					
SC-EXC	Refrigerant		-	R-32									
SC-EXC	Standard power supply		V	400/3N~/50									
SC-EXC	Sound power level	(2)	dB(A)	84	84	84	84	85	85	85	88	89	89
LN-EXC	Sound power level	(2)	dB(A)	81	81	81	81	82	82	82	84	85	85
EN-EXC	Sound power level	(2)	dB(A)	78	78	78	78	79	79	79	80	81	81

Size			WiSAT-YEE1	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	125	135	143	155	174	192	211	226	241	252
SC-PRM	Total power input (EN 14511:2022)	(1)	kW	44,2	49,2	53,5	58,8	62,4	73,2	71,6	78,1	80,3	86,0
SC-PRM	EER (EN 14511:2022)	(1)	-	2,83	2,74	2,67	2,64	2,79	2,63	2,94	2,90	3,00	2,93
SC-PRM	SEER	(3)	-	4,76	4,71	4,70	4,77	4,91	4,90	5,06	5,03	5,06	5,05
SC-PRM	$\eta_{s,c}$	(3)	%	188,0	185,0	185,0	188,0	193,0	193,0	199,0	198,0	199,0	199,0
SC-PRM	Refrigeration circuits		Nr	2									
SC-PRM	No. of compressors		Nr	4									
SC-PRM	Type of compressors		-	ROTARY INVERTER			*	SCROLL INVERTER					
SC-PRM	Refrigerant		-	R-32									
SC-PRM	Standard power supply		V	400/3N~/50									
SC-PRM	Sound power level	(2)	dB(A)	86	86	86	87	87	90	91	91	91	91
LN-PRM	Sound power level	(2)	dB(A)	83	83	83	84	84	87	88	88	88	88
EN-PRM	Sound power level	(2)	dB(A)	80	80	80	81	81	84	85	85	85	85

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(3) Data calculated according to the EN 14825:2022 Regulation
The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydronic unit on user side with 1 on-off pump
1PMH	Hydronic unit on user side with 1 high head on-off pump
1PMV	Hydronic unit on user side with 1 inverter pump
1PMVH	Hydronic unit on user side with 1 high head inverter pump
1P1SB	Hydronic unit on user side with 1+1 on-off pump
1PAP+S	Hydronic unit on user side with 1+1 on-off high head pump
1P1SBV	Hydronic unit on user side with 1+1 inverter pump
1PAPSV	Hydronic unit on user side with 1+1 high head inverter pump
ACC	Storage tank
IFWX	Steel mesh filter on the water side
ABU	Flush hydraulic connections

CMSC13	Serial communication module for Modbus TCP/IP, BACnet IP, BACnet MSTP superviso
REMAU	Additional board for advanced function management
RPR	Refrigerant leak detector
AVIBX	Anti-vibration mount support
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PGCCHX	Anti-hail protection grilles
IOTX	IoT industrial module for cloud based interoperability & services
CCME	Microchannel coil

Accessories whose code ends with "X" are supplied separately

LARGE EVO

Air-cooled reversible heat pump for outdoor installation.
Capacity from 115 to 233 kW

DC INVERTER

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | Electronic expansion valve | CONTROL4 NRG management | INTELLIPLANT | compliant ErP

- ✓Full inverter technology with scroll or rotary compressors
- ✓High temperature solution for harsh climates
- ✓Refrigerant R32 - GWP = 675
- ✓High seasonal efficiency with extremely compact dimensions
- ✓Hot water up to 60°C and wide operating range down to -20°C
- ✓Three acoustic configurations: standard, silent and super-silent
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly, system tank and partial heat recovery

Versions and configurations

TYPE OF FANS:

VENDC	DC high efficiency fan (Standard)

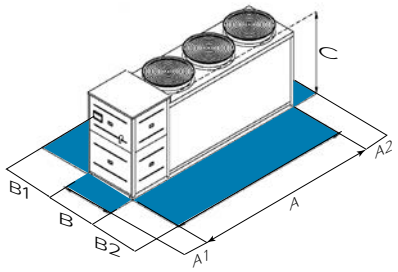
ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

ACOUSTIC CONFIGURATION:

SC	Acoustic configuration with compressor soundproofing (Standard)
LN	Silenced acoustic configuration
EN	Supersilenced acoustic configuration

Dimensions and connections



Size	WiSAN-YEE1	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4
A - Length	mm	3310	3310	3310	3310	4300	4300	4300	4300	4300
B - Width	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200
C - Height	mm	1900	1900	1900	1900	1900	1900	1900	1900	1900
A1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2	mm	800	800	800	800	800	800	800	800	800
B1	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350
B2	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350
Operating weight	kg	966	966	1009	1009	1250	1250	1352	1352	1352

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WiSAN-YEE1		45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4
Cooling capacity (EN 14511:2022)	(1)	kW	115	127	139	152	164	176	196	215	233
Total power input (EN 14511:2022)	(1)	kW	44,0	51,0	56,3	66,5	66,8	75,2	73,6	85,8	99,0
EER (EN 14511:2022)	(1)	-	2,62	2,49	2,47	2,29	2,46	2,34	2,66	2,51	2,35
SEER	(4)	-	4,51	4,51	4,38	4,37	4,48	4,45	4,48	4,45	4,42
$\eta_{s,c}$	(4)	%	177,4	177,4	171,4	172,0	176,2	175,0	176,2	175,0	173,8
Heating capacity (EN 14511:2022)	(2)	kW	118	130	150	170	190	210	230	250	268
Total power input (EN 14511:2022)	(2)	kW	37,7	43,2	47,3	55,1	60,0	67,7	70,5	79,7	88,7
COP (EN 14511:2022)	(2)	-	3,13	3,01	3,17	3,09	3,17	3,10	3,26	3,14	3,02
Refrigeration circuits		Nr					2				
No. of compressors		Nr					4				
Type of compressors		-	ROTARY INVERTER			*			SCROLL INVERTER		
Refrigerant		-					R-32				
Standard power supply		V					400/3N~/50				
SC-Sound power level	(3)	dB(A)	85	85	86	86	88	88	89	89	89
LN-Sound power level	(3)	dB(A)	81	81	82	82	84	84	85	85	85
EN-Sound power level	(3)	dB(A)	77	77	78	78	80	80	81	81	81
Directive ErP (Energy Related Products)											
SCOP - AVERAGE Climate - W35	(4)	-	4,16	4,12	4,15	4,07	4,19	4,15	4,22	4,16	4,11
$\eta_{s,H}$	(4)	%	163,0	162,0	163,0	160,0	165,0	163,0	166,0	163,0	161,0
SCOP - AVERAGE Climate - W55	(4)	-	2,97	2,88	2,96	2,88	2,93	2,87	2,99	2,95	2,93
$\eta_{s,H}$	(4)	%	116,0	112,0	115,0	112,0	114,0	112,0	117,0	115,0	114,0

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(4) Data calculated according to the EN 14825:2022 Regulation
* ROTARY/SCROLL INVERTER

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydronic unit on user side with 1 on-off pump
1PMH	Hydronic unit on user side with 1 high head on-off pump
1PMV	Hydronic unit on user side with 1 inverter pump
1PMVH	Hydronic unit on user side with 1 high head inverter pump
1P1SB	Hydronic unit on user side with 1+1 on-off pump
1PAP+S	Hydronic unit on user side with 1+1 on-off high head pump
1P1SBV	Hydronic unit on user side with 1+1 inverter pump
1PAPSV	Hydronic unit on user side with 1+1 high head inverter pump
ACC	Storage tank
IFWX	Steel mesh filter on the water side
IFWI	Steel mesh strainer on the water side include in the packaging
ABU	Flush hydraulic connections
CMSC13	Serial communication module for Modbus TCP/IP, BACnet IP, BACnet MSTP superviso

Accessories whose code ends with "X" are supplied separately

REMAU	Additional board for advanced function management
RPR	Refrigerant leak detector
AVIBX	Anti-vibration mount support
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PGCCHX	Anti-hail protection grilles
IOTX	IoT industrial module for cloud based interoperability & services
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
VACS	DHW switching valve: required
TCDC	Condensate collection pan with electric heater

LARGE EVO PL

Air-cooled multi-functional reversible heat pump for outdoor installation
Capacity from 51,7 to 238 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | Electronic expansion valve | CONTROL4 NRG management | INTELLIPLANT | compliant ErP

- ✓Three acoustic configurations: standard, silent and super-silent
- ✓Polyvalent technology configurable for 4-pipe
- ✓Refrigerant R32 - GWP = 675
- ✓Domestic hot water temperature up to 60°C and down to 5°C
- ✓Double independent circuits for high reliability
- ✓Three acoustic configurations: standard, silent and super-silent
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated hot side and cold side hydronic assemblies

Versions and configurations

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

ENERGY RECOVERY:

R Total energy recovery (Standard)

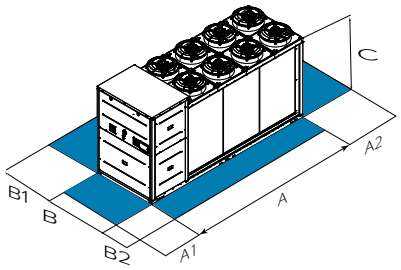
CONFIGURATION:

4T Configuration for 4-pipe system

ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)
LN Silenced acoustic configuration
EN Supersilenced acoustic configuration

Dimensions and connections



Size	WiSAN-YEE1 PL		20.2	25.2	30.2	35.2	40.2	45.2	50.2	55.4	60.4	65.4	70.4	75.4	80.4	85.4
A - Length		mm	2510	2510	3230	3230	3230	3905	3905	4060	4060	4400	4400	5195	5195	5195
B - Width		mm	1395	1395	1395	1395	1395	1395	1395	1545	1545	1545	1545	1545	1545	1545
C - Height		mm	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920
A1		mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2		mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800
B1		mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
B2		mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
Operating weight		kg	978	978	1300	1300	1300	1492	1492	1586	1586	2012	2012	2160	2160	2160

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WiSAN-YEE1 PL		20.2	25.2	30.2	35.2	40.2	45.2	50.2	55.4	60.4	65.4	70.4	75.4	80.4	85.4
Cooling 100% - Heating 0%																
Cooling capacity (EN 14511:2022)	(1)	kW	51,7	61,7	71,1	81,5	91,4	111	124	136	149	163	181	200	219	238
Total power input (EN 14511:2022)	(1)	kW	16,8	22,2	22,7	27,7	33,3	36,5	43,0	47,8	55,1	53,2	63,4	65,9	75,9	87,8
EER (EN 14511:2022)	(1)	-	3,07	2,77	3,13	2,95	2,74	3,03	2,88	2,85	2,70	3,05	2,85	3,03	2,88	2,71
SEER	(6)	-	4,26	4,23	4,48	4,45	4,44	4,62	4,60	4,38	4,35	4,65	4,64	4,62	4,61	4,59
$\eta_{s,c}$	(6)	%	167,1	166,3	176,2	175,0	174,6	181,6	180,8	172,1	170,9	183,0	182,6	181,9	181,5	180,7
Cooling 0% - Heating 100%																
Heating capacity (EN 14511:2022)	(2)	kW	64,5	72,8	80,5	92,3	104	120	137	154	173	192	211	231	253	280
Total power input (EN 14511:2022)	(2)	kW	20,7	24,3	24,0	28,5	33,2	37,0	42,4	48,0	55,8	58,6	66,5	69,3	78,5	90,5
COP (EN 14511:2022)	(2)	-	3,12	3,00	3,36	3,24	3,15	3,25	3,22	3,22	3,10	3,27	3,18	3,34	3,23	3,10
Cooling 100% - Heating 100%																
Cooling capacity (EN 14511:2022)	(3)	kW	53,0	62,2	69,8	80,2	88,0	108	116	134	149	166	176	189	208	226
Heating capacity (EN 14511:2022)	(3)	kW	70,6	84,0	92,0	108	119	144	156	178	200	218	232	246	274	303
Total power input (EN 14511:2022)	(3)	kW	18,2	22,7	22,9	28,2	32,4	37,4	42,0	45,5	52,2	53,5	57,9	58,9	68,5	79,0
TER (EN 14511:2022)	(4)	-	6,78	6,45	7,07	6,66	6,40	6,74	6,47	6,86	6,68	7,18	7,05	7,38	7,04	6,70
Refrigeration circuits		Nr	2													
No. of compressors		Nr	2										4			
Type of compressors		-	ROTARY INVERTER							SCROLL INVERTER						
Refrigerant		-	R32													
Standard power supply		V	400/3~/50													
SC-Sound power level	(5)	dB(A)	83	83	85	85	85	87	87	88	88	89	89	91	91	91
LN-Sound power level	(5)	dB(A)	79	79	81	81	81	83	83	84	84	85	85	87	87	87
EN-Sound power level	(5)	dB(A)	75	75	77	77	77	79	79	80	80	81	81	83	83	83
Directive ErP (Energy Related Products)																
SCOP - AVERAGE Climate - W35	(6)	-	4,16	4,15	4,17	4,12	4,10	4,16	4,14	4,08	4,06	4,13	4,12	4,08	4,06	4,04
$\eta_{s,H}$	(6)	%	163,0	163,0	164,0	162,0	161,0	163,0	163,0	160,0	159,0	162,0	162,0	160,0	160,0	159,0
SCOP - AVERAGE Climate - W55	(6)	-	2,95	3,06	3,04	3,08	3,17	3,07	3,18	3,07	3,12	3,17	3,19	3,01	3,11	3,27
$\eta_{s,H}$	(6)	%	115,0	119,0	119,0	120,0	124,0	120,0	124,0	120,0	122,0	124,0	125,0	117,0	121,0	128,0

(1) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Entering external exchanger air temperature = 35°C
(2) Data compliant to Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C; Entering external exchanger air temperature = 7°C D.B./6°C W.B.
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(6) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
ABU	Flush hydraulic connections
1PMCS	Hydronic unit on cold use side with 1 on-off pump
1PMCSV	Hydronic unit on cold use side with 1 inverter pump
1+1PMCS	Hydronic unit on cold use side with 1+1 on-off pump
1+1PMCSV	Hydronic unit on cold use side with 1+1 inverter pump
1PMHS	Hydronic unit on hot use side with 1 on-off pump
1PMHSV	Hydronic unit on hot use side with 1 inverter pump
1+1PMHS	Hydronic unit on hot use side with 1+1 on-off pump
1+1PMHSV	Hydronic unit on hot use side with 1+1 inverter pump
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
PFGP	Soundproofing paneling of the pumping unit
IFWX	Steel mesh filter on the water side
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
RPR	Refrigerant leak detector
AVIBX	Anti-vibration mount support
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PGCCHX	Anti-hail protection grilles
TCDC	Condensate collection pan with electric heater
IOTX	IoT industrial module for cloud based interoperability & services
FMCHX	Cooling and heating side flow meters
ECS	ECOSHARE function for the automatic management of a group of units
MISTER1	Indirect energy meter through pressure drops and unit probes temperature differential
MISTER2	Direct energy meter by flow rate and temperature differential with unit probes (available only with options: FMCHX)
IVFHDT	Variable flow-rate control on hot use side by inverter based on the temperature difference
IVFHDTS	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFHDTF	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFCDT	Variable flow rate control heating side by inverter according to the temperature differential
IVFCDTS	Variable flow control cooling side by inverter according to the temperature differential with pressure drop sensor
IVFCDTF	Variable flow rate control cooling side by inverter according to the temperature differential with a flow meter (available only with options: FMCHX)
CONTA3	M-bus total electricity meter
CONTA4	Total electricity meters and m-bus pump group
DML0-10	Demand limit with 0-10 V signal
DML4-20	Demand limit with 4-20 mA signal

Accessories whose code ends with "X" are supplied separately

LARGE EVO FC

Air-cooled liquid chiller with FREE-COOLING for outdoor installation
Capacity from 104 to 232 kW

DC INVERTER

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | FREE-COOLING | Electronic expansion valve | CONTROL4 NRG management | INTELLIPLANT | ErP compliant

- ✓Full inverter technology with scroll or rotary compressors
- ✓Solution for cold climates, versatile applications with modular concept
- ✓Refrigerant R32 - GWP = 675
- ✓Operation up to 48°C outdoor air temperature, chilled water down to -8°C
- ✓Direct Free cooling active at air temperatures above 0°C
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly and system tank

Versions and configurations

VERSION:

EXC	Excellence (standard)
PRM	Premium

TYPE OF FANS:

VENDC	DC high efficiency fan (Standard)

FREE-COOLING:

FDC	Direct free cooling

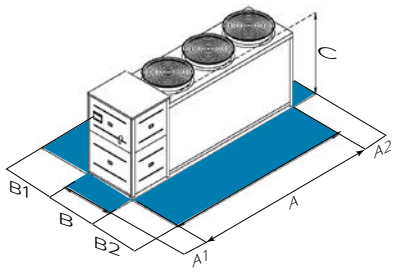
ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

ACOUSTIC CONFIGURATION:

SC	Acoustic configuration with compressor soundproofing (Standard)
EN	Supersilenced acoustic configuration

Dimensions and connections



Size	WiSAT-YEE1 FC		45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
A - Length		mm	3310	3310	3310	4300	4300	4300	4300	4300	4300	4300
B - Width		mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
C - Height		mm	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
A1		mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2		mm	800	800	800	800	800	800	800	800	800	800
B1		mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
B2		mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
Operating weight		kg	1337	1337	1337	1826	1826	1826	1886	1886	1886	1886

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WiSAT-YEE1 FC		45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.4	90.4
Free-Cooling Off												
Cooling capacity	(1)	kW	112	124	139	151	165	183	198	210	227	244
Total power input	(1)	kW	30,5	34,4	39,8	38,4	43,0	51,4	51,4	56,4	63,5	72,2
EER at full load	(1)	-	3,67	3,59	3,49	3,93	3,84	3,56	3,85	3,73	3,58	3,38
SEER	(4)	-	4,72	4,71	4,71	4,94	4,93	4,88	4,93	4,91	4,83	4,81
$\eta_{s,c}$	(4)	%	186	185	185	195	194	192	194	193	190	189
Direct Free-cooling on												
Cooling capacity - EXC / PRM	(2)	kW	112	124	139	151	165	183	198	210	227	244
ZET - EXC		°C	1,2	0,4	-0,6	2,1	1,4	0,5	-0,2	-0,8	-1,7	-2,5
ZET - PRM		°C	0,6	-0,2	-1,4	1,1	0,2	-0,9	-1,8	-2,6	-3,5	-4,7
Refrigeration circuits		Nr	2									
No. of compressors		Nr	4									
Type of compressors		-	ROTARY INVERTER				SCROLL INVERTER					
Refrigerant		-	R-32									
Standard airflow		l/s	14500	14500	14500	21750	21750	21750	21750	21750	21750	21750
Standard power supply		V	400/3~/50									
Sound power level (SC)	(3)	dB(A)	84	84	84	87	87	88	89	89	89	89
Sound power level (EN)	(3)	dB(A)	78	78	78	81	81	82	84	84	84	84

(1) Data referred to the following conditions: internal exchanger water = 16/10°C; glycol 30%; entering external exchanger air temperature 30°C
(2) Free-Cooling only data (compressors OFF) referred to the following conditions: internal exchanger water temperature = 16/10°C; entering external exchanger air temperature = ZET; glycol 30%
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydronic unit on user side with 1 on-off pump
1PMV	Hydronic unit on user side with 1 high head on-off pump
1PMH	Hydronic unit on user side with 1 inverter pump
1PMVH	Hydronic unit on user side with 1 high head inverter pump
1P1SB	Hydronic unit on user side with 1+1 on-off pump
1PAP+S	Hydronic unit on user side with 1+1 on-off high head pump
1P1SBV	Hydronic unit on user side with 1+1 inverter pump
1PAPSV	Hydronic unit on user side with 1+1 high head inverter pump
ACC	Storage tank
IFWX	Steel mesh filter on the water side
CMSC13	Serial communication module for Modbus TCP/IP, BACnet IP, BACnet MSTP superviso
REMAU	Additional board for advanced function management
RPR	Refrigerant leak detector
AVIBX	Anti-vibration mount support
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PGCCHX	Anti-hail protection grilles
IOTX	IoT industrial module for cloud based interoperability & services
CCME	Microchannel coil

Accessories whose code ends with "X" are supplied separately

ELFOENERGY STORM EVO

Air-cooled liquid chiller for outdoor installation
Capacity from 53,1 to 85,1 kW

DC INVERTER

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | Electronic expansion valve | CONTROL4 NRG management | ErP compliant

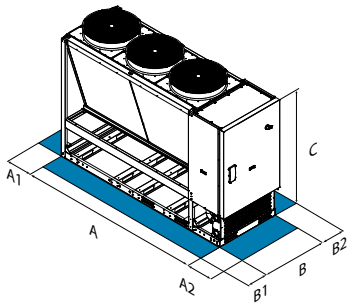
- ✓Full inverter technology with scroll or rotary compressors
- ✓Application versatility with modular concept
- ✓Refrigerant R32 - GWP = 675
- ✓High full load and seasonal efficiency with compact dimensions
- ✓Operation up to 48°C outdoor air temperature, chilled water down to -8°C
- ✓Three acoustic levels: standard, silenced and super-silenced
- ✓Modular design for up to 16 units in parallel (reduced installation space, enhanced system efficiency)
- ✓Integrated hydronic assembly and system tank

Versions and configurations

TYPE OF FANS:

VENDC DC high efficiency fan (Standard)

Dimensions and connections



Size	WSAT-YES		18.2	20.2	25.2	30.2	35.2
A - Length		mm	2364	2364	3220	3220	3220
B - Width		mm	1130	1130	1130	1130	1130
C - Height		mm	2155	2155	2155	2155	2155
A1		mm	800	800	800	800	800
A2		mm	800	800	800	800	800
B1		mm	500	500	500	500	500
B2		mm	500	500	500	500	500
Operating weight		kg	575	575	725	725	725

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WSAT-YES		18.2	20.2	25.2	30.2	35.2
Cooling capacity (EN 14511:2022)	(1)	kW	53,1	59,2	72,2	77,5	85,1
Total power input (EN 14511:2022)	(1)	kW	17,1	19,8	22,5	24,3	27,5
EER (EN 14511:2022)	(1)	-	3,10	2,99	3,21	3,19	3,10
SEER	(3)	-	4,85	4,84	4,89	4,81	4,74
$\eta_{s,c}$	(3)	%	190,8	190,6	192,6	189,5	186,4
Refrigeration circuits		Nr			1		
No. of compressors		Nr			2		
Type of compressors		-	ROTARY INVERTER		SCROLL INVERTER		
Refrigerant		-			R-32		
Standard airflow		l/s	6889	6889	10333	10333	10333
Standard power supply		V			400/3N~/50		
Sound power level	(2)	dB(A)	82	82	81	84	85

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(3) Data calculated according to the EN 14825:2022 Regulation
The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

HYGU1V	User side hydronic assembly with 1 inverter pump
ACIMP	Steel inertial storage tank
AMODX	Water fittings for modular unit
CCKMUX	Pipe plug kit for modular units
AVIBI	Advanced remote control module for auxiliary controls of sheen/storm units
AVIBX	Anti-vibration mount support
REMAUX	Advanced remote control module for auxiliary controls of sheen/storm units
SNATEX	Non atex main switch for remote external installation
SNB	On board main switch
IFWI	Steel mesh strainer on the water side include in the packaging
IFWX	Steel mesh filter on the water side
IFWCX	Steel mesh strainer on the water side for units in modular configuration (available only with options: AMODX)
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
IOTX	IoT industrial module for cloud based interoperability & services
CCME	Microchannel e-coated coil

Accessories whose code ends with "X" are supplied separately

ELFOENERGY STORM EVO

Air-cooled reversible heat pump for outdoor installation
Capacity from 53,3 to 85 kW

DC INVERTER

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | Electronic expansion valve | CONTROL4 NRG management | Hybrid system | ErP compliant

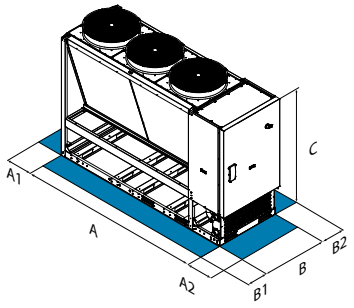
- ✓Full inverter technology with scroll or rotary compressors
- ✓Application versatility with modular concept
- ✓Refrigerant R32 - GWP = 675
- ✓High full load and seasonal efficiency with compact dimensions
- ✓Hot water up to 55°C and wide operating range down to -15°C
- ✓Three acoustic levels: standard, silenced and super-silenced
- ✓Modular design for up to 16 units in parallel (reduced installation space, enhanced system efficiency)
- ✓Available in hybrid version in combination with boiler

Versions and configurations

TYPE OF FANS:

VENDC DC high efficiency fan (Standard)

Dimensions and connections



Size	WSAN-YES	18.2	20.2	25.2	30.2	35.2
A - Length	mm	2364	2364	3220	3220	3220
B - Width	mm	1130	1130	1130	1130	1130
C - Height	mm	2155	2155	2155	2155	2155
A1	mm	800	800	800	800	800
A2	mm	800	800	800	800	800
B1	mm	500	500	500	500	500
B2	mm	500	500	500	500	500
Operating weight	kg	590	590	796	796	796

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size		WSAN-YES	18.2	20.2	25.2	30.2	35.2
Cooling capacity (EN 14511:2022)	(1)	kW	53,3	58,9	72,0	77,7	85,0
Total power input (EN 14511:2022)	(1)	kW	18,0	20,3	22,8	25,0	29,2
EER (EN 14511:2022)	(1)	-	2,95	2,90	3,15	3,10	2,91
SEER	(4)	-	4,57	4,51	4,64	4,62	4,50
$\eta_{s,c}$	(4)	%	179,8	177,4	182,6	181,8	177,0
Heating capacity (EN 14511:2022)	(2)	kW	53,0	66,0	79,3	84,7	91,0
Total power input (EN 14511:2022)	(2)	kW	16,5	20,6	23,8	25,7	28,0
COP (EN 14511:2022)	(2)	-	3,21	3,20	3,33	3,29	3,25
Refrigeration circuits		Nr			1		
No. of compressors		Nr			2		
Type of compressors		-	ROTARY INVERTER		SCROLL INVERTER		
Refrigerant		-			R-32		
Standard airflow		l/s	6889	6889	10333	10333	10333
Standard power supply		V			400/3N~/50		
Sound power level	(3)	dB(A)	82	82	81	84	85
Directive ErP (Energy Related Products)							
ErP Energy Class - AVERAGE Climate - W35		-	A++	A++	A++	A++	-
SCOP - AVERAGE Climate - W35	(4)	-	4,04	4,03	4,08	4,07	4,06
$\eta_{s,H}$	(4)	%	159	158	160	160	159

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

HYGU1V	User side hydronic assembly with 1 inverter pump
ACIMP	Steel inertial storage tank
AMODX	Water fittings for modular unit
CCKMUX	Pipe plug kit for modular units
AVIBI	Advanced remote control module for auxiliary controls of sheen/storm units
AVIBX	Anti-vibration mount support
SNATEX	Non atex main switch for remote external installation
SNB	On board main switch
REMSGX	Remote board for auxiliary controls with SG-Ready
IFWI	Steel mesh strainer on the water side include in the packaging
IFWX	Steel mesh filter on the water side
IFWCX	Steel mesh strainer on the water side for units in modular configuration (available only with options: AMODX)
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
IOTX	IoT industrial module for cloud based interoperability & services
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
3DHW	Three-way valve for domestic hot water

Accessories whose code ends with "X" are supplied separately

ELFOENERGY STORM EVO FC

Air-cooled liquid chiller with FREE-COOLING for outdoor installation
Capacity from 50,4 to 80,8 kW

DC INVERTER

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic rotary | Hermetic Scroll | Full inverter | FREE-COOLING | Electronic expansion valve | CONTROL4 NRG management | ErP compliant

- ✓Full inverter technology with scroll or rotary compressors
- ✓Solution for cold climates, versatile applications with modular concept
- ✓Refrigerant R32 - GWP = 675
- ✓High full load and seasonal efficiency with compact dimensions
- ✓Operation up to 48°C outdoor air temperature, chilled water down to 5°C
- ✓Direct Free cooling active at air temperatures above 0°C
- ✓Modular design to connect up to 16 units in parallel, compatible with chiller version
- ✓Integrated hydronic assembly and system tank

Versions and configurations

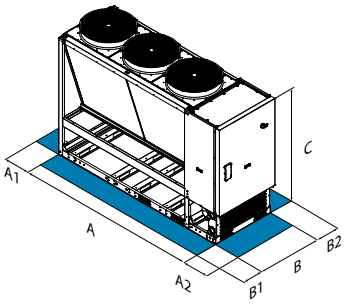
TYPE OF FANS:

VENDC DC high efficiency fan (Standard)

FREE-COOLING:

FCD Direct FREE-COOLING

Dimensions and connections



Size	WSAT-YES FC		18.2	20.2	25.2	30.2	35.2
A - Length		mm	2364	2364	3220	3220	3220
B - Width		mm	1130	1130	1130	1130	1130
C - Height		mm	2155	2155	2155	2155	2155
A1		mm	800	800	800	800	800
A2		mm	800	800	800	800	800
B1		mm	500	500	500	500	500
B2		mm	500	500	500	500	500
Operating weight		kg	659	659	850	850	850

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WSAT-YES FC			18.2	20.2	25.2	30.2	35.2
Free-Cooling Off								
Cooling capacity		(1)	kW	57,4	63,9	75,9	81,5	89,7
Total power input		(1)	kW	16,8	19	22,1	23,6	26,2
EER at full load		(1)	-	3,42	3,36	3,43	3,45	3,42
SEER		(4)	-	4,48	4,51	4,56	4,48	4,41
$\eta_{s,c}$		(4)	%	176,2	177,4	179,4	176,2	173,4
Direct Free-cooling on								
Cooling capacity		(2)	kW	42,2	43,5	71	71,9	72,5
Total power input		(2)	kW	1,7	1,7	2,5	2,5	2,5
EER at full load		(2)	-	24,8	25,6	28,4	28,8	29
Refrigeration circuits			Nr			1		
No. of compressors			Nr			2		
Type of compressors			-	ROTARY INVERTER			SCROLL INVERTER	
Refrigerant			-			R-32		
Standard airflow			l/s	6889	6889	10333	10333	10333
Standard power supply			V			400/3N~/50		
Sound power level		(3)	dB(A)	82	82	81	84	85

(1) Data referred to the following conditions: internal exchanger water temperature = 15/10 °C; glycol 30%; entering external exchanger air temperature 30°C
(2) Free-Cooling only data (compressors OFF) referred to the following conditions: internal exchanger water temperature = 15/10°C; entering external exchanger air temperature = 2°C D.B./1°C W.B.; glycol 30%
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

HYGU1V	User side hydronic assembly with 1 inverter pump
ACIMP	Steel inertial storage tank
IFWX	Steel mesh filter on the water side
IFWI	Steel mesh strainer on the water side include in the packaging
IFWCX	Steel mesh strainer on the water side for units in modular configuration (available only with options: AMODX)
AVIBX	Anti-vibration mount support
AVIBI	Advanced remote control module for auxiliary controls of sheen/storm units
SNATEX	Non atex main switch for remote external installation
AMODX	Water fittings for modular unit
CCME	Microchannel e-coated coil
CCKMUX	Pipe plug kit for modular units
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
REMAUX	Advanced remote control module for auxiliary controls of sheen/storm units
SNB	On board main switch
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

ELFOENERGY MAGNUM HW

Air-cooled reversible heat pump for outdoor installation
Capacity from 86,0 to 150 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Outdoor installation | R-410A | Hermetic Scroll | AxiTop | Vary Flow | Electronic expansion valve | INTELLIPLANT | ErP compliant

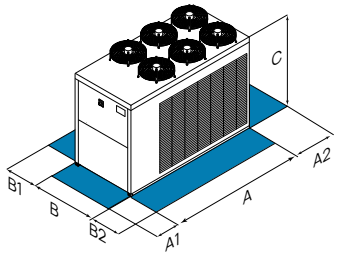
- ✓Double independent circuits for high reliability with scroll compressors
- ✓High water temperature solution for residential centralized systems
- ✓Refrigerant R410A - GWP = 2088
- ✓High full load and seasonal efficiency
- ✓Domestic hot water up to 65°C
- ✓Hot water up to 55°C and wide operating range down to -20°C
- ✓Partial energy recovery and user side DHW switching valve
- ✓Integrated hydronic assembly and system tank

Versions and configurations

ENERGY RECOVERY:

- \- Energy recovery: not required (Standard)
- D Partial energy recovery

Dimensions and connections



Size	WSAN-XEM HW		35.4	40.4	45.4	50.4	55.4	60.4
A - Length		mm	3400	3400	3400	3400	4400	4400
B - Width		mm	1812	1812	1812	1812	1812	1812
C - Height		mm	1800	1800	1800	1800	1800	1800
A1		mm	1300	1300	1300	1300	1300	1300
A2		mm	750	750	750	750	750	750
B1		mm	1100	1100	1100	1100	1100	1100
B2		mm	1100	1100	1100	1100	1100	1100
Operating weight		kg	1285	1418	1441	1444	1735	1739

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size	WSAN-XEM HW		35.4	40.4	45.4	50.4	55.4	60.4
Cooling capacity (EN 14511:2022)	(1)	kW	86,0	98,6	110	118	131	150
Total power input (EN 14511:2022)	(1)	kW	31,3	35,3	37,3	41,6	48,3	54,6
EER (EN 14511:2022)	(1)	-	2,74	2,80	2,95	2,84	2,72	2,74
SEER	(4)	-	2,93	3,35	3,50	3,31	3,28	3,09
$\eta_{s,c}$	(4)	%	114,2	131,0	137,0	129,4	128,2	120,6
Heating capacity (EN 14511:2022)	(2)	kW	109	123	133	143	165	184
Total power input (EN 14511:2022)	(2)	kW	31,7	34,8	37,8	41,6	48,1	54,5
COP (EN 14511:2022)	(2)	-	3,43	3,52	3,53	3,45	3,42	3,38
Refrigeration circuits		Nr	2					
No. of compressors		Nr	4					
Type of compressors		-	SCROLL					
Refrigerant		-	R-410A					
Standard airflow		l/s	16000	15567	15567	15567	20733	20733
Water flow-rate (User side)		l/s	5,25	5,91	6,43	6,92	7,95	8,89
Standard power supply		V	400/3N~/50					
Sound power level	(3)	dB(A)	86	86	86	86	88	88
Directive ErP (Energy Related Products)								
SCOP - AVERAGE Climate - W35	(4)	-	3,57	3,95	3,90	3,88	3,57	3,64
$\eta_{s,H}$	(4)	%	140	155	153	152	140	143
SCOP - AVERAGE Climate - W55	(4)	-	3,03	3,19	3,15	3,22	3,12	3,04
$\eta_{s,H}$	(4)	%	118	125	123	126	122	119

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

VARYP	VARYFLOW + (2 inverter pumps)
HYG1	Hydronic assembly with 1 ON/OFF pump
HYG2	Hydronic assembly with 2 ON/OFF pumps
VACSUX	User side DHW switching valve
ACC	Storage tank
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
SFSTR	Disposal for inrush current reduction
MF2	Multi-function phase monitor
CMSC10	Serial communication module for LonWorks supervisor
CMSLWX	LonWorks serial communication module
CMSC8	Serial communication module for BACnet supervisor
BACX	BACnet serial communication module
CMSC9	Serial communication module for Modbus supervisor
CMMBX	Serial communication module for supervisor (Modbus)
PFCP	Power factor correction capacitors (cosfi > 0.9)
PGFC	Finned coil protection grilles
PGFCX	Finned coil protection grilles
MHP	High and low pressure gauges
MHPX	High and low pressure gauges
IFWX	Steel mesh filter on the water side
RCTX	Remote control
AVIBX	Anti-vibration mount support
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SPINCHILLER4

Air-cooled liquid chiller for outdoor installation
Capacity from 222 to 675 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic Scroll | Electronic expansion valve | ECOBREEZE | Hydropack | INTELLIPLANT | ErP compliant

- ✓Scroll compressors, EC axial fans and two independent circuits for high reliability
- ✓Excellence version for high full-load and seasonal efficiency, Premium version for compact dimensions and reduced initial investment
- ✓Refrigerant R32 - GWP = 675
- ✓Operation up to 50°C outdoor air temperature, chilled water down to -12°C
- ✓Plate heat exchanger or shell & tube exchanger
- ✓Three acoustic configurations
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly, system tank, partial recovery and total recovery

Versions and configurations

VERSION:

EXC	Excellence (Standard)
PRM	Premium

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery
R	Total energy recovery

EVAPORATOR

EVPHE	Plate heat exchanger (Standard)
EVFTP	Shell and tube evaporator PED test

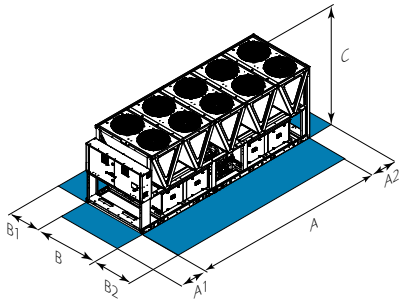
ACOUSTIC CONFIGURATION:

ST	Standard acoustic configuration (Standard)
SC	Acoustic configuration with compressor soundproofing (Standard)
EN	Supersilenced acoustic configuration

LOW TEMPERATURE:

-	Energy recovery: not required (Standard)
B	Water low temperature

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.
SC-EXC Compressors soundproofing (SC)-Excellence
SC-PRM Compressors soundproofing (SC)-Premium

Size		WSAT-YSC4	80.3	100.4	115.4	130.4	155.5	170.5	185.5	210.6	225.6	240.6
SC-EXC	A - Length	mm	2925	2925	4175	4175	5417	5417	5417	6680	6680	6680
SC-EXC	B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
SC-EXC	C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
SC-EXC	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-EXC	A2	mm	700	700	700	700	700	700	700	700	700	700
SC-EXC	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	B2	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-EXC	Operating weight	kg	1879	1898	2345	2494	2979	3152	3314	3810	3943	4100

Size		WSAT-YSC4	90.3	110.4	130.4	145.4	170.5	185.5	210.6	225.6	240.6
SC-PRM	A - Length	mm	2925	2925	2925	4175	4175	4175	5417	5417	5417
SC-PRM	B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228
SC-PRM	C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535
SC-PRM	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-PRM	A2	mm	700	700	700	700	700	700	700	700	700
SC-PRM	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-PRM	B2	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-PRM	Operating weight	kg	1893	2000	2116	2576	2763	2938	3396	3563	3684

Technical data

Size			WSAT-YSC4	80.3	100.4	115.4	130.4	155.5	170.5	185.5	210.6	225.6	240.6
ST/SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	222	267	314	364	423	472	520	573	624	675
ST/SC-EXC	Total power input (EN 14511:2022)	(1)	kW	69,4	85,5	99,8	115	135	149	167	184	200	218
ST/SC-EXC	EER (EN 14511:2022)	(1)	-	3,20	3,12	3,15	3,17	3,15	3,16	3,11	3,12	3,12	3,10
ST/SC-EXC	SEER	(3)	-	4,70	4,67	4,78	4,75	4,92	5,00	4,96	4,94	4,96	4,90
ST/SC-EXC	$n_{s,c}$	(3)	%	185,2	183,8	188,3	187,1	193,6	197,0	195,5	194,6	195,4	193,1
ST/SC-EXC	Refrigeration circuits		Nr	2									
ST/SC-EXC	No. of compressors		Nr	3		4		5				6	
ST/SC-EXC	Type of compressors		-	SCROLL									
ST/SC-EXC	Refrigerant		-	R-32									
ST/SC-EXC	Standard power supply		V	400/3~/50									
ST-EXC	Sound power level	(2)	dB(A)	90	91	92	93	94	95	95	96	96	97
SC-EXC	Sound power level	(2)	dB(A)	87	88	89	90	90	91	91	92	92	93
EN-EXC	Sound power level	(2)	dB(A)	84	84	86	86	86	87	88	88	88	89

Size			WSAT-YSC4	90.3	110.4	130.4	145.4	170.5	185.5	210.6	225.6	240.6
ST/SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	232	291	333	384	443	483	537	590	644
ST/SC-PRM	Total power input (EN 14511:2022)	(1)	kW	84,5	102	124	139	156	179	199	209	233
ST/SC-PRM	EER (EN 14511:2022)	(1)	-	2,74	2,85	2,69	2,77	2,84	2,70	2,70	2,82	2,76
ST/SC-PRM	SEER	(3)	-	4,38	4,48	4,46	4,47	4,65	4,64	4,61	4,69	4,62
ST/SC-PRM	$n_{s,c}$	(3)	%	172,3	176,1	175,4	175,8	183,0	182,5	181,2	184,7	181,9
ST/SC-PRM	Refrigeration circuits		Nr	2								
ST/SC-PRM	No. of compressors		Nr	3		4		5			6	
ST/SC-PRM	Type of compressors		-	SCROLL								
ST/SC-PRM	Refrigerant		-	R-32								
ST/SC-PRM	Standard power supply		V	400/3~/50								
ST-PRM	Sound power level	(2)	dB(A)	90	91	92	93	94	94	95	96	96
SC-PRM	Sound power level	(2)	dB(A)	87	88	89	89	90	90	91	92	92
EN-PRM	Sound power level	(2)	dB(A)	84	86	86	87	87	88	89	89	89

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(3) Data calculated according to the EN 14825:2022 Regulation
The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydropack on user side with 1 pump
1PMV	Hydropack user side with nr.1 inverter pump
1PMH	Hydropack on user side with 1 high head pump
1PMVH	Hydropack user side with nr.1 high static pressure inverter pump
2PM	Hydropack user side with 2 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
2PMH	Hydropack user side with nr.2 high static pressure pump
2PMVH	Hydropack user side with nr.2 high static pressure inverter pump
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IVFEDT	Variable flow-rate control of the inverter pump external to the unit depending on the temperature differential
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
ACC	Storage tank
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
CONTA2	Energy meter
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC1	Set point compensation with 4-20 mA signal
ECS	ECOSHARE function for the automatic management of a group of units
PFCP	Power factor correction capacitors (cosfi > 0.9)
SFSTR	Disposal for inrush current reduction
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
RE-39	Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
MHP	High and low pressure gauges
SDV	Cutoff valve on compressor supply and return
RPRI	Refrigerant leak detector in the casing
DML4-20	Demand limit with 4-20 mA signal
DML0-10	Demand limit with 0-10 V signal
PFGP	Soundproofing paneling of the pumping unit
PSWSA	Differential pressure switch water side with antifreeze protection
IOTX	IoT industrial module for cloud based interoperability & services
PPBM	Microchannel coils protection panels
PGCC	Finned coil protection grilles and compressor compartment
CCME	Microchannel e-coated coil

Accessories whose code ends with "X" are supplied separately

SPINCHILLER4

Air-cooled reversible heat pump for outdoor installation
Capacity from 215 to 655 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Outdoor installation | R-32 | Hermetic Scroll | Electronic expansion valve | ECOBREEZE | Hydropack | INTELLIPLANT | ErP compliant

- ✓Scroll compressors, EC axial fans and two independent circuits for high reliability
- ✓Excellence version for high full-load and seasonal efficiency, Premium version for compact dimensions and reduced initial investment
- ✓Refrigerant R32 - GWP = 675
- ✓Hot water up to 55°C and wide operating range down to -15°C
- ✓Plate heat exchanger or shell & tube exchanger
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly, system tank and partial heat recovery

Versions and configurations

VERSION:

EXC Excellence (Standard)
PRM Premium

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

ENERGY RECOVERY:

- Energy recovery: not required (Standard)
D Partial energy recovery

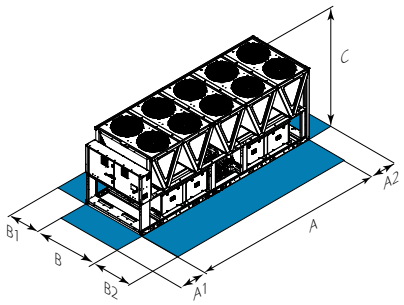
EVAPORATOR

EVPHE Plate heat exchanger (Standard)
EVFTP Shell and tube evaporator PED test

ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)
EN Supersilenced acoustic configuration

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.
SC-EXC Compressors soundproofing (SC)-Excellence
SC-PRM Compressors soundproofing (SC)-Premium

Size		WSAN-YSC4	80.3	90.4	100.4	110.4	120.4	130.4	145.4	160.4	185.5	210.6	225.6	240.6
SC-EXC	A - Length	mm	3118	4114	4114	4114	4114	5091	5091	5091	6066	6066	7045	7045
SC-EXC	B - Width	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-EXC	C - Height	mm	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520
SC-EXC	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-EXC	A2	mm	700	700	700	700	700	700	700	700	700	700	700	700
SC-EXC	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	B2	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	Operating weight	kg	2300	2631	2652	2772	2890	3295	3438	3594	4097	4199	4761	4861

Size		WSAN-YSC4	90.3	100.3	110.4	120.4	130.4	145.4	160.4	185.5	210.6	225.6	240.6
SC-PRM	A - Length	mm	3118	3118	3118	3118	4114	4114	4114	5091	5091	6066	6066
SC-PRM	B - Width	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-PRM	C - Height	mm	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520
SC-PRM	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-PRM	A2	mm	700	700	700	700	700	700	700	700	700	700	700
SC-PRM	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-PRM	B2	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-PRM	Operating weight	kg	2320	2445	2434	2562	2893	3018	3143	3779	3867	4310	4435

Technical data

Size			WSAN-YSC4	80.3	90.4	100.4	110.4	120.4	130.4	145.4	160.4	185.5	210.6	225.6	240.6
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	215	240	265	290	320	355	390	430	500	555	610	655
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	72,9	76,4	84,7	94,9	106	114	128	143	163	188	198	218
SC-EXC	EER (EN 14511:2022)	(1)	-	2,95	3,14	3,13	3,05	3,02	3,11	3,04	3,00	3,06	2,96	3,08	3,01
SC-EXC	SEER	(4)	-	4,45	4,79	4,74	4,81	4,84	4,86	4,78	4,72	4,88	4,84	4,89	4,86
SC-EXC	$\eta_{s,c}$	(4)	%	175,0	188,5	186,6	189,4	190,4	191,3	188,1	186,0	192,1	190,7	192,6	191,5
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW	225	255	280	310	335	375	415	455	530	585	640	685
SC-EXC	Total power input (EN 14511:2022)	(2)	kW	69,9	78,8	85,6	95,2	103	114	125	137	160	178	199	211
SC-EXC	COP (EN 14511:2022)	(2)	-	3,22	3,24	3,27	3,26	3,26	3,29	3,32	3,31	3,32	3,28	3,22	3,24
SC-EXC	Refrigeration circuits		Nr	2											
SC-EXC	No. of compressors		Nr	3				4				5		6	
SC-EXC	Type of compressors		-	SCROLL											
SC-EXC	Refrigerant		-	R-32											
SC-EXC	Standard power supply		V	400/3~/50											
SC-EXC	Sound power level	(3)	dB(A)	87	88	89	89	89	91	91	91	92	92	93	93
EN-EXC	Sound power level	(3)	dB(A)	84	85	86	86	86	86	87	87	88	89	90	90
Directive ErP (Energy Related Products)															
SCOP - AVERAGE Climate - W35		(4)	-	3,73	3,90	3,92	4,10	4,08	4,05	4,00	4,10	-	-	-	-
$\eta_{s,H}$		(4)	%	146	153	154	161	160	159	157	161	-	-	-	-

Size			WSAN-YSC4	90.3	100.3	110.4	120.4	130.4	145.4	160.4	185.5	210.6	225.6	240.6
SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	235	255	275	300	335	370	405	480	530	585	630
SC-PRM	Total power input (EN 14511:2022)	(1)	kW	83,7	94,1	102	116	119	136	155	172	200	207	227
SC-PRM	EER (EN 14511:2022)	(1)	-	2,80	2,71	2,70	2,59	2,81	2,72	2,61	2,80	2,65	2,83	2,77
SC-PRM	SEER	(4)	-	4,26	4,24	4,35	4,37	4,55	4,57	4,33	4,64	4,62	4,66	4,64
SC-PRM	$\eta_{s,c}$	(4)	%	167,2	166,7	171,0	171,6	178,9	179,9	170,1	182,8	181,8	183,4	182,5
SC-PRM	Heating capacity (EN 14511:2022)	(2)	kW	240	265	285	315	350	385	420	500	555	610	655
SC-PRM	Total power input (EN 14511:2022)	(2)	kW	76,4	85,5	92,3	102	112	124	134	157	175	191	206
SC-PRM	COP (EN 14511:2022)	(2)	-	3,15	3,10	3,09	3,09	3,12	3,10	3,13	3,19	3,17	3,18	3,18
SC-PRM	Refrigeration circuits		Nr	2										
SC-PRM	No. of compressors		Nr	3				4			5		6	
SC-PRM	Type of compressors		-	SCROLL										
SC-PRM	Refrigerant		-	R-32										
SC-PRM	Standard power supply		V	400/3~/50										
SC-PRM	Sound power level	(3)	dB(A)	87	88	88	88	90	90	90	91	91	92	92
EN-PRM	Sound power level	(3)	dB(A)	85	86	86	86	86	87	87	88	89	90	90
Directive ErP (Energy Related Products)														
SCOP - AVERAGE Climate - W35		(4)	-	3,47	3,64	3,83	3,87	3,80	3,64	3,82	3,91	-	-	-
$\eta_{s,H}$		(4)	%	136	143	150	152	149	143	150	153	-	-	-

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydropack on user side with 1 pump
1PMV	Hydropack user side with nr.1 inverter pump
1PMH	Hydropack on user side with 1 high head pump
1PMVH	Hydropack user side with nr.1 high static pressure inverter pump
2PM	Hydropack user side with 2 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
2PMH	Hydropack user side with nr.2 high static pressure pump
2PMVH	Hydropack user side with nr.2 high static pressure inverter pump
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
ACC	Storage tank
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
CONTA2	Energy meter
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC1	Set point compensation with 4-20 mA signal
ECS	ECOSHARE function for the automatic management of a group of units
PFCP	Power factor correction capacitors (cosfi > 0.9)
SFSTR	Disposal for inrush current reduction
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
MHP	High and low pressure gauges
SDV	Cutoff valve on compressor supply and return
RPRI	Refrigerant leak detector in the casing
DML4-20	Demand limit with 4-20 mA signal
DML0-10	Demand limit with 0-10 V signal
PFGP	Soundproofing paneling of the pumping unit
PSWSA	Differential pressure switch water side with antifreeze protection
IOTX	IoT industrial module for cloud based interoperability & services
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
PGCCH	Anti-hail protection grilles
PGFC	Finned coil protection grilles

Accessories whose code ends with "X" are supplied separately

SPINCHILLER4 PL

Air-cooled multi-functional reversible heat pump for outdoor installation
Capacity from 225 to 664 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump · Air cooled · Outdoor installation · R-32 · Hermetic Scroll · Electronic expansion valve · ECOBREEZE · Hydropack · INTELLIPLANT · ErP compliant

- ✓Scroll compressors, EC axial fans and two independent circuits for high reliability
- ✓Polyvalent technology configurable for 4-pipe
- ✓Refrigerant R32 - GWP = 675
- ✓Hot water up to 55°C, chilled water down to +5°C
- ✓Plate exchanger
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated hot side and cold side hydronic assemblies

Versions and configurations

VERSION:
EXC Excellence (Standard)

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:
CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

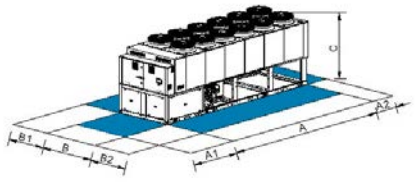
ENERGY RECOVERY:
R Total energy recovery (standard)

STRUCTURAL CONFIGURATION:
4T Configuration for 4-pipe system

EVAPORATOR
EVPHE Plate heat exchanger (Standard)

ACOUSTIC CONFIGURATION:
SC Acoustic configuration with compressor soundproofing (Standard)
EN Supersilenced acoustic configuration

Dimensions and connections



Size		WSAN-YSC4 PL		90.4	100.4	110.4	120.4	130.4	145.4	160.4	175.4	215.6	230.6	250.6	265.6
SC-EXC	A - Length		mm	4114	4114	4114	4114	4114	5091	5091	5091	6066	6066	7033	7045
SC-EXC	B - Width		mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-EXC	C - Height		mm	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530
SC-EXC	A1		mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-EXC	A2		mm	700	700	700	700	700	700	700	700	700	700	700	700
SC-EXC	B1		mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	B2		mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	Operating weight		kg	2604	2805	2911	3027	3151	3698	3903	4042	4480	4677	5590	5875

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

SC-EXC Compressors soundproofing (SC)-Excellence

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size			WSAN-YSC4 PL		90.4	100.4	110.4	120.4	130.4	145.4	160.4	175.4	215.6	230.6	250.6	265.6
Cooling 100% - Heating 0%																
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW		225	250	276	307	336	366	409	449	532	573	627	664
SC-EXC	Total power input (EN 14511:2022)	(1)	kW		72,4	84,8	96,5	108	118	126	141	156	195	210	217	237
SC-EXC	EER (EN 14511:2022)	(1)	-		3,11	2,95	2,87	2,85	2,83	2,90	2,90	2,87	2,73	2,73	2,89	2,81
SC-EXC	SEER	(6)	-		4,82	4,70	4,61	4,74	4,80	4,82	4,68	4,65	4,88	4,91	4,94	4,94
SC-EXC	$\eta_{s,c}$	(6)	%		190,0	185,0	182,0	187,0	189,0	190,0	184,0	183,0	192,0	193,0	195,0	195,0
Cooling 0% - Heating 100%																
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW		231	258	285	317	349	376	419	463	554	599	648	694
SC-EXC	Total power input (EN 14511:2022)	(2)	kW		71,8	80,1	89,3	97,5	106	115	128	140	172	182	199	213
SC-EXC	COP (EN 14511:2022)	(2)	-		3,21	3,23	3,19	3,25	3,30	3,27	3,27	3,31	3,23	3,29	3,26	3,25
Cooling 100% - Heating 100%																
SC-EXC	Cooling capacity (EN 14511:2022)	(3)	kW		221	250	280	315	346	374	418	465	555	601	642	687
SC-EXC	Heating capacity (EN 14511:2022)	(3)	kW		287	326	365	409	448	483	541	598	720	777	831	890
SC-EXC	Total power input (EN 14511:2022)	(3)	kW		66,7	76,2	85,6	94,5	103	111	124	134	167	178	191	205
SC-EXC	TER (EN 14511:2022)	(4)	-		7,61	7,56	7,54	7,65	7,73	7,75	7,72	7,92	7,66	7,74	7,71	7,69
SC-EXC	Refrigeration circuits		Nr		2											
SC-EXC	No. of compressors		Nr		4									6		
SC-EXC	Type of compressors		-		SCROLL											
SC-EXC	Refrigerant		-		R-32											
SC-EXC	Standard power supply		V		400/3~/50											
SC-EXC	Sound power level	(5)	dB(A)		90	90	90	91	91	92	92	93	93	93	94	94
EN-EXC	Sound power level	(5)	dB(A)		85	86	86	86	86	87	87	87	88	89	89	89
Directive ErP (Energy Related Products)																
SCOP - AVERAGE Climate - W35		(6)	-		3,88	3,91	3,86	3,93	4,01	3,89	3,94	3,93	3,96	3,95	3,97	3,99
$\eta_{s,H}$		(6)	%		152,0	153,0	151,0	154,0	157,0	153,0	155,0	154,0	155,0	155,0	156,0	157,0

(1) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Entering external exchanger air temperature = 35°C
(2) Data compliant to Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C; Entering external exchanger air temperature = 7°C D.B./6°C W.B.
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(6) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
2PMCS	Hydropack cooling side with 2 on-off pumps
2PMCS2V	Hydropack on cold user side with 2 pumps and 2 inverters
1+1PMCS	Hydropack cooling side with 1 + 1 on-off pump
1+1PMCSV	Hydropack cooling side with 1 + 1 inverter pump
2PMHS	Hydropack heating side with 2 on-off pumps
2PMHS2V	Hydropack on hot user side with 2 pumps and 2 inverters
1+1PMHS	Hydropack heating side with 1 + 1 on-off pump
1+1PMHSV	Hydropack heating side with 1 + 1 inverter pump
IVFCDT	Variable flow rate control heating side by inverter according to the temperature differential
IVFHDT	Variable flow-rate control on hot use side by inverter based on the temperature difference
IVFCDTS	Variable flow control cooling side by inverter according to the temperature differential with pressure drop sensor
IVFHDTS	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFCDTF	Variable flow rate control cooling side by inverter according to the temperature differential with a flow meter (available only with options: FMCHX)
IVFHDTF	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
PFGP	Soundproofing paneling of the pumping unit
CSVX	Couple of manually operated shut-off valves
IFWX	Steel mesh filter on the water side
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
RCMRX	Remote control via microprocessor control
CONTA3	M-bus total electricity meter
CONTA4	Total electricity meters and m-bus pump group
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
DML4-20	Demand limit with 4-20 mA signal
DML0-10	Demand limit with 0-10 V signal
ECS	ECOSHARE function for the automatic management of a group of units
RPRI	Refrigerant leak detector in the casing
SFSTR	Disposal for inrush current reduction
PFCC	Power factor correction capacitors (cosfi > 0.95)
SPC1	Set point compensation with 4-20 mA signal
SCP4	Set-point compensation with 0-10 V signal
PSX	Mains power supply
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PSWSA	Differential pressure switch water side with antifreeze protection
FMCHX	Cooling and heating side flow meters
RDVS	Switching valve with double safety valves
MISTER1	Indirect energy meter through pressure drops and unit probes temperature differential
MISTER2	Direct energy meter by flow rate and temperature differential with unit probes (available only with options: FMCHX)
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SPINCHILLER4

Air-cooled reversible heat pump for outdoor installation
Capacity from 670 to 1260 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Outdoor installation | R-32 | Hermetic Scroll | Electronic expansion valve | ECOBREEZE | Hydropack | INTELLIPLANT | ErP compliant

- ✓Four independent circuits for high reliability with scroll compressors and EC Axial fans
- ✓Excellence version for high full-load and seasonal efficiency, Premium version for compact dimensions and reduced initial investment
- ✓Refrigerant R32 - GWP = 675
- ✓Hot water up to 55°C and wide operating range down to -15°C
- ✓Plate heat exchanger or shell & tube exchanger
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 4 units in cascade
- ✓Integrated hydronic assembly, system tank and partial heat recovery

Versions and configurations

VERSION:

EXC	Excellence (Standard)
PRM	Premium

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

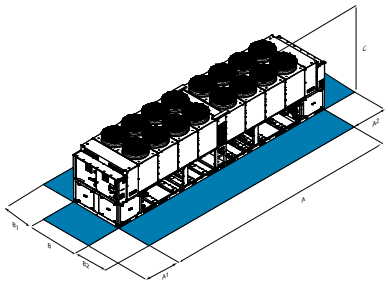
EVAPORATOR

EVPHE	Plate heat exchanger (Standard)
EVFTP	Shell and tube evaporator PED test

ACOUSTIC CONFIGURATION:

SC	Acoustic configuration with compressor soundproofing (Standard)
EN	Supersilenced acoustic configuration

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size			WSAN-YSC4	260.8	290.8	320.8	345.9	370.10	420.12	450.12
SC-EXC	A - Length	mm		10150	10150	10150	11122	12094	12094	13070
SC-EXC	B - Width	mm		2250	2250	2250	2250	2250	2250	2250
SC-EXC	C - Height	mm		2520	2520	2520	2520	2520	2520	2520
SC-EXC	A1	mm		1500	1500	1500	1500	1500	1500	1500
SC-EXC	A2	mm		1500	1500	1500	1500	1500	1500	1500
SC-EXC	B1	mm		1200	1200	1200	1200	1200	1200	1200
SC-EXC	B2	mm		1200	1200	1200	1200	1200	1200	1200
SC-EXC	Operating weight	kg		6786	7072	7384	7809	8636	8838	9280

Size			WSAN-YSC4	260.8	290.8	315.9	345.9	370.10	420.12	450.12	480.12
SC-PRM	A - Length	mm		8200	8200	9172	9172	10150	10150	12094	12094
SC-PRM	B - Width	mm		2250	2250	2250	2250	2250	2250	2250	2250
SC-PRM	C - Height	mm		2520	2520	2520	2520	2520	2520	2520	2520
SC-PRM	A1	mm		1500	1500	1500	1500	1500	1500	1500	1500
SC-PRM	A2	mm		1500	1500	1500	1500	1500	1500	1500	1500
SC-PRM	B1	mm		1200	1200	1200	1200	1200	1200	1200	1200
SC-PRM	B2	mm		1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	Operating weight	kg		5856	6232	7111	7156	7752	7940	8842	9092

Technical data

Size			WSAN-YSC4	260.8	290.8	320.8	345.9	370.10	420.12	450.12
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	710	780	860	930	1000	1111	1211
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	228	256	286	306	326	376	405
SC-EXC	EER (EN 14511:2022)	(1)	-	3,12	3,05	3,01	3,03	3,06	2,96	2,99
SC-EXC	SEER	(4)	-	4,82	4,75	4,70	4,81	4,86	4,83	4,84
SC-EXC	$\eta_{s,c}$	(4)	%	189,8	187,0	185,0	189,4	191,4	190,2	190,6
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW	750	830	910	985	1060	1169	1269
SC-EXC	Total power input (EN 14511:2022)	(2)	kW	228	250	274	297	319	356	389
SC-EXC	COP (EN 14511:2022)	(2)	-	3,29	3,32	3,32	3,32	3,33	3,28	3,26
SC-EXC	Refrigeration circuits		Nr				4			
SC-EXC	No. of compressors		Nr	8	8	8	9	10	12	12
SC-EXC	Type of compressors		-				SCROLL			
SC-EXC	Refrigerant		-				R-32			
SC-EXC	Standard power supply		V				400/3~/50			
SC-EXC	Sound power level	(3)	dB(A)	94	94	94	95	95	95	96
EN-EXC	Sound power level	(3)	dB(A)	89	90	90	91	91	92	92

Size			WSAN-YSC4	260.8	290.8	315.9	345.9	370.10	420.12	450.12	480.12
SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	670	740	815	885	960	1060	1171	1260
SC-PRM	Total power input (EN 14511:2022)	(1)	kW	238	272	290	327	343	400	414	454
SC-PRM	EER (EN 14511:2022)	(1)	-	2,82	2,72	2,81	2,71	2,80	2,65	2,83	2,77
SC-PRM	SEER	(4)	-	4,56	4,56	4,59	4,56	4,62	4,60	4,64	4,63
SC-PRM	$\eta_{s,c}$	(4)	%	179,4	179,3	180,4	179,3	181,9	181,2	182,8	182,0
SC-PRM	Heating capacity (EN 14511:2022)	(2)	kW	700	770	850	920	1000	1109	1219	1309
SC-PRM	Total power input (EN 14511:2022)	(2)	kW	224	248	269	291	314	350	382	411
SC-PRM	COP (EN 14511:2022)	(2)	-	3,12	3,10	3,16	3,16	3,19	3,17	3,19	3,18
SC-PRM	Refrigeration circuits		Nr				4				
SC-PRM	No. of compressors		Nr	8	8	9	9	10	12	12	12
SC-PRM	Type of compressors		-				SCROLL				
SC-PRM	Refrigerant		-				R-32				
SC-PRM	Standard power supply		V				400/3~/50				
SC-PRM	Sound power level	(3)	dB(A)	93	93	93	94	94	94	95	95
EN-PRM	Sound power level	(3)	dB(A)	89	90	91	91	91	92	93	93

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(4) Data calculated according to the EN 14825:2022 Regulation
The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
2PM	Hydropack user side with 2 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
1P1SB	Hydropack user side with 1+1 on-off pump
1P1SBV	Hydropack user side with 1+1 on-off pump
MHP	High and low pressure gauges
SDV	Cutoff valve on compressor supply and return
PFGP	Soundproofing paneling of the pumping unit
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
ACC	Storage tank
CSVX	Couple of manually operated shut-off valves
IFWX	Steel mesh filter on the water side
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
RCMRX	Remote control via microprocessor control
CONTA2	Energy meter
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
DML4-20	Demand limit with 4-20 mA signal
DML0-10	Demand limit with 0-10 V signal
ECS	ECOSHARE function for the automatic management of a group of units
RPRI	Refrigerant leak detector in the casing
SFSTR	Disposal for inrush current reduction
PFCP	Power factor correction capacitors (cosfi > 0.9)
PFCC	Power factor correction capacitors (cosfi > 0.95)
SPC1	Set point compensation with 4-20 mA signal
SCP4	Set-point compensation with 0-10 V signal
PSX	Mains power supply
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PSWSA	Differential pressure switch water side with antifreeze protection
RDVS	Switching valve with double safety valves
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SPINCHILLER4

Air-cooled liquid chiller for outdoor installation
Capacity from 720 to 939 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-32 | Hermetic Scroll | Electronic expansion valve | ECOBREEZE | Hydropack | INTELLIPLANT | ErP compliant

- ✓Scroll compressors, microchannel coils and two independent circuits for high reliability
- ✓Excellence version for high full-load and seasonal efficiency, Premium version for compact dimensions and reduced initial investment
- ✓Refrigerant R32 - GWP = 675
- ✓Operation up to 50°C outdoor air temperature, low water temperature down to -8°C
- ✓Plate heat exchanger or shell & tube exchanger
- ✓Three acoustic configurations
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly, system tank and partial heat recovery

Versions and configurations

VERSION:

EXC	Excellence (Standard)
PRM	Premium

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)
CREFP	Variable speed outdoor section fans consumption reduction device (phase cutting) (Standard in the Premium version)

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

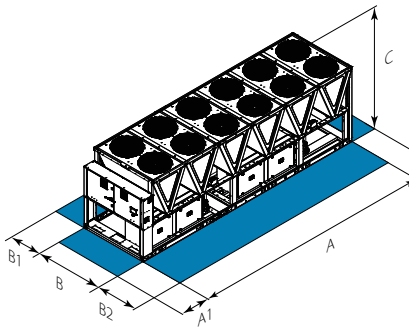
EVAPORATOR

EVPHE	Plate heat exchanger (Standard)
EVFTP	Shell and tube evaporator PED test

ACOUSTIC CONFIGURATION:

ST	Standard acoustic configuration (Standard)
SC	Acoustic configuration with compressor soundproofing (Standard)
EN	Supersilenced acoustic configuration

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size			WSAT-YSC4	265.6	290.7	310.7	350.8
SC-EXC	A - Length	mm		6665	6665	6665	7919
SC-EXC	B - Width	mm		2228	2228	2228	2228
SC-EXC	C - Height	mm		2538	2538	2538	2538
SC-EXC	A1	mm		1500	1500	1500	1500
SC-EXC	A2	mm		700	700	700	700
SC-EXC	B1	mm		1200	1200	1200	1200
SC-EXC	B2	mm		2250	2250	2250	2250
SC-EXC	Operating weight	kg		3954	4147	4192	4801

Size			WSAT-YSC4	265.6	290.7	310.7	350.8
SC-PRM	A - Length	mm		6665	6665	6665	7919
SC-PRM	B - Width	mm		2228	2228	2228	2228
SC-PRM	C - Height	mm		2538	2538	2538	2538
SC-PRM	A1	mm		1500	1500	1500	1500
SC-PRM	A2	mm		700	700	700	700
SC-PRM	B1	mm		1200	1200	1200	1200
SC-PRM	B2	mm		2250	2250	2250	2250
SC-PRM	Operating weight	kg		3954	4147	4192	4801

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.
SC-EXC Compressors soundproofing (SC) -Excellence
SC-PRM Compressors soundproofing (SC) -Premium

Technical data

Size			WSAT-YSC4	265.6	290.7	310.7	350.8
ST/SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	720	780	814	939
ST/SC-EXC	Total power input (EN 14511:2022)	(1)	kW	232	259	279	314
ST/SC-EXC	EER (EN 14511:2022)	(1)	-	3,10	3,01	2,92	3,00
ST/SC-EXC	SEER	(3)	-	5,28	5,26	5,23	5,22
ST/SC-EXC	$n_{s,c}$	(3)	%	208,2	207,4	206,2	205,8
ST/SC-EXC	Refrigeration circuits		Nr	2			
ST/SC-EXC	No. of compressors		Nr	6	7		8
ST/SC-EXC	Type of compressors		-	SCROLL			
ST/SC-EXC	Refrigerant		-	R-32			
ST/SC-EXC	Standard power supply		V	400/3~/50			
ST-EXC	Sound power level	(2)	dB(A)	97	97	98	98
SC-EXC	Sound power level	(2)	dB(A)	94	94	95	95
EN-EXC	Sound power level	(2)	dB(A)	90	90	91	91

Size			WSAT-YSC4	265.6	290.7	310.7	350.8
ST/SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	720	780	814	939
ST/SC-PRM	Total power input (EN 14511:2022)	(1)	kW	232	259	279	314
ST/SC-PRM	EER (EN 14511:2022)	(1)	-	3,10	3,01	2,92	3,00
ST/SC-PRM	SEER	(3)	-	5,03	5,01	4,98	4,94
ST/SC-PRM	$n_{s,c}$	(3)	%	198,2	197,4	196,2	194,6
ST/SC-PRM	Refrigeration circuits		Nr	2			
ST/SC-PRM	No. of compressors		Nr	6	7		8
ST/SC-PRM	Type of compressors		-	SCROLL			
ST/SC-PRM	Refrigerant		-	R-32			
ST/SC-PRM	Standard power supply		V	400/3~/50			
ST-PRM	Sound power level	(2)	dB(A)	97	97	98	98
SC-PRM	Sound power level	(2)	dB(A)	94	94	95	95
EN-PRM	Sound power level	(2)	dB(A)	90	90	91	91

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(3) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

2PM	Hydropack user side with 2 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
1P1SB	Hydropack user side with 1+1 on-off pump
1P1SBV	Hydropack on user side with one inverter pump and one stand-by pump with dedicated inverter
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
ACC	Storage tank
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
CONTA2	Energy meter
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC1	Set point compensation with 4-20 mA signal
ECS	ECOSHARE function for the automatic management of a group of units
PFCC	Power factor correction capacitors (cosfi > 0.95)
SFSTR	Disposal for inrush current reduction
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
RE-39	Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
SDV	Cutoff valve on compressor supply and return
RPRI	Refrigerant leak detector in the casing
DML4-20	Demand limit with 4-20 mA signal
DML0-10	Demand limit with 0-10 V signal
PFGP	Soundproofing paneling of the pumping unit
PSWSA	Differential pressure switch water side with antifreeze protection
PPBM	Microchannel coils protection panels
PGCC	Finned coil protection grilles and compressor compartment
CCME	Microchannel e-coated coil
RDVS	Switching valve with double safety valves
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SPINCHILLER3 FC

Air-cooled liquid chiller with FREE-COOLING for outdoor installation
Capacity from 260 to 445 kW

Cooling only | Air cooled | Outdoor installation | R-410A | Hermetic Scroll | Electronic expansion valve | AxiTop | FREE-COOLING | Hydropack | INTELLIPLANT | ErP compliant

- ✓Double independent circuits for high reliability with scroll compressors
- ✓Solution for cold climates and industrial application
- ✓Refrigerant R410A - GWP = 2088
- ✓Operation down to -39°C outdoor air temperature, low water temperature down to -8°C
- ✓Direct Free-cooling and No-glycol Free-cooling
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic unit

Versions and configurations

VERSION:
EXC Excellence (Standard)

LOW TEMPERATURE:
- Low temperature: not required (Standard)
B Water low temperature

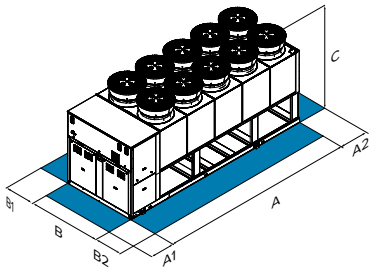
ACOUSTIC CONFIGURATION:
SC Acoustic configuration with compressor soundproofing (Standard)
EN Supersilenced acoustic configuration

FREE-COOLING:
FCD Direct FREE-COOLING (Standard)
FCI No-glycol FREE-COOLING

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:
CREFB ECOBREEZE outdoor section fans consumption reduction device (Standard in EN acoustic configuration)
CREFP Variable speed outdoor section fans consumption reduction device (phase cutting) (Standard in SC acoustic configuration)

TYPE FAN EXTERNAL SECTION:
AXIX High efficiency diffuser for axial fan - AxiTop (Standard)
NAXI High efficiency diffuser for axial fan - AxiTop: not required

Dimensions and connections



Size	WSAT-XSC3 FC		90.4	100.4	110.4	120.4	140.4	160.4
A - Length		mm	4543	4543	4543	4543	5518	5518
B - Width		mm	2243	2243	2243	2243	2243	2243
C - Height		mm	2668	2668	2668	2668	2668	2668
A1		mm	1500	1500	1500	1500	1500	1500
A2		mm	700	700	700	700	700	700
B1		mm	1200	1200	1200	1200	1200	1200
B2		mm	1200	1200	1200	1200	1200	1200
Operating weight		kg	3940	3994	4037	4105	4593	4645

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size		WSAT-XSC3 FC		90.4	100.4	110.4	120.4	140.4	160.4
Free-Cooling Off									
SC-EXC	Cooling capacity	(1)	kW	299	325	361	397	452	509
SC-EXC	Total power input	(1)	kW	79,5	86,8	96,6	110	123	139
SC-EXC	EER at full load	(1)	-	3,76	3,75	3,74	3,62	3,68	3,65
SC-EXC	SEER	(4)	-	4,64	4,65	4,62	4,56	4,66	4,65
SC-EXC	$\eta_{s,c}$	(4)	%	182,6	183,0	181,8	179,4	183,4	183,0
Direct Free-cooling on									
SC-EXC	Cooling capacity	(2)	kW	278	284	294	304	425	439
SC-EXC	Total power input	(2)	kW	9,8	9,9	9,9	10,1	13	13,3
SC-EXC	EER at full load	(2)	-	28,43	28,83	29,85	30,16	32,77	33,08
SC-EXC	Refrigeration circuits		Nr	2					
SC-EXC	No. of compressors		Nr	4					
SC-EXC	Type of compressors		-	SCROLL					
SC-EXC	Refrigerant		-	R-410A					
SC-EXC	Standard power supply		V	400/3~/50					
SC-EXC	Sound power level	(3)	dB(A)	92	92	92	92	92	93
EN-EXC	Sound power level	(3)	dB(A)	87	87	87	87	88	89

(1) Data referred to the following conditions: internal exchanger water temperature = 15/10 °C; glycol 30%; entering external exchanger air temperature 30°C
(2) Free-Cooling only data (compressors OFF) referred to the following conditions: internal exchanger water temperature = 15/10°C; entering external exchanger air temperature = 2°C D.B./1°C W.B.; glycol 30%
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

2PM	Hydropack user side with 2 pumps
3PM	Hydropack load side with 3 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
3PMV	Hydropack user side with no.3 of inverter pumps
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
AMMX	Spring antivibration mounts
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
CONTA2	Energy meter
RPRPDI	Refrigerant leak detector with pump down function in the casing
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
ECS	ECOSHARE function for the automatic management of a group of units
PFCP	Power factor correction capacitors (cosfi > 0.9)
SFSTR	Disposal for inrush current reduction
MHP	High and low pressure gauges
SDV	Cutoff valve on compressor supply and return
WOGLY	Unit supplied without glycol solution (FCI only)
A550	550 l. storage tank (FCD only)
A700	700 l. storage tank (FCD only)
A900	900 l. storage tank (FCD only)
PSPS	Set up for single power supply (260.6÷360.6)
RE-20	Electrical panel antifreeze protection for min. outdoor temperature down to -20°C
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
RE-30	Electrical panel antifreeze protection for min. outdoor temperature down to -30°C
RE-35	Electrical panel antifreeze protection for min. outdoor temperature down to -35°C
RE-39	Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE4-I MF

Air-cooled multi-functional reversible heat pump for outdoor installation
Capacity from 522 to 989 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump · Air cooled · Outdoor installation · R-513A · Semi-hermetic Twin-screw · Full Inverter · Electronic expansion valve · ECOBREEZE · HydroPack · INTELLIPLANT · ErP compliant

- ✓Screw compressors with inverter technology and EC Axialfans type
- ✓Polyvalent technology configurable for 4-pipe
- ✓Refrigerant R513A - GWP = 631
- ✓Hot water up to 60°C, low water temperature down to -8°C
- ✓Double independent circuits for high reliability
- ✓Three acoustic configurations: standard, silent and super-silent
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated hot side and cold side hydronic assemblies

Versions and configurations

VERSION:
EXC Excellence (Standard)

ENERGY RECOVERY:
R Total energy recovery (Standard)

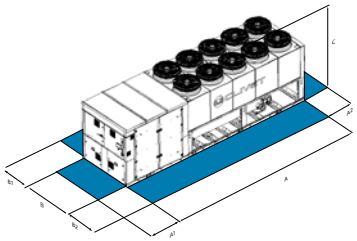
ACOUSTIC CONFIGURATION:
SC Acoustic configuration with compressor soundproofing (Standard)
LN Silenced acoustic configuration
EN Supersilenced acoustic configuration

CONFIGURATION:
4T Configuration for 4-pipe system

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:
CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

BASSA TEMPERATURA:
- Low temperature: not required (Standard)
B Water low temperature

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WDAN-iK4 MF		220.2	240.2	260.2	280.2	320.2	340.2	420.2
A - Length		mm	7756	7756	8725	9700	10680	10755	10755
B - Width		mm	2228	2228	2228	2228	2228	2228	2228
C - Height		mm	2538	2538	2538	2538	2538	2538	2538
A1		mm	1500	1500	1500	1500	1500	1500	1500
A2		mm	700	700	700	700	700	700	700
B1		mm	1200	1200	1200	1200	1200	1200	1200
B2		mm	1200	1200	1200	1200	1200	1200	1200
Operating weight		kg	7869	7869	9197	9708	10207	10516	11875

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		WDAN-iK4 MF		220.2	240.2	260.2	280.2	320.2	340.2	420.2
Cooling 100% - Heating 0%										
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	522	544	574	633	721	792	989
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	183	193	190	206	240	266	351
SC-EXC	EER (EN 14511:2022)	(1)	-	2,85	2,82	3,02	3,07	3,01	2,98	2,82
SC-EXC	SEER	(6)	-	5,10	5,08	5,08	5,17	5,12	5,05	5,05
SC-EXC	$\eta_{S,C}$	(6)	%	200,8	200,1	200,1	203,7	201,7	198,8	198,9
Cooling 0% - Heating 100%										
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW	504	509	538	632	697	777	908
SC-EXC	Total power input (EN 14511:2022)	(2)	kW	163	165	168	205	229	253	299
SC-EXC	COP (EN 14511:2022)	(2)	-	3,09	3,09	3,20	3,08	3,05	3,07	3,03
Cooling 100% - Heating 100%										
SC-EXC	Cooling capacity (EN 14511:2022)	(3)	kW	522	544	574	633	718	791	989
SC-EXC	Heating capacity (EN 14511:2022)	(3)	kW	667	694	728	805	917	1013	1266
SC-EXC	Total power input (EN 14511:2022)	(3)	kW	161	167	172	191	221	246	306
SC-EXC	TER (EN 14511:2022)	(4)	-	7,39	7,41	7,59	7,52	7,41	7,33	7,36
SC-EXC	Refrigeration circuits		Nr				2			
SC-EXC	No. of compressors		Nr				2			
SC-EXC	Type of compressors		-				SCREW INVERTER			
SC-EXC	Refrigerant		-				R-513A			
SC-EXC	Standard power supply		V				400/3~/50			
SC-EXC	Sound power level	(5)	dB(A)	97	97	99	99	101	100	101
LN-EXC	Sound power level	(5)	dB(A)	90	91	91	92	92	92	94
EN-EXC	Sound power level	(5)	dB(A)	86	86	88	88	89	89	88
Directive ErP (Energy Related Products)										
SC-EXC	SCOP - AVERAGE Climate - W35	(6)	-	4,03	4,03	4,12	-	-	-	-
SC-EXC	$\eta_{S,H}$	(6)	%	158	158	162	-	-	-	-

(1) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Entering external exchanger air temperature = 35°C
(2) Data compliant to Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C; Entering external exchanger air temperature = 7°C D.B./6°C W.B.
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(6) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
1+1PMHSV	Hydropack heating side with 1 + 1 inverter pump
2PMHSV	Hydropack cooling side with 2 inverter pumps
1+1PMHS	Hydropack heating side with 1 + 1 on-off pump
2PMHS	Hydropack heating side with 2 on-off pumps
1+1PMCSV	Hydropack cooling side with 1 + 1 inverter pump
2PMCSV	Hydropack heating side with 2 inverter pumps
1+1PMCS	Hydropack cooling side with 1 + 1 on-off pump
2PMCS	Hydropack cooling side with 2 on-off pumps
SPC1	Set point compensation with 4-20 mA signal
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
IVFCDT	Variable flow rate control heating side by inverter according to the temperature differential
IVFHDT	Variable flow-rate control on hot use side by inverter based on the temperature difference
IVFCDTS	Variable flow control cooling side by inverter according to the temperature differential with pressure drop sensor
IVFHDTS	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFCDTF	Variable flow rate control cooling side by inverter according to the temperature differential with a flow meter (available only with options: FMCHX)
IVFHDTF	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
CONTA3	M-bus total electricity meter
CONTA4	Total electricity meters and m-bus pump group
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
RPRI	Refrigerant leak detector in the casing
FMCHX	Cooling and heating side flow meters
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
ECS	ECOSHARE function for the automatic management of a group of units
FC2	EMC filtering to reduce conducted compressor emissions
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
RDVS	Switching valve with double safety valves
MISTER1	Indirect energy meter through pressure drops and unit probes temperature differential
MISTER2	Direct energy meter by flow rate and temperature differential with unit probes (available only with options: FMCHX)
MISTER3	Direct energy meter via m-bus (available only with options: FMCHX)
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE4-I

Air-cooled liquid chiller for outdoor installation
Capacity from 204 to 1055 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-1234ze | Semi-hermetic Twin-screw | Full Inverter | Electronic expansion valve | ECOBREEZE | HydroPack | INTELLIPLANT | ErP compliant

- ✓Screw compressors with inverter technology, Microchannel coils and EC Axial fans type
- ✓Quite zero environmental impact solution, with one or two indipendent circuits for high reliability
- ✓Refrigerant R1234ze - GWP = 7
- ✓High full load and seasonal efficiency (Excellence version)
- ✓Operation up to 52°C outdoor air temperature, chilled water down to -2°C
- ✓Three acoustic configurations
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated hydronic assembly and partial recovery

Versions and configurations

VERSION:

EXC	Excellence (Standard)

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

CONFIGURAZIONE ACUSTICA:

ST	Standard acoustic configuration (Standard)
SC	Acoustic configuration with compressor soundproofing
EN	Supersilenced acoustic configuration

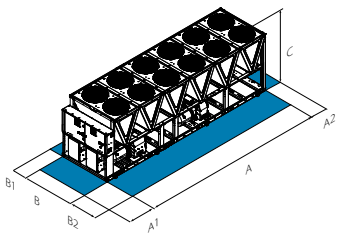
EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

RECUPERO ENERGETICO:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

Dimensions and connections



Size		WDAT-iZ4		120.1	160.1	200.1	240.1	290.1	250.2	280.2	320.2	360.2	400.2	440.2	480.2	540.2	580.2
ST/SC-EXC	A - Length	mm		2925	2925	4175	4175	5425	5425	5425	5425	6675	6675	7925	7925	9175	10425
ST/SC-EXC	B - Width	mm		2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
ST/SC-EXC	C - Height	mm		2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
ST/SC-EXC	A1	mm		1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
ST/SC-EXC	A2	mm		700	700	700	700	700	700	700	700	700	700	700	700	700	700
ST/SC-EXC	B1	mm		1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
ST/SC-EXC	B2	mm		2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700
ST-EXC	Operating weight	kg		2623	2761	3924	3929	4284	4850	4861	4867	6254	6264	6686	7183	7595	9141
SC/EN-EXC	Operating weight	kg		2794	2933	4179	4184	4539	5260	5271	5277	6714	6724	7146	7693	8105	9652

The above mentioned data are referred to standard units for the constructive configurations indicated.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

HYDRONIC

Technical data

Size			WDAT-iZ4	120.1	160.1	200.1	240.1	290.1	250.2	280.2	320.2	360.2	400.2	440.2	480.2	540.2	580.2
ST/SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	204	256	360	420	510	423	483	539	630	710	789	880	965	1055
ST/SC-EXC	Total power input (EN 14511:2022)	(1)	kW	64,4	85,2	115	142	167	134	155	180	212	241	263	301	322	348
ST/SC-EXC	EER (EN 14511:2022)	(1)	-	3,16	3,00	3,12	2,96	3,06	3,16	3,10	3,00	2,97	2,95	3,00	2,92	3,00	3,04
ST/SC-EXC	SEER	(3)	-	5,15	5,13	5,17	5,14	5,20	5,42	5,38	5,36	5,42	5,37	5,39	5,37	5,33	5,35
ST/SC-EXC	$\eta_{s,c}$	(3)	%	202,9	202,3	203,6	202,8	205,1	214,0	212,1	211,4	214,0	211,6	212,5	211,9	210,3	210,9
ST/SC-EXC	Refrigeration circuits		Nr	1					2								
ST/SC-EXC	No. of compressors		Nr	1					2								
ST/SC-EXC	Type of compressors		-	SCREW INVERTER													
ST/SC-EXC	Refrigerant		-	R-1234ze													
ST/SC-EXC	Standard power supply		V	400/3~/50													
ST-EXC	Sound power level	(2)	dB(A)	97	97	97	97	99	99	100	101	101	102	103	103	103	104
SC-EXC	Sound power level	(2)	dB(A)	93	94	94	94	96	96	97	98	98	99	100	100	100	101
EN-EXC	Sound power level	(2)	dB(A)	89	90	90	90	92	92	93	94	94	96	96	96	96	96

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(3) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydropack on user side with 1 pump
1PMV	Hydropack user side with nr.1 inverter pump
1PMH	Hydropack on user side with 1 high head pump
1PMVH	Hydropack user side with nr.1 high static pressure inverter pump
2PM	Hydropack user side with 2 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
2PMH	Hydropack user side with nr.2 high static pressure pump
2PMVH	Hydropack user side with nr.2 high static pressure inverter pump
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
CONTA2	Energy meter
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
RPRI	Refrigerant leak detector in the casing
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
PPBM	Microchannel coils protection panels
CCME	Microchannel e-coated coil
MHP	High and low pressure gauges
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
ECS	ECOSHARE function for the automatic management of a group of units
FC2	EMC filtering to reduce conducted compressor emissions
PGCC	Finned coil protection grilles and compressor compartment
RDVS	Switching valve with double safety valves
REGBT	Device for the partialisation of condensing coils
52G	Maximum ambient temperature 52°C
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE4-I

Air-cooled liquid chiller for outdoor installation
Capacity from 281 to 1422 kW

DC INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Air cooled | Outdoor installation | R-513A | Semi-hermetic Twin-screw | Full Inverter | Electronic expansion valve | ECOBREEZE | HydroPack | INTELLIPLANT | ErP compliant

- ✓Screw compressors with inverter technology, Microchannel coils and EC Axial fans type
- ✓Low environmental impact solution, with one or two indipendent circuits for high reliability
- ✓Refrigerant R513A - GWP = 631
- ✓Excellence version for high full-load and seasonal efficiency, Premium version for compact dimensions and reduced initial investment
- ✓Operation up to 52°C outdoor air temperature, chilled water down to -8°C
- ✓Three acoustic configurations
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated hydronic assembly and partial recovery

Versions and configurations

VERSION:

EXC	Excellence (Standard)
PRM	Premium

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

ACOUSTIC CONFIGURATION:

ST	Standard acoustic configuration (Standard)
SC	Acoustic configuration with compressor soundproofing
EN	Supersilenced acoustic configuration

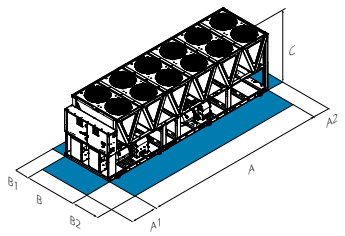
EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

RECUPERO ENERGETICO:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size		WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST-EXC	A - Length	mm	4175	4175	5425	6675	7925	7925	7925	9175	10425	10425	10425	12923	12923	12923
ST-EXC	B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
ST-EXC	C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
ST-EXC	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
ST-EXC	A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
ST-EXC	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
ST-EXC	B2	mm	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700
ST-EXC	Operating weight	kg	3024	3167	4253	4683	5627	6071	6075	6880	7934	7950	7956	9285	9289	9295
SC/EN-EXC	Operating weight	kg	3229	3372	4508	4938	6037	6481	6485	7340	8394	8410	8416	9795	9799	9805

Size		WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST-PRM	A - Length	mm	2925	2925	4175	5425	5424	5424	5424	6675	7924	7924	7924	10425	10425	10425
ST-PRM	B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
ST-PRM	C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
ST-PRM	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
ST-PRM	A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
ST-PRM	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
ST-PRM	B2	mm	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700
ST-PRM	Operating weight	kg	2673	2793	3860	4255	4862	4867	5305	6249	6696	6696	7468	8571	8581	8592
SC/EN-PRM	Operating weight	kg	2858	2998	4115	4510	5272	5277	5715	6709	7156	7156	7928	9081	9091	9102

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.
ST-EXC Acoustic standard configuration (ST) - Excellence
SC-EXC Compressors soundproofing (SC)-Excellence
EN-EXC Supersilenced acoustic configuration (EN) - Excellence
ST-PRM Standard acoustic configuration (ST) - Premium
SC-PRM Compressors soundproofing (SC)-Premium
EN-PRM Supersilenced acoustic configuration (EN) - Premium

Technical data

Size			WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST/SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	294	374	505	602	593	669	741	811	900	991	1089	1204	1325	1422
ST/SC-EXC	Total power input (EN 14511:2022)	(1)	kW	93,8	120	163	194	181	210	238	253	284	318	364	387	441	485
ST/SC-EXC	EER (EN 14511:2022)	(1)	-	3,13	3,11	3,10	3,11	3,27	3,19	3,12	3,21	3,17	3,11	2,99	3,11	3,01	2,93
ST/SC-EXC	SEER	(3)	-	5,13	5,12	5,11	5,12	5,36	5,38	5,37	5,39	5,34	5,31	5,35	5,34	5,30	5,31
ST/SC-EXC	$\eta_{s,c}$	(3)	%	202,3	202,0	201,3	201,7	211,3	212,2	211,9	212,6	210,5	209,6	211,0	210,6	209,0	209,5
ST/SC-EXC	Refrigeration circuits		Nr	1								2					
ST/SC-EXC	No. of compressors		Nr	1								2					
ST/SC-EXC	Type of compressors		-	SCREW INVERTER													
ST/SC-EXC	Refrigerant		-	R-513A													
ST/SC-EXC	Standard power supply		V	400/3~/50													
ST-EXC	Sound power level	(2)	dB(A)	97	97	97	98	101	101	101	102	102	102	103	103	104	104
SC-EXC	Sound power level	(2)	dB(A)	93	94	94	95	97	98	98	98	100	100	100	101	101	101
EN-EXC	Sound power level	(2)	dB(A)	89	90	90	91	93	94	94	94	96	96	96	97	97	97

Size			WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST/SC-PRM	1. Cooling capacity (EN 14511:2022)	(1)	kW	281	341	473	576	550	614	681	753	836	910	1006	1120	1240	1338
ST/SC-PRM	Total power input (EN 14511:2022)	(1)	kW	97,1	131	173	201	194	225	261	271	297	328	378	400	447	496
ST/SC-PRM	EER (EN 14511:2022)	(1)	-	2,89	2,61	2,73	2,87	2,83	2,73	2,61	2,78	2,81	2,78	2,66	2,80	2,78	2,70
ST/SC-PRM	SEER	(3)	-	4,96	4,84	4,80	4,89	4,95	4,92	4,87	4,99	4,88	4,91	4,90	4,97	4,97	4,97
ST/SC-PRM	$\eta_{s,c}$	(3)	%	195,4	190,7	189,1	192,5	194,9	193,8	191,7	196,4	192,1	193,5	192,8	195,8	195,8	195,8
ST/SC-PRM	Refrigeration circuits		Nr	1								2					
ST/SC-PRM	No. of compressors		Nr	1								2					
ST/SC-PRM	Type of compressors		-	SCREW INVERTER													
ST/SC-PRM	Refrigerant		-	R-513A													
ST/SC-PRM	Standard power supply		V	400/3~/50													
ST-PRM	Sound power level	(2)	dB(A)	97	97	97	98	100	101	101	102	102	102	103	103	104	104
SC-PRM	Sound power level	(2)	dB(A)	93	94	94	95	97	97	98	98	98	99	100	100	100	101
EN-PRM	Sound power level	(2)	dB(A)	89	90	90	91	93	93	94	94	94	95	96	96	96	97

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013

(3) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

1PM	Hydropack on user side with 1 pump
1PMV	Hydropack user side with nr.1 inverter pump
1PMH	Hydropack on user side with 1 high head pump
1PMVH	Hydropack user side with nr.1 high static pressure inverter pump
2PM	Hydropack user side with 2 pumps
2PMV	Hydropack user side with no.2 of inverter pumps
2PMH	Hydropack user side with nr.2 high static pressure pump
2PMVH	Hydropack user side with nr.2 high static pressure inverter pump
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IFWX	Steel mesh filter on the water side
CSVX	Couple of manually operated shut-off valves
AMMX	Spring antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
CONTA2	Energy meter
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
RPRI	Refrigerant leak detector in the casing
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
PPBM	Microchannel coils protection panels
CCME	Microchannel e-coated coil
MHP	High and low pressure gauges
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
ECS	ECOSHARE function for the automatic management of a group of units
FC2	EMC filtering to reduce conducted compressor emissions
PGCC	Finned coil protection grilles and compressor compartment
RDVS	Switching valve with double safety valves
REGBT	Device for the partialisation of condensing coils
52G	Maximum ambient temperature 52°C
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE3 FC

Air-cooled liquid chiller with FREE-COOLING for outdoor installation
Capacity from 520 to 1523 kW

It can only be sold in an industrial application

Cooling only | Air cooled | Outdoor installation | R-134a | Semi-hermetic Twin-screw | Electronic expansion valve | AxiTop | FREE-COOLING | HydroPack | INTELLIPLANT | ErP compliant

- ✓Double independent circuits for high reliability with screw compressors
- ✓Solution for cold climates and industrial application
- ✓Refrigerant R134a - GWP = 1430
- ✓Operation down to -39°C outdoor air temperature, low water temperature down to -8°C
- ✓Direct Free-cooling and No-glycol Free-cooling
- ✓Two acoustic configurations
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated hydronic assembly and partial recovery

Versions and configurations

VERSION:

EXC	Excellence (Standard)

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

ACOUSTIC CONFIGURATION:

SC	Acoustic configuration with compressor soundproofing (Standard)
EN	Supersilenced acoustic configuration (sizes 200.2 to 500.2)

FREE-COOLING:

FCD	Direct FREE-COOLING (Standard)
FCI	No-glycol FREE-COOLING

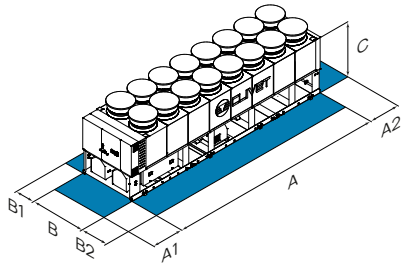
RIDUZIONE CONSUMO VENTILATORI SEZ. EXT.:

CREFP	Device for fan consumption reduction of the external section at variable speed (phase-cutting) (standard in the SC acoustic config.)
CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (standard in the EN acoustic config.)

TIPO VENTILATORE SEZIONE ESTERNA:

AXIX	High efficiency diffuser for axial fan - AxiTop (Standard)
NAXI	High efficiency diffuser for axial fan - AxiTop: not required

Dimensions and connections



Size	WDAT-SL3 FC		200.2	210.2	220.2	240.2	260.2	280.2	320.2	340.2	360.2	400.2	440.2	500.2	540.2	580.2
SC-FCD-EXC	A - Length	mm	5316	5316	6468	6468	6468	7265	7265	8241	8241	9217	9217	11166	11166	11166
SC-FCD-EXC	B - Width	mm	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246
SC-FCD-EXC	C - Height	mm	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668	2668
SC-FCD-EXC	A1	mm	1535	1535	1535	1535	1535	1535	1535	1535	1535	1535	1535	1535	1535	1535
SC-FCD-EXC	A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
SC-FCD-EXC	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-FCD-EXC	B2	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-FCD-EXC	Operating weight	kg	6102	6134	7214	7255	7344	8112	8163	9213	9710	11012	11074	12035	12169	12245

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

SC-FCD-EXC Compressors soundproofing (SC)-Direct FREE-COOLING-Excellence

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size			WDAT-SL3 FC	200.2	210.2	220.2	240.2	260.2	280.2	320.2	340.2	360.2	400.2	440.2	500.2	540.2	580.2
Free-Cooling Off																	
SC-EXC	Cooling capacity	(1)	kW	520	557	579	624	685	746	825	900	961	1049	1164	1311	1409	1523
SC-EXC	Total power input	(1)	kW	144	155	163	175	194	211	236	248	270	297	338	369	406	441
SC-EXC	EER at full load	(1)	-	3,61	3,59	3,55	3,56	3,53	3,53	3,5	3,62	3,56	3,53	3,44	3,55	3,47	3,45
SC-EXC	SEPR - FCD	(4)	-	6,09	6,16	6,16	6,24	6,20	6,10	6,11	6,00	6,00	6,07	6,12	6,16	6,12	6,26
SC-EXC	SEPR - FCI	(4)	-	5,76	5,84	5,90	5,86	6,02	5,84	6,00	5,93	5,81	6,05	5,90	5,87	5,83	5,96
Direct Free-cooling on																	
SC-EXC	Cooling capacity	(2)	kW	403	411	519	527	536	649	663	684	695	814	835	1066	1080	1093
SC-EXC	Total power input	(2)	kW	13	13	16	16	16	19	20	22	23	25	26	31	32	32
SC-EXC	EER at full load	(2)	-	31,1	31,4	32,6	32,8	33	33,8	33,8	30,5	30,5	32	32,2	34	34,1	33,8
SC-EXC	Refrigeration circuits		Nr	2													
SC-EXC	No. of compressors		Nr	2													
SC-EXC	Type of compressors		-	SCREW													
SC-EXC	Refrigerant		-	R-134a													
SC-EXC	Standard power supply		V	400/3~/50													
SC-EXC	Sound power level	(3)	dB(A)	98	98	98	98	98	98	98	100	100	102	104	105	106	106
EN-EXC	Sound power level	(3)	dB(A)	94	94	94	94	94	94	94	95	96	98	100	100	-	-

(1) Data referred to the following conditions: internal exchanger water temperature = 15/10 °C; glycol 30%; entering external exchanger air temperature 30°C
(2) Free-Cooling only data (compressors OFF) referred to the following conditions: internal exchanger water temperature = 15/10°C; entering external exchanger air temperature = 2°C D.B./1°C W.B.; glycol 30%
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

2PM	Hydropack user side with 2 pumps
3PM	Hydropack load side with 3 pumps
CSVX	Couple of manually operated shut-off valves
CCCA	Copper / aluminium condenser coil with acrylic lining
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment
AMMX	Spring antivibration mounts
PGCC	Finned coil protection grilles and compressor compartment
PGCCH	Anti-hail protection grilles
CONTA2	Energy meter
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
SPC1	Set point compensation with 4-20 mA signal
ECS	ECOSHARE function for the automatic management of a group of units
PFCP	Power factor correction capacitors (cosfi > 0.9)
SFSTR2	Progressive compressor start-up device
CBS	Overload circuit breakers
WOGLY	Unit supplied without glycol solution (FCI only)
RE-20	Electrical panel antifreeze protection for min. outdoor temperature down to -20°C
RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
RE-30	Electrical panel antifreeze protection for min. outdoor temperature down to -30°C
RE-35	Electrical panel antifreeze protection for min. outdoor temperature down to -35°C
RE-39	Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

ELFOENERGY DUCT MEDIUM

Air-cooled reversible heat pump for outdoor installation
Capacity from 34,0 to 99,1 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Air cooled | Indoor installation | R-410A | Hermetic Scroll | Electronic expansion valve | Electronically commutated Fan | INTELLIPLANT | ErP compliant

- ✓Scroll compressors with high available head Plug-fans
- ✓Ductable solution for small and medium-sized buildings air conditioning
- ✓Refrigerant R410A - GWP = 2088
- ✓High efficiency with compact dimensions
- ✓Versatility with the different solutions for supply and return of air
- ✓Hot water up to +55°C and wide operating range down to -10°C
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated hydronic assembly and partial recovery

Versions and configurations

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

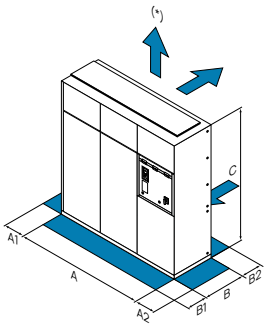
ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

CONFIGURATION:

EV	Vertical air expulsion (Standard)
EO	Horizontal exhaust air

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WSN-XEE	122	162	182	222	262	302	352	402
A - Length	mm	1450	1450	1874	1874	2650	2650	2650	2650
B - Width	mm	780	780	780	780	780	780	780	780
C - Height	mm	1996	1996	1996	1996	1996	1996	1996	1996
A1	mm	100	100	100	100	100	100	100	100
A2	mm	500	500	500	500	500	500	500	500
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1300	1300	1300	1300	1300	1300	1300	1300
Operating weight	kg	501	555	620	626	732	770	874	904

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		WSN-XEE	122	162	182	222	262	302	352	402
Cooling capacity (EN 14511:2022)	(1)	kW	34	41,2	47,8	54,7	64,8	75,2	86,6	99,1
Total power input (EN 14511:2022)	(1)	kW	16,6	18,3	21,5	25,9	28,8	32,9	39,2	43,5
EER (EN 14511:2022)	(1)	-	2,05	2,25	2,22	2,11	2,25	2,28	2,21	2,28
SEER	(4)	-	2,63	3,10	3,17	3,08	3,36	3,31	3,32	3,40
$\eta_{s,c}$	(4)	%	102,3	121,1	124,0	120,0	131,5	129,5	129,9	133,0
Heating capacity (EN 14511:2022)	(2)	kW	40,6	48,3	58,5	67,5	79,5	92,6	103	112
Total power input (EN 14511:2022)	(2)	kW	13,8	16,2	19,8	22,5	26,5	30,6	34,5	38,7
COP (EN 14511:2022)	(2)	-	2,95	2,98	2,96	3	3,01	3,02	2,98	2,88
Refrigeration circuits		Nr	1							
No. of compressors		Nr	2							
Type of compressors		-	SCROLL							
Refrigerant		-	R-410A							
Standard airflow		l/s	4444	4444	5000	5000	6667	7500	7500	7500
Max external static pressure		Pa	510	510	390	390	570	390	390	390
Water flow-rate (User side)		l/s	1,62	1,96	2,28	2,61	3,08	3,57	4,12	4,72
Standard power supply		V	400/3~/50							
Sound power in the duct	(3)	dB(A)	84	84	87	87	84	87	87	87
Directive ErP (Energy Related Products)										
ErP Energy Class - AVERAGE Climate - W35		-	A+	A+	A+	A++	A+	A+	-	-
SCOP - AVERAGE Climate - W35	(4)	-	3,25	3,31	3,51	3,94	3,75	3,36	3,50	3,80
$\eta_{s,H}$	(4)	%	127	129	137	155	147	131	137	149

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.
(3) Sound power measured in accordance with UNI EN ISO 9614 and Eurovent 8/1 standards for ducted unit with available pressure equal to 120 Pa
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

1PUB	Low static pressure single pump
1PUA	High static pressure single pump
1PUHE	High efficiency single inverter pump for primary circuit.
IFWX	Steel mesh filter on the water side
ABU	Flush hydraulic connections
CCCA	Copper / aluminium condenser coil with acrylic lining
AMRX	Rubber antivibration mounts
PGFC	Finned coil protection grilles
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
PFCC	Power factor correction capacitors (cosfi > 0.95)
SFSTR	Disposal for inrush current reduction
FANQE	Electrical panel ventilation
MHP	High and low pressure gauges
SDV	Cutoff valve on compressor supply and return
SCP4	Set-point compensation with 0-10V signal
SPC2	Set-point compensation with outdoor air temperature probe
CSVX	Couple of manually operated shut-off valves
MF2	Multi-function phase monitor
CONTA2	Energy meter
ECS	ECOSHARE function for the automatic management of a group of units
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
STSOL	Additional lifting brackets
OHE	Limit extension kit in heating up to -10°C (W.B.)
VACSUX	User side DHW switching valve
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

ELFOENERGY GROUND

Air-cooled reversible heat pump for outdoor installation
Capacity from 6,13 to 30,9 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Water cooled | Indoor installation | R-410A | Hermetic Scroll | CONTROL4 NRG management | Vary Flow | ErP compliant

- ✓Scroll compressor and plate heat exchangers
- ✓First investment driven and refurbishment applications
- ✓Refrigerant R410A - GWP = 2088
- ✓Versatile applications with double set-point and boiler control kits
- ✓Hot water up to 60°C, low water temperature down to -8°C
- ✓Energy saving with set-point compensation according to outside enthalpy or air temperature
- ✓Integrated source and user side hydronic assemblies and three-way valve

Versions and configurations

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature
BS	Water low temperature source side

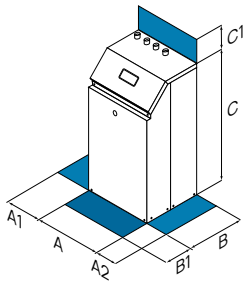
HYDRONIC ASSEMBLY SOURCE SIDE:

-	Hydronic assembly source side: not required (Standard)
HYGS	Hydronic assembly source side (sizes 17÷91)

VOLTAGE:

400TN	Supply voltage 400/3N~/50
230M	Supply voltage 230/1/50 (sizes 17÷51)

Dimensions and connections



Size	WSHN-EE	17	21	31	41	51	61	71	81	91	101	121
A - Length	mm	402	402	402	402	402	573	573	573	573	573	573
B - Width	mm	602	602	602	602	602	604	604	604	604	604	604
C - Height	mm	785	785	785	785	785	858	858	858	858	858	858
A1	mm	150	150	150	150	150	150	150	150	150	150	150
A2	mm	150	150	150	150	150	150	150	150	150	150	150
B1	mm	600	600	600	600	600	600	600	600	600	600	600
C1	mm	300	300	300	300	300	300	300	300	300	300	300
Operating weight	kg	81	83	86	90	98	115	129	147	163	164	170

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size		WSHN-EE		17	21	31	41	51	61	71	81	91	101	121
Unit for radiant panels														
W10/W35														
Heating capacity (EN 14511:2022)	(1)	kW		7,26	7,82	9,69	12,4	16,5	20,4	25,7	27,3	31,9	37,8	42,7
Total power input (EN 14511:2022)	(1)	kW		1,29	1,41	1,79	2,34	3,05	3,77	4,78	5,21	6,02	7,05	7,93
COP (EN 14511:2022)	(1)	-		5,62	5,53	5,40	5,31	5,41	5,41	5,38	5,24	5,30	5,36	5,38
W35/W18														
Cooling capacity (EN 14511:2022)	(4)	kW		9,07	9,35	11,7	15,6	18,4	22,9	28,9	30,6	35,3	39,6	43,0
Total power input (EN 14511:2022)	(4)	kW		1,49	1,64	1,96	2,49	3,49	4,31	5,35	5,44	6,52	7,73	8,31
EER (EN 14511:2022)	(4)	-		6,09	5,69	5,96	6,27	5,27	5,32	5,40	5,64	5,42	5,13	5,18
Terminal units														
W10/W45														
Heating capacity (EN 14511:2022)	(2)	kW		6,97	7,57	9,17	11,9	16,0	19,5	24,4	26,0	30,3	35,7	40,6
Total power input (EN 14511:2022)	(2)	kW		1,54	1,68	2,37	2,99	3,92	4,72	5,88	6,49	7,35	8,64	9,52
COP (EN 14511:2022)	(2)	-		4,54	4,50	3,86	3,99	4,08	4,14	4,16	4,01	4,13	4,13	4,27
W35/W7														
Cooling capacity (EN 14511:2022)	(5)	kW		6,13	6,47	7,93	10,7	13,1	16,0	20,5	22,1	25,5	29,0	30,9
Total power input (EN 14511:2022)	(5)	kW		1,42	1,56	1,92	2,37	3,25	3,97	4,81	4,94	5,97	7,02	7,73
EER (EN 14511:2022)	(5)	-		4,31	4,15	4,13	4,49	4,02	4,04	4,27	4,47	4,28	4,13	4,00
SEER	(6)	-		2,35	2,41	2,69	3,01	3,16	3,17	3,55	3,70	3,69	3,66	3,50
$\eta_{s,c}$	(6)	%		85,9	88,3	99,6	112,4	118,3	118,9	134,0	140,1	139,8	138,5	132,0
Radiators														
W10/W55														
Heating capacity (EN 14511:2022)	(3)	kW		6,60	7,32	8,83	11,3	13,8	18,0	23,1	24,4	28,9	33,2	38,1
Total power input (EN 14511:2022)	(3)	kW		1,94	2,04	3,12	3,74	4,84	5,91	7,33	8,20	8,94	10,6	11,5
COP (EN 14511:2022)	(3)	-		3,40	3,59	2,83	3,03	2,86	3,05	3,15	2,97	3,23	3,13	3,32
Refrigeration circuits			Nr						1					
No. of compressors			Nr						1					
Type of compressors									SCROLL					
Refrigerant									R-410A					
Water flow-rate (User side)	(5)	l/s		0,291	0,307	0,377	0,507	0,622	0,762	0,975	1,05	1,21	1,38	1,47
Useful pump discharge head	(5)	kPa		58	58	56	47	39	62	54	50	44	155	132
Water flow (Source side)	(5)	l/s		0,36	0,39	0,47	0,63	0,78	0,96	1,21	1,30	1,51	1,72	1,85
Standard power supply			V		230/1~/50					400/3N~/50				
Sound power level	(7)	dB(A)		57	57	57	58	58	60	63	64	65	66	67
Directive ErP (Energy Related Products)														
ErP Energy Class - AVERAGE Climate - W35			-	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
ErP Energy Class - AVERAGE Climate - W35			-	A+++	A+++	A++	A++	A+++	A+++	A+++	A++	A+++	A++	A+++
SCOP - AVERAGE Climate - W35	(6)		-	5,66	5,77	6,01	6,04	5,93	5,92	5,86	5,80	5,45	6,28	6,09
$\eta_{s,H}$	(6)		%	223	228	237	239	234	234	231	229	215	248	241
SCOP - AVERAGE Climate - W55	(6)		-	4,14	4,15	3,79	3,93	4,04	3,94	4,05	3,88	4,12	3,92	4,06
$\eta_{s,H}$	(6)		%	158	158	144	149	154	150	154	147	157	149	154

Data calculated in accordance with EN 14511:2022 under the following conditions:
(1) W10/W35 water to the user side exchanger 30/35°C; water entering the source side exchanger 10/7°C
(2) W10/W45 water to the user side exchanger 40/45°C; water entering the source side exchanger 10/7°C
(3) W10/W55 water to the user side exchanger 45/55°C; water entering the source side exchanger 10/7°C
(4) W35/W18 water to the user side exchanger 23/18°C; water entering the source side exchanger 30/35°C
(5) W35/W7 water to the user side exchanger 12/7°C; water entering the source side exchanger 30/35°C

(6) Data calculated according to the EN 14825:2022 Regulation
(7) The sound power values refer to a unit at full load, under nominal test conditions. Measurements are carried out in compliance with UNI EN ISO 9614-1, under the nominal standard conditions set out in the relevant regulations: EU 2016/2281, EU 813/2013, EU 811/2013.
Sound power level are not Eurovent certified.

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

3WV	Three-way valve
IVMSX	Source side 2-way modulating valve
IVWX	Water side motorized valve
AMRX	Rubber antivibration mounts
CMMBX	Serial communication module for supervisor (Modbus)
PBLC1X	Service keypad (cable from 1,5 metres)
PMX	Phase monitor
SCP3X	Set point compensation according to the outside enthalpy
SPCX	Set-point compensation with outdoor air temperature probe
SFSTR4N	Disposal for inrush current reduction, for unit 400/3N~/50
KDT3VX	Double temperature control kit, set point compensation with 4-20mA, 3
KDT3V	Double temperature control kit, set point compensation with 4-20mA, 3
3DHWX	Three-way valve for domestic hot water
SFSTR1	Disposal for inrush current reduction, for unit 230/1/50 (sizes 17÷51)
KTFL1X	1" water side hose kit (sizes 17÷71)
KTFL2X	1 1/4" water side hose kit
CACSX	Domestic hot water kit control
ACS300X	300-litre domestic hot water storage tank (sizes 17÷41)
ACS500X	500-litre domestic hot water storage tank (sizes 17÷81)
SCS08X	0.8 m² solar exchanger for flange installation
SCS12X	Solar coil for DHW boilers
KVMSP1X	Kit for management of radiant panels with connections of 1" (sizes 17÷51)
KVMSP2X	Kit for management of radiant panels with connections of 1 1/4"
KSAX	100-litre circuit breaker
KVICX	Boiler control kit (sizes 17÷81)
KITERAX	Electronic wall-mounting room thermostat
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

ELFOENERGY GROUND MEDIUM2

Water-cooled liquid chiller for indoor installation
Capacity from 35,6 to 250 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Solo freddo | Solo caldo | Water cooled | Indoor installation | R-410A | Hermetic Scroll | Reversible water circuit | Electronic expansion valve | Vary Flow | INTELLIPLANT | ErP compliant

✓Scroll compressors and plate heat exchangers

✓Solution for multi-family and commercial buildings

✓Refrigerant R410A - GWP = 2088

✓3 operating modes: Cooling only, Heating only, Operation with water circuit change-over

✓Condenser water temperature with heat only version (OHO) up to 60°C, evaporator water temperature down to -8°C

✓Modular operation management, up to 8 units in cascade

✓Integrated source and user side hydronic assemblies and partial recovery

Versions and configurations

VERSION:

OTH4	Operating conditions above 4°C (standard)
OTL4	Operating conditions below 4°C

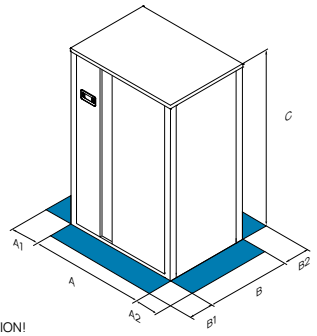
ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

OPERATION

OCO	Cooling-only operation (Standard)
OHO	Heating-only operation
OHI	Operation with water circuit change-over

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WSH-XEE2	12.2	16.2	19.2	22.2	27.2	35.2	40.2	45.2	55.2	60.2	70.2	80.2
A - Length	mm	837	837	837	837	1110	1110	1110	1110	1110	1110	1110	1110
B - Width	mm	607	607	607	607	885	885	885	885	885	885	1035	1035
C - Height	mm	1483	1483	1483	1483	1910	1910	1910	1910	1910	1910	1910	1910
A1	mm	100	100	100	100	150	150	150	150	150	150	150	150
A2	mm	100	100	100	100	150	150	150	150	150	150	150	150
B1	mm	500	500	500	500	500	500	500	500	500	500	500	500
B2	mm	300	300	300	300	350	350	350	350	350	350	350	350
Operating weight	kg	212	276	295	308	421	510	557	572	700	733	771	809

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size	WSH-XEE2		12.2	16.2	19.2	22.2	27.2	35.2	40.2	45.2	55.2	60.2	70.2	80.2
Cooling capacity (EN 14511:2022)	(1)	kW	35,6	49,8	59,3	68,4	84,2	109	124	147	173	197	222	250
Total power input (EN 14511:2022)	(1)	kW	7,50	10,6	12,5	15,7	17,5	23,7	26,8	31,8	38,1	43,2	48,6	55,3
EER (EN 14511:2022)	(1)	-	4,75	4,68	4,74	4,36	4,82	4,59	4,61	4,62	4,54	4,56	4,57	4,52
SEER	(4)	-	5,36	5,25	5,30	5,24	5,59	5,77	5,87	5,72	5,38	5,38	5,51	5,30
$\eta_{s,c}$	(4)	%	206,4	202,0	204,0	202,0	215,6	222,8	226,8	220,8	207,2	207,2	212,4	204,0
Heating capacity (EN 14511:2022)	(2)	kW	41,3	57,6	68,3	80,7	96,5	125	143	169	200	229	256	289
Total power input (EN 14511:2022)	(2)	kW	9,59	13,3	15,7	19,3	21,8	29,0	32,9	38,8	46,5	52,1	59,2	66,8
COP (EN 14511:2022)	(2)	-	4,30	4,32	4,34	4,18	4,43	4,32	4,34	4,35	4,29	4,39	4,33	4,32
Refrigeration circuits		Nr	1											
No. of compressors		Nr	2											
Type of compressors		-	SCROLL											
Refrigerant		-	R-410A											
Standard power supply		V	400/3~/50											
Sound power level	(3)	dB(A)	60	64	65	64	64	74	74	74	77	77	79	80

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Data calculated according to EN 14511:2022 referred to the following conditions Water to internal exchanger = 40/45°C; Water temperature to external exchanger = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

SDV	Cutoff valve on compressor supply and return
MOBMAG	Larger units
RCTX	Remote control
CMSC10	Serial communication module for LonWorks supervisor
CMSC8	Serial communication module for BACnet supervisor
CMSC9	Serial communication module for Modbus supervisor
CMMBX	Serial communication module for supervisor (Modbus)
CMSLWX	LonWorks serial communication module
BACX	Serial communication module for BACnet supervisor
SPCX	Set-point compensation with outdoor air temperature probe
IFWX	Steel mesh filter on the water side
SFSTR	Disposal for inrush current reduction
PFCP	Power factor correction capacitors (cosfi > 0.9)
AVIBX	Anti-vibration mount support
IOTX	Industrial module for cloud based interoperability & services
VS2MC	Cooling side 2-way modulating valve
VS2MCX	Cooling side 2-way modulating valve
VS3MC	Cooling side 3-way modulating valve
VS3MCX	Cooling side 3-way modulating valve
VARYC	VARYFLOW + (cooling side 2 inverter pumps)
VS2MH	Heating side 2-way modulating valve
VS2MHX	Heating side 2-way modulating valve
VS3MH	Heating side 3-way modulating valve
VS3MHX	Heating side 3-way modulating valve
VARYH	VARYFLOW + (heating side 2 inverter pumps)
VACSHX	Heating side DHW switching valve

Accessories whose code ends with "X" are supplied separately

ELFOENERGY GROUND MEDIUM2

Water-cooled reversible heat pump for indoor installation
Capacity from 34,5 to 241 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Water cooled | Indoor installation | R-410A | Hermetic Scroll | Electronic expansion valve | Vary Flow | Intelliplant | ErP compliant

- ✓Scroll compressors and plate heat exchangers
- ✓Solution for multi-family and commercial buildings
- ✓Refrigerant R410A - GWP = 2088
- ✓Hot water up to 60°C
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated source and user side hydronic assemblies and partial recovery

Versions and configurations

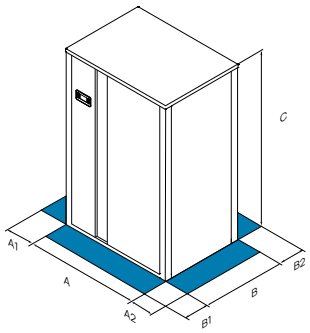
VERSION:

OTH4	Operating conditions above 4°C (standard)
OTL4	Operating conditions below 4°C

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

Dimensions and connections



Size	WSHN-XEE2		12.2	16.2	19.2	22.2	27.2	35.2	40.2	45.2	55.2	60.2	70.2	80.2
A - Length		mm	837	837	837	837	1110	1110	1110	1110	1110	1110	1110	1110
B - Width		mm	607	607	607	607	885	885	885	885	885	885	1035	1035
C - Height		mm	1483	1483	1483	1483	1910	1910	1910	1910	1910	1910	1910	1910
A1		mm	100	100	100	100	150	150	150	150	150	150	150	150
A2		mm	100	100	100	100	150	150	150	150	150	150	150	150
B1		mm	500	500	500	500	500	500	500	500	500	500	500	500
B2		mm	300	300	300	300	350	350	350	350	350	350	350	350
Operating weight		kg	223	290	309	322	441	519	580	581	728	743	808	820

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WSHN-XEE2		12.2	16.2	19.2	22.2	27.2	35.2	40.2	45.2	55.2	60.2	70.2	80.2
Cooling capacity (EN 14511:2022)	(1)	kW	34,5	48,6	58,0	68,1	82,3	102	120	139	168	187	218	241
Total power input (EN 14511:2022)	(1)	kW	7,42	10,5	12,4	15,4	17,5	23,8	26,9	32,0	38,1	43,0	48,7	55,1
EER (EN 14511:2022)	(1)	-	4,65	4,61	4,67	4,41	4,69	4,29	4,45	4,34	4,42	4,34	4,47	4,37
SEER	(4)	-	5,38	4,78	5,01	4,97	5,30	5,18	5,36	5,37	5,16	5,05	5,25	4,97
$\eta_{s,c}$	(4)	%	207,1	183,0	192,6	191,0	204,2	199,3	206,5	206,9	198,3	194,0	201,9	190,9
Heating capacity (EN 14511:2022)	(2)	kW	40,3	56,6	66,8	79,2	93,6	119	139	162	195	217	251	278
Total power input (EN 14511:2022)	(2)	kW	9,47	13,2	15,8	19,1	21,3	28,4	32,3	38,4	45,8	52,0	58,1	65,6
COP (EN 14511:2022)	(2)	-	4,25	4,28	4,24	4,15	4,40	4,18	4,29	4,22	4,25	4,18	4,32	4,25
Refrigeration circuits		Nr	1											
No. of compressors		Nr	2											
Type of compressors		-	SCROLL											
Refrigerant		-	R-410A											
Standard power supply		V	400/3~/50											
Sound power level	(3)	dB(A)	60	64	65	64	64	74	74	74	77	77	79	80
Directive ErP (Energy Related Products)														
ErP Energy Class - AVERAGE Climate - W35		-	A+++	A+++	-					-				
ErP Energy Class - AVERAGE Climate - W35		-	A+++	A+++	A+++					-				
SCOP - AVERAGE Climate - W35	(4)	-	5,69	5,45	5,47	4,85	5,97	5,67	5,84	5,68	5,68	5,55	5,63	5,45
$\eta_{s,H}$	(4)	%	225	215	216	191	231	219	226	219	219	214	217	210
SCOP - AVERAGE Climate - W55	(4)		4,51	4,35	4,36	4,40	4,83	4,60	4,69	4,67	4,64	4,61	4,69	4,65
$\eta_{s,H}$	(4)	%	172	166	166	168	185	176	180	179	178	176	180	178

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Data calculated according to EN 14511:2022 referred to the following conditions Water to internal exchanger = 40/45°C; Water temperature to external exchanger = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

SDV	Cutoff valve on compressor supply and return
MOBMAG	Larger units
RCTX	Remote control
CMSC10	Serial communication module for LonWorks supervisor
CMSC8	Serial communication module for BACnet supervisor
CMSC9	Serial communication module for Modbus supervisor
CMMBX	Serial communication module for supervisor (Modbus)
CMSLWX	LonWorks serial communication module
BACX	Serial communication module for BACnet supervisor
SPCX	Set-point compensation with outdoor air temperature probe
IFWX	Steel mesh filter on the water side
SFSTR	Disposal for inrush current reduction
PFCP	Power factor correction capacitors (cosfi > 0.9)
AVIBX	Anti-vibration mount support
IOTX	IoT industrial module for cloud based interoperability & services
VACSUX	User side DHW switching valve
VARYU	VARYFLOW + (user side 2 inverter pumps)
VS2M	Source side 2-way modulating valve
VS2MX	Source side 2-way modulating valve
VS3M	Source side 3-way modulating valve
VS3MX	Source side 3-way modulating valve
VARYS	VARYFLOW + (source side 2 inverter pumps)

Accessories whose code ends with "X" are supplied separately

ELFOENERGY GROUND MEDIUM2 HW

Water-cooled non-reversible heat pump for indoor installation
Capacity from 33,8 to 134 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heating only | Water cooled | Indoor installation | R-134a | Hermetic Scroll | Electronic expansion valve | Vary Flow | INTELLIPLANT | ErP compliant

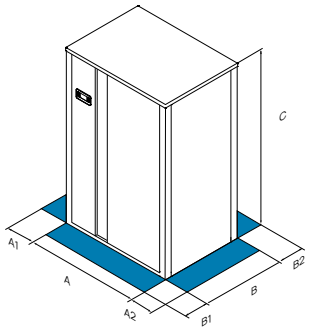
- ✓Scroll compressors and plate heat exchangers
- ✓High water temperature solution for residential centralized systems
- ✓Refrigerant R134a - GWP = 1430
- ✓Heating-only operation
- ✓Hot water up to 78°C
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated source and user side hydronic assemblies

Versions and configurations

OPERATION:

OHO Heating-only operation

Dimensions and connections



Size	WSHH-LEE1		19.2	22.2	27.2	35.2	40.2	45.2	60.2	80.2
A - Length		mm	854	854	854	854	854	1110	1110	1110
B - Width		mm	652	652	672	672	672	930	930	930
C - Height		mm	1483	1483	1483	1483	1483	1910	1910	1910
A1		mm	300	300	300	300	300	500	500	500
A2		mm	300	300	300	300	300	500	500	500
B1		mm	500	500	500	500	500	500	500	500
B2		mm	300	300	300	300	300	350	350	350
Operating weight		kg	347	367	398	417	420	702	754	831

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WSHH-LEE1		19.2	22.2	27.2	35.2	40.2	45.2	60.2	80.2
Heating capacity (EN 14511:2022)	(1)	kW	33,8	40,2	46,1	57,1	69,3	87,5	109	134
Total power input (EN 14511:2022)	(1)	kW	8,13	9,07	10,2	13,0	16,2	21,1	26,4	31,8
COP (EN 14511:2022)	(1)	-	4,16	4,43	4,52	4,40	4,28	4,16	4,13	4,23
Heating capacity (EN 14511:2022)	(2)	kW	73,4	83,0	96,8	122	144	184	224	278
Total power input (EN 14511:2022)	(2)	kW	16,9	18,1	20,8	28,0	34,3	44,6	54,7	66,8
COP (EN 14511:2022)	(2)	-	4,33	4,60	4,64	4,37	4,21	4,13	4,10	4,16
Refrigeration circuits		Nr	1							
No. of compressors		Nr	2							
Type of compressors		-	SCROLL							
Refrigerant		-	R-134a							
Water flow-rate (User side)		l/s	1,63	1,94	2,22	2,76	3,35	4,23	5,27	6,48
Water flow (Source side)		l/s	2,06	2,48	2,86	3,51	4,24	5,30	6,62	8,19
Standard power supply		-	400/3~/50							
Sound power level	(3)	dB(A)	70	70	71	74	76	78	78	80
Directive ErP (Energy Related Products)										
ErP Energy Class - AVERAGE Climate - W35	(4)	-	A+++	A+++	A+++	A+++	-	-	-	-
SCOP - AVERAGE Climate - W55	(4)	-	4,48	4,65	4,65	4,61	4,57	4,45	4,45	4,52
$\eta_{s,H}$	(4)	%	171,0	178,0	178,0	176,0	175,0	170,0	170,0	173,0

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 10/7°C; Entering external exchanger air temperature = 40/45°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 45/40°C; Entering external exchanger air temperature = 70/78°C
The data are not Eurovent certified.
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

SDV	Cutoff valve on compressor supply and return
RCTX	Remote control
CMSC10	Serial communication module for LonWorks supervisor
CMSC8	Serial communication module for BACnet supervisor
CMSC9	Serial communication module for Modbus supervisor
CMMBX	Serial communication module for supervisor (Modbus)
CMSLWX	LonWorks serial communication module
BACX	Serial communication module for BACnet supervisor
SPCX	Set-point compensation with outdoor air temperature probe
IFWX	Steel mesh filter on the water side
SFSTR	Disposal for inrush current reduction
PFCC	Power factor correction capacitors (cosfi > 0.95)
AVIBX	Anti-vibration mount support
MOBMAG	Larger units
VARYS	VARYFLOW + (source side 2 inverter pumps)
VARYU	VARYFLOW + (user side 2 inverter pumps)
V3MOL	User side three-way modulating valve for operating limits
V3MOLX	User side three-way modulating valve for operating limits
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

ELFOENERGY GROUND MEDIUM2 MF

Water-cooled multi-functional reversible heat pump for indoor installation
Capacity from 34,3 to 241 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Water cooled | Indoor installation | R-410A | Hermetic Scroll | Electronic expansion valve | Vary Flow | INTELLIPLANT | ErP compliant

- ✓Scroll compressors and plate heat exchangers
- ✓Polyvalent technology configurable for 4-pipe or 2-pipe systems for maximum versatility
- ✓Refrigerant R410A - GWP = 2088
- ✓High efficiency thanks to total heat recovery
- ✓Hot water up to 60°C, chilled water down to 4°C
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated source side, user side and recovery side hydronic assemblies

Versions and configurations

VERSION:

OTH4	Operating conditions above 4°C (standard)
OTL4	Operating conditions below 4°C

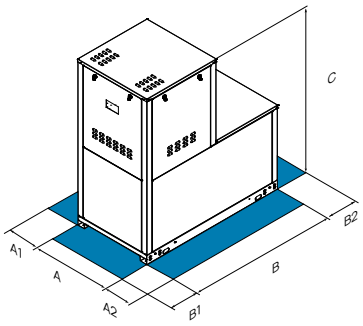
CONFIGURATION:

4T	Configuration for 4-pipe system (Standard)
2T	Configuration for 2-pipe system

ENERGY RECOVERY:

R	Total energy recovery (Standard)

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WSHN-XEE2 MF		12.2	16.2	19.2	22.2	27.2
A - Length		mm	900	900	900	900	900
B - Width		mm	1700	1700	1700	1700	1700
C - Height		mm	1870	1870	1870	1870	1870
A1		mm	100	100	100	100	100
A2		mm	100	100	100	100	100
B1		mm	700	700	700	700	700
B2		mm	700	700	700	700	700
Operating weight		kg	403	471	491	497	550

Size	WSHN-XEE2 MF		35.2	40.2	45.2	50.2	60.2	70.2	80.2
A - Length		mm	1100	1100	1100	1100	1100	1100	1100
B - Width		mm	1700	1700	1700	1700	1700	1700	1700
C - Height		mm	1870	1870	1870	1870	1870	1870	1870
A1		mm	100	100	100	100	100	100	100
A2		mm	100	100	100	100	100	100	100
B1		mm	700	700	700	700	700	700	700
B2		mm	700	700	700	700	700	700	700
Operating weight		kg	656	721	754	901	941	1045	1056

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size	WSHN-XEE2 MF		12.2	16.2	19.2	22.2	27.2
Cooling 100% - Heating 0%							
Cooling capacity (EN 14511:2022)	(1)	kW	34,3	48,1	57,3	66,3	81,2
Total power input (EN 14511:2022)	(1)	kW	7,60	10,7	12,6	15,8	17,6
EER (EN 14511:2022)	(1)	-	4,51	4,48	4,56	4,20	4,6
SEER	(6)	-	5,30	4,85	4,84	4,85	5,05
$\eta_{S,C}$	(6)	%	204,0	186,2	185,7	186,0	194,1
Cooling 0% - Heating 100%							
Heating capacity (EN 14511:2022)	(2)	kW	40,3	56,6	66,9	79,3	93,7
Total power input (EN 14511:2022)	(2)	kW	9,46	13,2	15,6	19,1	21,2
COP (EN 14511:2022)	(2)	-	4,26	4,3	4,28	4,15	4,42
Cooling 100% - Heating 100%							
Cooling capacity (EN 14511:2022)	(3)	kW	31,2	43,7	52,0	61	73,6
Heating capacity (EN 14511:2022)	(3)	kW	40,5	56,6	67,0	79,1	94,6
Total power input (EN 14511:2022)	(3)	kW	9,4	12,9	15,2	18,6	21,2
TER (EN 14511:2022)	(4)		7,62	7,75	7,82	7,55	7,93
Refrigeration circuits		Nr			1		
No. of compressors		Nr			2		
Type of compressors		-			SCROLL		
Refrigerant		-			R-410A		
Standard power supply		V			400/3~/50		
Sound power level	(5)	dB(A)	60	64	65	64	64
Directive ErP (Energy Related Products)							
ErP Energy Class - AVERAGE Climate - W35		-	A+++	A+++	-	-	-
ErP Energy Class - AVERAGE Climate - W35		-	A+++	A+++	A+++	-	-
SCOP - AVERAGE Climate - W35	(6)	-	5,69	5,45	5,47	4,85	5,97
$\eta_{S,H}$	(6)	%	225,0	215,0	216,0	191,0	231,0
SCOP - AVERAGE Climate - W55	(6)		4,56	4,42	4,42	4,46	4,89
$\eta_{S,H}$	(6)	%	174,0	169,0	169,0	170,0	188,0

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Source side water temperature = 30/35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C, Source side water temperature = 10/7°C
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.
(6) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Size	WSHN-XEE2 MF		35.2	40.2	45.2	50.2	60.2	70.2	80.2
Cooling 100% - Heating 0%									
Cooling capacity (EN 14511:2022)	(1)	kW	105	120	142	154	190	214	241
Total power input (EN 14511:2022)	(1)	kW	23,7	26,8	31,8	34,5	43,1	48,8	55,5
EER (EN 14511:2022)	(1)	-	4,44	4,46	4,46	4,48	4,41	4,39	4,35
SEER	(6)	-	5,17	5,31	5,29	5,06	4,92	5,00	4,82
$\eta_{S,C}$	(6)	%	203,7	209,2	208,4	199,5	193,7	197,2	189,7
Cooling 0% - Heating 100%									
Heating capacity (EN 14511:2022)	(2)	kW	119	139	163	179	218	252	279
Total power input (EN 14511:2022)	(2)	kW	28,4	32,3	38,4	41,2	51,8	58	65,4
COP (EN 14511:2022)	(2)	-	4,2	4,29	4,24	4,33	4,2	4,34	4,26
Cooling 100% - Heating 100%									
Cooling capacity (EN 14511:2022)	(3)	kW	95,0	108	128	139	174	195	219
Heating capacity (EN 14511:2022)	(3)	kW	123	140	165	180	224	251	283
Total power input (EN 14511:2022)	(3)	kW	28,3	32,1	38	41	50,9	57,7	65,2
TER (EN 14511:2022)	(4)	-	7,69	7,7	7,71	7,78	7,82	7,73	7,69
Refrigeration circuits		Nr				1			
No. of compressors		Nr				2			
Type of compressors		-				SCROLL			
Refrigerant		-				R-410A			
Standard power supply		V				400/3~/50			
Sound power level	(5)	dB(A)	74	74	74	77	77	79	80
Directive ErP (Energy Related Products)									
SCOP - AVERAGE Climate - W35	(6)	-	5,67	5,84	5,68	5,78	5,55	5,63	5,45
$\eta_{S,H}$	(6)	%	219,0	226,0	219,0	223,0	214,0	217,0	210,0
SCOP - AVERAGE Climate - W55	(6)	-	4,60	4,69	4,67	4,71	4,61	4,69	4,65
$\eta_{S,H}$	(6)	%	176,0	180,0	179,0	180,0	176,0	180,0	178,0

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Source side water temperature = 30/35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C, Source side water temperature = 10/7°C
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013
Sound power level are not Eurovent certified.

(6) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

Accessories

VARYU	VARYFLOW + (user side 2 inverter pumps)
VS2M	Source side 2-way modulating valve
VS2MX	Source side 2-way modulating valve
VS3M	Source side 3-way modulating valve
VS3MX	Source side 3-way modulating valve
VARYS	VARYFLOW + (source side 2 inverter pumps)
VARYR	VARYFLOW + (recovery side 2 inverter pumps)
VACSRX	Total recovery side DHW switching valve
SDV	Cutoff valve on compressor supply and return
CMSC10	Serial communication module for LonWorks supervisor
CMSC8	Serial communication module for BACnet supervisor
CMSC9	Serial communication module for Modbus supervisor
SPCX	Set-point compensation with outdoor air temperature probe
IFWX	Steel mesh filter on the water side
SFSTR	Disposal for inrush current reduction
PFCP	Power factor correction capacitors (cosfi > 0.9)
AVIBX	Anti-vibration mount support
RCTX	Remote control
BACX	BACnet serial communication module
CMMBX	Serial communication module for supervisor (Modbus)
CMSLWX	LonWorks serial communication module
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SPINCHILLER3

Water-cooled liquid chiller for indoor installation
Capacity from 217 to 394 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Heating only | Water cooled | Indoor installation | R-410A | Hermetic Scroll | Reversible water circuit | Electronic expansion valve | HydroPack | Vary Flow | Intelliplant | ErP compliant

- ✓Double independent circuits for high reliability with scroll compressors and plate heat exchangers
- ✓Solution for multi-family and commercial buildings
- ✓Refrigerant R410A - GWP = 2088
- ✓Flexible operation: water/water or glycol water/water
- ✓3 operating modes: Cooling only, Heating only, Operation with water circuit change-over
- ✓Condenser water temperature with heat only version (OHO) up to 60°C, evaporator water temperature down to -8°C
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated source and user side hydronic assemblies and partial recovery

Versions and configurations

ACOUSTIC CONFIGURATION:

EN	Super-silenced acoustic configuration (Standard)
BN	Basic acoustic configuration

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

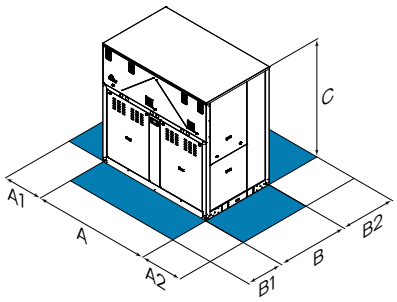
LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

FUNZIONAMENTO:

OCO	Cooling-only operation (Standard)
OHO	Heating-only operation
OHI	Operation with water circuit change-over

Dimensions and connections



Size	WSH-XSC3	70.4	75.4	80.4	85.4	90.4	100.4	110.4	120.4
A - Length	mm	2234	2234	2234	2234	2234	2234	2234	2234
B - Width	mm	1132	1132	1132	1132	1132	1132	1132	1460
C - Height	mm	2210	2210	2210	2210	2210	2210	2210	2210
A1	mm	500	500	500	500	500	500	500	500
A2	mm	500	500	500	500	500	500	500	500
B1	mm	800	800	800	800	800	800	800	800
B2	mm	1000	1000	1000	1000	1000	1000	1000	1000
EN Operating weight	kg	1246	1268	1336	1356	1419	1692	1751	1935

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

EN Super-silenced (EN)

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WSH-XSC3		70.4	75.4	80.4	85.4	90.4	100.4	110.4	120.4
Cooling capacity (EN 14511:2022)	(1)	kW	217	231	248	268	292	319	350	394
Total power input (EN 14511:2022)	(1)	kW	46,9	50,9	53,8	58,9	62,4	68,7	76	84,1
EER (EN 14511:2022)	(1)	-	4,63	4,55	4,61	4,54	4,67	4,65	4,61	4,69
SEER	(4)	-	6,16	6,24	6,18	6,06	6,01	5,73	5,65	5,91
$\eta_{s,c}$	(4)	%	238,6	241,7	239,1	234,3	232,4	221,3	217,9	228,2
Heating capacity (EN 14511:2022)	(2)	kW	245	262	281	304	330	360	395	451
Total power input (EN 14511:2022)	(2)	kW	58,1	62,9	66,5	73	78,7	85,5	94,2	106
COP (EN 14511:2022)	(2)	-	4,23	4,17	4,22	4,17	4,19	4,21	4,2	4,27
Refrigeration circuits		Nr	2							
No. of compressors		Nr	4							
Type of compressors		-	SCROLL							
Refrigerant		-	R-410A							
Water flow-rate (User side)		l/s	10,3	11,0	11,8	12,7	13,9	15,2	16,6	18,8
Water flow (Source side)		l/s	12,7	13,5	14,4	15,6	16,9	18,6	20,4	22,9
Standard power supply		V	400/3~/50							
EN Sound power level	(3)	dB(A)	81	82	83	83	83	84	85	86

(1) Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; External exchanger water temperature = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

AP	Rear water fittings
SDV	Cutoff valve on compressor supply and return
MHP	High and low pressure gauges
MF2	Multi-function phase monitor
SFSTR	Disposal for inrush current reduction
RCMRX	Remote control via microprocessor control
ACIE	Antifreeze heater for internal exchanger protection
EHCS	Source side antifreeze electric heaters
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
CSVX	Couple of manually operated shut-off valves
IFWX	Steel mesh filter on the water side
PFCP	Power factor correction capacitors (cosfi > 0.9)
AVIBX	Anti-vibration mount support
CONTA2	Energy meter
RPRPDI	Refrigerant leak detector with pump down function in the casing
ECS	ECOSHARE function for the automatic management of a group of units
PSX	Mains power supply
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IOTX	IoT industrial module for cloud based interoperability & services
HYGC1	Cooling side hydronic assembly with 1 ON/OFF pump
HYGC2	Cooling side hydronic assembly with 2 ON/OFF pumps
VS2MC	Cooling side 2-way modulating valve
VS2MCX	Cooling side 2-way modulating valve
VS3MCX	Cooling side 3-way modulating valve
VARYC	VARYFLOW + (cooling side 2 inverter pumps)
2PMC	Hydropack cooling side with 2 pumps
V2MCP	Cooling side 2-way modulating valve for high DP
V2MCPX	Cooling side 2-way modulating valve for high DP
HYGH1	Heating side hydronic assembly with 1 ON/OFF pump
HYGH2	Heating side hydronic assembly with 2 ON/OFF pumps
VARYH	VARYFLOW + (heating side 2 inverter pumps)
VS2MH	Heating side 2-way modulating valve
VS2MHX	Heating side 2-way modulating valve
VS3MHX	Heating side 3-way modulating valve
2PMH	Hydropack heating side with 2 pumps
V2MHP	Heating side 2-way modulating valve for high DP
V2MHPX	Heating side 2-way modulating valve for high DP

Accessories whose code ends with "X" are supplied separately

SPINCHILLER3

Water-cooled reversible heat pump for indoor installation
Capacity from 211 to 390 kW

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Water cooled | Indoor installation | R-410A | Hermetic Scroll | Electronic expansion valve | HydroPack | Vary Flow | Intelliplant | ErP compliant

- ✓Double independent circuits for high reliability with scroll compressors and plate heat exchangers
- ✓Solution for multi-family and commercial buildings
- ✓Refrigerant R410A - GWP = 2088
- ✓Flexible operation: water/water or glycol water/water
- ✓Hot water up to 55°C
- ✓Modular operation management, up to 8 units in cascade
- ✓Integrated source and user side hydronic assemblies and partial recovery

Versions and configurations

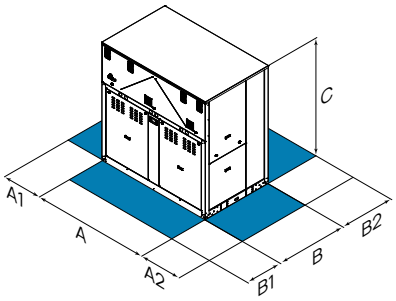
ACOUSTIC CONFIGURATION:

EN	Super-silenced acoustic configuration (Standard)
BN	Basic acoustic configuration

ENERGY RECOVERY:

-	Energy recovery: not required (Standard)
D	Partial energy recovery

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WSHN-XSC3		70.4	75.4	80.4	85.4	90.4	100.4	110.4	120.4
A - Length		mm	2234	2234	2234	2234	2234	2234	2234	2234
B - Width		mm	1134	1134	1134	1134	1134	1134	1134	1460
C - Height		mm	2210	2210	2210	2210	2210	2210	2210	2210
A1		mm	500	500	500	500	500	500	500	500
A2		mm	500	500	500	500	500	500	500	500
B1		mm	800	800	800	800	800	800	800	800
B2		mm	1000	1000	1000	1000	1000	1000	1000	1000
EN Operating weight		kg	1242	1264	1322	1343	1406	1583	1651	1924

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

EN Super-silenced (EN)

Technical data

Size	WSHN-XSC3		70.4	75.4	80.4	85.4	90.4	100.4	110.4	120.4
Cooling capacity (EN 14511:2022)	(1)	kW	211	225	242	262	283	313	342	390
Total power input (EN 14511:2022)	(1)	kW	48,5	52,6	55,5	61,1	65,5	71,6	79,1	88,0
EER (EN 14511:2022)	(1)	-	4,35	4,28	4,36	4,29	4,33	4,37	4,32	4,44
SEER	(4)	-	5,95	5,89	5,84	5,90	5,92	5,65	5,40	5,92
$\eta_{S,C}$	(4)	%	229,9	227,8	225,7	228,0	228,8	217,9	207,9	228,6
Heating capacity (EN 14511:2022)	(2)	kW	243	259	278	301	327	358	393	445
Total power input (EN 14511:2022)	(2)	kW	59,2	64,2	67,8	74,6	80,1	87,9	96,4	108
COP (EN 14511:2022)	(2)	-	4,11	4,04	4,11	4,04	4,08	4,07	4,08	4,13
Refrigeration circuits		Nr	2							
No. of compressors		Nr	4							
Type of compressors		-	SCROLL							
Refrigerant		-	R-410A							
Water flow-rate (User side)		l/s	10,0	10,7	11,5	12,5	13,5	14,9	16,3	18,6
Water flow (Source side)		l/s	12,4	13,3	14,3	15,5	16,7	18,4	20,2	22,9
Standard power supply		V	400/3~/50							
EN Sound power level	(3)	dB(A)	81	82	83	83	83	84	85	86
Directive ErP (Energy Related Products)										
SCOP - AVERAGE Climate - W35	(4)	-	6,09	6,09	6,13	6,05	5,89	6,22	6,07	-
$\eta_{S,H}$	(4)	%	241	241	242	239	233	246	240	-
SCOP - AVERAGE Climate - W55	(4)	-	4,72	4,67	4,72	4,67	4,41	4,77	4,70	-
$\eta_{S,H}$	(4)	%	181	179	181	179	168	183	180	-

(1) Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; External exchanger water temperature = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

AP	Rear water fittings
SDV	Cutoff valve on compressor supply and return
MHP	High and low pressure gauges
MF2	Multi-function phase monitor
SFSTR	Disposal for inrush current reduction
RCMRX	Remote control via microprocessor control
ACIE	Antifreeze heater for internal exchanger protection
EHCS	Source side antifreeze electric heaters
CMSC10	Serial communication module for LonWorks supervisor
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
CSVX	Couple of manually operated shut-off valves
IFWX	Steel mesh filter on the water side
PFCP	Power factor correction capacitors (cosfi > 0.9)
AVIBX	Anti-vibration mount support
CONTA2	Energy meter
RPRPDI	Refrigerant leak detector with pump down function in the casing
ECS	ECOSHARE function for the automatic management of a group of units
PSX	Mains power supply
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential
IOTX	IoT industrial module for cloud based interoperability & services
HYGU1	User side hydronic assembly with 1 ON/OFF pump
HYGU2	User side hydronic assembly with 2 ON/OFF pumps
VARYU	VARYFLOW + (user side 2 inverter pumps)
HYP2U	Hydropack user side with 2 pumps
HYGS1	Source side hydronic assembly with 1 ON/OFF pump
HYGS2	Source side hydronic assembly with 2 ON/OFF pumps
VARYS	VARYFLOW + (source side 2 inverter pumps)
VS2M	Source side 2-way modulating valve
VS2MX	Source side 2-way modulating valve
VS3MX	Source side 3-way modulating valve
HYP2S	Hydropack source side with 2 pumps
V2MSP	Source side 2-way modulating valve for high DP
V2MSPX	Source side 2-way modulating valve for high DP
VACSUX	User side DHW switching valve

Accessories whose code ends with "X" are supplied separately

SCREWLINE4-I PL

Water-cooled multi-functional reversible heat pump for indoor installation
Capacity from 440 to 945 kW

Screw INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Heat pump | Water cooled | Indoor installation | R-513A | Semi-hermetic Twin-screw | Full Inverter | Electronic expansion valve | Intelliplant | ErP compliant

- ✓Screw compressors with inverter technology and shell & tube heat exchanger
- ✓Polyvalent technology configurable for 4-pipe
- ✓Double independent circuits for high reliability
- ✓Refrigerant R513A - GWP = 631
- ✓High full load and seasonal efficiency
- ✓Domestic hot water temperature up to 55°C and down to 5°C
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 7 units in cascade

Versions and configurations

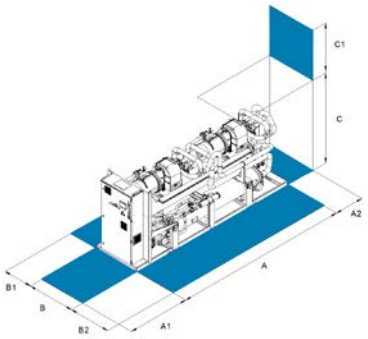
VERSION:

EXC	Excellence (Standard)

ACOUSTIC CONFIGURATION:

ST	Standard acoustic configuration (Standard)
EN	Supersilenced acoustic configuration

Dimensions and connections



Size	WiDHN-KSL1 PL		140.2	185.2	220.2	260.2	320.2	360.2
A - Length		mm	5172	5172	5172	5172	5752	5752
B - Width		mm	1543	1543	1543	1543	1543	1543
C - Height		mm	2156	2156	2156	2156	2363	2363
A1		mm	1500	1500	1500	1500	1500	1500
A2		mm	700	700	700	700	700	700
B1		mm	700	700	700	700	700	700
B2		mm	1000	1000	1000	1000	1000	1000
Operating weight		kg	5417	5417	7022	7022	9168	9168

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WiDHN-KSL1 PL		140.2	185.2	220.2	260.2	320.2	360.2
Cooling 100% - Heating 0%								
Cooling capacity (EN 14511:2022)	(1)	kW	440	529	621	709	840	945
Total power input (EN 14511:2022)	(1)	kW	97,4	123	137	165	193	230
EER (EN 14511:2022)	(1)	-	4,51	4,31	4,51	4,31	4,36	4,10
SEER	(6)	-	7,72	7,50	7,85	7,56	7,75	7,53
$\eta_{S,C}$	(6)	%	300,9	292,2	306,2	294,4	301,8	293,1
Cooling 0% - Heating 100%								
Heating capacity (EN 14511:2022)	(2)	kW	500	600	700	801	944	1048
Total power input (EN 14511:2022)	(2)	kW	120	149	162	189	215	247
COP (EN 14511:2022)	(2)	-	4,18	4,02	4,31	4,24	4,39	4,25
Cooling 100% - Heating 100%								
Cooling capacity (EN 14511:2022)	(3)	kW	401	481	560	640	754	860
Heating capacity (EN 14511:2022)	(3)	kW	518	630	720	826	963	1107
Total power input (EN 14511:2022)	(3)	kW	119	152	162	189	212	251
TER (EN 14511:2022)	(4)	-	7,70	7,32	7,87	7,77	8,11	7,84
Refrigeration circuits		Nr	2					
No. of compressors		Nr	2					
Type of compressors		-	SCREW INVERTER					
Refrigerant		-	R-513A					
Standard power supply		V	400/3~/50					
Sound power level	(5)	dB(A)	97	97	98	98	101	101
Directive ErP (Energy Related Products)								
SCOP - AVERAGE Climate - W35	(6)	-	6,77	6,43	6,74	6,53	6,75	6,69
$\eta_{S,H}$	(6)	%	262,9	249,3	261,5	253,4	262,0	259,6
SCOP - AVERAGE Climate - W55	(6)	-	4,44	4,33	4,58	4,50	4,67	4,59
$\eta_{S,H}$	(6)	%	169,5	165,2	175,2	172,1	178,7	175,5

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Source side water temperature = 30/35°C
(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C, Source side water temperature = 10/7°C
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013
Sound power level are not Eurovent certified.

(6) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CONTA3	Modbus total electric energy meters
CONTA4	Total electricity meters and m-bus pump group
CMSC9	Serial communication module for Modbus supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC1	Set point compensation with 4-20 mA signal
SPC2	Set-point compensation with outdoor air temperature probe
ECS	ECOSHARE function for the automatic management of a group of units
IVMSX	Source side 2-way modulating valve
IVMS3X	Source side 3-way modulating valve
CSVX	Couple of manually operated shut-off valves
IFWX	Steel mesh filter on the water side
RPR	Refrigerant leak detector
AMMSX	Spring anti-seismic antivibration mounts
AMMX	Spring antivibration mounts
AMRX	Rubber antivibration mounts
SSBP	Source side exchanger low flowrate
SSAP	Source side exchanger high flowrate
SUFBP	Cold user side exchanger low flowrate
SUFAP	Cold user side exchanger high flowrate
SUC4P	4-pass hot user side exchanger
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE4-I

Water-cooled liquid chiller for indoor installation
Capacity from 340 to 1440 kW

Screw INVERTER

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Heating only | Water cooled | Indoor installation | R-513A | Semi-hermetic Twin-screw | Full Inverter | Reversible water circuit | Electronic expansion valve | Intelliplant | ErP compliant

- ✓Screw compressors with inverter technology and spray shell & tube evaporator
- ✓Low environmental impact solution, with one or two indipendent circuits for high reliability
- ✓Refrigerant R513A - GWP = 631
- ✓High seasonal efficiency with SEER values up to 8.60
- ✓3 operating modes: Cooling only, Heating only, Operation with water circuit change-over
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 8 units in cascade
- ✓Condenser water temperature up to 65°C with high water temperature version (HWT), evaporator water temperature down to -8°C

Versions and configurations

VERSION:

EXC	Excellence (Standard)

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

OPERATION:

OCO	Cooling-only operation (Standard)
OHO	Heating-only operation
OHI	Operation with water circuit change-over

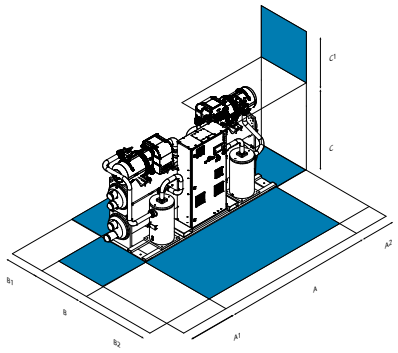
CONFIGURAZIONE ACUSTICA:

ST	Standard acoustic configuration (Standard)
EN	Supersilenced acoustic configuration

VERSIONE ALTA TEMPERATURA ACQUA:

HWT	High water temperature

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WDH-iK4		120.1	160.1	200.1	220.1	240.1	270.1	290.1	250.2	280.2	320.2	360.2	400.2	480.2	540.2
A - Length		mm	2639	2639	2902	2902	3527	3527	4187	4083	4083	4233	4384	4651	4651	4651
B - Width		mm	1195	1195	1400	1400	1400	1400	1450	1195	1195	1195	1450	1495	1495	1495
C - Height		mm	2103	2103	2293	2293	2293	2293	2375	2194	2194	2214	2375	2498	2498	2498
A1		mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2		mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
B1		mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
B2		mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
C1		mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Operating weight		kg	3241	3328	4217	4207	4849	4884	5013	5484	5694	6475	7241	9225	9177	9225

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size	WDH-iK4		120.1	160.1	200.1	220.1	240.1	270.1	290.1	250.2	280.2	320.2	360.2	400.2	480.2	540.2
Cooling capacity (EN 14511:2022)	(1)	kW	340	416	520	611	689	759	830	704	800	899	1065	1280	1355	1440
Total power input (EN 14511:2022)	(1)	kW	66,8	81,0	102	119	138	150	166	138	156	177	209	249	270	289
EER (EN 14511:2022)	(1)	-	5,08	5,13	5,11	5,13	5,00	5,06	5,00	5,10	5,12	5,08	5,11	5,13	5,02	4,98
SEER	(4)	-	8,41	8,46	8,53	8,57	8,55	8,60	8,57	8,59	8,38	8,47	8,56	8,38	8,44	8,53
η_{sc}	(4)	%	328,4	330,4	333,2	334,8	334,0	336	334,8	335,6	327,2	330,8	334,4	327,2	329,6	333,2
Heating capacity (EN 14511:2022)	(2)	kW	385	463	582	683	775	854	934	795	894	1006	1191	1431	1508	1680
Total power input (EN 14511:2022)	(2)	kW	88,9	104	129	152	179	193	213	186	205	232	270	323	348	390
COP (EN 14511:2022)	(2)	-	4,33	4,45	4,52	4,49	4,33	4,43	4,39	4,26	4,35	4,34	4,41	4,43	4,33	4,30
Refrigeration circuits		Nr	1										2			
No. of compressors		Nr	1										2			
Type of compressors		-	SCREW INVERTER													
Refrigerant		-	R-513A													
Water flow-rate (User side)		l/s	16,1	19,8	24,7	29,0	32,8	36,1	39,5	33,5	38,0	42,7	50,6	60,8	64,4	68,4
Water flow (Source side)		l/s	19,5	23,8	29,8	35,0	39,6	43,5	47,7	40,3	45,8	51,6	61,0	73,2	77,9	82,9
Standard power supply		V	400/3~/50													
ST Sound power level	(3)	dB(A)	94	96	97	97	97	98	98	100	101	101	102	102	102	103
EN Sound power level	(3)	dB(A)	91	93	94	94	94	95	95	97	98	98	99	99	99	100

(1) Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) HWT Version: Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; External exchanger water temperature = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.

(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

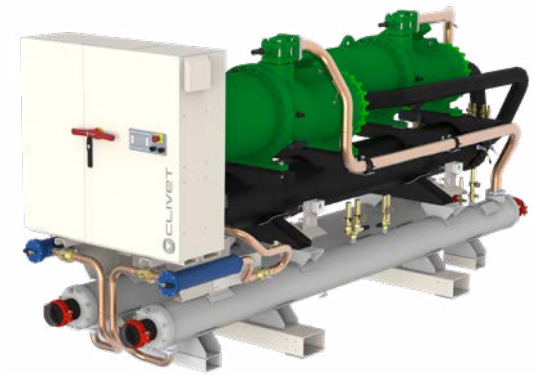
Accessories

AMRX	Rubber antivibration mounts
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CONTA2	Energy meter
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC1	Set point compensation with 4-20 mA signal
SPC2	Set-point compensation with outdoor air temperature probe
ECS	ECOSHARE function for the automatic management of a group of units
IVMSX	Source side 2-way modulating valve
MHP	High and low pressure gauges
SDV	Cutoff valve on compressor supply and return
CO3P	3-step condenser
AACT	Opposing evaporator water connections
AAR	DX evaporator water connections
CDR	DX condenser water connections
CDCT	Opposing condenser water connections
EV3P	3-step evaporator
ISS	Condenser insulation
IM	20 mm thickness insulation for increased evaporator
EHCS	Source side antifreeze electric heaters
EHWP	User side water piping antifreeze electric heaters
IFU2X	Steel mesh filter on cold side
IFS2X	Steel mesh filter on hot side
RPR	Refrigerant leak detector
FC2	EMC filtering to reduce conducted compressor emissions
AMMSX	Spring anti-seismic antivibration mounts
AMMX	Spring antivibration mounts
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE4

Water-cooled liquid chiller for indoor installation
Capacity from 572 to 1499 kW



Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Heating only | Water cooled | Indoor installation | R-134a | Semi-hermetic Twin-screw | Reversible water circuit | Electronic expansion valve | Intelliplant | ErP compliant

- ✓Double independent circuits for high reliability with screw compressors
- ✓First investment driven and refurbishment applications
- ✓Refrigerant R134a - GWP = 1430
- ✓3 operating modes: Cooling only, Heating only, Operation with water circuit change-over
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 7 units in cascade
- ✓Integrated partial and total recovery
- ✓Condenser water temperature up to 65°C with heating only version (OHO), evaporator water temperature down to -8°C

Versions and configurations

VERSION:

EXC	Excellence (Standard)

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

OPERATION:

OCO	Cooling-only operation (Standard)
OHO	Heating-only operation
OHI	Operation with water circuit change-over

CONFIGURAZIONE ACUSTICA:

ST	Standard acoustic configuration (Standard)
EN	Supersilenced acoustic configuration

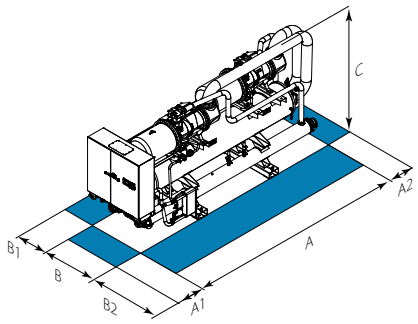
RECUPERO ENERGETICO:

-	Energy recovery: not required (Standard)
D	Partial energy recovery
R	Total energy recovery

VERSIONE ALTA TEMPERATURA ACQUA:

HWT	High water temperature

Dimensions and connections



Size ▸▸ WDH-SB4		220.2	240.2	280.2	320.2	360.2	440.2	500.2	540.2	580.2
A - Length	mm	4766	4766	4766	4785	4785	5028	5147	5147	5147
B - Width	mm	1408	1408	1408	1408	1408	1408	1408	1408	1408
C - Height	mm	2033	2033	2033	2183	2183	2182	2308	2308	2308
A1	mm	1470	1470	1470	1470	1470	1470	1470	1470	1470
A2	mm	700	700	700	700	700	700	700	700	700
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000
Operating weight	mm	4099	4119	4156	5854	5874	6004	6453	6681	6761

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	WDH-SB4		220.2	240.2	280.2	320.2	360.2	440.2	500.2	540.2	580.2
Cooling capacity (EN 14511:2022)	(1)	kW	572	613	706	867	978	1124	1299	1369	1499
Total power input (EN 14511:2022)	(1)	kW	109	120	138	164	188	213	244	273	304
EER (EN 14511:2022)	(1)	-	5,25	5,11	5,11	5,27	5,20	5,29	5,32	5,02	4,93
SEER	(4)	-	6,43	6,53	6,52	6,47	6,38	6,43	6,44	6,38	6,38
$\eta_{s,c}$	(4)	%	254,3	258,2	257,8	255,9	252,3	254,4	254,5	252,3	252,3
Heating capacity (EN 14511:2022)	(2)	kW	716	768	939	1033	1179	1454	1592	1740	1858
Total power input (EN 14511:2022)	(2)	kW	144	155	189	206	237	293	322	351	379
COP (EN 14511:2022)	(2)	-	4,97	4,95	4,97	5,00	4,97	4,96	4,94	4,96	4,90
Refrigeration circuits		Nr					2				
No. of compressors		Nr					2				
Type of compressors		-					SCREW				
Refrigerant		-					R-134a				
Water flow-rate (User side)		l/s	27,2	29,2	33,6	41,2	46,5	53,4	61,7	65,1	71,2
Water flow (Source side)		l/s	32,7	35,1	40,4	49,4	55,9	64,0	73,9	78,7	86,3
Standard power supply		V					400/3~/50				
ST Sound power level	(3)	dB(A)	99	100	100	101	101	103	103	105	105
EN Sound power level	(3)	dB(A)	95	96	96	98	98	100	100	101	101

(1) Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) HWT Version: Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; External exchanger water temperature = 10/7°C
(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

SPC1	Set point compensation with 4-20 mA signal
SCP4	Set-point compensation with 0-10 V signal
SPC2	Set-point compensation with outdoor air temperature probe
IVMSX	Source side 2-way modulating valve
CONTA2	Energy meter
IFWX	Steel mesh filter on the water side
AMRX	Rubber antivibration mounts
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
SFSTR2	Progressive compressor start-up device
PFCP	Power factor correction capacitors (cosfi > 0.9)
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
RPR	Refrigerant leak detector
ECS	ECOSHARE function for the automatic management of a group of units
CBS	Overload circuit breakers
RDVS	Switching valve with double safety valves
MHP	High and low pressure gauges
CO2P	2 pass condenser
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

CHILLER CENTRIFUGO HFO

Water-cooled liquid chiller for indoor installation
Capacity from 808 to 1599 kW

INVERTER

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Water cooled | Indoor installation | R-1234ze | Centrifugal | Full Inverter | Electronic expansion valve | INTELLIPLANT | ErP compliant

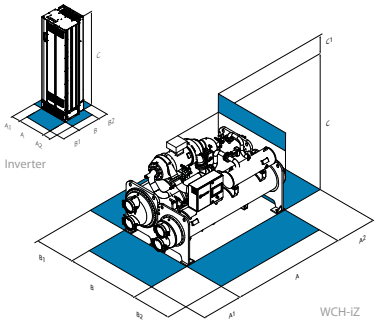
- ✓Patented horizontal back to back centrifugal compressor with inverter regulation
- ✓Solution for large commercial and industrial buildings, with quite zero environmental impact
- ✓Refrigerant R1234ze - GWP = 7
- ✓Vey high full load and seasonal efficiency with SEER values up to 9.64
- ✓Falling film evaporator, economizer, oil recovery system
- ✓Low noise operation and almost total absence of vibrations
- ✓Compact size: length measure less than 4 meters
- ✓Condenser water temperature up to 40°C, evaporator water temperature down to 4°C

Versions and configurations

HOT GAS BY PASS:

-	Hot gas by pass: not required (Standard)
B	Hot gas by pass

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WCH-iZ	230	270	300	350	380	420	450
Unit dimensions								
A - Length	mm	3820	3870	3770	3770	3770	3810	3810
B - Width	mm	1760	1760	1940	1940	1970	1970	1970
C - Height	mm	2128	2128	2170	2170	2170	2170	2170
A1	mm	1200	1200	1200	1200	1200	1200	1200
A2	mm	1200	1200	1200	1200	1200	1200	1200
B1	mm	1000	1000	1000	1000	1000	1000	1000
B2	mm	1200	1200	1200	1200	1200	1200	1200
C1	mm	1200	1200	1200	1200	1200	1200	1200
Operating weight	kg	5700	5785	6269	6469	7546	7546	7648

Size	WCH-iZ	230	270	300	350	380	420	450
Inverter dimensions								
A - Length	mm	420	420	420	420	420	420	602
B - Width	mm	378	378	378	378	378	378	514
C - Height	mm	1100	1100	1100	1100	1100	1100	2043
B1	mm	600	600	600	600	600	600	800
C1	mm	225	225	225	225	225	225	225
Operating weight	kg	125	125	125	125	125	125	300

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		WCH-iZ	230	270	300	350	380	420	450
Cooling									
Cooling capacity (EN 14511:2022)	(1)	kW	808	949	1069	1229	1353	1476	1599
Total power input (EN 14511:2022)	(1)	kW	144	169	185	212	227	249	272
EER (EN 14511:2022)	(1)	-	5,61	5,61	5,78	5,81	5,97	5,92	5,87
SEER	(4)	-	8,00	8,49	8,49	8,90	9,30	9,48	9,64
$\eta_{s,c}$	(4)	%	312,0	331,8	331,6	347,9	364,0	371,3	377,6
Refrigeration circuits		Nr				1			
No. of compressors		Nr				1			
Type of compressors	(3)	-				CFGi			
Refrigerant		-				R-1234ze			
Water flow-rate (User side)		l/s	38,4	45,1	50,8	58,4	64,3	70,2	76,0
Water flow (Source side)		l/s	45,6	53,6	60,1	69,0	75,7	82,6	89,6
Standard power supply		V				400/3~/50			
Sound power level	(2)	dB(A)	99	101	99	99	101	100	100

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.
(3) CFGi = Inverter driven centrifugal compressor
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

EV2R	Two-stage evaporator and right connections
EV10P	One-stage evaporator and opposing connections
EV30P	Three-stage evaporator and opposing connection
EV16	Evaporator water pressure 16 bar
IS40	Insulation for evaporator with thickness of 40mm
CO2R	Two-stage condenser and right connections
CO10P	One-stage condenser and opposing connections
CO30P	Three-stage condenser and opposing connection
CO16	Condenser water pressure 16 bar
AMMX	Spring antivibration mounts
AMRX	Rubber antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
2VBYX	ON/OFF motorized by-pass valve

CSIC	Shielded connection cables between inverter and compressor: length 4.5 metres
RPR	Refrigerant leak detector
QSGX	Main switch cabinet: shipped separately
CCSQX	Connection cables from electrical panel with main switch (QS6X) to inverter and unit electrical panel
EVMAG	Larger size evaporator
COMAG	Increased condenser
CTAS	Larger size compressor
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

CENTRIFUGAL CHILLER

Water-cooled liquid chiller for indoor installation
Capacity from 878 to 1933 kW

INVERTER

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com"

Cooling only | Water cooled | Indoor installation | R-134a | Centrifugal | Full Inverter | Electronic expansion valve | Intelliplant | ErP compliant

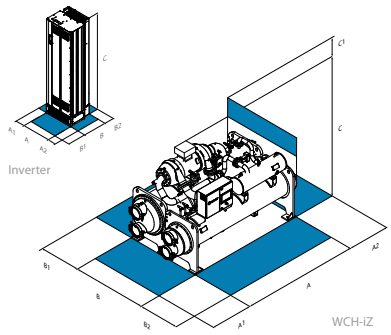
- ✓Patented horizontal back to back centrifugal compressor with inverter regulation
- ✓Solution for large commercial and industrial buildings
- ✓Refrigerant R134a - GWP = 1430
- ✓Vey high full load and seasonal efficiency with SEER values up to 9.06
- ✓Falling film evaporator, economizer, oil recovery system
- ✓Low noise operation and almost total absence of vibrations
- ✓Compact size: length measure less than 4 meters
- ✓Condenser water temperature up to 40°C, evaporator water temperature down to 4°C

Versions and configurations

HOT GAS BY PASS:

-	Hot gas by pass: not required (Standard)
B	Hot gas by pass

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	WCH-i	250	300	350	400	450	500	550
Unit dimensions								
A - Length	mm	3820	3870	3870	3770	3810	3810	3770
B - Width	mm	1760	1760	1760	1970	1970	1970	1970
C - Height	mm	2130	2130	2130	2170	2170	2170	2170
A1	mm	1200	1200	1200	1200	1200	1200	1200
A2	mm	1200	1200	1200	1200	1200	1200	1200
B1	mm	1000	1000	1000	1000	1000	1000	1000
B2	mm	1200	1200	1200	1200	1200	1200	1200
C1	mm	1200	1200	1200	1200	1200	1200	1200
Operating weight	kg	5780	5852	6020	7264	7688	7940	8364
Size	**WCH-i**	**250**	**300**	**350**	**400**	**450**	**500**	**550**
Inverter dimensions								
A - Length	mm	420	420	420	420	420	602	602
B - Width	mm	378	378	378	378	378	514	514
C - Height	mm	1100	1100	1100	1100	1100	2043	2043
B1	mm	600	600	600	600	600	800	800
C1	mm	225	225	225	225	225	225	225
Operating weight	kg	125	125	125	125	125	300	300

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		WCH-i	250	300	350	400	450	500	550
Cooling									
Cooling capacity (EN 14511:2022)	(1)	kW	878	1054	1230	1405	1581	1757	1933
Total power input (EN 14511:2022)	(1)	kW	156	182	211	236	262	292	326
EER (EN 14511:2022)	(1)	-	5,62	5,80	5,82	5,97	6,03	6,01	5,93
SEER	(4)	-	7,66	7,99	8,36	8,82	8,97	9,01	9,06
$\eta_{s,c}$	(4)	%	298,2	311,7	326,5	344,6	350,6	352,4	354,3
Refrigeration circuits		Nr				1			
No. of compressors		Nr				1			
Type of compressors	(3)	-				CFGi			
Refrigerant		-				R-134a			
Water flow-rate (User side)		l/s	41,7	50,1	58,5	66,8	75,1	83,5	91,9
Water flow (Source side)		l/s	49,5	59,2	69,0	78,5	88,2	98,1	108,0
Standard power supply		V				400/3~/50			
Sound power level	(2)	dB(A)	99	99	100	99	99	100	100

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C
(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
Sound power level are not Eurovent certified.
(3) CFGi = Inverter driven centrifugal compressor
(4) Data calculated according to the EN 14825:2022 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Accessories

EV2R	Two-stage evaporator and right connections
EV10P	One-stage evaporator and opposing connections
EV30P	Three-stage evaporator and opposing connection
EV16	Evaporator water pressure 16 bar
IS40	Insulation for evaporator with thickness of 40mm
CO2R	Two-stage condenser and right connections
CO10P	One-stage condenser and opposing connections
CO30P	Three-stage condenser and opposing connection
CO16	Condenser water pressure 16 bar
AMMX	Spring antivibration mounts
AMRX	Rubber antivibration mounts
AMMSX	Spring anti-seismic antivibration mounts
2VBYX	ON/OFF motorized by-pass valve
CSIC	Shielded connection cables between inverter and compressor: length 4.5 metres
QSGX	Electrical panel with main switch
CCSQX	Connection cables from electrical panel with main switch (QS6X) to inverter and unit electrical panel
EVMAG	Larger size evaporator
COMAG	Increased condenser
CTAS	Larger size compressor
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

SCREWLINE3

Liquid chiller with remote condensation for indoor installation
Capacity from 300 to 1427 kW

Cooling only | Remote condense | Indoor installation | R-134a | Semi-hermetic Twin-screw | Electronic expansion valve | INTELLIPLANT

- ✓Screw compressors and shell & tube evaporator
- ✓Solution for cold climates in combination with remote condensers
- ✓One or two indipendent circuits for high reliability
- ✓Refrigerant R134a - GWP = 1430
- ✓All sensitive components are protected against the atmospheric agents
- ✓Two acoustic configurations: standard and super-silenced
- ✓Modular operation management, up to 8 units in cascade
- ✓Condensing temperature up to 65°C, low water temperature down to -8°C

Versions and configurations

LOW TEMPERATURE:

-	Low temperature: not required (Standard)
B	Water low temperature

VERSION:

EXC	Excellence (Standard)

ACOUSTIC CONFIGURATION:

ST	Standard acoustic configuration (Standard)
EN	Supersilenced acoustic configuration

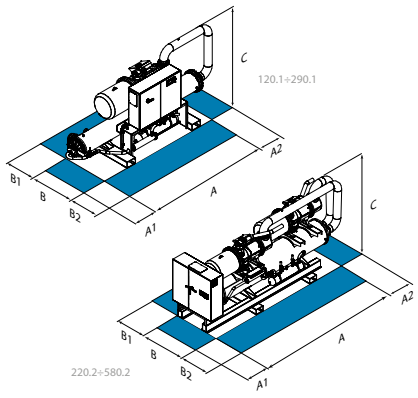
INSTALLAZIONE UNITÀ:

II	Indoor installation (Standard)

DOPPIO SET POINT:

-	Double set point: not required (Standard)
DSP	Double set point

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	MDE-SL3	120.1	140.1	160.1	180.1	200.1	220.1	250.1	270.1	290.1
A - Length	mm	4210	4210	4210	4189	4189	4189	4189	4324	4324
B - Width	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350
ST-EXC C- Height	mm	1558	1558	1558	1642	1642	1642	1642	1657	1657
EN-EXC C- Height	mm	1573	1573	1573	1750	1750	1750	1750	1750	1750
A1	mm	700	700	700	700	700	700	700	700	700
A2	mm	700	700	700	700	700	700	700	700	700
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1160	1160	1160	1160	1160	1160	1160	1160	1160
ST-EXC Operating weight	kg	2073	2152	2229	2821	2832	2843	2895	2981	3012
EN-EXC Operating weight	kg	2237	2345	2422	3044	3055	3066	3118	3204	3235

Size	MDE-SL3	220.2	240.2	260.2	280.2	300.2	320.2	340.2	360.2	400.2	440.2	470.2	500.2	540.2	580.2
A - Length	mm	4638	4638	4638	4638	4638	4638	4992	4992	5006	5006	5006	5077	5077	5077
B - Width	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
ST-EXC C- Height	mm	1790	1790	1790	1790	1790	1790	1995	1995	2010	2010	2010	2145	2145	2145
EN-EXC C- Height	mm	1900	1900	1900	1900	1900	1900	2121	2121	2121	2121	2121	2239	2239	2239
A1	mm	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410
A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
ST-EXC Operating weight	kg	3390	3422	3497	3587	3681	3745	4448	4675	4763	4784	4832	5680	5817	5876
EN-EXC Operating weight	kg	3830	3862	3966	4013	4107	4171	5010	5267	5388	5445	5493	6318	6455	6514

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.
ST-EXC Standard (ST)-Excellence
EN-EXC Supersilenced (EN)-Excellence

Technical data

Size			MDE-SL3	120.1	140.1	160.1	180.1	200.1	220.1	250.1	270.1	290.1
ST/EN-EXC	Cooling capacity	(1)	kW	300	364	401	466	508	566	620	683	728
ST/EN-EXC	Compressor power input	(1)	kW	69,1	82,4	90,5	105	114	128	140	154	165
ST/EN-EXC	Total power input	(1)	kW	69,6	82,9	91,0	105	114	128	140	154	165
ST/EN-EXC	EER	(2)	-	4,35	4,42	4,43	4,44	4,46	4,42	4,43	4,44	4,42
ST/EN-EXC	Refrigeration circuits		Nr	1								
ST/EN-EXC	No. of compressors		Nr	1								
ST/EN-EXC	Type of compressors		-	SCREW								
ST/EN-EXC	Refrigerant		-	R-134a								
ST/EN-EXC	Standard power supply		V	400/3~/50								
ST-EXC	Sound power level	(3)	dB(A)	91	95	96	98	98	99	101	101	101
EN-EXC	Sound power level	(3)	dB(A)	85	89	90	92	92	93	95	95	95

Size			MDE-SL3	220.2	240.2	260.2	280.2	300.2	320.2	340.2	360.2	400.2	440.2	470.2	500.2	540.2	580.2
ST/EN-EXC	Cooling capacity	(1)	kW	550	585	642	720	757	794	848	899	997	1115	1159	1231	1344	1427
ST/EN-EXC	Compressor power input	(1)	kW	128	137	150	164	173	181	195	208	228	255	267	280	307	329
ST/EN-EXC	Total power input	(1)	kW	128	138	151	165	174	182	196	209	228	256	268	281	308	329
ST/EN-EXC	EER	(2)	-	4,30	4,26	4,27	4,38	4,37	4,39	4,34	4,31	4,38	4,37	4,34	4,39	4,38	4,34
ST/EN-EXC	Refrigeration circuits		Nr	2													
ST/EN-EXC	No. of compressors		Nr	2													
ST/EN-EXC	Type of compressors		-	SCREW													
ST/EN-EXC	Refrigerant		-	R-134a													
ST/EN-EXC	Standard power supply		V	400/3~/50													
ST-EXC	Sound power level	(3)	dB(A)	94	94	96	99	99	99	100	101	102	103	104	104	105	105
EN-EXC	Sound power level	(3)	dB(A)	88	88	91	93	93	93	94	95	96	98	98	98	99	99

The units are shipped with a sealed charge of nitrogen. (sizes 220.2-580.2)
(1) Data referred to the following conditions: Internal exchanger water = 12/7°C; Condensing temperature = 45°C
(2) EER referred only to compressors

(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

Accessories

AMRX	Rubber antivibration mounts
RCMRX	Remote control via microprocessor control
PSX	Mains power supply
CONTA2	Energy meter
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
SCP4	Set-point compensation with 0-10 V signal
SPC1	Set point compensation with 4-20 mA signal
SPC2	Set-point compensation with outdoor air temperature probe
ECS	ECOSHARE function for the automatic management of a group of units
PFCP	Power factor correction capacitors (cosfi > 0.9)
SFSTR2	Progressive compressor start-up device
CBS	Overload circuit breakers
IOTX	IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

Medium attendance applications

			Air flow							
	SMARTPACK2	CKN-XHE2i	3200 ÷ 10500 m³/h (19 ÷ 42 kW)	AIR		R-410A	EC	ErP		
	CLIVETPACK3I	CSRN-iY	8500 ÷ 34000 m³/h (59 ÷ 155 kW)	AIR		R-410A	EC	ErP		
	CLIVETPACK3	CSRN-Y	29000 ÷ 60000 m³/h (191 ÷ 344 kW)	AIR		R-32	EC	ErP		

For high attendance applications

			Air flow							
	CLIVETPACK3	CSNX-iY	4000 ÷ 25000 m³/h (40 ÷ 119 kW)	AIR		R-410A	EC	ErP		

For full fresh air applications

			Air flow	
	CLIVETPACK2 FFA	CSRN-XHE2 FFA	3000 ÷ 9000 m³/h (40 ÷ 90 kW)	AIR ❄ R-410A EC ErP ↗

SMARTPACK2

Roof Top air-cooled reversible heat pump
Capacity from 19 to 42 kW

Clivet participates in the ECP Programme for "Rooftops". Check ongoing validity of certificate on: www.eurovent-certification.com

PACKAGE

Heat pump · Air cooled · Outdoor installation · R-410A · Full inverter · FREE-COOLING · Thermodynamic recovery · Electronically commutated Fan · Constant Airflow · Variable Airflow · Modbus · INTELLIAIR · ErP compliant

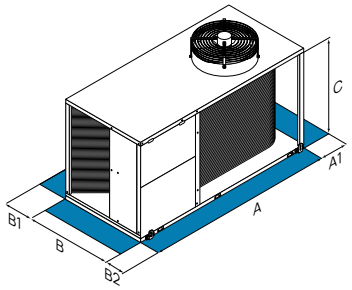
- ✓ Full inverter
- ✓ High part load efficiency
- ✓ Extended working limit (-15°C in heating mode)
- ✓ Enhanced air filtration with low ventilation consumption
- ✓ Thermodynamic recovery
- ✓ Smart Freecooling and Defrosting management
- ✓ All component included on board for an enhanced installation
- ✓ Remote and centralized system monitoring through INTELLIAIR

Versions and configurations

CONFIGURATION:

CAK Configuration with single fan section for full recirculation
CBK Configuration with single fan section for recirculation and fresh air
CCK Configuration with double fan section for recirculation, fresh and exhaust air

Dimensions and connections



Size		CKN-XHE2i	7.1	10.1	14.2
A - Length		mm	2250	2250	2610
B - Width		mm	1150	1150	1590
C - Height		mm	1210	1510	1660
A1		mm	1000	1000	1000
B1		mm	1000	1000	1000
B2		mm	1000	1000	1000
CAK/CBK	Operating weight	kg	416	496	635
CCK	Operating weight	kg	434	520	670

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size		CKN-XHE2i		7.1	10.1	14.2
Cooling capacity	(1)	kW		20,6	30,4	45,7
Sensible capacity	(1)	kW		16,5	24,6	35,9
Compressor power input	(1)	kW		5,3	8,3	11,5
Cooling capacity (EN 14511:2022)	(9)	kW		19,0	28,4	42,1
EER (EN 14511:2022)	(9)	-		3,08	2,88	2,97
Heating capacity	(2)	kW		20,9	29,8	43,8
Compressor power input	(2)	kW		5,1	7,2	9,9
Heating capacity (EN 14511:2022)	(10)	kW		20,5	29,1	43,1
COP (EN 14511:2022)	(10)	-		3,26	3,25	3,28
Refrigeration circuits		Nr		1	1	1
No. of compressors		Nr		1	1	2
Type of compressors	(3)	-		ROT	SCROLL	ROT
Nominal supply airflow		m^3/h		4000	6000	9000
Airflow range		m^3/h		3200-5000	4300-6800	6400-10500
Type of supply fan	(4)	-		RAD/EC	RAD/EC	RAD/EC
Number of supply fans		Nr		1	1	1
Max. static pressure supply fan	(5)	Pa		380	680	510
Type of exhaust fan	(4)	-		RAD/EC	RAD/EC	RAD/EC
Number of exhaust fans	(6)	Nr		1	1	1
Type of external fan	(4)	-		AX/EC	AX/EC	AX/EC
Standard power supply		V		400/3~/50 +N	400/3~/50 +N	400/3~/50 +N
Sound power level outside	(7)	dB(A)		83	85	88
Directive ErP (Energy Related Products)						
SEER - AVERAGE Climate	(8)	-		4,58	4,37	4,48
$\eta_{S,C}$	(8)	%		180,2	171,9	176,2
SCOP - AVERAGE Climate	(8)	-		3,22	3,20	3,27
$\eta_{S,H}$	(8)	%		125,8	125,0	127,8

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
Performance data are referred to operation with 30% of outdoor and exhaust air; (configuration CCK)
(1) Ambient air at 27°C/19°C W.B. Entering external exchanger air temperature 35°C
(2) Ambient temperature 20°C DB. Outside temperature 7°C DB/6°C WB
(3) ROT = Rotary compressor; SCROLL = Scroll compressor
(4) RAD = Radial fan; AX = Axial Fan; EC = Electronically Commutated
(5) Net outside static pressure to win the outlet and intake onboard pressure drops
(6) Configuration for outdoor air supply with exhaust and extraction; (only with CCK configuration)
(7) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to EN 12101-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.
(8) Data calculated according to the EN 14825:2022
(9) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 27°C D.B./19° CW.B.; outdoor temperature 35°C; EER according to EN 14511:2022
(10) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 20°C; outdoor temperature 7°C D.B./6° CW.B.; COP according to EN 14511:2022

Accessories

FC	Thermal FREE-COOLING (CCK version)
FCE	FREE-COOLING entalpico (CCK version)
PAQC	Air quality probe for CO_2 rate check (CCK version)
PAQCV	Air quality probe for CO_2 and VOC rate check (CCK version)
SER	Outdoor air damper manually set (CBK version)
SERM	Outdoor air motorized on/off damper (CBK version)
SFCM	Modulating motorized free-cooling damper (available only with options: CCK)
PCOSM	Constant supply airflow
PVAR	Variable airflow
GC01	Condensing gas heating module with modulating control 35 kW
GC08	Condensing gas heating module with modulating control 44kW
GC09	Condensing gas heating module with modulating control 65kW
GC10	Condensing gas heating module with modulating control 82kW
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)
F9	High efficiency F9 air filter (ISO 16890 ePM1 80%)
FES	It1IElectronic filters (ISO 16890 ePM1 90%)
PSAF	Differential pressure switch for dirty air filters
CHW2	Two-rows hot water coil
3WVM	3-way modulating valve
EH10	6 kW electric heaters
EH12	9 kW electric heaters
EH15	13.5 kW electric heaters
EH17	18 kW electric heaters
EH20	24 kW electric heaters
CPHG	Hot gas re-heating coil
HSE3	3 kg/h electrode boiler steam humidifier
HSE5	5 kg/h electrode boiler steam humidifier
HSE8	8 kg/h immersed electrodes steam humidifier (size
AMRX	Rubber antivibration mounts
UVC	UV-C germicidal lamps
PCMO	Sandwich panels of the handling zone in M0 fire reaction class
VENH	High static pressure fans
CSOND	Temperature and humidity ambient control with built-in probes
CTT	Temperature control with thermostat
PTAAX	Remote ambient air temperature sensor
IOTX	It1IIoT industrial module for cloud based interoperability & services
PTCO	Set up for shipping via container
LBPF	Packaging with wooden crate + fumigation

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

CLIVETPACK3I

Roof Top air-cooled reversible heat pump
Capacity from 59 to 155 kW

Clivet participates in the ECP Programme for "Rooftops". Check ongoing validity of certificate on: www.eurovent-certification.com

PACKAGE

Heat pump
Air cooled
Outdoor installation
R-32
FREE-COOLING
REVO trermodynamic recovery
Energy recovery through enthalpy wheel
Full inverter
ECOBREEZE
Electronically commutated Fan
Constant Airflow
Variable Airflow
Modbus
Silent
INTELLIAIR
ErP compliant

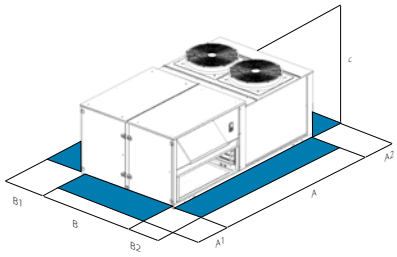
- ✓Refrigerant R32
- ✓Full inverter
- ✓Evolution of Energy recovery concept
- ✓Energy recovery through enthalpy wheel
- ✓Enhanced air filtration with low ventilation consumption
- ✓Extended working limit (-15°C in heating mode)
- ✓Reliability and increased efficiency ensured by double refrigerant circuit
- ✓Remote and centralized system monitoring through INTELLIAIR

Versions and configurations

CONFIGURATION:

CAK	Configuration with single fan section for full recirculation
CBK	Configuration with single fan section for recirculation and fresh air
CBK-G	Configuration with double fan section for recirculation, fresh and exhaust air
CCK-REVO	Configuration with double fan section with fresh air and REVO thermodynamic recovery

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size		CSRN-iY	20.2	28.2	40.4	56.4
A - Length		mm	3190	3970	3970	5315
B - Width		mm	2300	2300	2300	2300
C - Height		mm	1480	1510	1910	1920
A1		mm	2000	2000	2000	2600
A2		mm	1500	1500	1500	1500
B1		mm	1500	1500	1500	1500
B2		mm	1500	1500	1500	1500
CAK	Operating weight	kg	1087	1187	1678	2296
CBK	Operating weight	kg	1087	1187	1678	2296
CBK-G	Operating weight	kg	1103	1203	1714	2345
CCK-REVO	Operating weight	kg	1158	1258	1744	2386

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAK Configuration with single fan section for full recirculation
CBK Configuration with single fan section for recirculation and fresh air
CCK Configuration with double fan section for recirculation, fresh and exhaust air
CCK-REVO Configuration with double fan section with fresh air and REVO trermodynamic recovery

Technical data

Size			CSRN-iY	20.2	28.2	40.4	56.4
CCK-REVO	Cooling capacity	(1)	kW	65,9	85,8	129,0	170,5
CCK-REVO	Sensible capacity	(1)	kW	55,9	72,3	99,5	133,0
CCK-REVO	Compressor power input	(1)	kW	18,1	21,6	38,0	49,6
CCK-REVO	Cooling capacity (EN 14511:2022)	(9)	kW	59,0	76,5	116,2	152
CCK-REVO	EER (EN 14511:2022)	(9)	-	2,86	2,82	2,67	2,67
CCK-REVO	Heating capacity	(2)	kW	61,0	72,8	126,0	163,7
CCK-REVO	Compressor power input	(2)	kW	12,6	14,0	30,1	38,0
CCK-REVO	Heating capacity (EN 14511:2022)	(10)	kW	58,0	69,7	119,7	159,0
CCK-REVO	COP (EN 14511:2022)	(10)	-	3,73	3,71	3,19	3,31
CCK-REVO	Refrigeration circuits		Nr	2	2	2	2
CCK-REVO	No. of compressors		Nr	2	2	4	4
CCK-REVO	Type of compressors	(3)	-	ROT	SCROLL	ROT	SCROLL
CCK-REVO	Nominal supply airflow		m³/h	13000	17000	23000	32000
CCK-REVO	Airflow range		m³/h	8500-14000	13000-20500	17000-26000	22000-34000
CCK-REVO	Type of supply fan	(4)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of supply fans		Nr	1	2	2	3
CCK-REVO	Max. static pressure supply fan	(5)	Pa	330	450	410	300
CCK-REVO	Type of exhaust fan	(4)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of exhaust fans	(6)	Nr	1	2	2	2
CCK-REVO	Type of external fan	(4)	-	AX/EC	AX/EC	AX/EC	AX/EC
CCK-REVO	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound power level outside		(7)	dB(A)	88	89	88	90
Directive ErP (Energy Related Products)							
SEER - AVERAGE Climate		(8)	-	4,92	4,70	4,85	4,55
$\eta_{S,C}$		(8)	%	193,8	185,0	191,0	179,0
SCOP - AVERAGE Climate		(8)	-	3,91	3,79	3,81	3,93
$\eta_{S,H}$		(8)	%	153,4	148,6	149,4	154,2

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
Performances are referred to operation with 30% fresh and exhaust air with thermodynamic recovery REVO (CCK-REVO)
(1) Ambient air at 27°C/19°C W.B. Entering external exchanger air temperature 35°C D.B. / 24°C W.B.
(2) Ambient air at 20°C D.B. / 12°C W.B., Entering external exchanger air temperature 7°C D.B. / 6°C W.B.
(3) ROT = rotary compressor; SCROLL = scroll compressor
(4) RAD = Radial fan; AX = Axial Fan; EC = Electronically Commutated
(5) Net outside static pressure to win the outlet and intake onboard pressure drops
(6) Only for double fan section configuration with fresh air and REVO thermodynamic recovery (CCK-REVO)
(7) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013
(8) Data calculated according to the EN 14825:2022
(9) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 27°C D.B./19° CW.B.; outdoor temperature 35°C; EER according to EN 14511:2022
(10) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 20°C; outdoor temperature 7°C D.B./6°C W.B.; COP according to EN 14511:2022

Accessories

FC	Thermal FREE-COOLING (CBK-G, CCK-REVO version)
FCE	Enthalpy FREE-COOLING (CBK-G, CCK-REVO version)
REVO	REVO exhaust air thermodynamic energy recovery (CCK-REVO version)
CHW2	Two-rows hot water coil
CHWER	Energy recovery from food refrigeration
3WVM	3-way modulating valve
2WVM	2-way modulating valve
EH12	9 kW electric heaters (size 20.2)
EH14	12 kW electric heaters (size 20.2-28.2)
EH17	18 kW electric heaters (size 20.2-28.2-40.4)
EH20	24 kW electric heaters (size 28.2-40.4-56.4)
EH24	36 kW electric heaters (size 40.4-56.4)
EH28	48 kW electric heaters (size 56.4)
GC01X	Condensing gas heating module with modulating control 35 kW (size 20.2-28.2)
GC08X	Condensing gas heating module with modulating control 44 kW (size 20.2-28.2)
GC09X	Condensing gas heating module with modulating control 65 kW (size 20.2-28.2-40.4)
GC10X	Condensing gas heating module with modulating control 82 kW (size 28.2-40.4-56.4)
GC11X	Condensing gas heating module with modulating control 100 kW (size 28.2-40.4-56.4)
GC12X	Condensing gas heating module with modulating control 130 kW (size 40.4-56.4)
GC13X	Condensing gas heating module with modulating control 160 kW (size 56.4)
EWX	Enthalpy wheel energy recovery module (CBK-G version)
AMRX	Rubber antivibration mounts
AMRMX	Rubber antivibration mounts for unit and gas module
AMRUVX	Rubber antivibration mounts for unit and UV-C Lamps module
AMREWX	Rubber antivibration mounts for unit and enthalpy wheel module
RCX	Roof curb
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PCM0	Sandwich panels of the handling zone in M0 fire reaction class
CPHG	Hot gas re-heating coil
M3	Downward air supply
M5	Upflow air supply
ML	Sideward air supply
R3	Downward air return
R5	Upward return (CAK, CBK, CCK-REVO version)
NSERG	Gravity exhaust air damper: not required (CBK-G version)
SERM	Outdoor air motorized on/off damper (CBK version)
SER	Outdoor air damper manually set (CBK version)
SERMD	Modulating motorized outdoor air damper (optional for CBK, standard for CCK and CCKP)
VENH	High static pressure fan
PVAR	Variable airflow
PCOSM	Constant supply airflow
PVARDP	Variable airflow with pressure probe on the unit
PVMV	4-20mA signal for supply and exhaust air flow rate modulation
PAQC	Air quality probe for CO_2 rate check (CBK, CBK-G, CCK-REVO version)
PAQCV	Air quality sensor for CO_2 and VOC rate check (CBK, CBK-G, CCK-REVO version)
PAQC2	Double air quality probe for CO_2 rate check
PAQCV2	Double air quality probe for CO_2 and VOC rate check
PPAQC	External CO_2 signal management (CBK, CBK-G, CCK-REVO version)
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)
F9	High efficiency F9 air filter (ISO 16890 ePM1 80%)
FIFD	Electronic filter with iFD technology (ISO 16890 ePM1 90%)
PSAF	Differential pressure switch for dirty air filters
HSE3	3 kg/h immersed electrodes steam humidifier (sizes 20.2-28.2)
HSE5	5 kg/h immersed electrodes steam humidifier (sizes 20.2-28.2)
HSE8	8 kg/h immersed electrodes steam humidifier (size
HSE9	15 kg/h immersed electrodes steam humidifier
PUE	External humidifier management with 0-10V signal
LTEMP1	Application for low outdoor temperature
RPVI	Refrigerant leak detector in soundproof compressor compartment
EXFLOWC	Application in spaces with forced air exhaust at variable flow and exhaust section (CCK-REVO version)
UVCX	UV-C lamp module with germicidal effect
CMSC13X	Serial communication module for Modbus TCP/IP, BACnet IP, BACnet MSTP superviso
CTT	Temperature control with thermostat
CSOND	Temperature and humidity ambient control with built-in probes
MDMTX	Management of ambient temperature probes
MDMTUX	Management of ambient temperature and humidity probes
MDMADX	Advanced monitoring and management ambient probes
IOTX	It1IIoT industrial module for cloud based interoperability & services
DESM	Smoke detector
CONTA2	Energy meter
CHMET	It1ICooling and Heating Capacity Meter
DML	Demand Limit
PTCO	Set up for shipping via container

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

PACKAGE

CLIVETPACK3

Roof Top air-cooled reversible heat pump
Capacity from 191 to 344 kW

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com
Clivet participates in the ECP Programme for "Rooftops". Check ongoing validity of certificate on: www.eurovent-certification.com

PACKAGE

Heat pump
Air cooled
Outdoor installation
R-32
REVO trermodynamic recovery
Energy recovery through enthalpy wheel
FREE-COOLING
ECOBREEZE
Electronically commutated Fan
Constant Airflow
Variable Airflow
Modbus
INTELLIAIR
ErP compliant

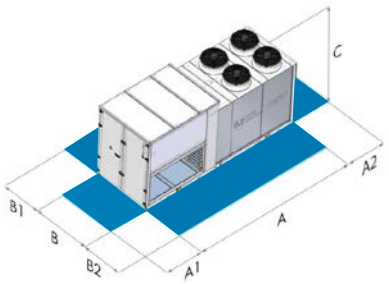
- ✓ Refrigerant R32
- ✓ Evolution of Energy recovery concept
- ✓ Energy recovery through enthalpy wheel
- ✓ Enhanced air filtration with low ventilation consumption
- ✓ Extended working limit (-15°C in heating mode)
- ✓ Reliability and increased efficiency ensured by double refrigerant circuit
- ✓ Remote and centralized system monitoring through INTELLIAIR

Versions and configurations

CONFIGURATION:

CAK	Configuration with single fan section for full recirculation
CBK	Configuration with single fan section for recirculation and fresh air
CBK-G	Configuration with double fan section for recirculation, fresh and exhaust air
CCK-REVO	Configuration with double fan section with fresh air and REVO thermodynamic recovery

Dimensions and connections



Size		CSRN-Y	60.4	70.4	80.4	90.4	100.4	120.4
A - Length		mm	6300	6300	6300	8050	8050	8050
B - Width		mm	2300	2300	2300	2300	2300	2300
C - Height		mm	2250	2250	2250	2250	2250	2250
A1		mm	1500	1500	1500	1500	1500	1500
A2		mm	1500	1500	1500	1500	1500	1500
B1		mm	1500	1500	1500	1500	1500	1500
B2		mm	1500	1500	1500	1500	1500	1500
CAK	Operating weight	kg	2605	2643	2643	3536	3536	3750
CBK	Operating weight	kg	2605	2643	2643	3536	3536	3750
CBK-G	Operating weight	kg	2605	2643	2643	3536	3536	3750
CCK-REVO	Operating weight	kg	2745	2783	2783	3728	3728	3942

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size			CSRN-Y	60.4	70.4*	80.4*	90.4*	100.4*	120.4*
CCK-REVO	Cooling capacity	(1)	kW	209	234	265	296	324	378
CCK-REVO	Sensible capacity	(1)	kW	159	179	207	226	247	282
CCK-REVO	Compressor power input	(1)	kW	47,9	54,0	64,7	65,8	73,6	95,1
CCK-REVO	Cooling capacity (EN 14511:2022)	(9)	kW	191,0	213,9	240,7	270,3	296,0	344,0
CCK-REVO	EER (EN 14511:2022)	(9)	-	3,40	3,40	3,20	3,45	3,42	3,14
CCK-REVO	Heating capacity	(2)	kW	199	220	248	284	309	363
CCK-REVO	Compressor power input	(2)	kW	43,5	48,7	54,6	60,0	67,7	87,6
CCK-REVO	Heating capacity (EN 14511:2022)	(10)	kW	191,8	213,5	242,7	274,0	298,8	352,5
CCK-REVO	COP (EN 14511:2022)	(10)	-	3,44	3,44	3,46	3,50	3,43	3,19
CCK-REVO	Refrigeration circuits		Nr	2	2	2	2	2	2
CCK-REVO	No. of compressors		Nr	4	4	4	4	4	4
CCK-REVO	Type of compressors	(3)	-	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
CCK-REVO	Nominal supply airflow		m³/h	33000	37000	44000	49000	53000	58000
CCK-REVO	Airflow range		m³/h	29000-47000	29000-47000	29000-47000	38000-60000	38000-60000	38000-60000
CCK-REVO	Type of supply fan	(4)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of supply fans		Nr	4	4	4	6	6	6
CCK-REVO	Max. static pressure supply fan	(5)	Pa	870	760	580	860	810	740
CCK-REVO	Type of exhaust fan	(4)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of exhaust fans	(6)	Nr	2	2	2	2	2	2
CCK-REVO	Type of external fan	(4)	-	AX/AC	AX/AC	AX/AC	AX/AC	AX/AC	AX/AC
CCK-REVO	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound power level outside		(7)	dB(A)	92	94	97	95	96	98
Directive ErP (Energy Related Products)									
SEER - AVERAGE Climate		(8)	-	4,74	4,69	4,37	4,44	4,31	4,16
$\eta_{s,c}$		(8)	%	186,6	184,7	171,7	174,7	169,5	163,5
SCOP - AVERAGE Climate		(8)	-	3,41	3,47	3,42	3,42	3,39	3,37
$\eta_{s,H}$		(8)	%	133,5	135,8	133,9	133,9	132,5	132,0

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
* models so marked are not Eurovent certified
Performances are referred to operation with 30% fresh and exhaust air with thermodynamic recovery REVO (CCK-REVO)
(1) Ambient air at 27°C/19°C W.B. Entering external exchanger air temperature 35°C D.B. / 24°C W.B.
(2) Ambient air at 20°C D.B. / 12°C W.B., Entering external exchanger air temperature 7°C D.B. / 6°C W.B.
(3) SCROLL = Scroll compressor
(4) RAD = Radial fan; AX = Axial Fan; EC = Electronically Commutated; AC = Alternatig current
(5) Net outside static pressure to win the outlet and intake onboard pressure drops
(6) Only for double fan section configuration with fresh air and REVO thermodynamic recovery (CCK-REVO)
(7) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013
(8) Data calculated according to the EN 14825:2022
(9) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 27°C D.B./19° CW.B.; outdoor temperature 35°C; EER according to EN 14511:2022
(10) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 20°C; outdoor temperature 7°C D.B./6°C W.B.; COP according to EN 14511:2022

Accessories

FC	Thermal FREE-COOLING (CBK-G, CCK-REVO version)
FCE	Enthalpy FREE-COOLING (CBK-G, CCK-REVO version)
REVO	REVO exhaust air thermodynamic energy recovery (CCK-REVO version)
CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type
CHW2	Two-rows hot water coil
CHWER	Energy recovery from food refrigeration
3WVM	3-way modulating valve
2WVM	2-way modulating valve
EH20	24 kW electric heaters
EH24	36 kW electric heaters
EH28	48 kW electric heaters
GC10X	Condensing gas heating module with modulating control 82 kW (sizes 60.4÷80.4)
GC11X	Condensing gas heating module with modulating control 100 kW (size 60.4÷80.4)
GC12X	Condensing gas heating module with modulating control 130 kW (sizes 90.4÷120.4)
GC13X	Condensing gas heating module with modulating control 164 kW
GC06X	Condensing gas heating module with modulating control 200 kW
GC07X	Modulo di riscaldamento a gas a condensazione modulante da 300 kW (gr.90.4÷120.4)
EWX	Enthalpy wheel energy recovery module (CBK-G version)
AMRX	Rubber antivibration mounts
AMRMX	Rubber antivibration mounts for unit and gas module
AMRUVX	Rubber antivibration mounts for unit and UV-C Lamps module
AMREWX	Rubber antivibration mounts for unit and enthalpy wheel module
RCX	Roof curb
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PCM0	Sandwich panels of the handling zone in M0 fire reaction class
CPHG	Hot gas re-heating coil
M3	Downward supply
M5	Upward supply
R3	Downward air return
R5	Upward return
SER	Outdoor air damper manually set (CBK version)
SERM	Outdoor air motorized on/off damper (CBK version)
SFCM	SModulating motorised FREE-COOLING damper (Optional for CBK, Standard for CBK-G and CCK-REVO)
NSERG	Gravity exhaust air damper: not required (CBK-G version)
VENH	High static pressure fan
PVAR	Variable airflow
PCOSM	Constant supply airflow
PVARDP	Variable airflow with pressure probe on the unit
SPVAR	0-10 V signal for air flow modulation
PAQC	Air quality probe for CO_2 rate check (CBK, CBK-G, CCK-REVO version)
PAQCV	Air quality sensor for CO_2 and VOC rate check (CBK, CBK-G, CCK-REVO version)
PAQC2	Double air quality probe for CO_2 rate check (CBK, CBK-G, CCK-REVO version)
PAQCV2	Double air quality probe for CO_2 and VOC rate check (CBK, CBK-G, CCK-REVO version)
PPAQC	External CO_2 signal management
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)
F9	High efficiency F9 air filter (ISO 16890 ePM1 80%)
FIFD	Electronic filter with iFD technology (ISO 16890 ePM1 90%)
PSAF	Differential pressure switch for dirty air filters
HSE8	8 kg/h immersed electrodes steam humidifier (size
HSE9	15 kg/h immersed electrodes steam humidifier
PUE	External humidifier management with 0-10V signal
LTEMP1	Application for low outdoor temperature
RPVI	Refrigerant leak detector in soundproof compressor compartment
EXFLOWC	Application in spaces with forced air exhaust at variable flow and exhaust section (CCK-REVO version)
UVCX	UV-C lamp module with germicidal effect
BRCI	Sloping drain pan
LON	TP/FT serial port with LonWorks protocol
BACIP	BACnet-IP serial communication module
BACMSTP	BACnet-MSTP serial communication module
SFSTR	Disposal for inrush current reduction
NCRC	Remote control with user interface: not required
CSOND	Temperature and humidity ambient control with built-in probes
MDMTX	Management of ambient temperature probes
MDMTUX	Management of ambient temperature and humidity probes
MDMADX	Advanced monitoring and management ambient probes
IOTX	It1IIoT industrial module for cloud based interoperability & services
SIX	Service interface (cable of 1,5 metres)
PFCC	Power factor correction capacitors (cosfi > 0.95)
DESM	Smoke detector
CONTA2	Energy meter
CHMET	It1ICooling and Heating Capacity Meter
PTCO	Set up for shipping via container

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

CLIVETPACK3I

Roof Top air-cooled reversible heat pump
Capacity from 40 to 119 kW

Clivet participates in the ECP Programme for "Rooftops". Check ongoing validity of certificate on: www.eurovent-certification.com

PACKAGE

Heat pump
Air cooled
Outdoor installation
R-32
FREE-COOLING
REVO trermodynamic recovery
Full inverter
ECOBREEZE
Electronically commutated Fan
Constant Airflow
Variable Airflow
Modbus
Silent
INTELLIAIR
ErP compliant

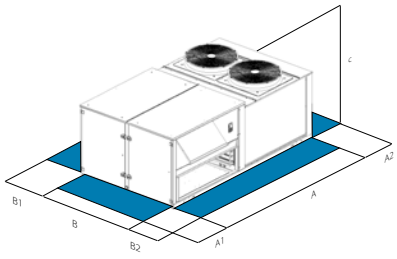
- ✓Specifically designed for crowded buildings
- ✓Refrigerant R32
- ✓Full inverter
- ✓Evolution of Energy recovery concept
- ✓Evolution of Energy recovery concept
- ✓Extended working limit (-15°C in heating mode)
- ✓Reliability and increased efficiency ensured by double refrigerant circuit
- ✓Remote and centralized system monitoring through INTELLIAIR

Versions and configurations

CONFIGURATION:

CCK-REVO Configuration with double fan section with fresh air and REVO thermodynamic recovery

Dimensions and connections



Size	CSNX-iY	20.2	28.2	40.4
A - Length	mm	2650	3550	3970
B - Width	mm	2300	2300	2300
C - Height	mm	1480	1510	1910
A1	mm	1500	1500	2000
A2	mm	1500	1500	1500
B1	mm	1500	1500	1500
B2	mm	1500	1500	1500
CCK-REVO Operating weight	kg	968	1119	1744

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CCK-REVO Configuration with double fan section with fresh air and REVO trermodynamic recovery

Technical data

Size			CSNX-iY	20.2	28.2	40.4
CCK-REVO	Cooling capacity	(1)	kW	48,7	90,0	146,0
CCK-REVO	Sensible capacity	(1)	kW	35,0	63,8	104,0
CCK-REVO	Compressor power input	(1)	kW	10,8	23,0	42,4
CCK-REVO	Cooling capacity (EN 14511:2022)	(8)	kW	39,3	73,4	119,2
CCK-REVO	EER (EN 14511:2022)	(8)	-	3,04	2,66	2,52
CCK-REVO	Heating capacity	(2)	kW	44,5	77,6	130,0
CCK-REVO	Compressor power input	(2)	kW	9,2	16,0	29,0
CCK-REVO	Heating capacity (EN 14511:2022)	(9)	kW	40,9	73,7	120,6
CCK-REVO	COP (EN 14511:2022)	(9)	-	3,17	3,01	3,00
CCK-REVO	Refrigeration circuits		Nr	2	2	2
CCK-REVO	No. of compressors		Nr	2	2	4
CCK-REVO	Type of compressors	(3)	-	ROT	SCROLL	ROT
CCK-REVO	Nominal supply airflow		m^3/h	6000	10500	19000
CCK-REVO	Airflow range		m^3/h	4000-8000	7000-13500	13000-25000
CCK-REVO	Type of supply fan	(4)	-	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of supply fans		Nr	1	1	2
CCK-REVO	Max. static pressure supply fan	(5)	Pa	690	440	470
CCK-REVO	Type of exhaust fan	(4)	-	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of exhaust fans		Nr	1	1	2
CCK-REVO	Type of external fan	(4)	-	AX/EC	AX/EC	AX/EC
CCK-REVO	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50
Sound power level outside		(6)	dB(A)	83	89	88
Directive ErP (Energy Related Products)						
SEER - AVERAGE Climate		(7)	-	4,67	4,94	4,57
$\eta_{S,C}$		(7)	%	183,8	194,6	179,8
SCOP - AVERAGE Climate		(7)	-	3,53	3,95	3,75
$\eta_{S,H}$		(7)	%	138,2	155,0	146,6

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
Performances are referred to operation with 30% fresh and exhaust air with thermodynamic recovery REVO (CCK-REVO)
(1) Ambient air at 27°C/19°C W.B. Entering external exchanger air temperature 35°C D.B. / 24°C W.B.
(2) Ambient air at 20°C D.B. / 12°C W.B., Entering external exchanger air temperature 7°C D.B. / 6°C W.B.
(3) ROT = Rotary compressor; SCROLL = Scroll compressor
(4) RAD = Radial fan; AX = Axial Fan; EC = Electronically Commutated
(5) Net outside static pressure to win the outlet and intake onboard pressure drops
(6) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013
(7) Data calculated according to the EN 14825:2022
(8) Capacity in total recirculation according to EN 14511-2022, indoor air temperature 27°C D.B./19° CW.B.; outdoor temperature 35°C; EER according to EN 14511-2022
(9) Capacity in total recirculation according to EN 14511-2022, indoor air temperature 20°C; outdoor temperature 7°C D.B./6° CW.B.; COP according to EN 14511-2022

Accessories

FC	Thermal FREE-COOLING (Standard)
FCE	Enthalpy FREE-COOLING
REVO	REVO exhaust air thermodynamic energy recovery (standard)
CHW2	Two-rows hot water coil
3WVM	3-way modulating valve
2WVM	2-way modulating valve
EH10	6 kW electric heaters (size 20.2)
EH12	9 kW electric heaters (size 20.2)
EH15	13.5 kW electric heaters (size 20.2-28.2)
EH17	18 kW electric heaters (size 28.2-40.4)
EH20	24 kW electric heaters (size 28.2-40.4)
EH24	36 kW electric heaters (size 40.4)
GC01X	Condensing gas heating module with modulating control 35 kW (sizes 20.2-28.2)
GC08X	Condensing gas heating module with modulating control 44 kW (sizes 20.2-28.2)
GC09X	Condensing gas heating module with modulating control 65 kW (sizes 28.2-40.4)
GC10X	Condensing gas heating module with modulating control 82 kW (sizes 28.2-40.4)
GC11X	Condensing gas heating module with modulating control 100 kW (sizes 40.4)
GC12X	Condensing gas heating module with modulating control 130 kW (sizes 40.4)
AMRX	Rubber antivibration mounts
AMRMX	Rubber antivibration mounts for unit and gas module
AMRUVX	Rubber antivibration mounts for unit and UV-C Lamps module
RCX	Roof curb
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
PCM0	Sandwich panels of the handling zone in M0 fire reaction class
CPHG	Hot gas re-heating coil
M3	Downward air supply
M5	Upflow air supply
ML	Sideward supply
R3	Downward air return
R5	Air return from above
SERMD	Modulating motorized outdoor air damper (standard)
VENH	High static pressure fan
PVAR	Variable airflow
PCOSM	Constant supply airflow
PVARDP	Variable airflow with pressure probe on the unit
PVMV	4-20mA signal for supply and exhaust air flow rate modulation
PAQC	Air quality probe for CO_2 rate check
PAQCV	Air quality sensor for CO_2 and VOC rate check
PAQC2	Double air quality probe for CO_2 rate check
PAQCV2	Double air quality probe for CO_2 and VOC rate check
PPAQC	External CO_2 signal management
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)
F9	High efficiency F9 air filter (ISO 16890 ePM1 80%)
FIFD	Electronic filter with iFD technology (ISO 16890 ePM1 90%)
PSAF	Differential pressure switch for dirty air filters
HSE3	3 kg/h immersed electrodes steam humidifier (size 20.2)
HSE5	5 kg/h immersed electrodes steam humidifier (size 20.2-28.2)
HSE8	8 kg/h immersed electrodes steam humidifier (size
HSE9	15 kg/h immersed electrodes steam humidifier (size 28.2-40.4)
PUE	External humidifier management with 0-10V signal
LTEMP1	Application for low outdoor temperature
RPVI	Refrigerant leak detector in soundproof compressor compartment
EXFLOWC	Application in spaces with forced air exhaust at variable flow and exhaust section
UVCX	UV-C lamp module with germicidal effect
CMSC13X	Serial communication module for Modbus TCP/IP, BACnet IP, BACnet MSTP superviso
CTT	Temperature control with thermostat
CSOND	Temperature and humidity ambient control with built-in probes
MDMTX	Management of ambient temperature probes
MDMTUX	Management of ambient temperature and humidity probes
MDMADX	Advanced monitoring and management ambient probes
IOTX	It1IIoT industrial module for cloud based interoperability & services
DESM	Smoke detector
CONTA2	Energy meter
CHMET	It1ICooling and Heating Capacity Meter
DML	Demand Limit
PTCO	Set up for shipping via container

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

CLIVETPACK2 FFA

Roof Top air-cooled reversible heat pump
Capacity from 40 to 90 kW

PACKAGE

Heat pump | Air cooled | Outdoor installation | R-410A | Ice protection system | FREE-COOLING | Thermodynamic recovery | ECOBREEZE | Electronically commutated Fan | Constant Airflow | INTELLIAIR

- ✓Specifically designed for 100% fresh air conditioning application
- ✓No contamination between supply and exhaust air
- ✓High part load efficiency
- ✓Smart Freecooling and Defrosting management
- ✓Enhanced air filtration with low ventilation consumption
- ✓Thermodynamic recovery
- ✓Compliant with main communication protocols (Modbus, Bacnet and Lonworks)
- ✓Many available configurations suitable for the most different project situation
- ✓Interaction with third part extraction systems
- ✓All component included on board for an enhanced installation
- ✓Remote and centralized system monitoring through INTELLIAIR

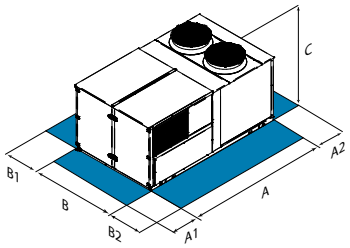
Versions and configurations

CONFIGURATION:

CBFFA Configuration for fresh air supply only (Standard)

CCFFA Configuration for fresh air supply with extraction and exhaust

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size		CSRN-XHE2-FFA	12.2	16.2	20.4	22.4	24.4
CBFFA	A - Length	mm	2090	2090	3110	3110	3110
CBFFA	B - Width	mm	2300	2300	2300	2300	2300
CBFFA	C - Height	mm	1560	1560	1650	1650	1650
CBFFA	A1	mm	1500	1500	1500	1500	1500
CBFFA	A2	mm	1500	1500	1500	1500	1500
CBFFA	B1	mm	1500	1500	1500	1500	1500
CBFFA	B2	mm	1500	1500	1500	1500	1500
CBFFA	Operating weight	kg	1273	1297	1358	1393	1427
CCFFA	Operating weight	kg	1401	1425	1560	1595	1629

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CBFFA Configuration for fresh air supply only
CCFFA Configuration for fresh air supply with extraction and exhaust

Technical data

Size		CSRN-XHE2-FFA		12.2	16.2	20.4	22.4	24.4
CBFFA	Cooling capacity	(1)	kW	39,8	49,5	76,1	83,4	90,4
CBFFA	Sensible capacity	(1)	kW	21,5	27,8	38,3	43,3	48,0
CBFFA	Compressor power input	(1)	kW	9,4	12,9	20,0	21,7	23,3
CBFFA	EER	(1)	-	4,23	3,84	3,81	3,84	3,88
CBFFA	Heating capacity	(2)	kW	39,6	50,0	73,2	81,4	89,5
CBFFA	Compressor power input	(2)	kW	9,9	11,9	17,2	18,2	20,7
CBFFA	COP	(2)	-	4,00	4,20	4,26	4,47	4,32
CBFFA	Refrigeration circuits		Nr	2	2	2	2	2
CBFFA	No. of compressors		Nr	2	2	4	4	4
CBFFA	Type of compressors	(3)	-	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
CBFFA	Nominal supply airflow		m³/h	3400	4500	6000	7000	8000
CBFFA	Airflow range		m³/h	3000-4000	4000-5300	5300-6500	6400-7600	7300-9000
CBFFA	Type of supply fan	(4)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC
CBFFA	Number of supply fans		Nr	1	1	1	1	1
CBFFA	Max. static pressure supply fan	(5)	Pa	675	470	775	730	650
CBFFA	Type of external fan	(4)	-	AX/AC	AX/AC	AX/AC	AX/AC	AX/AC
CBFFA	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound power level outside		(6)	dB(A)	83	85	84	85	87

Performance refers to operation with 80% of expelled and outdoor air
(1) Ambient air at 27°C D.B./19°C W.B. Outdoor air temperature: 35°C D.B./ 24°C W.B; EER referred only to compressors
(2) Ambient temperature 20°C DB. Outside temperature 7°C DB/6°C WB; COP referred only to compressors
(3) SCROLL = Scroll compressor
(4) RAD = Radial fan; AX = Axial Fan; EC = Electronically Commutated
(5) Available nett pressure to overcome the supply
(6) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard.

CBFFA Configuration for fresh air supply only

Accessories

RE1	Thermodynamic heat recovery system (CCFFA version)
M3	Downward air supply
M5	Upflow air supply
R3	Downward air return
PCOSM	Constant supply airflow
PCOSME	Constant airflow in supply and exhaust (CCFFA version)
CREFB	Device for fan consumption reduction of the external section, ECOBREEZE type (sizes 20.4÷24.4)
VENH	High static pressure fans
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)
F9	High efficiency F9 air filter (ISO 16890 ePM1 80%)
FIFD	Electronic filter with iFD technology (ISO 16890 ePM1 90%)
PSAF	Differential pressure switch for dirty air filters
EH12	9 kW electric heaters (size 12.2÷16.2)
EH15	13,5 kW electric heaters (sizes 12.2÷16.2)
EH17	18 kW electric heaters (size 20.4÷24.4)
EH22	27 kW electric heaters (sizes 20.4÷24.4)
CHW2	Two-rows hot water coil
3WVM	3-way modulating valve
2WVM	2-way modulating valve
GC01X	Condensing gas heating module with modulating control 35 kW (sizes 12.2÷16.2)
GC08X	Condensing gas heating module with modulating control 44 kW (sizes 12.2÷16.2)
GC09X	Condensing gas heating module with modulating control 65kW
GC10X	Condensing gas heating module with modulating control 82 kW (sizes 20.4÷24.4)
LTEMP1	Application for low outdoor temperature
PGFC	Finned coil protection grilles
PGCCH	Anti-hail protection grilles
CPHG	Hot gas re-heating coil
HSE5	5 kg/h immersed electrodes steam humidifier (size 12.2÷16.2)
HSE8	8 kg/h immersed electrodes steam humidifier (size
HSE9	15 kg/h immersed electrodes steam humidifier (size 20.4÷24.4)
MHP	High and low pressure gauges
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
CTERM	Remote keypad for indoor temperature and humidity control
PM	Phase monitor
PFCC	Power factor correction capacitors (cosfi > 0.95)
SFSTC	Progressive compressor start-up device
PTAAX	Remote ambient air temperature sensor
PTUAX	Remote ambient air temperature and humidity probe
IOTX	It1IIoT industrial module for cloud based interoperability & services
PCM0	Sandwich panels of the handling zone in M0 fire reaction class
PTCO	Set up for shipping via container
AMRX	Rubber antivibration mounts
AMRMX	Rubber antivibration mounts for unit and gas module
RCX	Roof curb

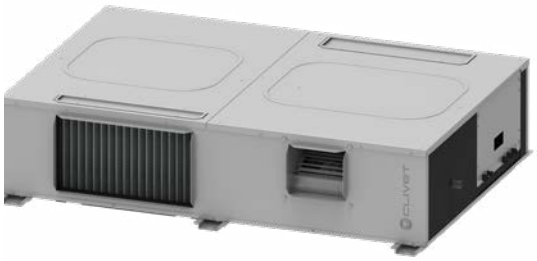
Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

Commercial

			Air flow	
	FRESH LARGE EVO	CiSDN-Y EF 1 S	300 ÷ 2500 m³/h 2 ÷ 8 kW	R-32 EC
	ZEPHIR3	CPAN-XHE3	1000 ÷ 3500 m³/h 10 ÷ 18 kW	R-410A EC
	ZEPHIR4	CPAN-iY	2300 ÷ 19000 m³/h 42 ÷ 127 kW	R-32 EC

FRESH LARGE EVO

Full outdoor air renewal units with extraction/exhaust and active thermodynamic recovery Indoor installation
Air flow from 300 to 2500 m³/h



Heat pump
Air cooled
Indoor installation
R-32
FREE-COOLING
Active Thermodynamic Recovery
Electronically commutated Fan
Full inverter DC
Constant Airflow
Variable Airflow
Modbus
Silent
CONTROL4 NRG management
VRF management
INTELLIAIR
Clivet Eye monitoring

- ✓Refrigerant R32
- ✓Full inverter
- ✓Extended working limit (up to -20°C in heating mode)
- ✓Additional available capacity for indoor air conditioning
- ✓Efficient exhaust air energy recovery and low ventilation consumption thanks to the active thermodynamic recovery
- ✓Enhanced air filtration with low ventilation consumption
- ✓No contamination between supply and exhaust air
- ✓Smart Freecooling and Indoor Air Quality
- ✓All primary air devices already on board, for a simplified system design
- ✓Compatible with VRF and Clivet monitoring systems (CONTROL4 NRG, CLIVET EYE, INTELLIAIR)
- ✓EPP structure for maximum acoustic comfort and thermal insulation

Versions and configurations

INSTALLATION:

II Indoor installation (Standard)

AERAULIC CIRCUIT

FM5S Filter on outdoor air M5 (ISO 16890 ePM10 65%) (Standard)

FM5R Return air filter M5 (ISO 16890 ePM10 65%) (Standard)

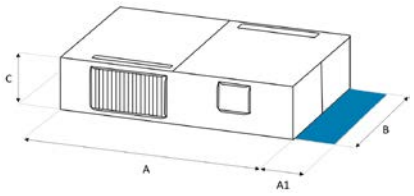
CONNECTIVITY:

CMSC9 Serial communication module for Modbus supervisor (Standard)

HYDRAULIC CIRCUIT:

CDP Condensate drain pump on board (Standard)

Dimensions and connections



Grand.	CiSDN-Y EF 1 S		Size 1	Size 2	Size 3
A - Lunghezza		mm	1743	1743	1743
B - Profondità		mm	1220	1220	1220
C - Altezza		mm	310	410	590
A1		mm	500	500	500
Peso in funzionamento		kg	96	126	138

I dati sopra riportati sono riferiti ad unità standard per le configurazioni costruttive indicate.
Per tutte le altre configurazioni consultare il Bollettino Tecnico dedicato.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	CiSDN-Y EF 1 S		Size 1	Size 2	Size 3
Standard airflow					
Nominal air flow		m³/h	500	1000	2000
Max external static pressure (supply)		Pa	250	425	300
Max external static pressure (extraction)		Pa	215	390	230
Cooling					
Cooling capacity	(1)	kW	1,9	3,6	7,4
Sensible cooling capacity	(1)	kW	1,9	3,6	7,2
EERc	(1)	-	8,43	5,76	7,83
Cooling capacity (EN 14511:2022)	(2)	kW	1,9	3,5	7,1
EER (EN 14511:2022)	(2)	-	6,83	4,49	4,17
Maximum cooling capacity	(3)	kW	4,4	8,3	15,0
Heating					
Heating capacity	(1)	kW	2,3	4,5	9,3
COPc	(1)	-	6,94	6,60	7,12
Heating capacity (EN 14511:2022)	(2)	kW	2,30	4,60	9,60
COP (EN 14511:2022)	(2)		6,09	5,42	4,68
Maximum heating capacity	(3)		3,9	7,8	15,6
Refrigeration circuits		Nr	1	1	1
No. of compressors		Nr	1	1	1
Type of compressors	(4)	-	ROT	ROT	ROT
Type of supply fan	(5)	-	CFG/EC	CFG/EC	CFG/EC
Number of supply fans		Nr	1	1	1
Type of exhaust fan	(5)	-	CFG/EC	CFG/EC	CFG/EC
Number of exhaust fans		Nr	1	1	1
Standard power supply		V	230/1~/50	230/1~/50	230/1~/50
Sound power level	(6)	dB(A)	62	65	72
Minimum air flow		m³/h	300	700	1400
Maximum air flow		m³/h	720	1500	2500

Erp (Energy Related Products) European Directive, that includes the Commission delegated Regulation (EU) No 2016/2281 also known as Ecodesign Lot21, does not report this Product category.
Cooling working conditions: indoor air temperature 27°C D.B./19°C W.B., outdoor air temperature 35°C D.B./24°C W.B.
Heating woorking conditions: indoor air temperature 20°C D.B./12°C W.B., outdoor air temperature 7°C D.B./6°C W.B.
(1) Supply air temperature in cooling 24°C, supply air temperature in heating 20°C
(2) Data according to EN 14511-2022 and external static pressure 50Pa
(3) Supply air humidity ratio 11g/kg in cooling and supply air temperature 30°C in heating
(4) ROT = Rotary compressor
(5) CFG = Centrifugal fan; EC = Electronically commutated
(6) Sound power levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions.

Accessories

FC	Thermal free-cooling (Standard)
PCOSME	Constant airflow in supply and exhaust (Standard)
PVARC	Variable air flow on supply and exhaust with CO_2 probe
PVARCV	Variable air flow on supply and exhaust with CO_2+VOC probe
PPAQC	External CO_2 signal management
F7B	High efficiency F7 air filter (ISO 16890 ePM1 60%)
FELIFD	Electronic filter with iFD technology (ISO 16890 ePM1 90%)
FG3CX	Prefiltration for duct installation G3 (ISO 16890 Coarse 40%)
CRC	Remote control with user interface (Standard)
IOTX	It1IIoT industrial module for cloud based interoperability & services
VRFGX	VRF Gateway Kit
CUE1	External humidifier control with ON-OFF control
MEAX	Absorbed energy meter
ASOFX	Kit of antivibration mounts for ceiling installation
APAVX	Kit of antivibration mounts for floor installation

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

ZEPHIR3

Full outdoor air renewal units with extraction/exhaust and active thermodynamic recovery
Reversible heat pump technology. Indoor or outdoor installation
Air flow from 1000 to 3500 m³/h

Heat pump | Air cooled | Indoor installation | Outdoor installation | R-410A | FREE-COOLING | Active Thermodynamic Recovery | Electronically commutated fan | Full inverter DC | Constant Airflow | Variable Airflow | INTELLIAIR | Hot gas reheating coil | Electronic filtration iFD

PRIMARY AIR

- ✓Inverter compressors
- ✓Constant supply of temperature and humidity, both in cooling and heating mode both in cooling and heating mode.
- ✓Additional available capacity for indoor air conditioning
- ✓Efficient exhaust air energy recovery and low ventilation consumption thanks to the active thermodynamic recovery
- ✓Enhanced air filtration (Electronic Filter iFD as std) with low ventilation consumption
- ✓No contamination between supply and exhaust air
- ✓Modulating re-heating, free heat from condenser
- ✓Smart Freecooling and Indoor Air Quality management
- ✓All primary air devices already on board, for a simplified system design
- ✓Remote and centralized system monitoring through INTELLIAIR

Versions and configurations

ENERGY RECOVERY:

RTA	Active thermodynamic recovery (Standard)

OPERATION:

RCM	Refrigeration circuit with capacity modulation (Standard)
FCE	Enthalpy free-cooling (Standard)

VERSIONE

RECH	Hydronic recovery device for extended operating range
EPWRC	EXTRAPOWER-C (with additional chilled water heat exchanger)
EPWRH	EXTRAPOWER-H (with additional hot water heat exchanger, without electronic filters)

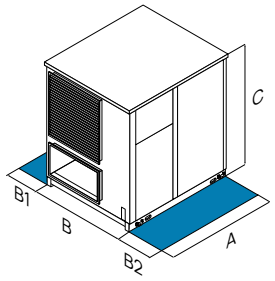
CIRCUITO AERAULICO:

FG4EE	G4 class air filters on outdoor and exhaust air (Standard)
FELIFD	Electronic filters with ifd technology (ISO 16890 ePM1 90%) (Standard)
CPHGM	Hot gas re-heating coil with capacity modulation (Standard)
PSTAF	Clogged filter diffential pressure switch on extract and delivery (Standard)
PCOSME	Constant airflow in supply and exhaust (Standard)

INSTALLAZIONE

IO	Outdoor installation (Standard)
II	Indoor installation

Dimensions and connections



Grand.	CPAN-XHE3		Size 1	Size 2
A - Lunghezza		mm	1895	1895
B - Profondità		mm	950	950
C - Altezza		mm	1025	1625
B1		mm	700	700
B2		mm	1200	1200
Peso in funzionamento		kg	320	450

I dati sopra riportati sono riferiti ad unità standard per le configurazioni costruttive indicate.
Per tutte le altre configurazioni consultare il Bollettino Tecnico dedicato.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	CPAN-XHE3		Size 1	Size 2
Standard airflow				
Nominal air flow		m³/h	1300	2200
Max external static pressure (supply)		Pa	630	630
Max external static pressure (extraction)		Pa	630	630
Use with fixed-point supply control (CS)				
Cooling				
Total cooling capacity	(1)	kW	10,6	17,5
Re-heating capacity	(1)	kW	2,7	4,2
Compressor power input	(1)	kW	2,9	4,9
EERc	(1)	-	4,57	4,41
Heating				
Heating capacity	(2)	kW	5,9	10,0
Compressor power input	(2)	kW	0,7	1,4
COPc	(2)	-	8,38	7,45
Operation at maximum available capacity (MC)				
Cooling				
Total cooling capacity	(3)	kW	10,6	17,5
Compressor power input	(3)	kW	3,3	5,5
EERc	(3)	-	3,25	3,18
Heating				
Heating capacity	(4)	kW	10,5	17,8
Compressor power input	(4)	kW	2,3	3,8
COPc	(4)	-	4,61	4,72
Operation in high air flow mode (HA)				
Cooling				
Total cooling capacity	(5)	kW	9,2	18,2
Compressor power input	(5)	kW	1,6	3,4
EERc	(5)	-	5,89	5,38
Heating				
Heating capacity	(6)	kW	6,0	11,1
Compressor power input	(6)	kW	0,5	1,3
COPc	(6)	-	11,1	8,46
Refrigeration circuits		Nr	1	1
No. of compressors		Nr	1	1
Type of compressors	(7)	-	ROT	SCROLL
Type of supply fan	(8)	-	RAD/EC	RAD/EC
Number of supply fans		Nr	1	1
Type of exhaust fan	(8)	-	RAD/EC	RAD/EC
Number of exhaust fans		Nr	1	1
Standard power supply		V	400/3~/50	400/3~/50
Sound power level	(9)	dB(A)	77	77
Minimum air flow		m³/h	1000	1600
Maximum air flow	(10)	m³/h	1900	3500

Erp (Energy Related Products) European Directive, that includes the Commission delegated Regulation (EU) No 2016/2281 also known as Ecodesign Lot21, does not report this Product category.
DB = dry bulb; WB = wet bulb; EERc = Thermodynamic efficiency of the system in cooling; COPc = Thermodynamic efficiency of the system in heating
(1) Outdoor air temperature: 35°C D.B./ 24°C W.B; Exhaust air temperature: 26°C D.B. Supply air humidity ratio: 11g/kg; Supply air temperature: 24°C D.B.
(2) Outdoor air temperature: 7°C D.B./6.0°C W.B. Exhaust air temperature: 20°C D.B./ 12°C W.B; Supply air temperature: 20°C D.B.
(3) Outdoor air temperature: 35°C D.B./ 24°C W.B; Exhaust air temperature: 26°C D.B. Supply air humidity ratio: 11g/kg
(4) Outdoor air temperature: 7°C D.B./6.0°C W.B.; Exhaust air temperature: 20°C D.B./12°C W.B; Supply air temperature: 30°C D.B.
(5) Outdoor air temperature: 35°C D.B./ 24°C W.B; Exhaust air temperature: 26°C D.B. Supply air temperature: 22°C D.B.
(6) Outdoor air temperature: 7°C D.B./6.0°C W.B. Exhaust air temperature: 20°C D.B./ 12°C W.B; Supply air temperature: 16°C D.B.
(7) ROT = rotary compressor; SCROLL = scroll compressor
(8) RAD = radial fan; EC = Electronically Commutated
(9) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard.
(10) In high airflow mode, the unit always operates at this flow rate.

Accessories

CCA	Copper/aluminium exchanger on exhaust air with acrylic lining
CEA	Copper/aluminium exchanger on outdoor air with acryic lining
CPHGMA	Post-heating by hot gas recovery to modulation capacity in acrylic Cu/Al execution
PVARC	Variable air flow on supply and exhaust with CO_2 probe
PVARCV	Variable air flow on supply and exhaust with CO_2+VOC probe
PVARP	Variable air flow on supply and exhaust air with supply pressure probe
MHSEX	Immersed electrodes steam humidifying module
MOB	Serial port RS485 with Modbus protocol
LON	TP/FT serial port with LonWorks protocol
BACIP	BACnet-IP serial communication module
VRFG	VRF gateway
VSXSA	Modification of the supply humidity ratio setpoint "X_SA" by an external signal: enable/disable via external contact or setpoint changing via Modbus and BACnet-IP protocol
DESM	Smoke detector
AMRX	Rubber antivibration mounts
AMRUX	Rubber antivibration mounts for unit and humidification module
RSSX	Remote supply air sensor
PTCO	Set up for shipping via container
F7B	High efficiency F7 air filter (ISO 16890 ePM1 60%)

Accessories whose code ends with "X" are supplied separately

ZEPHIR4

Make-up unit, full fresh air, with return/exhaust and thermodynamic heat recovery.
Reversible heat pump technology. Outdoor installation.
Air flow from 2300 to 19000 m³/h

Heat pump | Air cooled | Outdoor installation | R-32 | FREE-COOLING | Active Thermodynamic Recovery | Electronically commutated fan | Full inverter DC | Constant Airflow | Variable Airflow | Hot gas reheating coil | Electronic filtration iFD

Modbus | Silent | Certified structure | VRF management | INTELLIAIR | Clivet Eye monitoring

- ✓Full inverter
- ✓Efficient energy recovery of ejected air with low ventilation absorption thanks to active thermodynamic recovery.
- ✓High mechanical performance structure (T2 / TB2)
- ✓Extended operating range (-20°C in heating mode)
- ✓Maximum filtration efficiency (standard iFD electronic filters) with low ventilation consumption
- ✓Fixed-point control of temperature and humidity supply conditions in both heating and cooling modes
- ✓Modulating re-heating, free heat from condenser
- ✓Additional available capacity for indoor air conditioning
- ✓No contamination between supply and exhaust air
- ✓Smart Freecooling and Indoor Air Quality management
- ✓All primary air devices already on board, for a simplified system design
- ✓Compiant with VRF centralizers and Clivet supervision systems (Clivet EYE, INTELLIAIR)

Versions and configurations

ENERGY RECOVERY:
RTA Active thermodynamic recovery (Standard)

OPERATION:
RCM Refrigeration circuit with capacity modulation(Standard)
FCE Enthalpy free-cooling (Standard)

INSTALLATION:
IO Outdoor installation
RPRC Compressors vane refrigerant leak detector (Standard

AERAULIC CIRCUIT
FG4EE G4 class air filters on outdoor and exhaust air (Standard)
FELIFD Electronic filters with ifd technology (ISO 16890 ePM1 90%) (Standard)
CPHGM Hot gas re-heating coil with capacity modulation (Standard)
PSTAF Clogged filter diffential pressure switch on extract and delivery (Standard)
PCOSME Constant airflow in supply and exhaust (Standard)

CONNECTIVITY:
CMSC9 Serial communication module for Modbus supervisor (Standard)

Technical data

Size		CPAN-iY	Size 1	Size 2	Size 3	Size 4
Standard airflow						
Nominal air flow		m³/h	5000	7000	10000	15000
Max external static pressure (supply)		Pa	720	740	830	740
Max external static pressure (extraction)		Pa	780	980	810	980
Use with fixed-point supply control (CS)						
Cooling						
Total cooling capacity	(1)	kW	42,1	59,3	85,2	127,0
Re-heating capacity	(1)	kW	10,7	15,2	22,5	33,4
Compressor power input	(1)	kW	8,8	12,4	16,0	23,6
EERc	(1)	-	5,99	6,01	6,72	6,82
Cooling capacity (EN 14511-2022)	(2)	kW	42,2	59,5	85,4	127,4
EER (EN 14511-2022)	(2)	-	4,49	4,54	5,01	5,06
Heating						
Heating capacity	(3)	kW	22,8	32,0	45,7	68,5
Compressor power input	(3)	kW	2,1	3,3	5,1	6,9
COPc	(3)		11,00	9,83	9,05	9,92
Heating capacity (EN 14511-2022)	(2)	kW	22,7	31,8	45,5	68,1
COP (EN 14511-2022)	(2)	-	8,54	8,03	7,45	8,03
Operation at maximum available capacity (MC)						
Cooling						
Total cooling capacity	(4)	kW	43,1	60,7	86,1	129,0
Compressor power input	(4)	kW	15,0	22,1	29,4	42,7
EERc	(4)	-	2,87	2,75	2,93	3,01
Heating						
Heating capacity	(5)	kW	40,4	56,5	80,7	121,0
Compressor power input	(5)	kW	7,9	11,1	15,5	23,4
COPc	(5)	-	5,13	5,09	5,22	5,17
Operation at maximum comfort (XC)						
Cooling						
Total cooling capacity	(6)	kW	42,1	59,3	85,2	127,0
Re-heating capacity	(6)	kW	10,7	75,2	22,5	33,4
Compressor power input	(6)	kW	7,3	10,4	13,3	19,6
EERc	(6)	-	7,20	7,23	8,08	8,20
Heating						
Heating capacity	(7)	kW	26,3	36,9	52,7	79,0
Compressor power input	(7)	kW	2,79	4,06	6,15	8,50
COPc	(7)	-	9,44	9,09	8,56	9,30
Refrigeration circuits		Nr	2	2	2	2
No. of compressors		Nr	2	2	2	2
Type of compressors	(8)	-	ROT	ROT	SCROLL	SCROLL
Type of supply fan	(9)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC
Number of supply fans		Nr	1	1	1	2
Type of exhaust fan	(9)	-	RAD/EC	RAD/EC	RAD/EC	RAD/EC
Number of exhaust fans		Nr	1	1	2	2
Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound power level	(10)	dB(A)	80	82	85	88
Minimum air flow		m³/h	2300	5000	7000	10000
Maximum air flow		m³/h	6000	9000	13000	19000

Erp (Energy Related Products) European Directive, that includes the Commission delegated Regulation (EU) No 2016/2281 also known as Ecodesign Lot21, does not report this Product category.
DB = dry bulb; WB = wet bulb; EERc = Thermodynamic efficiency of the system in cooling; COPc = Thermodynamic efficiency of the system in heating
(1) Outdoor air temperature: 35°C D.B./ 24°C W.B; Exhaust air temperature: 26°C D.B. Supply air humidity ratio: 11g/kg; Supply air temperature: 24°C D.B.
(2) Data according to EN 14511-2022 and external static pressure 50Pa
(3) Outdoor air temperature: 7°C D.B./6.0°C W.B. Exhaust air temperature: 20°C D.B./ 12°C W.B; Supply air temperature: 20°C D.B.
(4) Outdoor air temperature: 35°C D.B./ 24°C W.B; Exhaust air temperature: 26°C D.B. Supply air humidity ratio: 11g/kg
(5) Outdoor air temperature: 7°C D.B./6.0°C W.B.; Exhaust air temperature: 20°C D.B./12°C W.B; Supply air temperature: 30°C D.B.
(6) Outdoor air temperature: 35°C D.B./ 24°C W.B; Exhaust air temperature: 26°C D.B. Supply air temperature: 26°C D.B.
(7) Outdoor air temperature: 7°C D.B./6.0°C W.B. Exhaust air temperature: 20°C D.B./ 13.8°C W.B; Supply air temperature: 22°C D.B.
(8) ROT = Rotary compressor; SCROLL = Scroll compressor
(9) RAD = Radial fan; EC = Electronically Commutated
(10) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard

Accessories

F7B	High efficiency F7 air filter (ISO 16890 ePM1 60%)
F9B	High efficiency F9 air filter (ISO 16890 ePM1 80%)
PVARC	Variable air flow on supply and exhaust with CO_2 probe
PVARC2	Variable air flow on supply and exhaust with CO_2 probe
PVARCV	Variable air flow on supply and exhaust with CO_2+VOC probe
PVARCV2	Variable air flow on supply and exhaust with doubleCO_2+VOC probe
PVARP	Variable air flow on supply and exhaust air with supply pressure probe
PVMS	Variable air flow on supply and exhaust by an external signal
PVARCX	Variable air flow on supply and exhaust with remote CO_2 probe
MHSEX	Immersed electrodes steam humidifying module
R5	Upward return
RSSX	Remote supply air sensor
EHR	Requested heating elements
PUE	External humidifier management with 0-10V signal
CMSC11	Serial communication module for BACnet-IP supervisor
CMSC12	Serial communication module for BACnet-IP supervisor
DESM	Smoke detector
NCRC	Remote control with user interface: not required
MDMTX	Management of ambient temperature probes
MDMTUX	Management of ambient temperature and humidity probes
MDMADX	Advanced monitoring and management ambient probes
IOTX	It1IIoT industrial module for cloud based interoperability & services
VRFG	VRF gateway
CONTA2	Energy meter
CHMET	Cooling and heating capacity meter
SIX	Service interface (cable of 1,5 metres)
PREAEX	External device management to pre-handle the renewal air
CEA	Copper/aluminium exchanger on outdoor air with acryic lining
CCA	Copper/aluminium exchanger on exhaust air with acrylic lining
CPHGMA	Hot gas re-heating Cu/Al coil with capacity modulation and acrylic lining
AMMX	Spring antivibration mounts
AMMSX	Anti-seismic anti-vibration kit
AMMBX	Spring antivibration mounts for unit and humidifying module
AMMUX	Anti-seismic spring antivibration mounts for unit and humidifying module
PTCO	Set up for shipping via container
RPRCMX	Remote refrigerant leak detector for supply, additional to the standard supplied detector in the compressor compartment

Accessories whose code ends with "X" are supplied separately

Water loop applications

			Capacities	
	VERSATEMP	EQV-X	2,1 ÷ 4,1 kW	AIR, R-410A, ErP
	VERSATEMP	EQV-X	2,1 ÷ 4,1 kW	AIR, R-410A, ErP
	VERSATEMP	EVH-X	2,3 ÷ 4,2 kW	AIR, R-410A, ErP
	VERSATEMP	EVH-X SPACE	8 ÷ 31 kW	AIR, R-410A, ErP

Medium attendance applications

			Capacities	
	CLIVETPACK2	CRH-XHE2	9000-60000 m³/h 51 ÷ 387 kW	H2O, R-410A, ErP

VERSATEMP

Direct expansion high efficiency air conditioner
Water-cooled reversible heat pump. Indoor installation, vertical in full view or uncased
Capacity from 2,1 to 4,1 kW

Heat pump | Water cooled | Vertical cased | Vertical uncased | R-410A | Hermetic rotary | Electronic expansion valve | ErP compliant

- ✓Reversible heat pump
- ✓High efficiency in all the operating conditions
- ✓Vertical indoor installation either cased or uncased
- ✓Elegant design and low noise operation
- ✓Specific hydraulic circuit components for different plant solutions
- ✓Compliant with main communication protocols
- ✓Compliant with main communication protocols

Versions and configurations

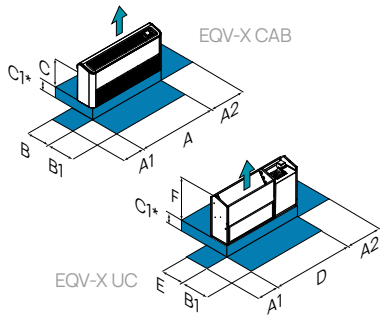
CONFIGURATION:

UC	Uncased version (without casing) (Standard)
CAB	Configuration with fairing for cased applications

RETURN:

R3	Floor air inlet (Standard)
RF	Front air inlet

Dimensions and connections



Size	EQV-X	5	7	9	15	17	21
A - Length	mm	1050	1200	1200	1350	1350	1350
B - Width	mm	240	240	240	240	240	240
C - Height	mm	520	520	520	520	520	520
D - Length	mm	945	1095	1095	1245	1245	1245
E - Width	mm	225	225	225	225	225	225
F - Height	mm	490	490	490	490	490	490
A1	mm	200	200	200	200	200	200
A2	mm	100	100	100	100	100	100
B1	mm	500	500	500	500	500	500
C1	mm	100	100	100	100	100	100
Operating weight	kg	55	61	61	64	64	68

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

(*) Only for units with floor air inlet

Technical data

Size		EQV-X	5	7	9	15	17	21
Cooling capacity	(1)	kW	2,08	2,39	2,88	3,38	3,75	4,11
Sensible capacity	(1)	kW	1,47	1,69	2,12	2,55	2,64	3,05
Compressor power input	(1)	kW	0,43	0,56	0,61	0,71	0,77	0,84
Total power input	(1)	kW	0,49	0,62	0,67	0,81	0,87	0,96
EER	(1)	-	4,19	3,78	4,2	4,09	4,22	4,2
Heating capacity	(2)	kW	2,54	3,05	3,55	4,29	4,78	5,1
Compressor power input	(2)	kW	0,47	0,63	0,7	0,77	0,92	1,04
Total power input	(2)	kW	0,53	0,69	0,76	0,87	1,02	1,16
COP	(2)	-	4,91	4,49	4,71	5,05	4,72	4,49
No. of compressors	(3)	Nr	1	1	1	1	1	1
Type of compressors		-	ROT	ROT	ROT	ROT	ROT	ROT
Supply air flow rate	(4)	m^3/h	380	460	455	750	750	830
Type of supply fan	(5)	-	CFG	CFG	CFG	CFG	CFG	CFG
Water flow (Source side)		l/s	0,12	0,14	0,17	0,19	0,21	0,24
Standard power supply	(6)	V	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Sound pressure level		dB(A)	41	41	41	45	45	47
Directive Erp (Energy related Products)								
SEER	(7)	-	3,99	4,13	4,08	4,02	3,95	4,22
$\eta_{S,C}$	(7)		151,6	157,2	155,2	152,8	150	160,8
SCOP	(7)	-	4,15	3,8	3,85	3,8	4,02	3,84
$\eta_{S,H}$	(7)		158	144	146	144	152,8	145,6

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Values read in compliance with EN14511:2022 and including the required system fan motor and water pump capacity for overcoming pressure drops inside the unit. DB = dry bulb; WB = wet bulb
(1) Ambient air 27°C D.B./19°C W.B. Exchanger water temperature 30°C / 35°C
(2) Ambient air at 20°C D.B./15°C W.B. Water temperature at plate exchanger 20°C input; The water temperature at the exchanger output is read in relation to the flow of water being chilled.
(3) ROT = rotary compressor
(4) CFG = Centrifugal fan
(5) Water flow calculated in relation to the performances in cooling
(6) The sound levels are referred to unit operating at a full load in nominal conditions. The sound pressure level is referred at a distance of 1m. from the external unit surface, with fairing, fitted to a wall. Please note that when the unit is installed in conditions other than nominal test conditions /for example near walls or obstacles in general) the sound levels may undergo substantial variation. Measurements are made in accordance to the UNI EN ISO 9614-2, with units installed over two sound reflective surfaces.
(7) Data calculated according to the EN 14825:2022

Accessories

CONT	Electronic room control with display, installed in a visible position on the unit with fairing
CONTX	Electronic room control with display, for installation on the uncased unit
CWMX	It1lElectronic room control with display, for wall installation
CIWMX	Electronic room control with display, for wall installation in a flush-mounted box
MIPC	Hydraulic pipework arrangement for loop with constant flow rate with manual valves
MIPV	Hydraulic pipework arrangement for loop with variable flow rate with 2 way ON-OFF valve
REQV	Constant flow retrofit water connections for EQV,VV,VM units
V2MODX	2-way modulating valve for disposable water system
KFVMX	Two ways modulating valve fixing kit for disposable water system
DAOJX	Air supply duct with flexible connection
GOJX	Air supply grille with flexible connection
FCVBX	Water balancing valve
PFHCX	200 mm flexible pipes for the connection to the water circuit + drop conduit
PFHC1X	500 mm flexible pipes for the connection to the water circuit + drop conduit
IFWX	Steel mesh filter on the water side
CDPX	Condensate drain pump
CDPA	Condensate drain pump, built-in
FXVFX	Painted plinths for floor fixing
FXVFHX	Floor mounted painted feet kit with front grille
FXPFX	Zinc-coated plinths for floor fixing on uncased unit
FXPMX	Increased zinc-coated plinths for floor fixing on uncased unit
BACKV	Rear painted panel for cased units
MOBA	RS485 serial port with Modbus protocol, built-in
MOBX	Modbus RS485 serial port kit
BACX	BACnet serial communication module
CSVX	Couple of manually operated shut-off valves

Accessories whose code ends with "X" are supplied separately

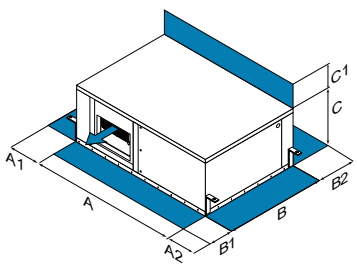
VERSATEMP

High-efficiency direct expansion autonomous air conditioner.
Water-cooled reversible heat pump. Indoor installation, horizontal uncased
Capacity from 2,3 to 4,2 kW

Heat pump | Water cooled | Horizontal: uncased | R-410A | Hermetic rotary | Electronic expansion valve | ErP compliant

- ✓Reversible heat pump
- ✓Internal and horizontal installation, ductable
- ✓High efficiency in all the operating conditions
- ✓Quiet Operation
- ✓Specific hydraulic circuit components for different plant solutions
- ✓Compliant with main communication protocols
- ✓Compliant with main communication protocols

Dimensions and connections



Size	EVH-X	5	7	9	11	15	17
A - Length	mm	1034	1034	1034	1034	1034	1034
B - Width	mm	513	513	513	513	513	513
C - Height	mm	361	361	361	386	386	386
A1	mm	100	100	100	100	100	100
A2	mm	350	350	350	350	350	350
B1	mm	350	350	350	350	350	350
B2	mm	350	350	350	350	350	350
C1	mm	100	100	100	100	100	100
Operating weight	kg	71	73	74	77	81	82

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size		EVH-X	5	7	9	11	15	17
A27/19 W30								
Cooling capacity	(1)	kW	2,26	2,83	3,16	3,45	3,87	4,16
Sensible cooling capacity		kW	1,91	2,41	2,75	2,93	3,22	3,5
Total power input		kW	0,54	0,66	0,74	0,77	0,85	0,92
EER (EN 14511:2022)		-	4,22	4,27	4,28	4,5	4,54	4,51
A20 W20								
Heating capacity	(2)	kW	2,76	3,38	3,85	4,15	4,5	4,92
Total power input		kW	0,55	0,65	0,77	0,82	0,94	1,06
COP (EN 14511:2022)		-	4,99	5,2	4,97	5,05	4,81	4,66
A20 W15								
Heating capacity	(3)	kW	2,46	2,97	3,33	3,66	3,98	4,42
Total power input		kW	0,55	0,63	0,72	0,8	0,89	1,02
COP (EN 14511:2022)		-	4,42	4,6	4,47	4,59	4,4	4,3
No. of compressors		Nr	1	1	1	1	1	1
Type of compressors	(4)	-	ROT	ROT	ROT	ROT	ROT	ROT
Supply air flow rate		m^3/h	533	533	612	684	800	800
Type of supply fan	(5)	-	CFG	CFG	CFG	CFG	CFG	CFG
Number of supply fans		Nr	1	1	1	1	1	1
Max. static pressure supply fan		Pa	40	40	40	40	40	40
Water flow (Source side)		l/s	0,13	0,16	0,18	0,2	0,22	0,24
Standard power supply		V	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Sound pressure level	(7)	dB(A)	33	33	34	34	34	35
Directive Erp (Energy related Products)								
SEER	(8)	-	3,75	4,06	3,9	4,1	4,05	4,18
$n_{S,C}$	(8)	-	142	154,4	148	156	154	159,2
SCOP	(8)	-	3,41	3,9	3,63	3,77	3,97	4,05
$n_{S,H}$	(8)		128,4	148	137,2	142,8	150,8	154

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Values read in compliance with EN14511:2022 and including the required system fan motor and water pump capacity for overcoming pressure drops inside the unit.
(1) Ambient air 27°C D.B./19°C W.B. Exchanger water temperature 30°C / 35°C
(2) Ambient air 20°C D.B. Exchanger inlet water temperature 20°C. The water temperature at the exchanger output is read in relation to the flow of water being chilled.
(3) Ambient air 20°C D.B. Exchanger inlet water temperature 15°C. The water temperature at the exchanger output is read in relation to the flow of water being chilled.
(4) ROT = rotary compressor
(5) CFG = Centrifugal fan
(6) Water flow calculated in relation to the performances in cooling
(7) Sound levels refer to the unit at full load installed on the ceiling, ducted, with minimum, standard and maximum air flow rate of the fan. Available static pressure 40 Pa. In accordance with the UNI-EN ISO 3744 regulation, the average sound pressure level refers to a distance of 1 m from the outer surface of a ducted unit installed on the ceiling. Measurements are made in accordance to the UNI EN ISO 9614-2, with units installed over two sound reflective surfaces
(8) Data calculated according to the EN 14825:2022

Accessories

CWMX	It1lElectronic room control with display, for wall installation
CIWMX	Electronic room control with display, for wall installation in a flush-mounted box
V2MODX	2-way modulating valve for disposable water system
V2ONX	2-way ON-OFF valve for variable flow-rate loop
TPF	Filter-holder frame with lateral and bottom exhaust
AMMX	Spring antivibration mounts
DAOJX	Air supply duct with flexible connection
DAIX	Return air duct
DAOIX	Air discharge and intake duct
FCVBX	Water balancing valve
VIFWX	Steel mesh strainer and hand shut-off valve
PFHCX	200 mm flexible pipes for the connection to the water circuit + drop conduit
PFHC1X	500 mm flexible pipes for the connection to the water circuit + drop conduit
CDPX	Condensate drain pump
MOBA	RS485 serial port with Modbus protocol, built-in
MOBX	Modbus RS485 serial port kit
BACX	BACnet serial communication module
VIMANX	Hand shut-off valve
BPH2OX	Shut-off valve for by-pass (water side)

Accessories whose code ends with "X" are supplied separately

VERSATEMP

Packaged air-conditioning unit
Water-cooled reversible heat pump. Indoor installation, horizontal ductable
Capacity from 4,8 to 30,8 kW

Heat pump | Water cooled | Horizontal: uncased | R-410A | Hermetic rotary (size 2.1-5.1) | Hermetic Scroll (size 7.1-12.1) | ErP compliant

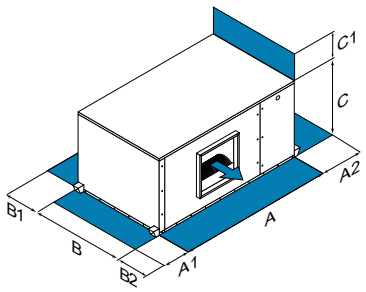
- ✓Reversible heat pump
- ✓Internal and horizontal installation, ductable
- ✓High efficiency in all the operating conditions
- ✓Air supply available in line or with angle at 90°.
- ✓Specific hydraulic circuit components for different plant solutions
- ✓Compliant with main communication protocols
- ✓Compliant with main communication protocols

Versions and configurations

APPLICATION

W	Water Loop Heat Pump application (Standard)
PW	Once-through water application

Dimensions and connections



Size	EVH-X SPACE		2.1	3.1	5.1	7.1	10.1	12.1
A - Length		mm	962	962	1167	1167	1467	1467
B - Width		mm	692	692	802	802	927	927
C - Height		mm	490	490	590	590	705	705
A1		mm	800	800	800	800	800	800
A2		mm	800	800	800	800	800	800
B1		mm	800	800	800	800	800	800
B2		mm	800	800	800	800	800	800
C1		mm	10	10	10	10	10	10
Operating weight		kg	98	103	138	151	200	225

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size	EVH-X SPACE		2.1	3.1	5.1	7.1	10.1	12.1
Cooling capacity	(1)	kW	4,81	8,46	11,2	17,9	25,9	30,8
Sensible capacity	(1)	kW	3,74	6,44	8,84	13,9	20	22,4
Compressor power input	(1)	kW	0,96	1,61	2,27	3,07	4,74	5,36
EER	(1)	-	3,59	4,05	3,58	4,17	4,24	3,97
Heating capacity	(2)	kW	7,06	9,83	13,5	22,1	32,3	36,4
Compressor power input	(2)	kW	1,46	1,99	2,56	4,02	6,04	6,23
COP	(2)	-	4,01	4,1	3,97	4,17	4,42	4,23
Refrigeration circuits		Nr	1	1	1	1	1	1
No. of compressors		Nr	1	1	1	1	1	1
Type of compressors		-	ROT	ROT	ROT	SCROLL	SCROLL	SCROLL
Supply air flow rate		m^3/h	1000	1500	2800	3800	4900	6000
Type of supply fan	(3)	-	CFG	CFG	CFG	CFG	CFG	CFG
Number of supply fans		Nr	1	1	1	1	1	1
Max. static pressure supply fan	(4)	Pa	250	270	290	310	220	410
Water flow (Source side)		l/s	0,27	0,47	0,64	1	1,47	1,72
Standard power supply		V	230/1~/50	230/1~/50	230/1~/50	400/3~/50+N	400/3~/50+N	400/3~/50+N
Sound pressure level	(5)	dB(A)	37	42	44	49	47	50
Directive Erp (Energy related Products)								
SEER	(6)		3,28	3,93	3,57	4,23	4,47	3,97
$\eta_{S,C}$	(6)		123,1	149,1	134,9	161,3	170,8	150,9
SCOP	(6)		3,81	3,82	3,81	3,91	4,08	4,01
$\eta_{S,H}$	(6)		144,4	144,8	144,4	148,4	155,2	152,4

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

(1) Ambient air 26°C DB / 19°C WB; Exchanger inlet water 30°C; Exchanger water outlet 35°C
(2) Ambient temperature 20°C; Exchanger water outlet 10°C
(3) CFG = Centrifugal fan
(4) Max available static pressure with standard electrofan at min speed and nominal air flow; According to the variability of the voltage also the value of capacity and head pressure
(5) Sound levels refer to units with full load under nominal test conditions. The sound pressure is measured at 1 m from the external surface of the unit in open field conditions
(6) Data calculated according to the EN 14825:2022

Accessories

APFLX	Filter holder with access from the lower side
CDPX	Condensate drain pump
VIFWX	Steel mesh strainer and hand shut-off valve
FCVBX	Water balancing valve
V20NX	2-way ON-OFF valve for variable flow-rate loop
BPH20X	Shut-off valve for by-pass (water side)
V2MANX	Two-way manually actuated valves for constant water flow loop
V2MODX	2-way modulating valve for disposable water system
FLOX	Water control flow switch
MOBX	Modbus RS485 serial port kit
BACX	BACnet serial communication module
CWMX	It1IElectronic room control with display, for wall installation
CIWMX	Electronic room control with display, for wall installation in a flush-mounted box
AMMX	Spring antivibration mounts
PCFMO	Panels with M0 reaction to fire class

Accessories whose code ends with "X" are supplied separately

CLIVETPACK2

Packaged air-conditioning unit
Roof Top water-cooled reversible heat pump
Capacity from 51 to 412 kW

Heat pump | Water cooled | Outdoor installation | R-410A | Hermetic Scroll | FREE-COOLING | THOR (THermodynamic Overboost Recovery) | Electronically commutated Fan | Constant Airflow | Variable Airflow | INTELLIAIR | ErP compliant

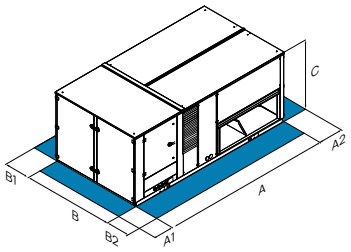
- ✓High part load efficiency
- ✓Smart Freecooling management
- ✓Enhanced air filtration with low ventilation consumption
- ✓Thermodynamic recovery
- ✓Suitable for closed or open loop water systems
- ✓Compliant with main communication protocols
- ✓Many available configurations suitable for the most different project situation
- ✓All component included on board for an enhanced installation
- ✓Remote and centralized system monitoring through INTELLIAIR

Versions and configurations

CONFIGURATION:

CAK	Configuration with single fan section for full recirculation
CBK	Configuration with single fan section for recirculation and fresh air
CCK	Configuration with double fan section for recirculation, fresh and exhaust air
CCKP	Configuration with double fan section with fresh air and THOR thermodynamic recovery

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.
CAK Configuration with single fan section for full recirculation

Size			CRH-XHE2	14.2	16.4	20.4	25.4	30.4	33.4	40.4	44.4
CAK	A - Length	mm		3560	3560	4155	4155	4155	4155	4155	4155
CAK	B - Width	mm		2300	2300	2300	2300	2300	2300	2300	2300
CAK	C - Height	mm		1405	1405	1405	1405	1405	1705	1705	1705
CAK	A1	mm		1500	1500	1500	1500	1500	1500	1500	1500
CAK	A2	mm		1500	1500	1500	1500	1500	1500	1500	1500
CAK	B1	mm		1500	1500	1500	1500	1500	1500	1500	1500
CAK	B2	mm		1500	1500	1500	1500	1500	1500	1500	1500
CBK	Operating weight	kg		1396	1456	1530	1549	1559	1602	1636	1641

Size			CRH-XHE2	49.4	54.4	60.4	70.4	80.4	90.4	100.4	110.4
CAK	A - Length	mm		3910	3910	4900	4900	4900	5520	5520	5520
CAK	B - Width	mm		2300	2300	2300	2300	2300	2300	2300	2300
CAK	C - Height	mm		2250	2250	2250	2250	2250	2250	2250	2250
CAK	A1	mm		1500	1500	1500	1500	1500	1500	1500	1500
CAK	A2	mm		1500	1500	1500	1500	1500	1500	1500	1500
CAK	B1	mm		1500	1500	1500	1500	1500	1500	1500	1500
CAK	B2	mm		1500	1500	1500	1500	1500	1500	1500	1500
CBK	Operating weight	kg		2080	2397	2613	2672	3074	3245	3461	3987

Technical data

Size			CRH-XHE2	14.2	16.4	20.4	25.4	30.4	33.4	40.4	44.4
Cooling capacity (EN 14511:2022)	(1)	kW		50,6	65,6	82,1	92,2	102,7	120,6	152,5	162,1
Sensible capacity	(1)	kW		38,5	48,9	62,9	69,8	77,4	88,9	106,0	114,0
Compressor power input	(1)	kW		9,1	13,0	15,4	17,4	19,1	21,2	26,6	28,8
EER (EN 14511:2022)	(1)	-		5,06	4,57	4,94	4,89	4,88	5,45	5,66	5,31
Heating capacity (EN 14511:2022)	(2)	kW		56,6	77,4	91,0	104,0	93,5	109,0	136,5	150,9
Compressor power input	(2)	kW		9,9	15,5	18,2	20,4	23,8	27,7	30,1	33,3
COP (EN 14511:2022)	(2)	-		4,71	4,19	4,24	4,33	3,74	3,86	4,50	4,35
Refrigeration circuits		Nr		2	2	2	2	2	2	2	2
No. of compressors		Nr		2	4	4	4	4	4	4	4
Type of compressors	(3)	-		SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
Nominal supply airflow		m³/h		9000	11500	13500	15000	17000	18500	21000	23000
Airflow range		m³/h		8500-13000	8500-13000	12000-20000	12000-20000	12000-20000	16000-25000	16000-25000	16000-25000
Type of supply fan	(4)	-		RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC
Number of supply fans		Nr		1	1	2	2	2	2	2	2
Max. static pressure supply fan	(5)	Pa		510	390	510	510	510	510	440	380
Water flow (Source side)	(6)	l/s		2,87	3,80	4,69	5,28	5,88	6,79	8,53	9,16
Standard power supply		V		400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Directive Erp (Energy related Products)											
SEER - AVERAGE Climate	(7)	-		5,12	5,22	5,51	5,46	5,35	6,15	6,99	6,58
$\eta_{S,C}$	(7)			196,8	200,7	212,4	210,2	206,1	238,1	271,6	255,3
SCOP - AVERAGE Climate	(7)	-		3,99	4,26	4,03	4,59	4,32	4,66	5,38	4,79
$\eta_{S,H}$	(7)			151,6	162,4	153,2	175,6	164,8	178,4	207,2	183,6

Size			CRH-XHE2	49.4	54.4	60.4	70.4	80.4	90.4	100.4	110.4
Cooling capacity (EN 14511:2022)	(1)	kW		173,2	183,6	213,5	252,4	278,8	334,5	361,1	387,2
Sensible capacity	(1)	kW		124	134	143	163	186	239	258	277
Compressor power input	(1)	kW		30,8	33,1	39,9	45,4	52,4	61,7	66,3	72,1
EER (EN 14511:2022)	(1)	-		5,18	4,89	4,94	5,10	4,78	4,96	4,87	4,90
Heating capacity (EN 14511:2022)	(2)	kW		165,5	179,3	198,3	235,9	264,7	316,8	346,2	378,3
Compressor power input	(2)	kW		38,0	41,0	48,1	53,2	60,5	66,8	75,0	82,6
COP (EN 14511:2022)	(2)	-		4,13	4,00	3,92	4,48	4,03	4,38	4,31	4,22
Refrigeration circuits		Nr		2	2	2	2	2	2	2	2
No. of compressors		Nr		4	4	4	4	4	4	4	4
Type of compressors	(3)	-		SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
Nominal supply airflow		m³/h		26000	29000	33000	37000	44000	51000	56000	60000
Airflow range		m³/h		22000-34000	22000-34000	29000-47000	29000-47000	29000-47000	38000-60000	38000-60000	38000-60000
Type of supply fan	(4)	-		RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC	RAD/EC
Number of supply fans		Nr		3	3	4	4	4	6	6	6
Max. static pressure supply fan	(5)	Pa		630	540	660	570	360	620	540	460
Water flow (Source side)	(6)	l/s		9,40	10,0	11,70	13,80	15,40	18,40	19,80	21,30
Standard power supply		V		400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Directive Erp (Energy related Products)											
SEER - AVERAGE Climate	(7)	-		6,29	5,07	5,61	6,07	5,47	5,80	5,17	5,31
$\eta_{S,C}$	(7)			243,7	195,0	216,6	234,9	210,7	224,0	198,9	204,5
SCOP - AVERAGE Climate	(7)	-		4,92	4,52	4,04	4,73	4,31	4,54	4,55	4,60
$\eta_{S,H}$	(7)			188,8	172,8	153,6	181,2	164,4	173,6	174,0	176,0

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

Performance refers to operation at full recirculation (CAK config.)
(1) Data referred to the following conditions: Ambient air at 27°C/19°C W.B. Water to internal exchanger 30/35°C

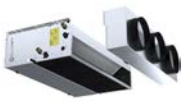
(2) Data referred to the following conditions: Ambient temperature 20°C DB; Exchanger water outlet 10°C
(3) SCROLL = Scroll compressor
(4) RAD = ventilador radial; EC = Electronically Commutated
(5) Net outside static pressure to win the outlet and intake onboard pressure drops
(4) Nominal water capacity determined in function of the cooling power
(7) Data calculated according to the EN 14825:2022

Accessories

THR	Exhaust air THOR thermodynamic energy recovery (CCKP version)
FC	Thermal FREE-COOLING
FCE	Enthalpy FREE-COOLING
M3	Downward air supply
M5	Upflow air supply
R3	Downward air return
SER	Outdoor air damper manually set
SERM	Outdoor air motorized on/off damper
SERMD	Modulating motorized outdoor air damper
PVAR	Variable airflow
PCOSM	Constant supply airflow
PAQC	Air quality probe for CO_2 rate check
PAQCV	Air quality sensor for CO_2 and VOC rate check
VENH	High static pressure fans
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)
FIFD	Electronic filter with iFD technology (ISO 16890 ePM1 90%)
PSAF	Differential pressure switch for dirty air filters
EH12	9 kW electric heaters (size 14.2÷16.4)
EH14	12 kW electric heaters (size 14.2÷30.4)
EH17	18 kW electric heaters (size 14.2÷44.4)
EH20	24 kW electric heaters (size 20.4÷110.4)
EH24	36 kW electric heaters (size 33.4÷110.4)
EH28	48 kW electric heaters (size 49.4÷110.4)
ACPC	Hydraulic pipework arrangement for loop with constant flow-rate
ACPV	Hydraulic pipework arrangement for loop with variable flow-rate
ACPM	Hydraulic pipework arrangement for system with disposable water
ACIS	Antifreeze heater protection on the water side exchanger
IFWX	Steel mesh filter on the water side
CHW2	Two-rows hot water coil
CHWER	Energy recovery from food refrigeration
3WVM	3-way modulating valve
2WVM	2-way modulating valve
LTEMP1	Application for low outdoor temperature
CPHG	Hot gas re-heating coil
HSE3	3 kg/h immersed electrodes steam humidifier (size 14.2÷30.4)
HSE5	5 kg/h immersed electrodes steam humidifier (size 14.2÷30.4)
HSE8	3 kg/h electrode boiler steam humidifier (size 14.2÷110.4)
HSE9	15 kg/h immersed electrodes steam humidifier (size 14.2÷110.4)
HWS	Water to waste evaporating wet-deck humidifier
MHP	High and low pressure gauges
CMSC9	Serial communication module for Modbus supervisor
CMSC10	Serial communication module for LonWorks supervisor
CMSC11	Serial communication module for BACnet-IP supervisor
CTERM	Remote keypad for indoor temperature and humidity control
CSOND	Temperature and humidity ambient control with built-in probes
PM	Phase monitor
PFCC	Power factor correction capacitors (cosfi > 0.95)
DML	Demand Limit
DESM	Smoke detector
SFSTC	Progressive compressor start-up device
PCM0	Sandwich panels of the handling zone in M0 fire reaction class
AMRX	Rubber antivibration mounts
RCX	Roof curb
PTCO	Set up for shipping via container

Accessories whose code ends with "X" are supplied separately

Commercial

			Capacities	
	AURA	CFF	1,5 ÷ 8,2 kW	
	AURA	CFFA	1,5 ÷ 8,2 kW	
	ELFOSPACE BOX3	CFK	2,98 ÷ 11,19 kW	
	MOOD	CFW-2	2,7 ÷ 4,9 kW	
	LARICE MP	DUE-M1 / DUA-M1	0,75 ÷ 10,6 kW	
	LARICE HP	DUE-H1 / DUA-H1	4,1 ÷ 25,3 kW	

Commercial and Industrial

		Size	Air flow rate	
	SAHU	8	1500÷15000 m³/h	ErP
	AQX	Custom	1200÷120000 m³/h	ErP FC
	CLA	Custom	1200÷120000 m³/h	ErP FC

AURA

Water terminal unit. DC fan. Indoor installation, horizontal and vertical, in full view and uncased.
Capacity from 1,5 to 8,2 kW

CFFU
uncased

CFFC
cased

Clivet participates in the ECP Programme
for "Fan Coil". Check ongoing validity of certificate on
www.eurovent-certification.com

Cool & heat | Vertical cased | Vertical: uncased | Horizontal: cased | Horizontal: uncased | Water | CONTROL4 NRG management | DC Motor

- ✓Compact and quiet, with an elegant design suitable for any room
- ✓Cased and uncased installation, vertical and horizontal, bottom and front return
- ✓Versions for 2-pipe and 4-pipe systems
- ✓DC technology for energy savings up to 70%
- ✓Reversible hydraulic connections on site

Versions and configurations

VERSION:

CFFC	Cased version for vertical and horizontal installation
CFFU	Uncased version for vertical and horizontal installation

TYPE OF SYSTEM:

CC2	2-pipe (Standard)
CC4	4 pipe

RETURN:

R3	Return from the bottom (vertical installation / from the back (horizontal installation) (Standard)
RF	Air return from the front (vertical installation) / from the bottom (horizontal installation)

CONNESSIONI IDRAULICHE:

SX	Connections on the left (Standard)
DX	Right side fittings

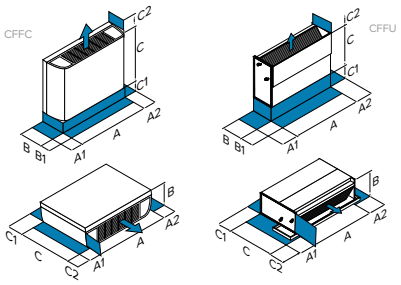
VALVOLE MONTATE A BORDO:

-	not required (Standard)
3V2	3-way ON/OFF valves for 2-pipe version
3V4	3-way ON/OFF valves for 4-pipe version

TERMOSTATO MONTATO A BORDO:

NOHMI	not required (Standard)
HMIDM	KJRP-75A control

Dimensions and connections



Size				1	2	3	4	5	6	8	9	10	12
CFFC (cased)	DIMENSIONS	TO	mm	790	790	1020	1020	1240	1240	1240	1360	1360	1360
		B	mm	200	200	200	200	200	200	200	200	200	200
		C	mm	495	495	495	495	495	495	495	495	495	591
	CLEARANCES	A1	mm	150	150	150	150	150	150	150	150	150	150
		A2	mm	150	150	150	150	150	150	150	150	150	150
		C1 (R3 only)	mm	90	90	90	90	90	90	90	90	90	90
		C2	mm	150	150	150	150	150	150	150	150	150	150
	WEIGHT	CFFC CC2 R3	kg	18	18,5	21,5	22	-	26,5	26,5	-	29,5	34,5
		CFFC CC4 R3	kg	-	-	22,5	-	27	-	-	30	-	-
CFFU (uncased)	DIMENSIONS	TO	mm	628	628	858	858	1078	1078	1078	1198	1198	1198
		B	mm	200	200	200	200	200	200	200	200	200	200
		C	mm	455	455	455	455	455	455	455	455	455	551
	CLEARANCES	A1	mm	150	150	150	150	150	150	150	150	150	150
		A2	mm	150	150	150	150	150	150	150	150	150	150
		C1	mm	90	90	90	90	90	90	90	90	90	90
		C2	mm	150	150	150	150	150	150	150	150	150	150
	WEIGHT	CFFU CC2 R3	kg	11,8	12,1	13,9	14,8	-	18,2	18,2	-	20,8	24,3
		CFFU CC4 R3	kg	-	-	15,3	-	18,7	-	-	21,3	-	-

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		CFF	1*	2	3*	4	6	8*	10*	12*
2 pipe										
High speed										
Air flow rate		m³/h	255	255	400	425	595	800	1190	1300
Cooling capacity	(1)	kW	1,5	1,95	2,35	2,85	3,9	4,85	6,35	8,25
Sensible capacity	(1)	kW	1,14	1,42	1,79	2,06	2,9	3,63	4,98	6,12
Water flow-rate	(1)	l/h	260	330	400	490	670	830	1090	1430
Water pressur drop	(1)	kPa	13,94	27,2	13,33	26,01	37,4	54,33	32,77	71,43
Heating capacity	(2)	kW	1,57	2,05	2,6	2,95	4	5,25	7,05	8,7
Water flow-rate	(2)	l/h	270	350	450	510	700	910	1220	1510
Water pressur drop	(2)	kPa	15,1	25,34	14,31	24,38	36,52	53,44	37,61	62,61
Total power input		W	15	19	16	18	28	47	87	106
Medium speed										
Air flow rate		m³/h	170	210	315	300	450	600	875	980
Cooling capacity	(1)	kW	1,06	1,66	1,94	2,13	3,2	3,92	5,19	6,65
Sensible capacity	(1)	kW	0,77	1,19	1,44	1,51	2,35	2,85	3,98	4,82
Water flow-rate	(1)	l/h	180	280	340	370	550	670	900	1140
Water pressur drop	(1)	kPa	8,21	20,88	9,98	15,06	25,91	36,81	21,75	46,17
Heating capacity	(2)	kW	1,07	1,75	2,11	2,15	3,22	4,09	5,61	6,81
Water flow-rate	(2)	l/h	190	300	370	370	560	710	980	1180
Water pressur drop	(2)	kPa	7,63	19,65	10,33	13,65	25,34	36,54	25,47	41,06
Total power input		W	9	14	11	11	17	25	44	51
Low speed										
Air flow rate		m³/h	150	150	190	190	310	420	530	680
Cooling capacity	(1)	kW	0,92	1,21	1,19	1,41	2,43	2,93	3,62	4,84
Sensible capacity	(1)	kW	0,66	0,85	0,86	0,96	1,72	2,08	2,68	3,42
Water flow-rate	(1)	l/h	160	210	210	240	420	510	630	830
Water pressur drop	(1)	kPa	6,16	12,2	4,59	7,41	15,37	21,77	11,43	25,39
Heating capacity	(2)	kW	0,92	1,25	1,34	1,42	2,39	3,04	3,83	4,85
Water flow-rate	(2)	l/h	160	220	230	240	410	530	670	830
Water pressur drop	(2)	kPa	5,84	10,25	4,5	6,64	14,22	20,47	12,5	21,68
Total power input		W	8	9	7	8	10	13	18	22
Standard power supply		V/n°/Hz	220-240/1/50							
Type of supply fan	(3)	-	CFG							
No. of supply fan		-	1	1	2	2	2	2	3	3
H Sound pressure level	(4)	dB(A)	34	39	29	32	40	45	50	50
M Sound pressure level	(4)	dB(A)	24	33	24	23	34	39	43	43
L Sound pressure level	(4)	dB(A)	21	25	18	19	30	30	31	33
H Sound power level	(4)	dB(A)	47	52	43	46	52	59	62	63
M Sound power level	(4)	dB(A)	36	46	37	37	45	51	56	57
L Sound power level	(4)	dB(A)	34	38	29	29	36	43	46	47

Airflow with free outlet (0 Pa static pressure)
(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C

(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field

* RF version available while stocks last

Size		CFF	3*	5*	9*
4 pipe					
High speed					
Air flow rate		m³/h	425	595	1190
Cooling capacity	(1)	kW	2,7	3,8	6,05
Sensible capacity	(1)	kW	1,9	2,8	4,8
Water flow-rate	(1)	l/h	460	650	1040
Water pressur drop	(1)	kPa	16,97	39,17	53,66
Heating capacity	(2)	kW	2,3	2,88	4,6
Water flow-rate	(2)	l/h	200	250	390
Water pressur drop	(2)	kPa	28,16	55,37	132,32
Total power input		W	20	29	92
Medium speed					
Air flow rate		m³/h	280	461	887
Cooling capacity	(1)	kW	1,94	3,18	5
Sensible capacity	(1)	kW	1,3	2,3	3,88
Water flow-rate	(1)	l/h	330	550	860
Water pressur drop	(1)	kPa	9,73	28,35	36,96
Heating capacity	(2)	kW	1,78	2,49	3,95
Water flow-rate	(2)	l/h	150	210	340
Water pressur drop	(2)	kPa	18,45	43	104,19
Total power input		W	11	17	46
Low speed					
Air flow rate		m³/h	158	324	564
Cooling capacity	(1)	kW	1,1	2,32	3,43
Sensible capacity	(1)	kW	0,7	1,61	2,53
Water flow-rate	(1)	l/h	190	400	590
Water pressur drop	(1)	kPa	3,51	16,91	19,07
Heating capacity	(2)	kW	1,22	2	3,02
Water flow-rate	(2)	l/h	100	170	260
Water pressur drop	(2)	kPa	10,08	29,2	63,73
Total power input		W	8	11	19
Standard power supply		V/n°/Hz			
Type of supply fan	(3)	-			
No. of supply fan		-	2	2	3
H Sound pressure level	(4)	dB(A)	32	40	50
M Sound pressure level	(4)	dB(A)	23	34	43
L Sound pressure level	(4)	dB(A)	19	30	31
H Sound power level	(4)	dB(A)	46	52	62
M Sound power level	(4)	dB(A)	37	45	56
L Sound power level	(4)	dB(A)	29	36	46

Airflow with free outlet (0 Pa static pressure)
(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C

(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field

* RF version available while stocks last

Accessories

3V2SX/3V2DX	Three-way valve kit for 2-pipe type "on/off" system (3V2SX for left side fittings / 3V2DX for right side fittings)
3V4SX/3V4DX	Three-way valve kit for 4-pipe type "on/off" system (3V4SX for left side fittings / 3V4DX for right side fittings)
COADX	It1IPair of adapters 3/4 F Eurokonus > 1/2 female (for 2-pipe units)
BRVHX	Auxiliary condensate collection tray ausiliaria for vertical/horizontal installation
KPDX	Feet kit
CCM09	Wired centraliser with weekly scheduler
KJR90X	KJR90 electronic room control for wall installation
PROL5X	5-metre extension lead for connecting the KJR-90D electronic wall-mounted room controller
CCM30-BX	Touch-key indoor units' centralized controller
KJR150X	Indoor units' group controller
HMIFDCX	KJRP-75A electronic wired control for on-board or wall-mounted assembly (for DC versions)
EXTENX	KJRP-75 wired control connection cable extension (2m)
CCM-180A/WS	Wired centraliser with 6.2" touchscreen display and weekly scheduler
CCM-270A/WS	Wired centraliser with 10.1" touchscreen display and weekly scheduler
KCMDX	Motor connection cables for units with connections on the right (for DC versions and size 9-10-12)

Accessories whose code ends with "X" are supplied separately

AURA

Water terminal unit. Indoor installation, horizontal and vertical, in full view and uncased.
Capacity from 1,6 to 8,2 kW

CFFAU
uncased

CFFAC
cased

Clivet participates in the ECP Programme for "Fan Coil". Check ongoing validity of certificate on www.eurovent-certification.com

Cool & heat | Vertical cased | Vertical: uncased | Horizontal: cased | Horizontal: uncased | Water | CONTROL4 NRG management

- ✓Compact and quiet, with an elegant design suitable for any room
- ✓Cased and uncased installation, vertical and horizontal, bottom and front return
- ✓Versions for 2-pipe and 4-pipe systems
- ✓Can be easily managed by external control systems
- ✓Reversible hydraulic connections on site

Versions and configurations

VERSION:

CFFAC	Cased version for vertical and horizontal installation
CFFAU	Uncased version for vertical and horizontal installation

TYPE OF SYSTEM:

CC2	2-pipe (Standard)
CC4	4 pipe

RETURN:

R3	Return from the bottom (vertical installation / from the back (horizontal installation) (Standard)
RF	Air return from the front (vertical installation) / from the bottom (horizontal installation)

CONNESSIONI IDRAULICHE:

SX	Connections on the left (Standard)
DX	Right side fittings

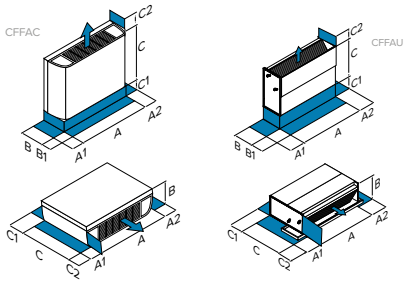
VALVOLE MONTATE A BORDO:

-	not required (Standard)
3V2	3-way ON/OFF valves for 2-pipe version
3V4	3-way ON/OFF valves for 4-pipe version

TERMOSTATO MONTATO A BORDO:

NOHMI	not required (Standard)
HMIDM	KJRP-86R control mounted on board

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size			CFFA	1	2	3	4	5	6	8	9	10	12
CFFAC (cased)	DIMENSIONS	A - Length	mm	790	790	1020	1020	1240	1240	1240	1360	1360	1360
		B - Width	mm	200	200	200	200	200	200	200	200	200	200
		C - Height	mm	495	495	495	495	495	495	495	495	495	591
	CLEARANCES	A1	mm	150	150	150	150	150	150	150	150	150	150
		A2	mm	150	150	150	150	150	150	150	150	150	150
		C1 (R3 only)	mm	90	90	90	90	90	90	90	90	90	90
		C2	mm	150	150	150	150	150	150	150	150	150	150
	WEIGHT	CFFAC CC2 R3	kg	16,3	16,7	20	20,8	-	25,4	26,3	-	28,5	34
		CFFAC CC4 R3	kg	-	-	21,3	-	25,9	-	-	29	-	-
CFFAU (uncased)	DIMENSIONS	A - Length	mm	628	628	858	858	1078	1078	1078	1198	1198	1198
		B - Width	mm	200	200	200	200	200	200	200	200	200	200
		C - Height	mm	455	455	455	455	455	455	455	455	455	551
	CLEARANCES	A1	mm	150	150	150	150	150	150	150	150	150	150
		A2	mm	150	150	150	150	150	150	150	150	150	150
		C1	mm	90	90	90	90	90	90	90	90	90	90
		C2	mm	150	150	150	150	150	150	150	150	150	150
	WEIGHT	CFFAU CC2 R3	kg	11,6	12	13,9	14,8	-	18,2	18,8	-	21,7	25,2
		CFFAU CC4 R3	kg	-	-	15,3	-	18,7	-	-	22,2	-	-

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		CFFA	1*	2	3*	4	6	8*	10*	12*
2 pipe										
High speed										
Air flow rate		m³/h	255	255	400	425	595	800	1150	1300
Cooling capacity	(1)	kW	1,65	2,25	2,65	3,05	4,2	5,35	6,75	8,25
Sensible capacity	(1)	kW	1,25	1,65	2,05	2,23	3,05	3,96	5,09	6,08
Water flow-rate	(1)	l/h	280	390	450	520	720	920	1160	1410
Water pressur drop	(1)	kPa	15,75	33,19	18,03	26,71	41,15	61,48	40,26	64,72
Heating capacity	(2)	kW	1,85	2,35	3,05	3,15	4,3	5,7	7,15	8,5
Water flow-rate	(2)	l/h	320	400	520	540	740	980	1230	1460
Water pressur drop	(2)	kPa	15,13	33,19	17,56	23,31	37,2	60,89	42,16	61,96
Total power input		W	35	40	47	47	51	91	110	118
Medium speed										
Air flow rate		m³/h	165	192	273	284	450	574	885	1132
Cooling capacity	(1)	kW	1,22	1,85	2,02	2,26	3,38	4,25	5,8	7,52
Sensible capacity	(1)	kW	0,88	1,35	1,5	1,61	2,43	3,08	4,36	5,53
Water flow-rate	(1)	l/h	210	320	350	390	580	730	1000	1290
Water pressur drop	(1)	kPa	9,33	22,37	11,18	15,66	27,07	41,44	29,2	55,03
Heating capacity	(2)	kW	1,29	1,87	2,24	2,28	3,43	4,36	5,81	7,6
Water flow-rate	(2)	l/h	220	320	380	390	590	750	1000	1300
Water pressur drop	(2)	kPa	8,22	22,37	10,28	12,57	24,5	37,73	28,68	47,46
Total power input		W	17	24	26	26	32	54	89	104
Low speed										
Air flow rate		m³/h	142	139	180	184	319	404	591	836
Cooling capacity	(1)	kW	1,09	1,4	1,4	1,58	2,48	3,31	4,24	5,87
Sensible capacity	(1)	kW	0,78	1	1,02	1,08	1,73	2,34	3,12	4,21
Water flow-rate	(1)	l/h	190	240	240	270	430	570	730	1010
Water pressur drop	(1)	kPa	7,37	4,64	5,48	8,42	15,71	26,62	16,15	34,88
Heating capacity	(2)	kW	1,13	1,42	1,52	1,6	2,52	3,31	4,3	5,9
Water flow-rate	(2)	l/h	190	240	260	280	430	570	740	1020
Water pressur drop	(2)	kPa	6,64	4,64	5,43	6,11	13,75	21,79	14,66	28,84
Total power input		W	14	15	14	14	19	35	64	82
Standard power supply		V/n°/Hz	220-240/1/50							
Type of supply fan	(3)	-	CFG							
No. of supply fan		-	1	1	2	2	2	2	3	3
H Sound pressure level	(4)	dB(A)	35	42	34	34	40	47	50	50
M Sound pressure level	(4)	dB(A)	24	35	24	25	35	40	44	45
L Sound pressure level	(4)	dB(A)	21	27	18	19	31	31	33	37
H Sound power level	(4)	dB(A)	47	53	46	47	52	59	62	63
M Sound power level	(4)	dB(A)	35	47	37	38	45	51	56	58
L Sound power level	(4)	dB(A)	34	39	31	32	37	43	46	50

Airflow with free outlet (0 Pa static pressure)
(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C

(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field

* RF version available while stocks last

Size		CFFA	3*	5*	9*
4 pipe					
High speed					
Air flow rate		m³/h	425	595	1150
Cooling capacity	(1)	kW	2,89	4,09	6,4
Sensible capacity	(1)	kW	2,05	2,94	4,9
Water flow-rate	(1)	l/h	500	700	1100
Water pressur drop	(1)	kPa	21,38	47,7	63,05
Heating capacity	(2)	kW	2,45	2,95	4,65
Water flow-rate	(2)	l/h	210	250	400
Water pressur drop	(2)	kPa	31,95	58,17	135,21
Total power input		W	47	51	110
Medium speed					
Air flow rate		m³/h	284	430	885
Cooling capacity	(1)	kW	2,05	3,35	5,59
Sensible capacity	(1)	kW	1,39	2,38	4,25
Water flow-rate	(1)	l/h	350	570	960
Water pressur drop	(1)	kPa	11,95	33,04	48,47
Heating capacity	(2)	kW	1,7	2,5	4,09
Water flow-rate	(2)	l/h	150	210	350
Water pressur drop	(2)	kPa	16,83	43,35	111,75
Total power input		W	26	32	89
Low speed					
Air flow rate		m³/h	184	319	591
Cooling capacity	(1)	kW	1,25	2,35	4
Sensible capacity	(1)	kW	0,84	1,6	2,95
Water flow-rate	(1)	l/h	210	400	690
Water pressur drop	(1)	kPa	4,99	18,22	27,23
Heating capacity	(2)	kW	1,19	2	3,19
Water flow-rate	(2)	l/h	100	170	270
Water pressur drop	(2)	kPa	9,52	29,2	70,91
Total power input		W	14	19	64
Standard power supply		V/n°/Hz			
Type of supply fan	(3)	-			
No. of supply fan		-	2	2	3
H Sound pressure level	(4)	dB(A)	34	40	50
M Sound pressure level	(4)	dB(A)	25	33	44
L Sound pressure level	(4)	dB(A)	19	24	33
H Sound power level	(4)	dB(A)	47	52	62
M Sound power level	(4)	dB(A)	38	45	56
L Sound power level	(4)	dB(A)	32	37	46

Airflow with free outlet (0 Pa static pressure)
(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C

(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field

* RF version available while stocks last

Accessories

3V2SX/ 3V2DX	Three-way valve kit for 2-pipe type "on/off" system (3V2SX for left side fittings / 3V2DX for right side fittings)
3V4SX/ 3V4DX	Three-way valve kit for 4-pipe type "on/off" system (3V4SX for left side fittings / 3V4DX for right side fittings)
COADX	It1lPair of adapters 3/4 F Eurokonus > 1/2 female (for 2-pipe units)
BRVHX	Auxiliary condensate collection tray for vertical/ horizontal installation
KPDX	Feet kit
DCPRX	Power interface to control 4 Fancoils for 2-4 systems
HMIFACX	KJRP-86R wired controller for on-board or wall installation
BOXX	Wall installation with concealed box KJRP-86R
HID-TIFX	Thermostat for fancoil unit with 0-10V port and water probe included (AC/EC fan control)

Accessories whose code ends with "X" are supplied separately

ELFOSPACE BOX3

Water terminal unit. Indoor installation, cassette type
Capacity from 2,98 to 11,19 kW

Clivet participates in the ECP Programme for "Fan Coil". Check ongoing validity of certificate on www.eurovent-certification.com

Cool & heat | Cassette | Water | DC Motor | CONTROL4 NRG management

- ✓Two modules (600 x 600 and 800 x 800) for perfect architectural integration
- ✓Versions for 2-pipe and 4-pipe systems
- ✓DC technology for energy savings up to 70%
- ✓Remote control and condensate drain pump supplied as standard

Versions and configurations

COIL CONFIGURATION:

CC2	Coil configuration for 2-pipe system (Standard)
CC4	Coil configuration for 4-pipe system

STANDARD CONFIGURATION:

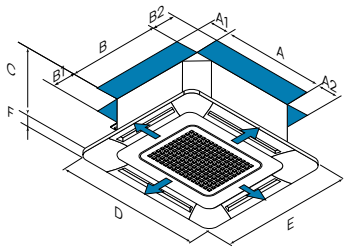
IRPCB	Electronics with infrared remote control (Standard)
R05	R05 infrared remote control (Standard)
VEC	High efficiency EC fan (Standard)
XYE	XYE communication port (Standard)

Technical data

Size		CFK	007.0	011.0	015.0	021.0	031.0	041.0
2 pipe								
High speed								
Air flow rate		m³/h	535	610	781	1175	1581	1871
Cooling capacity	(1)	kW	2,98	3,96	4,2	5,93	7,87	10,7
Sensible capacity	(1)	kW	2,49	3,2	3,45	5	6,68	9,04
Water flow-rate	(1)	l/h	513	681	722	1020	1354	1925
Water pressur drop	(1)	kPa	10	11,5	12,3	23,8	22,3	36,6
Heating capacity	(2)	kW	2,61	4,08	4,95	6,06	9,16	8,98
Water flow-rate	(2)	l/h	449	702	851	1042	1576	1732
Water pressur drop	(2)	kPa	12,1	12,7	9,4	25,9	28,8	49,2
Total power input		W	15	37	43	41	85	137
Medium speed								
Air flow rate		m³/h	429	477	611	987	1371	1415
Cooling capacity	(1)	kW	2,53	3,26	3,48	5,3	7,12	8,82
Sensible capacity	(1)	kW	2,08	2,57	2,74	4,34	5,95	7,03
Water flow-rate	(1)	l/h	435	561	599	912	1225	1517
Water pressur drop	(1)	kPa	7	8,2	8,6	19,1	18,1	22,7
Heating capacity	(2)	kW	2,31	3,34	3,99	5,72	8,54	9,37
Water flow-rate	(2)	l/h	397	574	686	985	1469	1612
Water pressur drop	(2)	kPa	8,5	8,6	8,2	20,1	24	31,2
Total power input		W	9	15	28	30	59	58
Low speed								
Air flow rate		m³/h	322	381	494	768	1236	1198
Cooling capacity	(1)	kW	2	2,76	3,01	4,4	6,67	7,48
Sensible capacity	(1)	kW	1,59	2,1	2,31	3,52	5,5	5,97
Water flow-rate	(1)	l/h	344	475	518	757	1147	1287
Water pressur drop	(1)	kPa	5	6,5	7,4	13,6	16,3	16,4
Heating capacity	(2)	kW	2,24	2,73	3,26	5,32	7,9	8,68
Water flow-rate	(2)	l/h	385	470	561	915	1359	1493
Water pressur drop	(2)	kPa	5,3	6	6,1	19,9	20,7	23,3
Total power input		W	5	9	21	20	45	39
4 pipe								
High speed								
Air flow rate		m³/h	493	669	673	1184	1642	1708
Cooling capacity	(1)	kW	2,16	2,78	2,77	4,96	7,98	8,04
Sensible capacity	(1)	kW	1,86	2,4	2,33	4,15	6,68	6,58
Water flow-rate	(1)	l/h	372	478	476	853	1373	1383
Water pressur drop	(1)	kPa	17,4	13,15	16,8	14,8	33,9	33
Heating capacity	(2)	kW	3,13	3,71	3,94	6,15	9,75	9,93
Water flow-rate	(3)	l/h	269	319	339	529	839	854
Water pressur drop	(3)	kPa	23,5	24,1	26,8	25,3	42,4	48,7
Total power input		W	24	38	42	62	121	139
Medium speed								
Air flow rate		m³/h	395	523	526	997	1421	1297
Cooling capacity	(1)	kW	1,86	2,38	2,38	4,38	7,25	6,62
Sensible capacity	(1)	kW	1,58	2	1,97	3,71	5,99	5,51
Water flow-rate	(1)	l/h	320	409	409	753	1247	1139
Water pressur drop	(1)	kPa	13,5	9,4	13,1	11,5	30	22,6
Heating capacity	(2)	kW	2,63	3,14	3,3	5,43	8,96	8,33
Water flow-rate	(3)	l/h	226	270	284	467	771	716
Water pressur drop	(3)	kPa	17,1	17,9	19,2	20,5	36,6	32,5
Total power input		W	18	35	27	44	83	70
Low speed								
Air flow rate		m³/h	295	415	425	783	1285	1096
Cooling capacity	(1)	kW	1,49	2,05	2,07	3,64	6,7	5,84
Sensible capacity	(1)	kW	1,24	1,67	1,7	3,05	5,5	4,81
Water flow-rate	(1)	l/h	256	353	356	626	1152	1004
Water pressur drop	(1)	kPa	9,3	7	10,3	8,1	24	17,7
Heating capacity	(2)	kW	2,08	2,65	2,83	4,61	8,42	7,51
Water flow-rate	(3)	l/h	179	228	243	396	724	646
Water pressur drop	(3)	kPa	11,3	13,1	14,5	14,5	32,6	27
Total power input		W	14	30	20	30	66	49
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(4)	-	CFG					
No. of supply fan		-	1					
H Sound pressure level	(5)	dB(A)	39	42	43	43	48	49
M Sound pressure level	(5)	dB(A)	33	36	38	39	44	43
L Sound pressure level	(5)	dB(A)	27	30	32	33	41	39
H Sound power level	(5)	dB(A)	51	54	59	55	60	61
M Sound power level	(5)	dB(A)	45	48	50	51	56	55
L Sound power level	(5)	dB(A)	39	42	44	45	53	51

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C
(3) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C
(4) CFG = centrifugal fan
(5) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size		CFK	007.0	011.0	015.0	021.0	031.0	041.0
CC2	A - Length	mm	575	575	575	840	840	840
CC2	B - Width	mm	575	575	575	840	840	840
CC2	C - Height	mm	261	261	261	230	300	300
CC2	D - Length	mm	647	647	647	950	950	950
CC2	E - Width	mm	647	647	647	950	950	950
CC2	F - Height	mm	50	50	50	45	45	45
CC2	A1	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC2	A2	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC2	B1	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC2	B2	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC2	Operating weight	kg	16,5+2,5	16,5+2,5	16,5+2,5	23+6	27+6	27+6
CC4	A - Length	mm	575	575	575	840	840	840
CC4	B - Width	mm	575	575	575	840	840	840
CC4	C - Height	mm	261	261	261	300	300	300
CC4	D - Length	mm	647	647	647	950	950	950
CC4	E - Width	mm	647	647	647	950	950	950
CC4	F - Height	mm	50	50	50	45	45	45
CC4	A1	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC4	A2	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC4	B1	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC4	B2	mm	>1000	>1000	>1000	>1000	>1000	>1000
CC4	Operating weight	kg	16,7+2,5	16,7+2,5	16,7+2,5	27,5+6	30+6	30+6

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.
CC2 2 pipes
CC4 4 pipes

Accessories

KJR90X	KJR90 electronic room control for wall installation
KJR150X	Indoor units' group controller
PROL5X	5-metre extension lead for connecting the KJR-90D electronic wall-mounted room controller
360PX	Air return and supply frame with supply at 360°
CCM30BX	Touch-key indoor units' centralized controller
CCM09	Plastic frame for air supply and return (Standard)
CCM-180A/WS	Wired centraliser with 6.2" touchscreen display and weekly scheduler (compatible with 021.0 to 041.0)
CCM-270A/WS	Wired centraliser with 10.1" touchscreen display and weekly scheduler (compatible with 021.0 to 041.0)
3V2X	Three-way valve kit for 2-pipe type "on/off" system
3V4X	Three-way valve kit for 4-pipe type "on/off" system
DTX	Auxiliary condensate collection tray

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

MOOD

Water terminal unit. Indoor installation, wall-mounted with cabinet
Capacity from 2,7 to 4,87 kW

Clivet participates in the ECP Programme for "Fan Coil". Check ongoing validity of certificate on www.eurovent-certification.com

Cool & heat | Vertical cased | Water | DC Motor | CONTROL4 NRG management

- ✓Compact and quiet, for residential and commercial applications
- ✓DC technology for energy savings up to 70%
- ✓Remote control, three-way valve and Modbus port supplied as standard

Versions and configurations

STANDARD CONFIGURATION:

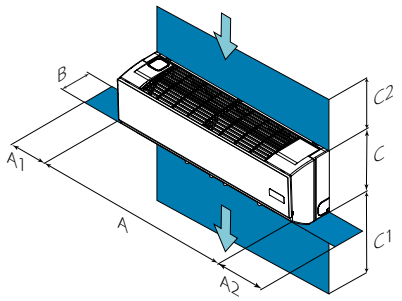
IRPCB	Electronics with infrared remote control (Standard)
R05	R05 infrared remote control (Standard)
VEC	High efficiency EC fan (Standard)
3V2	Three-way valve kit for 2-pipe "on/off" system (Standard)
CRCC	Boiler/pump potential free contats (Standard)

Accessories

KJR90X	KJR90 electronic room control for wall installation
KJR150X	Indoor units' group controller
PROL5X	5-metre extension lead for connecting the KJR-90D electronic wall-mounted room controller
CCM30BX	Touch-key indoor units' centralized controller
CCM09	Wired centraliser with weekly scheduler
CCM-180A/WS	Wired centraliser with 6.2" touchscreen display and weekly scheduler
CCM-270A/WS	Wired centraliser with 10.1" touchscreen display and weekly scheduler

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

Dimensions and connections



Size	CFW-2	1	2	3	4	5
A - Length	mm	916	916	916	1074	1074
B - Width	mm	233	233	233	237	237
C - Height	mm	290	290	290	317	317
A1	mm	300	300	300	300	300
A2	mm	300	300	300	300	300
C1	mm	>2000	>2000	>2000	>2000	>2000
C2	mm	300	300	300	300	300
Operating weight	kg	12,7	12,7	12,7	14,9	14,9

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Technical data

Size		CFW-2	1	2	3	4	5
2 pipe							
High speed							
Air flow rate		m³/h	492	585	825	755	979
Cooling capacity	(1)	kW	2,70	2,91	3,81	3,96	4,87
Sensible capacity	(1)	kW	2,15	2,33	3,18	2,66	4,11
Water flow-rate	(1)	l/h	465	501	656	682	839
Water pressur drop	(1)	kPa	31,6	37,2	56,8	41,2	50,7
Heating capacity	(2)	kW	2,12	3,23	4,3	4,84	5,26
Water flow-rate	(2)	l/h	365	556	741	751	906
Water pressur drop	(2)	kPa	37,5	40,6	61,9	43,7	51,7
Total power input		W	13	15	34	26	38
Medium speed							
Air flow rate		m³/h	454	485	689	653	849
Cooling capacity	(1)	kW	2,59	2,54	3,3	3,52	4,26
Sensible capacity	(1)	kW	2,03	2	2,71	2,33	3,56
Water flow-rate	(1)	l/h	445	437	568	606	733
Water pressur drop	(1)	kPa	29	30	41	34	40
Heating capacity	(2)	kW	2,02	2,77	3,65	3,81	4,68
Water flow-rate	(2)	l/h	347	476	628	655	805
Water pressur drop	(2)	kPa	34,9	31,5	47,5	33,8	42,8
Total power input		W	11	11	22	18	26
Low speed							
Air flow rate		m³/h	400	413	590	552	717
Cooling capacity	(1)	kW	2,39	2,19	2,88	3,08	3,79
Sensible capacity	(1)	kW	1,85	1,71	2,31	2,01	3,1
Water flow-rate	(1)	l/h	411	377	495	531	652
Water pressur drop	(1)	kPa	25,4	23,4	33	27,1	33,7
Heating capacity	(2)	kW	1,86	2,42	3,09	3,26	3,96
Water flow-rate	(2)	l/h	320	416	531	561	681
Water pressur drop	(2)	kPa	30,2	25,1	35,7	26,3	33
Total power input		W	10	9	15	13	18
Standard power supply		V/n°/Hz	220-240/1/50				
Type of supply fan	(3)	-	TGZ DC				
No. of supply fan		-	1				
H Sound pressure level	(4)	dB(A)	32	32	45	38	44
M Sound pressure level	(4)	dB(A)	30	27	39	34	40
L Sound pressure level	(4)	dB(A)	27	23	35	30	35
H Sound power level	(4)	dB(A)	44	44	57	50	56
M Sound power level	(4)	dB(A)	42	39	51	46	52
L Sound power level	(4)	dB(A)	39	35	47	42	47

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C
(3) TGZ DC = DC Brushless tangential fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems. The sound pressure level refers to 1 m from the external surface of the unit operating in the open field

LARICE MP

Water terminal unit. Indoor installation, horizontal and vertical uncased ductable
Capacity from 0,75 to 10,6 kW

Clivet participates in the ECP Programme for "Fan Coil". Check ongoing validity of certificate on www.eurovent-certification.com

Cool & heat | Horizontal and vertical: cased | Water | EC Motor | CONTROL4 NRG management

✓For ducted applications with medium head

✓Versions with high efficiency EC motor (DUE) and AC motor (DUA)

✓Also in the version for a 4-pipe system (DUA)

Versions and configurations

TYPE OF SYSTEM:

CC2	2-pipe (Standard)
CC4	4 pipe

INSTALLAZIONE:

INH/V	Horizontal/vertical uncased (Standard)

RIPRESA DELL'ARIA:

RP	From the back / From the bottom (Standard)
RB	From the bottom / From the front

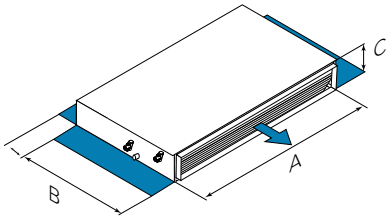
CONNESSIONI IDRAULICHE

SX	Connections on the left (Standard)
DX	Right side fittings

VALVOLE MONTATE A BORDO:

-	not required (Standard)
2V2	2-way ON/OFF valves for 2-pipe version
3V2	3-way ON/OFF valves for 2-pipe version
2V4	2-way ON/OFF valves for 4-pipe version
3V4	3-way ON/OFF valves for 4-pipe version

Dimensions and connections



Size		DUE/DUA-M1	12	14	22	24	32	34	42	44	52	54	62	64	72	82	92	102	112	122
DUA-M1	A - Length	mm	689	689	689	904	904	1119	904	1334	1119	1549	1119	1549	1334	1334	1549	1549	1549	1549
	B - Width	mm	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511
	C - Height	mm	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248
DUE-M1	A - Length	mm	474	474	474	689	689	904	689	1119	904	1549	904	1764	1119	1119	1549	1549	1764	1764
	B - Width	mm	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511
	C - Height	mm	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248
Weight	DUA-M1 - CC2	kg	18,5		19,5		25,4		26,7		26,5		27,9		27,9	29,0	47,2	48,9	47,4	49,1
	DUA-M1 - CC4	kg		19,7		26,9		28,3		29,7		49,5		49,7						
	DUE-M1 - CC2	kg	13,8		14,3		16,9		17,9		22,6		23,6		26,4	27,5	44,5	46,6	48,9	51,6
	DUE-M1 - CC4	kg		14,5		18,1		24,0		28,1		46,7		51,3						

CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		DUE-M1	12	22	32	42	52	62	72	82	92	102	112	122
2 pipe														
High speed														
Air flow rate		m³/h	290	290	360	360	630	630	980	980	1410	1410	1923	1923
External static pressure		Pa	75	75	68	68	70	70	66	66	72	72	70	70
Cooling capacity	(1)	kW	1,65	1,95	2,23	2,48	3,55	4,25	5,43	5,91	7,67	8,47	10,00	10,60
Sensible capacity	(1)	kW	1,30	1,45	1,63	1,78	2,68	3,04	4,21	4,45	5,86	6,33	7,80	8,20
Water flow-rate	(1)	l/h	284	336	384	427	611	732	935	922	1321	1459	1722	1826
Water pressur drop	(1)	kPa	9,2	15,4	23,0	13,0	19,0	31,0	23,0	15,0	21,0	18,0	39,0	40,0
Heating capacity	(2)	kW	1,90	2,00	2,37	2,52	4,00	4,37	6,27	6,55	8,24	9,35	10,70	11,50
Water flow-rate	(2)	l/h	327	345	408	434	689	753	1080	1128	1419	1611	1843	1981
Water pressur drop	(2)	kPa	8,0	12,3	22,0	13,0	18,0	26,6	23,0	14,0	19,0	18,0	43,0	39,0
Total power input		W	37	37	39	39	64	64	98	98	155	155	246	246
Medium speed														
Air flow rate		m³/h	225	225	305	305	540	540	850	850	1175	1175	1638	1638
External static pressure		Pa	50	50	50	50	50	50	50	50	50	50	50	50
Cooling capacity	(1)	kW	1,39	1,55	1,97	2,17	3,21	3,79	4,94	5,34	6,81	7,46	8,60	9,25
Sensible capacity	(1)	kW	1,00	1,15	1,42	1,54	2,38	2,68	3,77	3,97	5,11	5,48	6,50	7,10
Water flow-rate	(1)	l/h	239	267	339	374	553	653	851	841	1173	1285	1481	1593
Water pressur drop	(1)	kPa	6,7	10,8	19,0	10,0	16,0	25,0	19,0	13,0	17,0	14,0	29,0	30,0
Heating capacity	(2)	kW	1,50	1,65	2,05	2,17	3,51	3,80	5,56	5,77	7,09	7,96	9,25	10,00
Water flow-rate	(2)	l/h	258	284	353	374	605	655	958	994	1221	1371	1593	1722
Water pressur drop	(2)	kPa	5,5	8,1	17,0	10,0	15,0	21,0	19,0	12,0	15,0	14,0	34,0	30,0
Total power input		W	21	21	29	29	43	43	67	67	100	100	160	160
Low speed														
Air flow rate		m³/h	110	110	240	240	430	430	595	595	900	900	1238	1238
External static pressure		Pa	10	10	32	32	34	34	24	24	30	30	28	28
Cooling capacity	(1)	kW	0,75	0,80	1,64	1,77	2,72	3,14	3,84	4,09	5,66	6,12	6,75	7,20
Sensible capacity	(1)	kW	0,55	0,60	1,17	1,25	1,99	2,20	2,83	2,95	4,15	4,40	5,05	5,50
Water flow-rate	(1)	l/h	129	138	282	305	469	541	661	661	975	1054	1163	1240
Water pressur drop	(1)	kPa	3,5	3,5	13,0	7,0	12,0	18,0	12,0	8,0	12,0	10,0	19,0	20,0
Heating capacity	(2)	kW	0,80	0,80	1,65	1,73	2,88	3,08	4,07	4,19	5,69	6,26	7,00	8,00
Water flow-rate	(2)	l/h	138	138	284	298	496	531	701	722	980	1078	1206	1378
Water pressur drop	(2)	kPa	1,7	2,6	12,0	7,0	10,0	14,0	11,0	6,0	10,0	9,0	25,0	20,0
Total power input		W	7	7	18	18	26	26	30	30	52	52	84	84
Standard power supply		V/n°/Hz	220-240/1/50											
Type of supply fan	(3)	-	CFG EC											
No. of supply fan		-	1	1	1	1	2	2	2	2	2	2	3	3
H Sound pressure level (supply)	(4)	dB(A)	55	55	55	55	58	58	62	62	64	64	66	66
M Sound pressure level (supply)	(4)	dB(A)	48	48	48	48	49	49	55	55	57	57	59	59
L Sound pressure level (supply)	(4)	dB(A)	43	44	44	44	47	47	52	52	54	54	56	56
H Sound pressure level (return + irradiated)	(4)	dB(A)	41	42	42	42	46	46	53	53	52	52	54	54
M Sound pressure level (return + irradiated)	(4)	dB(A)	29	38	38	38	42	42	44	44	47	47	49	49
L Sound pressure level (return + irradiated)	(4)	dB(A)	27	36	36	36	39	39	42	42	45	45	47	47

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.

Size		DUE-M1	14	24	34	44	54	64
4 pipe								
High speed								
Air flow rate		m³/h	315	625	790	980	1240	1425
External static pressure		Pa	58	58	60	65	60	63
Cooling capacity	(1)	kW	1,65	2,23	3,55	5,35	7,67	10,00
Sensible capacity	(1)	kW	1,30	1,63	2,67	4,13	5,86	7,80
Water flow-rate	(1)	l/h	284	384	611	922	1321	1722
Water pressur drop	(1)	kPa	9,2	23,0	19,0	23,0	21,0	39,0
Heating capacity	(2)	kW	1,29	1,92	3,03	4,22	6,31	7,80
Water flow-rate	(2)	l/h	111	165	261	363	543	672
Water pressur drop	(2)	kPa	3,2	9,0	5,0	9,0	18,0	29,0
Total power input		W	37	39	67	98	155	246
Medium speed								
Air flow rate		m³/h	225	305	540	835	1175	1638
External static pressure		Pa	50	50	50	50	50	50
Cooling capacity	(1)	kW	1,39	1,97	3,21	4,88	6,81	8,60
Sensible capacity	(1)	kW	1,00	1,42	2,38	3,71	5,11	6,50
Water flow-rate	(1)	l/h	239	339	553	841	1173	1481
Water pressur drop	(1)	kPa	6,7	19,0	16,0	19,0	17,0	29,0
Heating capacity	(2)	kW	1,07	1,72	2,74	3,87	5,60	7,00
Water flow-rate	(2)	l/h	92	148	236	333	482	603
Water pressur drop	(2)	kPa	2,4	7,0	4,0	7,0	14,0	27,0
Total power input		W	21	29	43	67	100	160
Low speed								
Air flow rate		m³/h	110	240	430	595	900	1238
External static pressure		Pa	10	32	34	24	30	28
Cooling capacity	(1)	kW	0,75	1,64	2,72	3,84	5,66	6,75
Sensible capacity	(1)	kW	0,55	1,17	1,98	2,83	4,15	5,05
Water flow-rate	(1)	l/h	129	282	469	661	975	1163
Water pressur drop	(1)	kPa	3,5	13,0	12,0	12,0	12,0	19,0
Heating capacity	(2)	kW	0,56	1,46	2,36	3,09	4,70	6,00
Water flow-rate	(2)	l/h	47	126	203	266	405	517
Water pressur drop	(2)	kPa	1,1	5,0	3,0	5,0	11,0	20,0
Total power input		W	7	18	27	30	52	84
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(3)	-	CFG EC					
No. of supply fan		-	1	1	2	2	2	3
H Sound pressure level (supply)	(4)	dB(A)	55	55	58	62	64	66
M Sound pressure level (supply)	(4)	dB(A)	48	48	49	55	57	59
L Sound pressure level (supply)	(4)	dB(A)	43	44	47	52	54	56
H Sound pressure level (return + irradiated)	(4)	dB(A)	41	42	46	53	52	54
M Sound pressure level (return + irradiated)	(4)	dB(A)	29	38	42	44	47	49
L Sound pressure level (return + irradiated)	(4)	dB(A)	27	36	39	42	45	47

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.

Size		DUA-M1	12	22	32	42	52	62	72	82	92	102	112	122
2 pipe														
High speed														
Air flow rate		m³/h	315	315	625	625	790	790	980	980	1240	1240	1425	1425
External static pressure		Pa	58	58	58	58	60	60	65	65	60	60	63	63
Cooling capacity	(1)	kW	2,00	2,22	3,60	4,28	4,72	5,36	5,47	5,94	7,11	7,82	7,70	8,62
Sensible capacity	(1)	kW	1,44	1,57	2,70	3,04	3,55	3,84	4,22	4,46	5,36	5,72	5,89	6,38
Water flow-rate	(1)	l/h	345	382	620	737	813	923	942	1023	1225	1347	1326	1485
Water pressur drop	(1)	kPa	20,0	11,0	19,6	31,3	17,7	36,1	23,2	15,6	18,7	15,6	21,7	18,7
Heating capacity	(2)	kW	2,11	2,23	3,98	4,34	5,22	5,42	6,27	6,55	7,58	8,34	8,49	9,42
Water flow-rate	(2)	l/h	363	384	686	748	899	934	1080	1128	1306	1437	1462	1623
Water pressur drop	(2)	kPa	18,0	10,5	18,3	26,2	16,6	28,9	23,0	14,5	16,5	15,0	20,2	18,6
Total power input		W	51	51	94	94	110	110	148	148	145	145	186	186
Medium speed		Pa												
Air flow rate		m³/h	290	290	575	575	720	720	850	850	1120	1120	1270	1270
External static pressure			50	50	50	50	50	50	50	50	50	50	50	50
Cooling capacity	(1)	kW	1,88	2,07	3,40	4,01	4,42	4,99	4,97	5,36	6,62	7,25	7,11	7,92
Sensible capacity	(1)	kW	1,35	1,46	2,53	2,84	3,30	3,55	3,77	3,97	4,94	5,26	5,37	5,80
Water flow-rate	(1)	l/h	324	357	586	691	761	860	856	923	1140	1249	1225	1364
Water pressur drop	(1)	kPa	17,0	9,7	17,7	27,9	15,7	31,7	19,4	12,9	16,4	13,6	18,8	16,1
Heating capacity	(2)	kW	1,96	2,07	3,70	4,02	4,82	4,99	5,56	5,77	6,96	7,63	7,73	8,52
Water flow-rate	(2)	l/h	338	357	637	692	830	860	958	994	1199	1314	1331	1468
Water pressur drop	(2)	kPa	16,0	9,2	16,1	22,8	14,3	24,9	18,6	11,5	14,2	12,7	17,1	15,6
Total power input		W	45	45	87	87	96	96	122	122	125	125	177	177
Low speed														
Air flow rate		m³/h	205	205	395	395	380	380	600	600	580	580	905	905
External static pressure		Pa	25	25	26	26	14	14	23	23	15	15	26	26
Cooling capacity	(1)	kW	1,43	1,54	2,57	2,93	2,68	2,89	3,85	4,10	3,99	4,23	5,58	6,10
Sensible capacity	(1)	kW	1,01	1,07	1,85	2,03	1,90	2,00	2,82	2,95	2,83	2,96	4,06	4,34
Water flow-rate	(1)	l/h	246	265	443	505	462	498	663	706	687	729	961	1051
Water pressur drop	(1)	kPa	11,0	5,6	10,6	15,8	6,3	11,8	12,2	7,9	6,6	5,1	12,2	10,1
Heating capacity	(2)	kW	1,43	1,49	2,67	2,85	2,71	2,76	4,10	4,22	3,94	4,17	5,82	6,30
Water flow-rate	(2)	l/h	246	257	460	491	467	475	706	727	679	718	1002	1085
Water pressur drop	(2)	kPa	9,0	5,1	8,9	12,3	5,1	8,6	10,7	6,6	5,1	4,3	10,3	9,0
Total power input		W	27	27	59	59	50	50	88	88	69	69	155	155
Standard power supply		V/n°/Hz	220-240/1/50											
Type of supply fan	(3)	-	CFG AC											
No. of supply fan		-	1	1	2	2	2	2	2	2	2	2	3	3
H Sound pressure level (supply)	(4)	dB(A)	52	52	56	56	58	58	62	62	60	60	63	63
M Sound pressure level (supply)	(4)	dB(A)	43	43	49	49	51	51	55	55	52	52	56	56
L Sound pressure level (supply)	(4)	dB(A)	50	50	55	55	56	56	59	59	58	58	60	60
H Sound pressure level (return + irradiated)	(4)	dB(A)	42	42	47	47	48	48	52	52	50	50	53	53
M Sound pressure level (return + irradiated)	(4)	dB(A)	42	42	45	45	43	43	51	51	46	46	53	53
L Sound pressure level (return + irradiated)	(4)	dB(A)	34	34	38	38	36	36	44	44	38	38	46	46

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.

Size		DUA-M1	14	24	34	44	54	64
4 pipe								
High speed								
Air flow rate		m³/h	315	625	790	980	1240	1425
External static pressure		Pa	58	58	60	65	60	63
Cooling capacity	(1)	kW	2,00	3,60	4,72	5,47	7,11	7,70
Sensible capacity	(1)	kW	1,44	2,70	3,55	4,22	5,36	5,89
Water flow-rate	(1)	l/h	345	620	813	942	1225	1326
Water pressur drop	(1)	kPa	19,5	19,6	17,7	23,2	18,7	21,7
Heating capacity	(2)	kW	1,76	3,02	3,91	4,49	5,8	6,35
Water flow-rate	(2)	l/h	152	260	337	387	500	547
Water pressur drop	(2)	kPa	7,5	4,8	7,5	9,6	15,3	18,1
Total power input		W	51	94	110	148	145	186
Medium speed								
Air flow rate		m³/h	290	575	720	850	1120	1270
External static pressure		Pa	50	50	50	50	50	50
Cooling capacity	(1)	kW	1,88	3,40	4,42	4,97	6,62	7,11
Sensible capacity	(1)	kW	1,35	2,53	3,30	3,77	4,94	5,37
Water flow-rate	(1)	l/h	324	586	761	856	1140	1225
Water pressur drop	(1)	kPa	17,4	17,7	15,7	19,4	16,4	18,8
Heating capacity	(2)	kW	1,66	2,85	3,68	4,10	5,44	5,90
Water flow-rate	(2)	l/h	143	245	317	353	469	508
Water pressur drop	(2)	kPa	6,8	4,3	6,7	8,2	13,7	15,8
Total power input		W	45	87	96	122	125	177
Low speed								
Air flow rate		m³/h	205	395	380	600	580	905
External static pressure		Pa	25	26	14	23	15	26
Cooling capacity	(1)	kW	1,43	2,57	2,68	3,85	3,99	5,58
Sensible capacity	(1)	kW	1,01	1,85	1,90	2,82	2,83	4,06
Water flow-rate	(1)	l/h	246	443	462	663	687	961
Water pressur drop	(1)	kPa	10,5	10,6	6,3	12,2	6,6	12,2
Heating capacity	(2)	kW	1,30	2,22	2,38	3,26	3,48	4,72
Water flow-rate	(2)	l/h	112	191	205	281	300	407
Water pressur drop	(2)	kPa	4,4	2,8	3,1	5,4	6,1	10,6
Total power input		W	27	59	50	88	69	155
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(3)	-	CFG AC					
No. of supply fan		-	1	2	2	2	2	3
H Sound pressure level (supply)	(4)	dB(A)	52	56	58	62	60	63
M Sound pressure level (supply)	(4)	dB(A)	43	49	51	55	52	56
L Sound pressure level (supply)	(4)	dB(A)	50	55	56	59	58	60
H Sound pressure level (return + irradiated)	(4)	dB(A)	42	47	48	52	50	53
M Sound pressure level (return + irradiated)	(4)	dB(A)	42	45	43	51	46	53
L Sound pressure level (return + irradiated)	(4)	dB(A)	34	38	36	44	38	46

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.

Accessories

2V2X	Two-way "on/off" valve kit for main coil for 2-pipes units
3V2X	Three-way "on/off" valve kit for main coil for 2-pipse units
2V4OHX	Two-way "on/off" valve kit for additional coil for 4-pipes units
3V4OHX	Three-way "on/off" valve kit for additional coil for 4-pipes units
VB2X	Balancing valve kit for main coil for 2-pipes units
VB4X	Balancing valve kit for additional coil for 4-pipes units
BROPX	Auxiliary drain pan (horizontal installation)
BRVX	Auxiliary condensate collection pan (horizontal installation)
DPHX	Condensate drain pump for horizontal installation
DPVX	Condensate drain pump for vertical installation
GFDX	Return air grille for straight flange
FDAX	Straight return air flange
GF90X	Return air grille for 90° flange
F90AX	90° return air flange
PCCRAX	Return air plenum with circular connections
SILRX	Silencer return air plenum
FMX	Straight supply air flange
F90MX	90° supply air flange
PCCMAX	Supply air plenum with circular connections
BOMX	Supply air nozzle
SILMX	Silencer supply air plenum
HIDE2X	Electro-mechanical thermostat for wall-installation with built-in temperature probe (for AC version)
HMIFACX	KJRP-86R electronic wired controller for unit or wall-mounting
BOXX	Box for wall installation of KJRP-86R user interface
HID-TIFX	Thermostat for fancoil unit with 0-10V port and water probe included (AC/EC fan control)

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin.

LARICE HP

Water terminal unit. Indoor installation, horizontal uncased ductable
Capacity from 4,1 to 25,3 kW

Clivet participates in the ECP Programme for "Fan Coil". Check ongoing validity of certificate on www.eurovent-certification.com

Cool & heat | Horizontal: uncased | Water | EC Motor | CONTROL4 NRG management

✓For ducted applications with high head

✓Versions with high efficiency EC motor (DUE) and AC motor (DUA)

✓Also in the version for a 4-pipe system (DUA)

Versions and configurations

TYPE OF SYSTEM:

CC2 2-pipe (Standard)
CC4 4 pipe

INSTALLAZIONE:

INH Horizontal built-in installation (Standard)

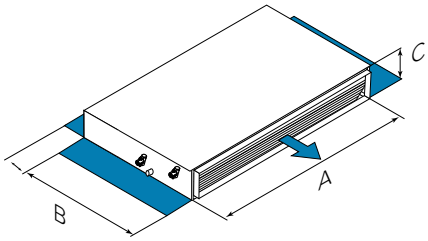
RIPRESA DELL'ARIA:

RP From the back (Standard)

CONNESSIONI IDRAULICHE

SX Connections on the left (Standard)
DX Right side fittings

Dimensions and connections



Size		DUE/DUA-H1	12	14	22	24	32	34	42	44	52	54	62	64
DUA-H1 DUE-H1	A - Length	mm	1133	1133	1133	1133	1133	1133	1445	1445	1445	1445	1535	1535
	B - Width	mm	698	698	698	698	698	698	853	853	853	853	1100	1100
	C - Height	mm	255	255	255	255	305	305	293	293	368	368	421	421
Weight	DUA-H1 - CC2	kg	47		48		56		78		88		124	
	DUA-H1 - CC4	kg		50		51		60		83		94		134
	DUE-H1 - CC2	kg	47		48		56		78		88		124	
	DUE-H1 - CC4	kg		50		51		60		83		94		134

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

Technical data

Size		DUE-H1	12	22	32	42	52*	62*
2 pipe								
High speed								
Air flow rate		m³/h	1310	1780	2390	3080	3920	5205
External static pressure		Pa	70	85	75	80	70	74
Cooling capacity	(1)	kW	5,61	7,94	10,81	13,99	18,17	24,30
Sensible capacity	(1)	kW	4,72	6,44	8,72	11,23	14,75	20,30
Water flow-rate	(1)	l/h	966	1368	1862	2410	3130	4186
Water pressur drop	(1)	kPa	8,7	15,8	21,6	21,7	21,4	31,8
Heating capacity	(2)	kW	7,76	10,62	13,06	18,08	23,25	29,76
Water flow-rate	(2)	l/h	1337	1829	2250	3114	4005	5126
Water pressur drop	(2)	kPa	13,7	18,8	21,4	23,9	25,4	33,1
Total power input		W	144	225	340	530	609	636
Medium speed								
Air flow rate		m³/h	1100	1360	1950	2440	3320	4295
External static pressure		Pa	50	50	50	50	50	50
Cooling capacity	(1)	kW	5,11	6,86	9,70	12,39	16,70	21,91
Sensible capacity	(1)	kW	4,18	5,36	7,61	9,65	13,26	17,79
Water flow-rate	(1)	l/h	880	1182	1671	2134	2877	3774
Water pressur drop	(1)	kPa	7,2	11,8	17,4	16,9	17,9	25,9
Heating capacity	(2)	kW	6,80	8,64	11,25	15,15	20,51	25,83
Water flow-rate	(2)	l/h	1171	1488	1938	2610	3533	4449
Water pressur drop	(2)	kPa	10,7	12,9	16,4	17,4	20,3	25,6
Total power input		W	88	110	195	253	383	330
Low speed								
Air flow rate		m³/h	780	940	1380	1840	2400	2825
External static pressure		Pa	26	24	25	28	25	22
Cooling capacity	(1)	kW	4,14	5,44	7,87	10,47	13,73	16,91
Sensible capacity	(1)	kW	3,24	4,08	5,93	7,90	10,46	12,84
Water flow-rate	(1)	l/h	713	937	1356	1803	2365	2913
Water pressur drop	(1)	kPa	4,9	7,7	11,7	12,2	12,3	15,9
Heating capacity	(2)	kW	5,18	6,42	8,64	12,13	15,90	18,63
Water flow-rate	(2)	l/h	892	1106	1488	2089	2739	3209
Water pressur drop	(2)	kPa	6,5	7,5	10,1	11,6	12,8	14,2
Total power input		W	40	44	80	110	166	106
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(3)	-	CFG EC					
No. of supply fan		-	2	2	2	2	2	2
H Sound pressure level (supply)	(4)	dB(A)	61	63	66	69	73	75
M Sound pressure level (supply)	(4)	dB(A)	59	61	64	67	71	73
L Sound pressure level (supply)	(4)	dB(A)	55	57	62	64	70	72
H Sound pressure level (return + irradiated)	(4)	dB(A)	52	55	60	62	67	69
M Sound pressure level (return + irradiated)	(4)	dB(A)	48	48	55	58	61	60
L Sound pressure level (return + irradiated)	(4)	dB(A)	45	45	52	55	58	57

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.
* Sizes not covered by Eurovent certification

Size		DUE-H1	14	24	34	44	54*	64*
4 pipe								
High speed								
Air flow rate		m³/h	1264	1750	2350	3040	3858	5140
External static pressure		Pa	70	85	75	80	70	74
Cooling capacity	(1)	kW	5,98	7,87	10,70	13,90	19,38	24,10
Sensible capacity	(1)	kW	4,61	6,35	8,61	11,13	15,12	20,09
Water flow-rate	(1)	l/h	1053	1356	1843	2394	3436	4151
Water pressur drop	(1)	kPa	3,9	15,5	21,2	21,4	10,7	31,4
Heating capacity	(2)	kW	4,80	6,25	8,02	10,75	14,25	34,54
Water flow-rate	(2)	l/h	431	538	691	926	1295	2975
Water pressur drop	(2)	kPa	12,2	26,4	17,3	33,0	31,4	41,3
Total power input		W	144	225	340	530	609	661
Medium speed								
Air flow rate		m³/h	1040	1340	1920	2400	3300	4235
External static pressure		Pa	50	50	50	50	50	50
Cooling capacity	(1)	kW	4,94	6,79	9,59	12,27	16,62	21,71
Sensible capacity	(1)	kW	4,01	5,30	7,51	9,53	13,19	17,59
Water flow-rate	(1)	l/h	851	1170	1652	2113	2863	3740
Water pressur drop	(1)	kPa	6,8	11,6	17,1	16,6	16,3	25,4
Heating capacity	(2)	kW	4,18	5,42	7,20	9,48	12,67	30,58
Water flow-rate	(2)	l/h	360	467	620	816	1091	2634
Water pressur drop	(2)	kPa	13,4	20,4	14,3	26,3	25,7	33,2
Total power input		W	88	115	200	253	384	343
Low speed								
Air flow rate		m³/h	750	920	1350	1810	2428	2629
External static pressure		Pa	26	24	25	28	25	22
Cooling capacity	(1)	kW	4,04	5,36	7,76	10,36	14,38	14,94
Sensible capacity	(1)	kW	3,14	4,01	5,83	7,79	10,79	10,75
Water flow-rate	(1)	l/h	696	923	1337	1785	2500	2588
Water pressur drop	(1)	kPa	4,9	7,5	11,4	12,0	6,1	5,6
Heating capacity	(2)	kW	3,43	4,33	5,90	8,06	10,88	22,98
Water flow-rate	(2)	l/h	295	373	508	694	962	1979
Water pressur drop	(2)	kPa	9,4	13,6	9,9	19,6	18,4	19,8
Total power input		W	40	44	80	110	164	124
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(3)	-	CFG EC					
No. of supply fan		-	2	2	2	2	2	2
H Sound pressure level (supply)	(4)	dB(A)	61	63	66	69	73	75
M Sound pressure level (supply)	(4)	dB(A)	59	61	64	67	71	73
L Sound pressure level (supply)	(4)	dB(A)	55	57	62	64	70	72
H Sound pressure level (return + irradiated)	(4)	dB(A)	52	55	60	62	67	69
M Sound pressure level (return + irradiated)	(4)	dB(A)	48	48	55	58	61	60
L Sound pressure level (return + irradiated)	(4)	dB(A)	45	45	52	55	58	57

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.
* Sizes not covered by Eurovent certification

Size		DUA-H1	12	22	32	42	52*	62*
2 pipe								
High speed								
Air flow rate		m³/h	1734	1825	2440	3020	3850	5062
External static pressure		Pa	75	80	70	67	70	70
Cooling capacity	(1)	kW	8,89	8,16	10,70	13,60	17,76	25,31
Sensible capacity	(1)	kW	6,58	6,62	8,65	10,90	14,37	19,74
Water flow-rate	(1)	l/h	1590	1406	1843	2343	3059	4608
Water pressur drop	(1)	kPa	8,9	17,0	23,0	21,0	19,4	15,3
Heating capacity	(2)	kW	7,67	10,10	13,13	16,53	22,93	29,60
Water flow-rate	(2)	l/h	1321	1740	2351	2847	3950	5350
Water pressur drop	(2)	kPa	11,3	18,3	15,0	21,3	22,8	16,9
Total power input		W	358	285	470	570	760	1334
Medium speed		Pa						
Air flow rate		m³/h	801	1410	2075	2580	3280	3546
External static pressure			50	50	50	50	50	50
Cooling capacity	(1)	kW	4,83	7,01	9,76	12,40	16,19	20,06
Sensible capacity	(1)	kW	3,53	5,48	7,68	9,70	12,80	15,04
Water flow-rate	(1)	l/h	856	1207	1681	2136	2789	3600
Water pressur drop	(1)	kPa	3,8	13,0	20,0	18,0	16,3	10,1
Heating capacity	(2)	kW	6,44	8,27	11,80	14,92	20,32	22,47
Water flow-rate	(2)	l/h	1109	1425	2033	2570	3500	4507
Water pressur drop	(2)	kPa	8,2	12,7	20,2	17,7	18,3	10,2
Total power input		W	152	230	420	490	617	909
Low speed								
Air flow rate		m³/h	790	840	1710	2070	2740	2127
External static pressure		Pa	25	15	30	35	35	35
Cooling capacity	(1)	kW	4,17	4,99	8,71	10,90	14,54	13,70
Sensible capacity	(1)	kW	3,25	3,66	6,67	8,25	11,21	10,00
Water flow-rate	(1)	l/h	718	860	1500	1878	2505	2473
Water pressur drop	(1)	kPa	5,0	7,0	16,0	14,0	13,3	5,2
Heating capacity	(2)	kW	4,98	5,57	10,43	12,79	17,67	14,57
Water flow-rate	(2)	l/h	858	959	1868	2203	3044	2639
Water pressur drop	(2)	kPa	5,2	6,2	9,9	13,4	13,3	4,8
Total power input		W	115	170	350	390	500	693
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(3)	-	CFG AC					
No. of supply fan		-	2	2	2	2	2	2
H Sound pressure level (supply)	(4)	dB(A)	60	64	67	68	72	76
M Sound pressure level (supply)	(4)	dB(A)	58	61	65	66	70	73
L Sound pressure level (supply)	(4)	dB(A)	55	59	64	65	69	70
H Sound pressure level (return + irradiated)	(4)	dB(A)	52	56	62	63	67	67
M Sound pressure level (return + irradiated)	(4)	dB(A)	47	47	60	61	65	62
L Sound pressure level (return + irradiated)	(4)	dB(A)	44	44	57	59	63	63

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 45°C (temperature differential 5°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.
* Sizes not covered by Eurovent certification

Size		DUA-H1	14	24	34	44	54*	64*
4 pipe								
High speed								
Air flow rate		m³/h	1350	1775	2390	2960	3800	4993
External static pressure		Pa	75	80	70	67	70	70
Cooling capacity	(1)	kW	5,79	8,03	10,58	13,47	16,73	25,79
Sensible capacity	(1)	kW	4,87	6,49	8,51	10,72	13,56	19,86
Water flow-rate	(1)	l/h	997	1383	1822	2320	2882	4658
Water pressur drop	(1)	kPa	9,0	16,0	23,0	20,0	17,4	15,8
Heating capacity	(2)	kW	4,81	6,30	8,08	10,60	13,64	35,13
Water flow-rate	(2)	l/h	414	543	696	913	1175	3175
Water pressur drop	(2)	kPa	17,5	26,3	18,1	33,9	38,4	22,5
Total power input		W	185	275	460	570	760	1310
Medium speed								
Air flow rate		m³/h	1090	1390	2045	2545	3245	3531
External static pressure		Pa	50	50	50	50	50	50
Cooling capacity	(1)	kW	5,11	6,96	9,67	12,34	15,31	20,52
Sensible capacity	(1)	kW	4,16	5,42	7,60	9,61	12,13	15,34
Water flow-rate	(1)	l/h	880	1199	1666	2126	2637	3600
Water pressur drop	(1)	kPa	7,0	13,0	19,0	17,0	14,7	10,4
Heating capacity	(2)	kW	4,29	5,53	7,44	9,95	12,55	27,97
Water flow-rate	(2)	l/h	369	476	641	857	1081	2516
Water pressur drop	(2)	kPa	14,2	20,8	15,6	29,9	32,9	14,8
Total power input		W	155	225	415	490	617	894
Low speed								
Air flow rate		m³/h	770	840	1680	2055	2700	2117
External static pressure		Pa	25	15	30	35	35	35
Cooling capacity	(1)	kW	4,09	4,99	8,61	10,85	13,75	13,99
Sensible capacity	(1)	kW	3,18	3,66	6,58	8,21	10,62	10,07
Water flow-rate	(1)	l/h	705	860	1483	1869	2368	2520
Water pressur drop	(1)	kPa	5,0	7,0	15,7	13,8	12,0	5,4
Heating capacity	(2)	kW	3,49	4,09	6,70	8,95	11,34	19,34
Water flow-rate	(2)	l/h	301	352	577	771	977	1746
Water pressur drop	(2)	kPa	9,8	12,0	12,9	24,6	27,4	7,7
Total power input		W	115	170	345	390	500	689
Standard power supply		V/n°/Hz	220-240/1/50					
Type of supply fan	(3)	-	CFG AC					
No. of supply fan		-	2	2	2	2	2	2
H Sound pressure level (supply)	(4)	dB(A)	60	64	67	68	72	76
M Sound pressure level (supply)	(4)	dB(A)	58	61	65	66	70	73
L Sound pressure level (supply)	(4)	dB(A)	55	59	64	65	69	70
H Sound pressure level (return + irradiated)	(4)	dB(A)	52	56	62	63	67	67
M Sound pressure level (return + irradiated)	(4)	dB(A)	47	47	60	61	65	62
L Sound pressure level (return + irradiated)	(4)	dB(A)	44	44	57	59	63	63

(1) Entering exchanger water 7°C (temperature differential 5°C) - Ambient air 27°C D.B. / 19°C W.B.
(2) Entering exchanger water 65°C (temperature differential 10°C) - Ambient air 20°C
(3) CFG = Centrifugal fan
(4) Sound levels tested in anechoic chamber and referring to units for 2-pipe systems.
* Sizes not covered by Eurovent certification

Accessories

3V2X	Three-way "on/off" valve kit for main coil for 2-pipse units
3V4OHX	Three-way "on/off" valve kit for additional coil for 4-pipes units
PCX	Supply/Return air plenum with circular connections
FG4X	Synthetic filter Class G4 (ePM10 50%)
BROPX	Auxiliary drain pan (horizontal installation)
HIDE2X	Electro-mechanical thermostat for wall-installation with built-in temperature probe (for AC version)
HMIFACX	KJRP-86R electronic wired controller for unit or wall-mounting (for AC version)
BOXX	Box for wall installation of KJRP-86R user interface
HID-TIFX	Thermostat for fancoil unit with 0-10V port and water probe included (AC/EC fan control)

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin.

SAHU

Water-cooled non-reversible heat pump for indoor installation
Air flow from 1500 to 15000 m³/h

*units out of the scope of Eurovent certification

Cool & heat | Horizontal | Vertical | Water | INTELLIAIR | ErP compliant

- ✓ available in version for 2 and 4-pipe systems with or without on-board cotrol;
- ✓ available in direct expansion version for connection to Clivet VRF and mini VRF systems;
- ✓ standard with self-bearing sandwich paneling thickness 40mm;
- ✓ centrifugal fans with belt / pulley transmission and IE2 type with inverter, IE3 engines settable at high pressure for air distribution through ducting;
- ✓ settable with EC plug fans (IE4) with high pressure (standard with on-board control);
- ✓ 4 or 6 row water coil or 4-row direct expansion coil;
- ✓ wide choice of accessories (mixing chamber, filters, bases, antivibration mounts, etc);
- ✓ electric heater section with different power
- ✓ remote and centralized system monitoring through INTELLIAIR

Versions and configurations

VOLTAGE:

400T upply voltage 400/3~/50

VERSION:

SAHU H Horizontal air handling unit with centrifugal fan
SAHU V Vertical air handling unit with centrifugal fan
SAHU H EC Horizontal air handling unit with EC plug fan
SAHU V EC Vertical air handling unit with EC plug fan

MAIN COIL:

C4 4-row water coil
C6 6-row water coil
E4 4-row direct expansion coil

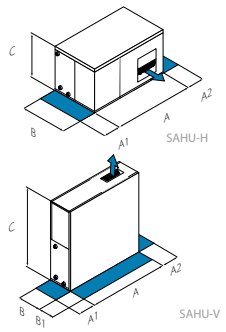
ATTACCHI ACQUA:

DX Water fittings to the right
SX Water fittings to the left

BATTERIA SECONDARIA AD ACQUA CALDA:

- Hot water coil: not required (Standard)
CH1 1-row hot water secondary coil
CH2 2-row hot water secondary coi

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

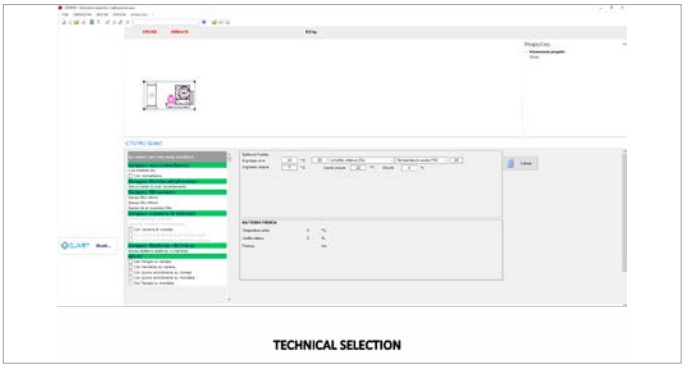
Size	SAHU H / SAHU H_EC		1	2	3	4	5	6	7	8
A - Length		mm	780	880	1120	1280	1500	1720	1890	2510
B - Width		mm	1100	1100	1100	1300	1350	1350	1350	1350
C - Height		mm	530	530	530	590	660	750	900	900
A1		mm	500	500	500	500	500	500	500	500
A2		mm	500	500	500	500	500	500	500	500
H C4	Weight	kg	78	85	98	134	167	202	274	330
H C6	Weight	kg	81	88	102	141	176	215	292	353
H E4	Weight	kg	78	84	97	133	165	199	270	326
H_EC C4	Weight	kg	57	63	74	101	132	163	211	268
H_EC C6	Weight	kg	60	66	78	108	141	176	229	291
H_EC E4	Weight	kg	57	62	73	100	130	160	207	264

Size	SAHU V / SAHU V_EC		1	2	3	4	5	6	7	8
A - Length		mm	780	880	1120	1280	1500	1720	1890	2510
B - Width		mm	530	530	530	590	660	750	900	900
C - Height		mm	1100	1100	1100	1300	1350	1570	1870	1950
A1		mm	500	500	500	500	500	500	500	500
A2		mm	500	500	500	500	500	500	500	500
B1		mm	1000	1000	1000	1000	1000	1000	1000	1000
V C4	Weight	kg	84	91	105	142	177	217	318	386
V C6	Weight	kg	87	94	109	149	186	230	336	409
V E4	Weight	kg	84	90	104	141	175	214	314	382
V_EC C4	Weight	kg	63	69	81	109	142	178	255	328
V_EC C6	Weight	kg	66	72	85	116	151	191	273	351
V_EC E4	Weight	kg	63	68	80	108	140	175	251	324

The above mentioned data are referred to standard units for the constructive configurations indicated.
The weight indicated refer to unit without water/gas inside of the coil.

Selection Software

The CTAPRO air handling units selection software allows to size the units and to have immediately the complete technical offer with executive drawings and technical data sheets.



Technical data

Size			SAHU	1	2	3	4	5	6	7	8
Air flow rate			m³/h	1500	2090	2890	4020	5580	7750	10770	15000
C4	Cooling capacity	(1)	kW	8,5	11,5	15,7	22,7	32,4	42,9	60,5	83,0
C4	Sensible capacity	(1)	kW	6,2	8,5	11,7	16,6	23,4	31,7	44,3	61,1
C4	Water flow-rate	(1)	l/s	0,4	0,5	0,8	1,1	1,5	2,0	2,9	4,0
C6	Cooling capacity	(1)	kW	10,3	13,8	19,4	26,6	37,9	50,3	70,9	99,2
C6	Sensible capacity	(1)	kW	7,3	10,0	13,9	19,2	27,1	36,5	51,2	71,4
C6	Water flow-rate	(1)	l/s	0,5	0,7	0,9	1,3	1,8	2,4	3,4	4,7
E4	Cooling capacity	(2)	kW	7,3	10,1	15,5	22,2	30,9	42,3	59,1	82,3
E4	Sensible capacity	(2)	kW	5,8	8,0	11,6	16,5	22,9	31,4	43,8	60,9
C4	Heating capacity	(3)	kW	9,6	13,1	18,0	24,5	35,6	48,6	67,7	93,8
C4	Water flow-rate	(3)	l/s	0,5	0,6	0,9	1,2	1,7	2,3	3,3	4,5
C6	Heating capacity	(3)	kW	10,9	14,9	20,6	28,7	40,1	54,9	76,5	106,7
C6	Water flow-rate	(3)	l/s	0,5	0,7	1,0	1,4	1,9	2,6	3,7	5,2
MAX power input (IE3 - CFG C&P)		(4)	kW	0,8	1,1	1,1	2,2	3,0	4,0	5,5	7,5
MAX power input (IE4 - EC PLUG FAN)			kW	1,1	1,1	1,1	1,1	1,9	2,9	3,3	5,0
Power supply			V/n°/Hz	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound pressure level		(5)	dB(A)	74	79	85	80	85	84	83	92

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.
(1) HYDRONIC SAHU Cooling: Exchanger inlet water 7°C (temperature differential 5°C) Ambient air 27°C D.B. / 19°C W.B. - ESP = 0 Pa
(2) DIRECT EXPANSION SAHU Cooling: Indoor temperature 27°C D.B. / 19°C W.B. Eveporating temperature 8°C / Condensing temperature 46°C - ESP = 0 Pa - R410A
(3) HYDRONIC SAHU Heating: Exchanger inlet water 45°C (temperature differential 5°C), Ambient air 20°C D.B., 50% U.R., ESP = 0 Pa

Accessories

FS4	Frame with G4 efficiency filters, thickness 48 mm
FS5	Frame with M5 efficiency filters, thickness 98 mm
FS6	Frame with M6 efficiency filters, thickness 98 mm
FS7	Frame with F7 efficiency filters, thickness 98 mm
FS8	Frame with F8 efficiency filters, thickness 98 mm
FS9	Frame with F9 efficiency filters, thickness 98 mm
FS45	Frame with G4 efficiency filters, thickness 48 mm + M5 th. 98 mm
FS46	Frame with G4 efficiency filters, thickness 48 mm + M6 th. 98 mm
FS47	Frame with G4 efficiency filters, thickness 48 mm + F7 th. 98 mm
FS48	Frame with G4 efficiency filters, thickness 48 mm + F8 th. 98 mm
FS49	Frame with G4 efficiency filters, thickness 48 mm + F8 th. 98 mm
BAH	Base for horizontal basic unit H=120 mm
BAV	Base for vertical basic unit H=120 mm
BAMX	Base for mixing chamber H=120 mm
MBXX	Mixing chamber with dampers
AFMX	Antivibration mount for mixing chamber damper
AFRX	Return antivibration mount for basic unit
AFSX	Supply antivibration mount for basic unit
DARX	Return damper for basic unit
FLRX	Return flange for basic unit
FLSX	Supply flange for basic unit
EC1X	Electric coil version 1
EC2X	Electric coil version 2
FTB	Box with terminal block for centrifugal fan wires
ETB	Box with terminal block for EC plug fan wires
KT4X	Spare filters - G4 th. 48 mm
KT5X	Spare filters - M5 th. 98 mm
KT6X	Spare filters - M6 th. 98 mm
KT7X	Spare filters - F7 th. 98 mm
KT8X	Spare filters - F8 th. 98 mm
KT9X	Spare filters - F9 th. 98 mm

Accessories whose code ends with "X" are supplied separately
For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.

AQX

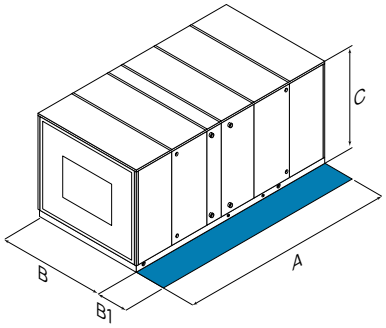
Air conditioning units for air treatment in modular sections. Indoor and outdoor installation
Air flow from 1200 to 120000 m³/h

Clivet participates in the ECP Programme for "Air Handling Units". Check ongoing validity of certificate on www.eurovent-certification.com

Heating-Cooling | Indoor inst. | Outdoor inst. | Free-cooling | INTELLIAIR | ErP compliant

- ✓ two types of structure and panelling, 50 mm and 60 mm, which allow thermal break classes T2/TB3 and T2/TB2 to be achieved;
- ✓ 32 standard sizes with continuous air flow coverage at frontal speed of 2 to 3m/s;
- ✓ customisation of the dimensions in height and width with a 50 mm pitch to meet the most stringent architectural constraints.
- ✓ sandwich-type double-sheet panels with injected polyurethane or mineral wool thermal and acoustic insulation in between, thermal cut between the sheets, 50 or 60 mm thick, seven different types of sheet available;
- ✓ modular structure with smooth internal surfaces to minimise dust accumulation and facilitate cleaning and disinfection;
- ✓ for indoor or outdoor installation with protective roof;
- ✓ wide range of air filtration solutions from coarse filters, medium filters with rigid or floppy pockets, absolute, electronic, activated carbon, high and very high efficiency filters;
- ✓ germicidal and virucidal solutions with UV-C lamps or photocatalytic oxidation modules;
- ✓ static, rotary, run-around heat recovery units;
- ✓ water, direct expansion, steam, thermal oil, electric heat exchangers;
- ✓ adiabatic humidification systems, self-generated or network steam, water spray, washers;
- ✓ internal condensate collection tanks with anti-condensate insulation, with inclination towards the discharge, made of aluminium or stainless steel;
- ✓ centrifugal fan sections with belt and pulley drive, plug-fan radial with brushless EC motors, electric fans;
- ✓ without control systems or complete with probes, actuators, wiring, electrical panel with control system and unit management logic
- ✓ remote and centralized system monitoring through INTELLIAIR

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	AQX	1	2	3	4	5	6	7	8	9	10	11
A - Length	mm						(*)					
B - Width	mm	770	820	920	870	920	1020	970	1020	1170	1120	1220
C - Height (***)	mm	570	570	620	720	720	720	820	820	820	920	920
B1 - Servicing space												
for inspection	mm	800	800	800	800	800	800	800	800	800	800	800
coil removal	mm	964	1034	1024	1024	1094	1187	1194	1214	1324	1284	1394
Operating weight	kg						(**)					

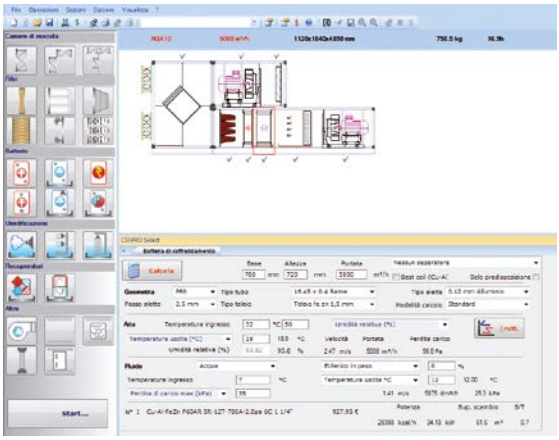
Size	AQX	12	13	14	15	16	17	18	19	20	21	22
A - Length	mm						(*)					
B - Width	mm	1220	1370	1370	1570	1570	1620	1770	1820	2070	2120	2220
C - Height (***)	mm	1070	1070	1170	1170	1320	1420	1420	1520	1520	1670	1770
B1 - Servicing space												
for inspection	mm	800	800	800	800	800	800	800	800	800	800	800
coil removal	mm	1524	1504	1574	1734	1744	1774	1894	2094	2324	2264	2524
Operating weight	kg						(**)					

Size	AQX	23	24	25	26	27	28	29	30	31	32
A - Length	mm						(*)				
B - Width	mm	2370	2470	2620	2820	3170	3570	4020	4570	5170	5870
C - Height (***)	mm	1920	2020	2120	2270	2270	2270	2270	2270	2270	2270
B1 - Servicing space											
for inspection	mm	800	800	800	800	800	800	800	800	800	800
coil removal	mm	2524	2594	2744	3074	3444	3874	4364	4924	5564	6304
Operating weight	kg						(**)				

(*) Length A depends on the specific configuration.
(**) Operating weight depends on the specific configuration.
(***) Height without base. Standard base = 120 mm
Dimensions refer to model with 50 mm structure, add 20 mm to the indicated dimensions to obtain the 60 mm structure.
The above data refer to standard units.

Selection Software

The air handling units selection software allows to size the units and to have immediately the complete technical offer with executive drawings, technical data sheets and list of main components and materials used.



Hygienic air handling units

The AQX H version is available for applications that require high hygienic standards (pharmaceutical, hospital, food and microelectronic sectors). It guarantees maximum cleanliness and ease of maintenance in compliance with DIN 1946-4 and VDI 6022-1 standards. For more details, refer to the dedicated brochure by scanning the following QR code.

Technical data

Size		AQX	1	2	3	4	5	6	7	8	9	10	11
	(1)	m³/h	1200	1400	1600	1800	2100	2400	2700	3100	3500	4000	4600
Air flow rate	(2)	m³/h	1500	1700	2000	2200	2600	2900	3400	3900	4400	5100	5800
	(3)	m³/h	1800	2000	2400	2700	3100	3500	4100	4600	5300	6100	6900

Size		AQX	12	13	14	15	16	17	18	19	20	21	22
	(1)	m³/h	5300	6100	6900	7900	9100	10500	12000	13500	15500	18000	20500
Air flow rate	(1)	m³/h	6600	7600	8700	9900	11500	13000	15000	17000	19500	22500	26000
	(3)	m³/h	7900	9100	10500	12000	13500	15500	18000	20500	23500	27000	31000

Size		AQX	23	24	25	26	27	28	29	30	31	32
	(1)	m³/h	23500	27000	31000	35500	40500	46500	53500	61000	70000	80000
Air flow rate	(2)	m³/h	29500	34000	38500	44500	51000	58000	66500	76500	87500	100000
	(3)	m³/h	35500	40500	46500	53000	61000	70000	80000	91500	105000	120000

(1) Air passage speed on the heat exchange coils 2 m/s
(2) Air passage speed on the heat exchange coils 2,5 m/s
(3) Air passage speed on the heat exchange coils 3 m/s

Accessories

The air treatment units of the AQX series are available with a vast range of accessories that can be selected directly with the selection software.
A few of the most common accessories are listed below:

✓ Weatherproof roof and control protection technical compartment;

✓ Weatherproof covers on the external air inlets and outlets

✓ Safety device for moving components

✓ Spotlights and viewing panel for inspection

✓ Inverters on the fan motors
Other accessories not found in the basic selection can be assessed on request.

CLA

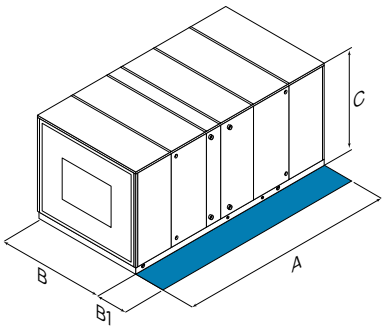
Air conditioning units for air treatment in modular sections. Indoor and outdoor installation
Air flow from 1200 to 120000 m³/h

*units out of the scope of Eurovent certification

Heating-Cooling | Indoor inst. | Outdoor inst. | Free-cooling | INTELLIAIR | ErP compliant

- ✓ two types of structure and panelling, 50 mm and 60 mm, which allow thermal break classes T2/TB3 and T2/TB2 to be achieved;
- ✓ 32 standard sizes with continuous air flow coverage at frontal speed of 2 to 3m/s;
- ✓ customisation of the dimensions in height and width with a 50 mm pitch to meet the most stringent architectural constraints.
- ✓ sandwich-type double-sheet panels with injected polyurethane or mineral wool thermal and acoustic insulation in between, thermal cut between the sheets, 50 or 60 mm thick, seven different types of sheet available;
- ✓ modular structure with smooth internal surfaces to minimise dust accumulation and facilitate cleaning and disinfection;
- ✓ for indoor or outdoor installation with protective roof;
- ✓ wide range of air filtration solutions from coarse filters, medium filters with rigid or floppy pockets, absolute, electronic, activated carbon, high and very high efficiency filters;
- ✓ germicidal and virucidal solutions with UV-C lamps or photocatalytic oxidation modules;
- ✓ static, rotary, run-around heat recovery units;
- ✓ water, direct expansion, steam, thermal oil, electric heat exchangers;
- ✓ adiabatic humidification systems, self-generated or network steam, water spray, washers;
- ✓ internal condensate collection tanks with anti-condensate insulation, with inclination towards the discharge, made of aluminium or stainless steel;
- ✓ centrifugal fan sections with belt and pulley drive, plug-fan radial with brushless EC motors, electric fans;
- ✓ without control systems or complete with probes, actuators, wiring, electrical panel with control system and unit management logic
- ✓ remote and centralized system monitoring through INTELLIAIR

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

Size	CLA	12	13	14	15	16	17	18	19	20	21	22
A - Length	mm						(*)					
B - Width	mm	1220	1370	1370	1570	1570	1620	1770	1820	2070	2120	2220
C - Height (***)	mm	1070	1070	1170	1170	1320	1420	1420	1520	1520	1670	1770
B1 - Servicing space												
for inspection	mm	800	800	800	800	800	800	800	800	800	800	800
coil removal	mm	1524	1504	1574	1734	1744	1774	1894	2094	2324	2264	2524
Operating weight	kg						(**)					

Size	CLA	1	2	3	4	5	6	7	8	9	10	11
A - Length	mm						(*)					
B - Width	mm	770	820	920	870	920	1020	970	1020	1170	1120	1220
C - Height (***)	mm	570	570	620	720	720	720	820	820	820	920	920
B1 - Servicing space												
for inspection	mm	800	800	800	800	800	800	800	800	800	800	800
coil removal	mm	964	1034	1024	1024	1094	1187	1194	1214	1324	1284	1394
Operating weight	kg						(**)					

Size	CLA	23	24	25	26	27	28	29	30	31	32
A - Length	mm						(*)				
B - Width	mm	2370	2470	2620	2820	3170	3570	4020	4570	5170	5870
C - Height (***)	mm	1920	2020	2120	2270	2270	2270	2270	2270	2270	2270
B1 - Servicing space											
for inspection	mm	800	800	800	800	800	800	800	800	800	800
coil removal	mm	2524	2594	2744	3074	3444	3874	4364	4924	5564	6304
Operating weight	kg						(**)				

(*) Length A depends on the specific configuration.
(**) Operating weight depends on the specific configuration.
(***) Height without base. Standard base = 120 mm
Dimensions refer to model with 50 mm structure, add 20 mm to the indicated dimensions to obtain the 60 mm structure.
The above data refer to standard units.

Selection Software

The air handling units selection software allows to size the units and to have immediately the complete technical offer with executive drawings, technical data sheets and list of main components and materials used.

Technical data

Size		CLA	1	2	3	4	5	6	7	8	9	10	11
Air flow rate	(1)	m³/h	1200	1400	1600	1800	2100	2400	2700	3100	3500	4000	4600
	(2)	m³/h	1500	1700	2000	2200	2600	2900	3400	3900	4400	5100	5800
	(3)	m³/h	1800	2000	2400	2700	3100	3500	4100	4600	5300	6100	6900

Size		CLA	12	13	14	15	16	17	18	19	20	21	22
Air flow rate	(1)	m³/h	5300	6100	6900	7900	9100	10500	12000	13500	15500	18000	20500
	(2)	m³/h	6600	7600	8700	9900	11500	13000	15000	17000	19500	22500	26000
	(3)	m³/h	7900	9100	10500	12000	13500	15500	18000	20500	23500	27000	31000

Size		CLA	23	24	25	26	27	28	29	30	31	32
Air flow rate	(1)	m³/h	23500	27000	31000	35500	40500	46500	53500	61000	70000	80000
	(2)	m³/h	29500	34000	38500	44500	51000	58000	66500	76500	87500	100000
	(3)	m³/h	35500	40500	46500	53000	61000	70000	80000	91500	105000	120000

(1) Air passage speed on the heat exchange coils 2 m/s
(2) Air passage speed on the heat exchange coils 2,5 m/s
(3) Air passage speed on the heat exchange coils 3 m/s

Accessories

The air treatment units of the CLA series are available with a vast range of accessories that can be selected directly with the selection software.
A few of the most common accessories are listed below:

✓ Weatherproof roof and control protection technical compartment;

✓ Weatherproof covers on the external air inlets and outlets

✓ Safety device for moving components

✓ Spotlights and viewing panel for inspection

✓ Inverters on the fan motors
Other accessories not found in the basic selection can be assessed on request.

CONTROL4 NRG

Energy assistant for the air conditioning system for Smart Office and commercial & industrial applications

- ✓ It manages up to 24 elements simultaneously
- ✓ Management of scenarios with different operating conditions and related programming bands
- ✓ Class A control according to European standard EN15232
- ✓ Scalable system for potential system expansions and integration of additional appliance control and self-consumption
- ✓ Energy management with power consumption and self-consumption data display
- ✓ Option for remote monitoring and control of systems from a PC or APP
- ✓ Compatible for interfacing with INTELLIPLANT systems

The whole system at your fingertips

CONTROL4 NRG is a centralised supervision and management system for hydronic systems used for cooing, heating, domestic hot water production and air quality control in residential buildings and small businesses.
It enables the centralised management of systems made with compatible Clivet units, intelligently controlling all the system elements in order to obtain optimal comfort with maximum efficiency.

In synergy with renewable energy sources

CONTROL4 NRG guarantees top system performance thanks to the Class A energy classification according to the strictest requirements for energy classification of buildings in compliance with the European standard UNI EN15232 (Energy performance of buildings - Impact of building automation, controls and technical building management).
Check self-consumption levels and decide when to switch on or off the air conditioning system according to the availability of energy from the photovoltaic system.

In synergy with renewable energy sources

CONTROL4 NRG s designed to integrate with the most advanced renewable energy technologies for a cleaner, more sustainable future.
It captures the energy produced by your photovoltaic system as well as that of your air conditioning system, and displays the energy profiles in a simple and intuitive way.

Comfort and air quality

CONTROL4 NRG manages room comfort both in traditional systems with seasonal reversibility (2-pipe configurations) and in new generation energy saving systems with heat recovery, which provide simultaneous and independent energy production in heating and cooling mode (4-pipe configuration).
CONTROL4 NRG manages room comfort also thanks to the management of air renewal systems, ensuring that healthy environments are kept in line with the most stringent regulatory requirements on the well-being and health of people.
CONTROL4 NRG and Clivet's Zephir renewal units also make it possible to replace the hydronic system mid-season to fulfil the heating requirements, thus ensuring more energy saving.

Ideal for all sectors

The system offers the utmost flexibility of use due to a number of climate zones available in both heating and cooling modes, its integration with substitute energy sources, energy consumption management and remote management from a PC or dedicated APP.

Offices

Shops

Restaurants

Remote control and access

The CLIVET EYE APP allows remote access to the CONTROL4 NRG system, enables monitoring of operating temperatures and access to the main system functions. Also available via WEB-APP from a PC or tablet. An internet connection is required.
CLIVET EYE is ideal for all users who want to safely and efficiently manage the comfort of their office or business for the well-being of the people who work there.

HID-TSmart

HID-TSmart evolves the thermostat concept with a new generation device from which you can access all the information you need for efficient room management.

HID-TSmart is not only a smart thermostat, it is also an extension of CONTROL4 NRG that can provide information on the main system operating parameters simply and immediately: it allows you to acquire information on the temperature, relative humidity, energy consumption, energy produced by the photovoltaic system and charging level of the Clivet SINERGY electric water tank. It is enhanced with area control that allows you to set the system mode and ventilation level.

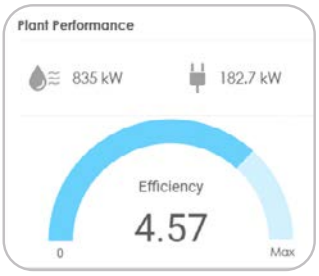
INTELLIPLANT

Optimisation system for centralised hydronic systems

✓ INTELLIPLANT is the innovative technological solution designed to optimise the central heating/cooling plant of medium and large capacity systems, ensuring efficiency and reliability in any application, from comfort applications to more complex applications for industrial processes that require continuity of operation under any operating condition.

✓ INTELLIPLANT optimises centralised systems by using the control algorithms of the devices which are involved in the production and distribution of thermal energy, as well as an advanced diagnostics survey engine which makes it possible to determine their state of maintenance.

Control and optimisation



INTELLIPLANT identifies the best activation sequence for units by starting them according to their performance curves, fulfilling the energy requirements of the system with minimum power consumption. INTELLIPLANT also optimises pumping units to ensure the distribution of fluids through the primary and secondary circuits by managing the variable flow-rates while reducing energy consumption.
The benefits from these control strategies are:
high system efficiency levels
reduction of waste from the over-production of energy
better stabilisation of the system with reduced thermal and mechanical stress on the units.

Preventive diagnostics

INTELLIPLANT evolves the concept of maintenance, from conventional scheduled maintenance to "Condition Based Maintenance", i.e. maintenance tailored to each specific system based on its operating status.
The benefits from this model are:
reduction of the amount of interventions and field trips
better management of maintenance personnel
lower maintenance costs
reduction of system downtime due to sudden failures
increased system productivity
longer service life of thermal energy generation and distribution devices.

Energy under control

INTELLIPLANT has dedicated pages and reports to allow the plant's energy consumption to be monitored and controlled, with functions to:

✓ analyse and normalise the energy consumption of the devices in the plant

✓ identify critical issues and eliminate waste

✓ increase the level of comfort

✓ increase the continuity of system operation

✓ promote activities to increase the overall efficiency of the systems.

Functions and features

Clivet's Cloud-based service offers the option of remotely connecting to the INTELLIPLANT system and accessing its functions from any PC, smartphone and tablet with a web browser, without needing to install a dedicated APP.

System dashboard

Unit dashboard

INTELLIPLANT provides the user with a wide range of graphical pages that combine the most significant plant and unit operating parameters to ensure total control of mechanical systems both locally and remotely.
All of the pages can be viewed on a PC or smart device.
The main pages include:

✓ System dashboard, with the most significant general system operating data

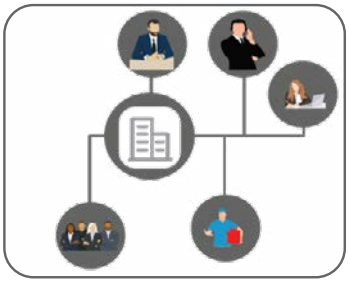
✓ Unit dashboard, with all the operating variables of the individual units

✓ Energy dashboard, with system and individual unit efficiency indices

✓ Maintenance dashboard, with operating values of system components and their operating status

✓ Commissioning page, to facilitate system start-up and calibration operations.

INTELLIPLANT is a solution for all professionals involved in the design, management and operation of technological systems:



✓HVAC system consultants and designers

✓Building and Facility Managers

✓Energy Managers

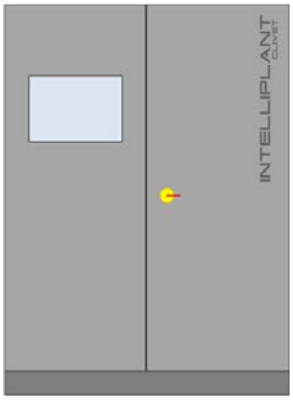
✓ESCO

✓Service Managers and maintenance technicians

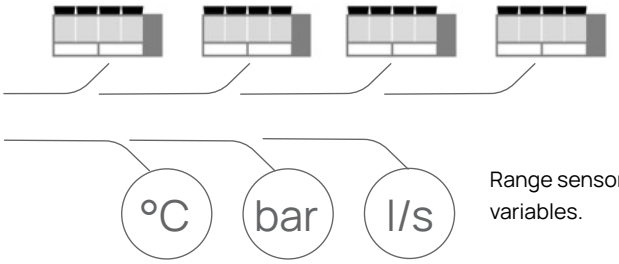
✓Builders and installers

✓System investors and owners

INTELLIPLANT is a flexible, modular and expandable solution to better meet the most stringent structural, application and installation requirements in full compliance with safety standards and regulations.



INTELLIPLANT acquires in-situ all the information needed to keep the entire system running efficiently, such as temperatures, water flow-rates and operating pressures, right down to the most direct operating parameters of each individual heating/cooling unit.



Heating/cooling units, circulation pumps and source devices.

Range sensors for acquiring operating variables.

INTELLIPLANT CORE

Optimisation system for centralised hydronic systems

✓ Monitoring and control of hydronic chiller units, reversible heat pumps and multifunctional units

✓ Workload distribution: The heating and cooling load is equally distributed between the various units, making the most of their operation in partial load mode.

✓ Centralised management: Professional multi-site cloud platform for unified and simplified control. This allows the various systems to be monitored and managed from a single interface

System manager

The INTELLIPLANT system allows you to efficiently and continuously manage the hydronic units on the local operator panel and on the remote interface on a computer, smartphone or tablet. INTELLIPLANT CORE consists of a main control panel that manages the connection to the various hydronic units (chillers, reversible heat pumps and multifunctional units) equipped with both serial and Ethernet communication. Thanks to the values acquired in real time from the system, advanced control logics enable efficient management of thermal loads based on real system demand, constantly monitoring the system conditions and selecting unit activation, either based on the most performing activation sequence or by balancing the operating hours.

✓ Monitoring and control of hydronic chiller units, reversible heat pumps and multifunctional units

✓ Primary circuit management of 2-pipe and 4-pipe systems with Clivet air source units with integrated hydronic unit

✓ Integration with BMS/BAS through open protocols

✓ Management of operating parameters such as temperature and seasonal mode change

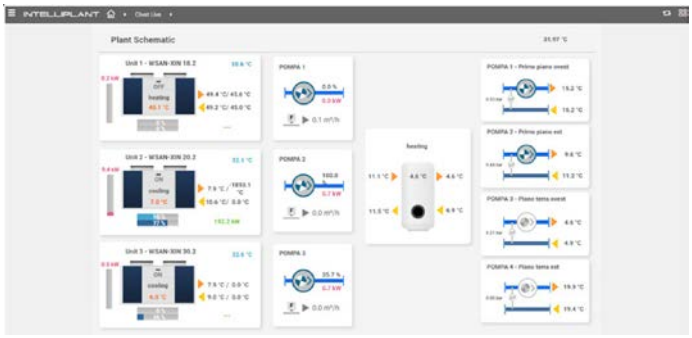
✓ Scheduled and manual system switch-on

Management, safety and professionalism

The INTELLIPLANT CORE system ensures centralised multi-site monitoring via a cloud platform that adheres to data protection privacy levels in accordance with the most stringent interpretations of the GDPR (Global Data Protection Regulation).
Aimed at operators such as facility managers, system operators and plant managers.

Graphic interface

Plant schematic



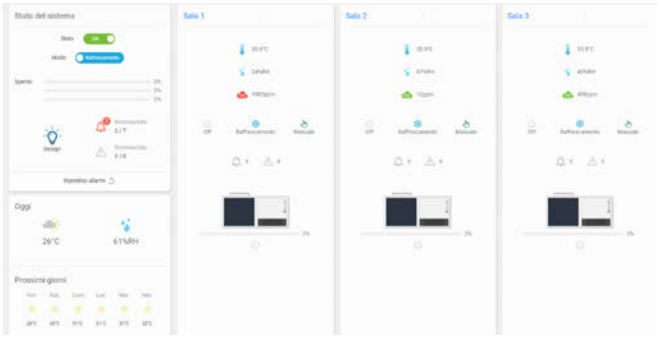
The page offers a customised graphic representation where each area can be checked:

✓ operation status;

✓ real-time values of key operating parameters such as temperature and humidity;

✓ presence of alarms that must be promptly reported to the system supervisor/manager

Plant dashboard



The main page of the system provides an overview with reports for all areas:

✓ system operational status and quick action buttons;

✓ percentage and mode of operation of individual units, broken down by areas;

✓ maintenance status resulting from the preventive analysis of each individual unit;

✓ priority and second-level alarms;

✓ current day's weather and forecast for the next 7 days;

In detail, the user can access all parameters specific to the area or individual units and their operating parameters.

Unit

The following basic information is displayed for each unit:

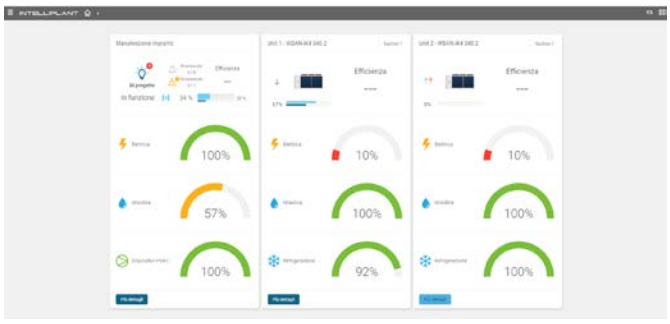
✓ graphical model of the unit with dynamic representation of the operating state;

✓ operating status of the unit and buttons for quick actions;

✓ details of component status (fans, compressors, etc.);

✓ list of parameters and their values in real time.

Predictive maintenance



INTELLIPLANT helps to develop the concept of maintenance from traditional "scheduled routine maintenance" to the more advanced idea of "condition based maintenance", i.e. maintenance customised per event according to its operational status, applicable to the most significant situations affecting refrigeration thermal unit components.

INTELLIAIR

Optimisation system for centralised hydronic systems

✓ Local and remote visibility via dedicated Cloud platform

✓ Ventilation optimisation with air quality acquisition

✓ Advanced scheduler for the activation of energy profiles

✓ Diagnostic survey system for preventive maintenance management

✓ Integration with BMS/BAS for alarm notification and supervision

Focus on comfort

IINTELLIAIR is Clivet's specialised solution for the supervision and control of air conditioning systems in all applications where comfort and energy efficiency are paramount. Thanks to the integration with autonomous rooftop air conditioning units, a high level of consumption optimisation in air handling can be achieved while ensuring the utmost comfort in the rooms.
The INTELLIAIR supervision solution is perfect for:

✓ shopping centres

✓ multiplex cinemas, theatres, auditoriums

✓ commercial premises and areas

✓ Ho.Re.Ca sector
The high energy savings with INTELLIAIR are ensured by the automated management of independent areas, through the programming of targeted energy profiles to eliminate inefficiencies that can occur in centralised systems, without sacrificing comfort.

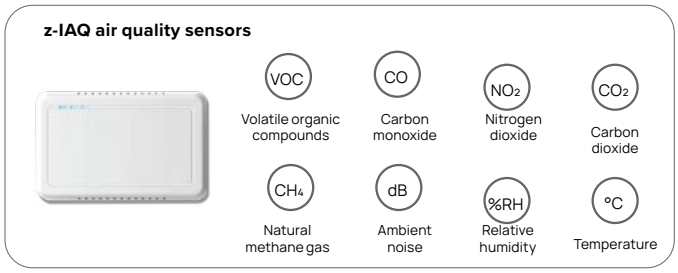
Highly adaptable

INTELLIAIR consists of a pre-wired and pre-assembled hardware and software system inside a control box suitable for installation in a control room or dedicated technical room. A 10" touchscreen panel on the control box allows the operator to consult all pages containing information on the system to be monitored.

Everything under control

Communication between INTELLIAIR, Clivet air conditioning units and field devices is via RS-485 serial line with RTU Modbus communication protocol, which simplifies wiring and ensures long operating distances. Furthermore, communication can be provided based on Ethernet protocol to extend the application range to Clivet units with TCP/IP Modbus communication protocol.

In addition to temperature and humidity control, comfort is even more advanced due to the full integration of high-tech sensors that monitor the air quality index for every single area.



TEMPERATURE **HUMIDITY** **AIR QUALITY**

INTELLIAIR is designed to provide full compatibility with all BMS/BAS, thereby ensuring total transparency when viewing the system even by these systems.

INTELLIAIR provides an intuitive dashboard that easily displays all the information on the system's operating mode on cards that automatically adjust to the size of the screen on the local operator panel and on the remote interface.

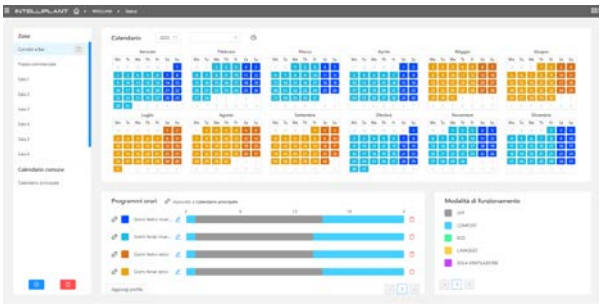
Comfort planning

Programming is one of the most important features of INTELLIAIR for automatic system operation. With the scheduler, you can program the right comfort in the different zones of the building throughout the year so as to maintain their comfort independently of the others, thus eliminating the waste and inefficiency that can occur in centralised systems. The main features are:

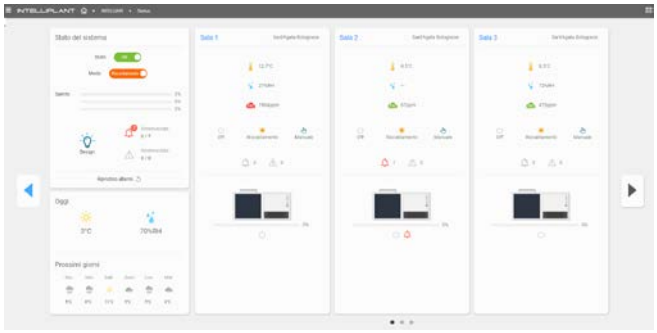
✓ Daily/annual programming of temperature, humidity, CO_2 setpoints

✓ Sharing set-points with all the units belonging to that zone

✓ Maintenance planning



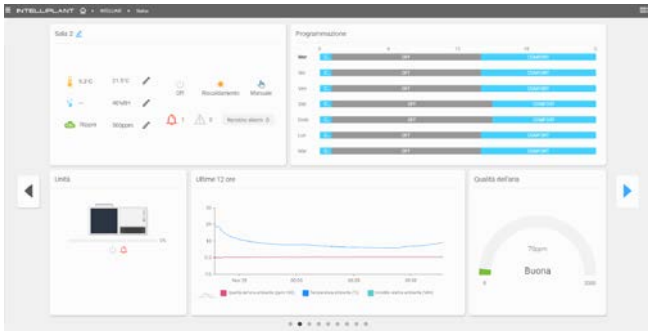
From an overall view to the individual detail



The main system page provides direct access to the various zones and displays the following main information:

- ✓ operating status of the system and buttons for quick actions
- ✓ percentage and operating mode of single units, by area
- ✓ maintenance status following the preventive analysis of each individual unit
- ✓ priority and second-level alarms
- ✓ current day's weather and forecast for the next 7 days

In detail, the user can access all parameters specific to the area or individual units and their operating parameters.



Percentage and operating mode of single units, by area:

- ✓ 7-day scheduling of units connected to the area
- ✓ display and modification of the room temperature setpoint, relative humidity and air quality
- ✓ alarm status and specific warnings for the area
- ✓ room temperature, relative humidity and air quality trends over the last 12 hours

The following basic information is displayed for each unit:

- ✓ operating mode (heating / cooling / Auto) and performance of the unit
- ✓ operating status (comfort / Eco / off)
- ✓ current temperature, relative humidity and air quality values
- ✓ detailed component status (fans, compressors, etc.)

CLIVET EYE

Optimisation system for centralised hydronic systems

✓ CLIVET EYE is the monitoring system to remotely control air conditioning, heating, air renewal and hot water production units and systems for both private and professional use.

✓ It is intended for end users and professionals for the control and preventive maintenance of heating and cooling units.

All systems at a glance

With CLIVET EYE you can monitor and manage all Clivet systems located in the country, even if they are of different types.
The geographical map of CLIVET EYE enables all of the systems to be quickly and constantly monitored in real-time, showing their operating conditions simply and intuitively.
Event notifications promptly warn of any system malfunctions.
CLIVET EYE provides a graphic page with the location of the units and identifies their operating status with a “traffic light” system.
This makes it possible to detect the operating status of the units in advance and react promptly to avoid system breakages and shut-downs.

Unit running
No action required on site

Unit offline
Requires verification of network connection

Non-blocking fault
Requires verification of unit operating parameters to preserve system integrity and operation continuity

Blocking alarm
Requires verification of unit status to restore correct operation

Main features

✓ Easy control of units / systems via the App and Web Dashboard

✓ Prompt signalling of malfunctions through e-mail event notifications

✓ Programming of operating conditions through time schedules (switch-on, switch-off, changing operating set points)

✓ In-depth remote analyses and reset of small alarms reducing the need for on-site intervention

✓ Faster and more effective interventions due to prompt signalling of malfunctions via e-mail

✓ Analysis of the history of operating conditions

✓ Verification of electric and power consumption of individual units (check compatibility with individual unit model)

✓ Calculation of efficiencies of individual units (check compatibility with individual unit model)

✓ Air quality analysis (available for roof top units fitted with air quality sensors)

Advanced functions

Performance monitoring

CLIVET EYE acquires the electric energy and consumption values of individual units and makes them available in graphic format on simple and intuitive interfaces.
In the desktop version, CLIVET EYE also calculates the efficiency of the unit accurately, thereby allowing professionals to carry out diagnostic surveys based on actual performance conditions measured in real time.

Air quality index

CLIVET EYE acquires the air quality values of air-conditioned rooms by means of Clivet roof top units.
The graphic interface displays the following values:

✓ temperature and humidity

✓ VOC index

✓ carbon dioxide (CO_2)

✓ carbon monoxide (CO)

✓ methane (CH_4)

✓ nitrogen dioxide (NO_2)

✓ ambient noise level (dB)

All values measured are available in real time and in chart format with the trend of changes over time.

Connectable Units

Hydronic units for chilled and hot water production, 4-pipe multifunctional units, dedicated heat pumps for high temperature hot water production

Roof top for the air conditioning of medium- and high-crowded buildings.
Independent primary air unit

Air handling unit

Who needs CLIVET EYE?

CLIVET EYE is intended for end users, facility managers, service centres and system managers in general who need to monitor the system remotely.

END USERS

SYSTEM MANAGERS

MAINTENANCE PERSONNEL

8.1 Index

Clivet, in compliance with Regulation 517/2014, informs that its products contain or function with the use of fluorinated greenhouse gases: R-32 (GWP 675), R-410A (GWP 2087,5), R-134a (GWP 1430) and R-407C (GWP 1773,85), R-513A (GWP 631), R-1234ze (GWP 7).

Icons guide

Icons guide

Hydronic

- Heat pump
- Air cooled
- Outdoor installation
- Hermetic Scroll
- Full inverter
- Electronic expansion valve
- Gestione CONTROL4 NRG
- INTELLIPLANT
- Hermetic Rotary
- Hybrid system
- Chillers
- Free cooling
- AxiTop
- Vary Flow
- ECOBREEZE
- Hydropack
- Semi-hermetic Twin-screw
- Indoor installation
- Electronically controlled ventilation
- Water cooled
- Heating only
- Heat pumps with inversion on the water circuit
- Centrifugal
- Remote condense
- High Temperature Chillers External Air
- Free Cooling Chillers
- Heat pumps High temperature water
- Polyvalent heat pumps
- Ducted units
- Inverter centrifugal Compressor, Refrigerant R-134a
- Inverter centrifugal Compressor, Refrigerant R-1234ze
- Inverter Scroll Compressor, Refrigerant R-32
- Inverter Scroll Compressor, Refrigerant R-290
- Inverter Scroll Compressor, Refrigerant R-410A
- Scroll Compressors, Refrigerant R-410A
- Scroll Compressor, Refrigerant R-32
- Screw Compressors, Refrigerant R-134a
- Inverter Screw Compressors, Refrigerant R-513A
- Inverter Screw Compressors, Refrigerant R-1234ze

Packaged

- Heat pump
- Air Source
- Outdoor installation
- Full inverter
- Free cooling
- Thermodynamic energy recovery
- Electronically commutated Fan
- Constant airflow
- Variable airflow
- Modbus
- INTELLIAIR
- Free cooling
- REVO thermodynamic energy recovery
- Energy recovery through enthalpy wheel
- ECOBREEZE
- Electronic filtration
- Ice protection system
- Silent
- Active dehumidification
- Scroll Compressors, Refrigerant R-410A
- Rotary compressor/Inverter Scroll, Refrigerant R-32
- Tandem Scroll Compressors, Refrigerant R-410A
- Tandem Scroll Compressors, Refrigerant R-32

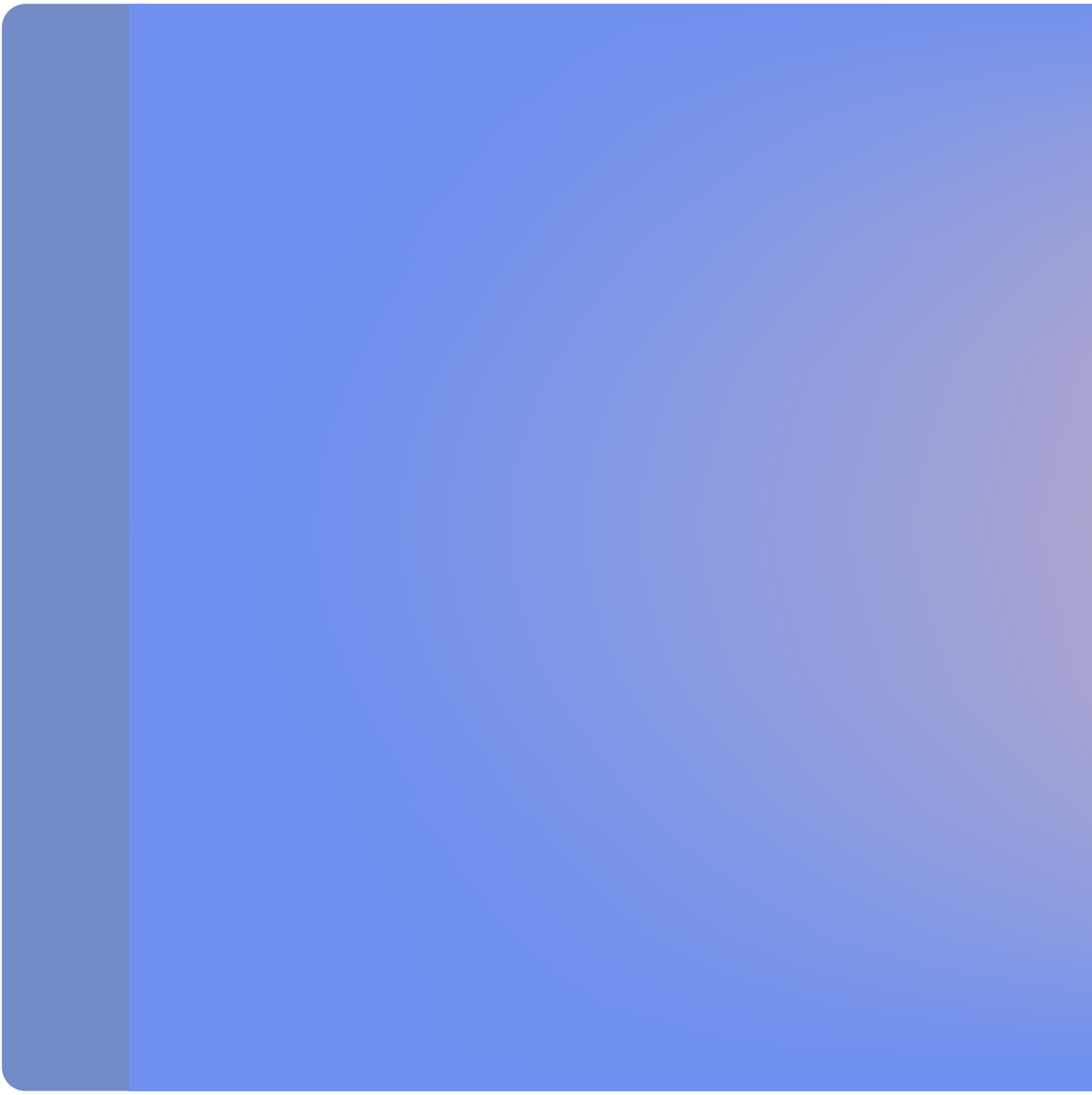
Primary air

- Heat pump
- Air Source
- Outdoor installation
- Free cooling
- Active Thermodynamic Recovery
- Electronically commutated Fan
- Full inverter
- Constant airflow
- Variable airflow
- Modbus
- Silent
- Gestione CONTROL4 NRG
- Hot gas reheating coil
- Electronic filtration IFD
- VRF management
- INTELLIAIR
- Clivet Eye monitoring
- Indoor installation
- Certified structure

WLHP - TERMINAL

- Heat pump
- Water cooled
- Vertical cased
- Vertical uncased
- Hermetic Rotary
- Electronic expansion valve
- Horizontal uncased
- Hermetic Scroll
- Free cooling
- THOR (THermodynamic Overboost Recovery)
- Electronically commutated Fan
- Constant airflow
- Variable airflow
- INTELLIAIR
- Hot & Cold
- Horizontal cased
- 2 pipe
- 4 pipe
- High head
- RS485 Connection
- Gestione CONTROL4 NRG
- DC Motor

For OVER 35 years we have been offering solutions for sustainable comfort and the well-beingof people and the environment



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Valid from:
January 2026

DG26A003GB-00