CLIVET Home

GUIDE **2022**

PRODUCTS AND SYSTEMS

HOME

CLIVET | AIR CONDITIONING AND AIR QUALITY PARTNER

Inspiring Solutions since 1989

CLIVET Home

This document is dedicated to those looking for advanced and specialized solutions for heating and cooling, air conditioning, renewal and purification of air in the residential area.

Solutions able to increase the comfort level in the places where we live be they single or multi-family homes, new homes or renovations.

Complete year round systems, focused on substantial energy savings and a reduction in CO_2 emissions.

Full electric or hybrid heat pumps, with integrated condensing boiler, cased or uncased that adapt to any type of system.

With over 30 years of experience!

INSPIRING SOLUTIONS

CLIVET | AIR CONDITIONING AND AIR QUALITY PARTNER

This Guide 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 “SYSTEMS AND PRODUCTS” area at www.clivet.com and on Clivet Apps, where they can be downloaded free of charge.

To keep up to date with Clivet news, follow us on our social networks:

CLIVET. INSPIRING SOLUTIONS

HEAT PUMPS

TERMINAL UNIT

HEAT PUMPS FOR DHW (Domestic Hot Water)

VMC WITH RECOVERY

SOLUTIONS

ALWAYS READY FOR THE FUTURE

INSPIRING SOLUTIONS

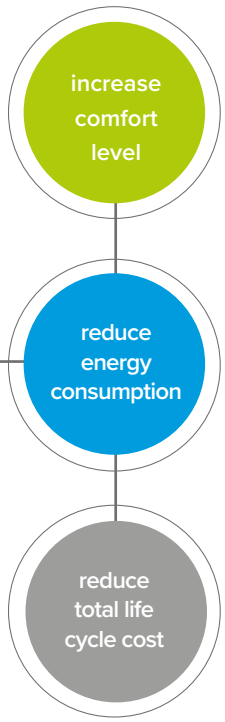
In over 30 years of working on the design, manufacturing and distribution of air conditioning and handling systems, combining high efficiency with minimal environmental impact, Clivet has developed solutions to ensure sustainable comfort and the well-being of people and the environment.
Designing and developing year-round air conditioning solutions with innovative technologies are part of Clivet's DNA, which means the company has always been ready for the future.

COMFORT FOR THE PLANET & PEOPLE

OUR VALUES

IN THE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SECTORS

Increasing comfort, saving energy and providing customers with the best value for the entire life cycle of the system: these are the values that inspire our systems for the residential, services and industrial sectors.



OUR NUMBERS

35
AGENCIES IN ITALY

53.500 m²
OF PLANTS IN FELTRE - BELLUNO VERONA (UTA PRODUCTION)

100
COUNTRIES WE EXPORT TO

707
EMPLOYEES IN ITALY AND ABROAD

260
WHOLESALERS WITH CONTRACT

7 BRANCHES:
GREAT BRITAIN, GERMANY, INDIA, RUSSIA, UAE, CHINA, BALKANS

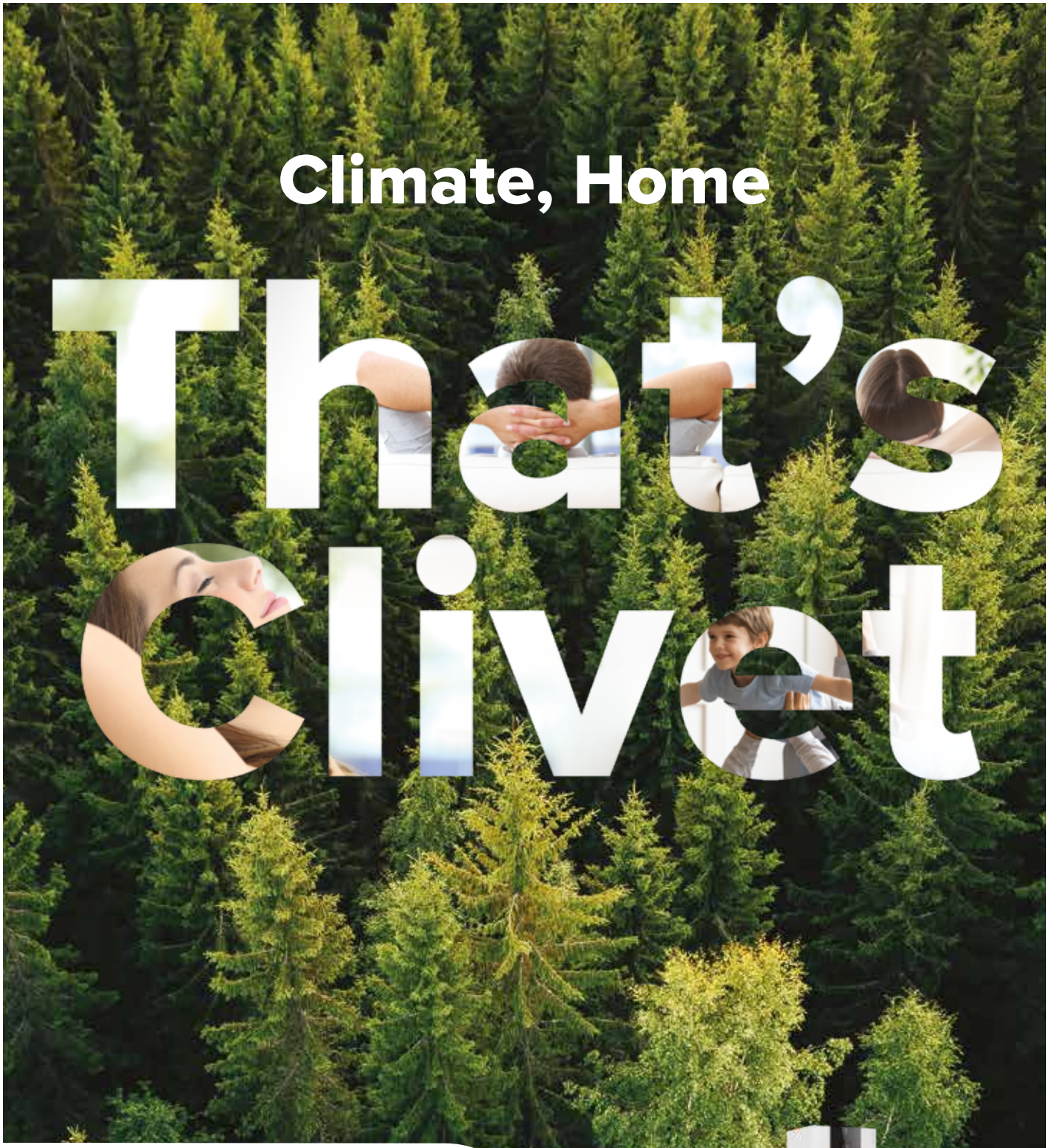
160
SERVICE CENTRES

2015
CLIVET LIVE IS BORN

2016
STRATEGIC ALLIANCE WITH MIDEA GROUP

2021
MIDEA GROUP #288 FORTUNE GLOBAL 500

44.100 $M
OF TURNOVER



CLIVET

For more than thirty years, Clivet has been designing sustainable solutions to guarantee comfort and perfect climate to your home.
A range of products to heat, cool, produce domestic hot water and purify the air for maximum energy efficiency and ease of use thanks to the control App.
All with ecological refrigerants!

Climate, Home, That's Clivet
www.clivet.com

CLIVET | AIR CONDITIONING AND AIR QUALITY PARTNER

New additions to the 2022 range

SPHERA EVO 2.0 EASYHybrid

New high efficiency gas split heat pump in hybrid version from 4 to 16 kW, to renew the system with the most advanced technology and low running costs.

Edge EVO 2.0 - EXC

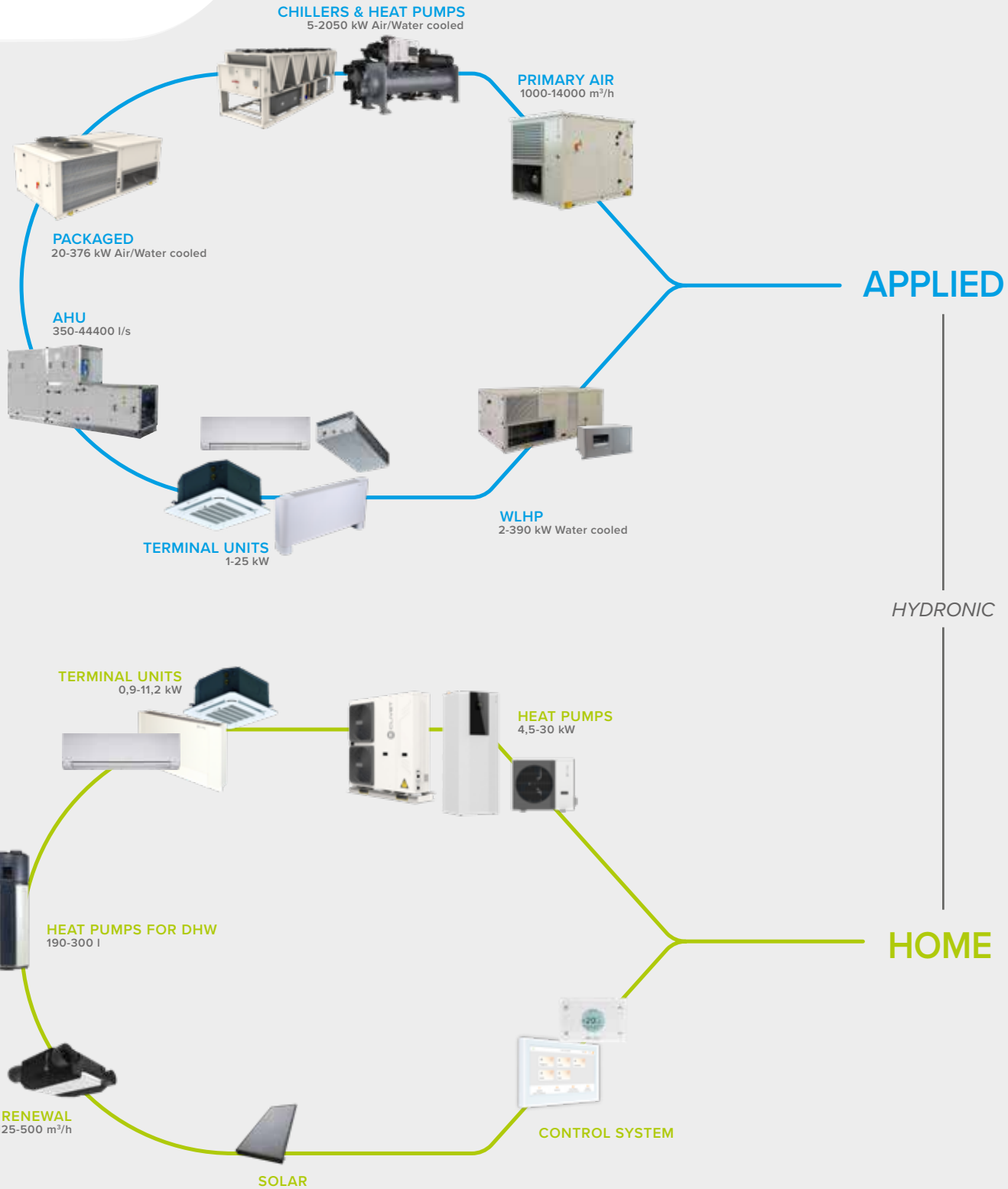
Monoblock heat pump, compact, efficient and very quiet with a capacity range from 4 to 30 kW.

ELFOFresh EVO

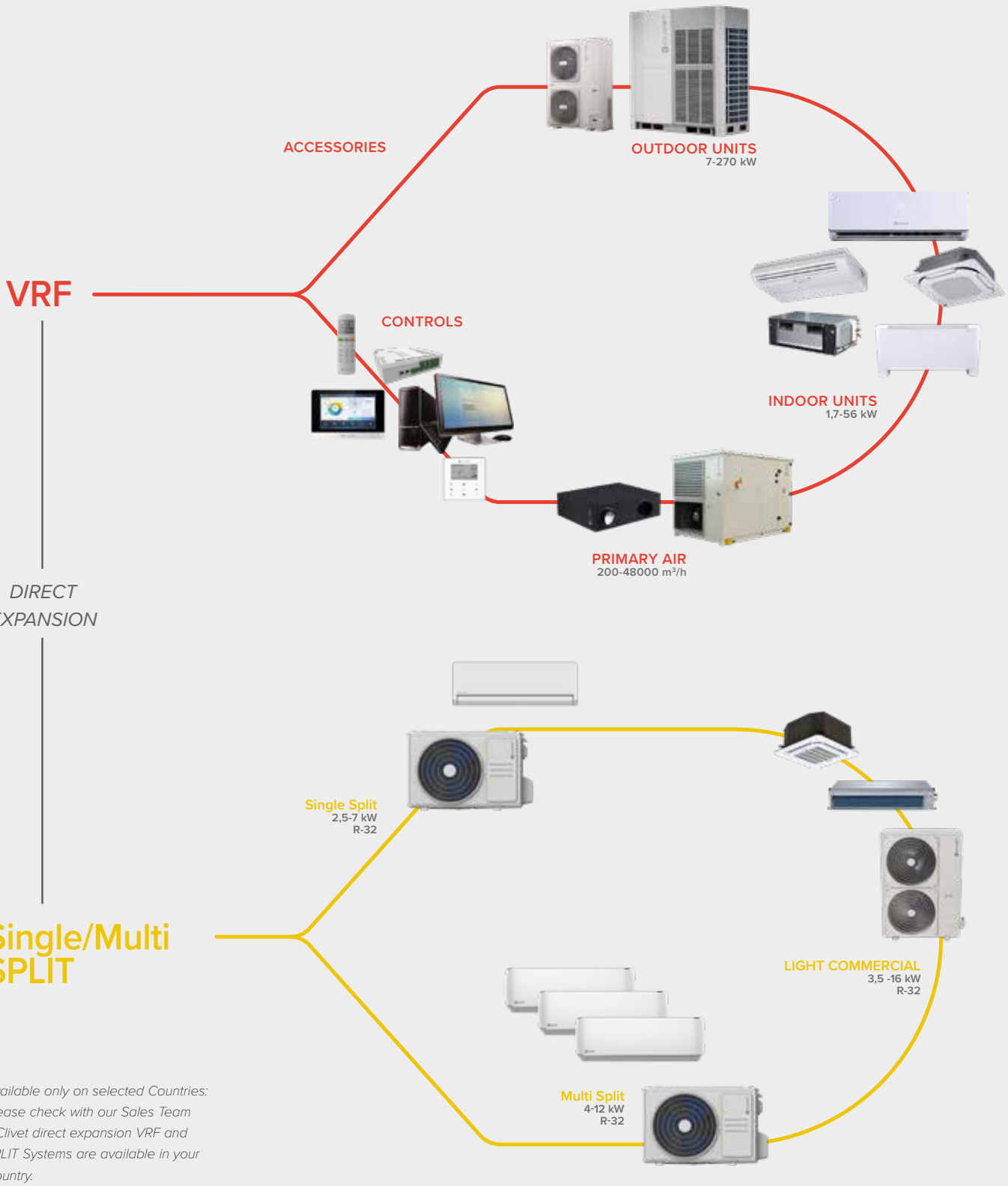
New electronic filter with IFD technology, installed inside the unit ensuring a high filtration efficiency of PM1 90%, and yet a more compact system.

ALL TECHNOLOGIES FOR

A COMPLETE PROPOSAL



Heating, cooling, air renewal and domestic hot water production



Available only on selected Countries: please check with our Sales Team if Clivet direct expansion VRF and SPLIT Systems are available in your Country.

HOME

The range Clivet HOME

HEAT PUMPS

Full Electric Heat pumps

Split

	SPHERA EVO 2.0	R-32 Refrig.	APP		4 ÷ 16 kW
	SPHERA EVO 2.0 Box	R-32 Refrig.	APP		4 ÷ 16 kW
	SPHERA EVO 2.0 Invisible	R-32 Refrig.	APP		4 ÷ 10 kW

Monoblock

	ELFOEnergy Edge EVO	R-32 Refrig.	APP		4 ÷ 30 kW
	*PREVIEW 2022* Edge EVO 2.0 - EXC	R-32 Refrig.	APP		4 ÷ 30 kW

Hybrid heat pumps

Split

	*PREVIEW 2022* SPHERA EVO 2.0 EASYHybrid Box	R-32 Refrig.	APP	Integr. Boiler	4 ÷ 16 kW 23 ÷ 33 kW (boiler)
	*PREVIEW 2022* SPHERA EVO 2.0 EASYHybrid T	R-32 Refrig.	APP	Integr. Boiler	4 ÷ 16 kW 23 ÷ 33 kW (boiler)
	SPHERA EVO 2.0 Box Hybrid	R-32 Refrig.	APP		4 ÷ 16 kW 23 ÷ 33 kW (boiler)
	SPHERA EVO 2.0 Hybrid	R-32 Refrig.	APP		4 ÷ 16 kW 23 ÷ 33 kW (boiler)
	SPHERA EVO 2.0 Invisible Hybrid	R-32 Refrig.	APP	Integr. Boiler	4 ÷ 10 kW 24 kW (boiler)

Monoblock

	ELFOEnergy Edge EVO Hybrid	R-32 Refrig.	APP		4 ÷ 16 kW 23 ÷ 33 kW (boiler)
	*PREVIEW 2022* Edge EVO 2.0 - EXC Hybrid	R-32 Refrig.	APP		4 ÷ 16 kW 23 ÷ 115 kW (boiler)

TERMINAL UNIT

	MOOD		DC Motor	2,7 ÷ 4,9 kW
	ELFORoom[2]		DC Motor	0,9 ÷ 3,7 kW
	AURA	AC Motor	DC Motor	1,5 ÷ 8,3 kW
	ELFOSpace BOX3		DC Motor	3,0 ÷ 11,2 kW
	Nebula MP *PREVIEW 2022*	AC Motor	DC Motor	1,6 ÷ 7,8 kW
	Nebula HP *PREVIEW 2022*	AC Motor	DC Motor	3 ÷ 26,8 kW

DHW HEAT PUMPS (Domestic Hot Water)

	AQUA Plus	APP	190 - 300

VMC (Controlled Mechanical Ventilation) WITH RECOVERY

	ELFOFresh EVO	R-32 Refrig.	APP	Full Inverter DC	125 ÷ 320 m²/h
	ELFOFresh[2]	R-410A Refrig.			500 m²/h

CONTROL

	HID-TConnect	APP	-
	ELFOControl[3] EVO	APP	-

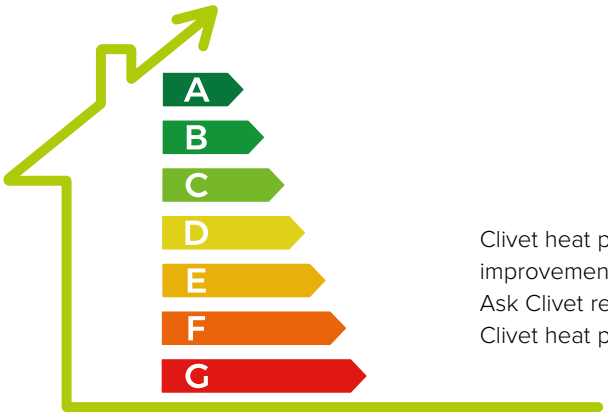
World Assistance for Clivet HOME products

Clivet's After-Sales Service reaches its Customers through a well-organized support network that is always on hand, as high technology levels require fast and skilled services.
Moreover, Clivet has facilities dedicated to the training of its after-sales service, Clivet University, with over 500 m^2 rooms for practical and theoretical trainings, where professionals can test Clivet systems operating in real conditions.
The service is available in most of the countries around the world through Distributors, Branches or selected Service Centres.

Learn more about the warranty and service conditions for your country by contacting the Distributor or the Branch closest to you.

discover your nearest service centre

TAX Credit



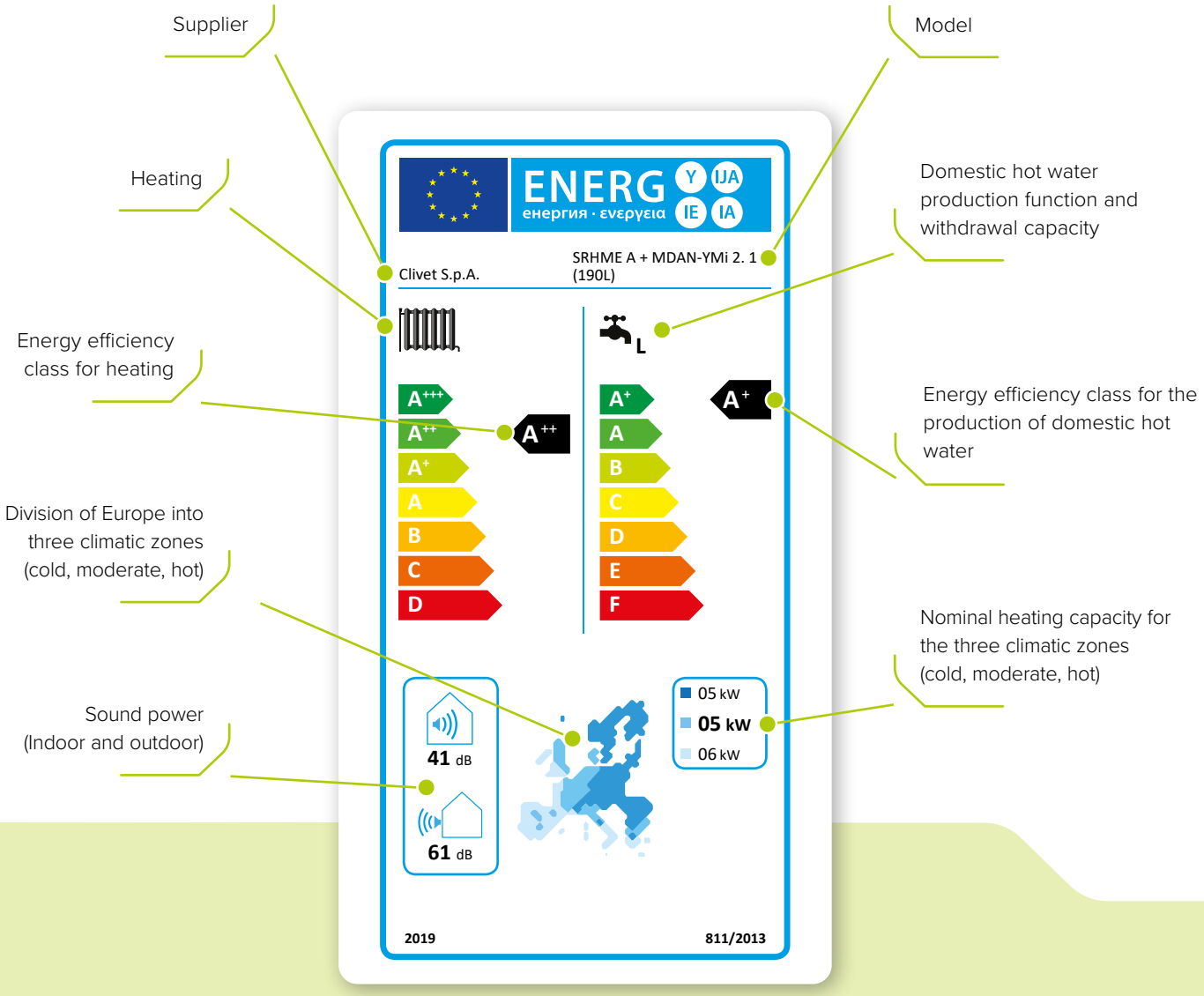
Clivet heat pumps allow to access to many tax credit/government incentives for improvements of energy efficiency.
Ask Clivet representative of your area which are the incentives you can obtain with Clivet heat pump systems.

ErP - Energy Related Products

The Delegated Regulations on ErPs (Energy-related Products) came into force on 26 September 2015 and are aimed at reducing energy consumption and supporting the most efficient solutions.
The regulations apply to heat generators used to heat rooms, appliances for domestic hot water production and systems consisting of a combination of several elements:

- ✓ All appliances with rated heating capacity up to 400 kW and boilers up to 2000 litres must comply with the requirements for environmentally compatible design, also based on minimum seasonal energy efficiency values;
- ✓ Only appliances with heating capacity up to 70 kW and boilers up to 500 litres must also comply with maximum noise level values (for heat pumps) and energy labelling.

Clivet's specialised systems considerably exceed the strict requirements of these directives.



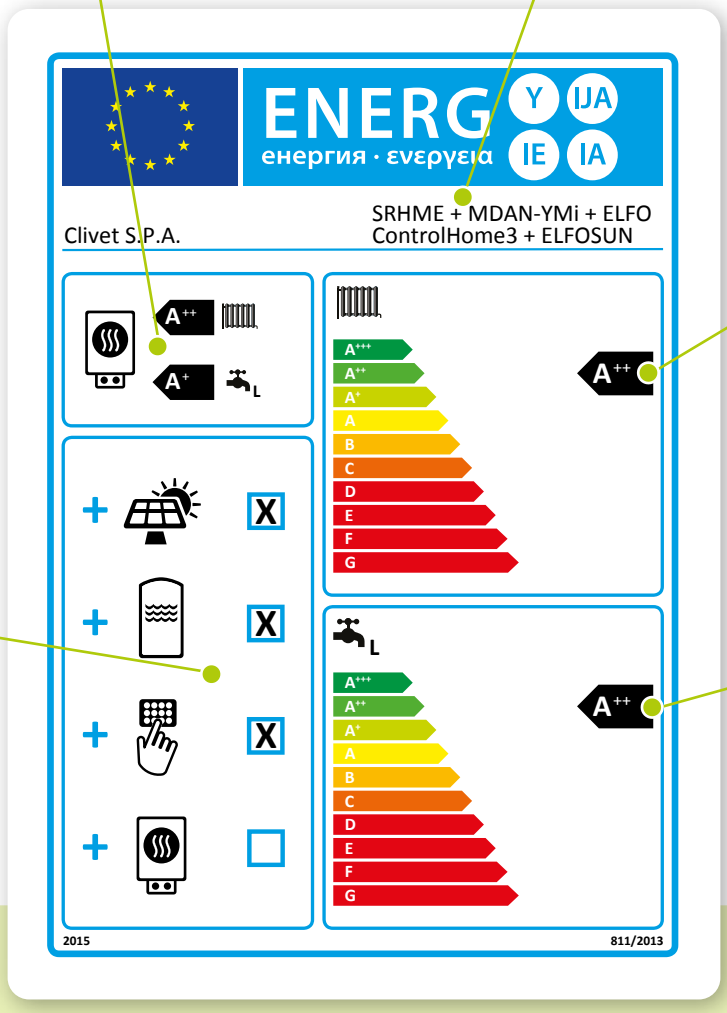
PRODUCT LABEL

It indicates the seasonal energy efficiency of a product according to a scale ranging from A+++ to D: it distinguishes heating efficiency from heating for the production of domestic hot water (DHW), reporting both in the case of products that can provide both services.

It also reports other useful information such as capacity and consumption in the various climate zones, noise levels, etc.

Energy efficiency class of the appliance for heating and for the production of domestic hot water

Models that are part of the system



Overall heating energy efficiency class

Information on whether a solar manifold, a hot water tank, a temperature control device and/or an appliance for additional heating can be included in the set

Energy efficiency class for the production of domestic hot water as a whole

SYSTEM LABEL

Indicates the energy efficiency for the installed system.
A system is the set of single products, in any combination, operating as a whole.
For instance, a heat pump, a boiler, a thermal solar system and electronic control for the system: if they work as a single system, their energy performance can be calculated as a combination of the individual components.

Clivet's complete system approach, which is based on the energy benefits of controlled mechanical ventilation with thermodynamic recovery and control over the entire system, allows for higher seasonal efficiency levels compared to those required by current directives.

Certifications

Clivet products comply with applicable **product directives**, as required in all EU countries, in order to guarantee an appropriate level of safety.

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 **CasaClima** partner, joining the network of companies that stand out for their high technical expertise and constant focus on sustainable management of homes.

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

Clivet participates in the **EUROVENT** "Liquid Chilling Packages and Heat Pumps", "Rooftops", "Air Handling 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 apply to water chillers up to 2000 kW, to rooftops up to 100 kW, to air handling units and to VRF up to 100 kW.

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.

A solution for every home

NEW BUILDINGS

Building and system working together as one

Solutions designed to be **fully integrated into the configuration of each house**, following specific requirements that may depend on the climate, the need for mechanical ventilation or dehumidification, structural insulation, the presence of renewable sources and much more.
These systems are complete and highly customisable: they are already **conceived at the design stage** to not only fulfil Heating, Cooling and Domestic Hot Water production, but also Ventilation, Air renewal and heat recovery. They are also optimised to provide maximum efficiency and quiet operation, as well as the lowest possible consumption levels.

- ✓ SPHERA EVO 2.0
- ✓ SPHERA EVO 2.0 Invisible
- ✓ Edge EVO 2.0
- ✓ ELFOSun²
- ✓ ELFOFresh²

RENOVATIONS

Turn your ideas into reality and create comfort

Solutions designed to enhance systems in existing houses by also **intervening on the distribution and control system,** which require building works such as renovating the distribution system, installing an intelligent management system or creating a thermal cladding system.
Incentives make these interventions extremely cost-effective, even with low investments.
These are cutting-edge systems that significantly increase comfort levels: they are **designed at the renovation stage** to replace the Heating system and the production of Domestic Hot Water, but also to add cooling, renewable energy sources (e.g. solar panels) or intelligent management systems such as ELFOControl.

- ✓ SPHERA EVO 2.0
- ✓ SPHERA EVO 2.0 Box
- ✓ SPHERA EVO 2.0 EASYHybrid T
- ✓ SPHERA EVO 2.0 Hybrid
- ✓ SPHERA EVO 2.0 Box Hybrid
- ✓ ELFOEnergy Edge EVO
- ✓ ELFOEnergy Edge EVO Hybrid
- ✓ Edge EVO 2.0
- ✓ Edge EVO 2.0 Hybrid
- ✓ ELFOSun²
- ✓ ELFOFresh²

REPLACEMENTS

Get maximum results with minimum effort

Solutions designed to **update old generators without modifying the system**, using stage-of-the-art products that require similar overall dimensions and no significant masonry works. Incentives and extremely quick intervention times clearly make this an obvious choice.
These systems are very versatile and can adapt to any existing facilities: they simply replace the generator that provides Heating and Domestic Hot Water, improving comfort and efficiency, as well as ensuring peace of mind.

- ✓ SPHERA EVO 2.0 Box
- ✓ SPHERA EVO 2.0 EASYHybrid Box
- ✓ SPHERA EVO 2.0 EASYHybrid T
- ✓ SPHERA EVO 2.0 Box Hybrid
- ✓ ELFOEnergy EDGE EVO
- ✓ ELFOEnergy Edge EVO Hybrid
- ✓ Edge EVO 2.0
- ✓ Edge EVO 2.0 Hybrid
- ✓ AQUA Plus

HEAT PUMPS

Full electric heat pumps:

✓ split

✓ monoblock

Hybrid heat pumps:

✓ split

✓ monoblock

Accessory products to heat pumps:

✓ solar panels

✓ boilers

FULL ELECTRIC HEAT PUMPS: SPLIT

SPHERA EVO 2.0

SPHERA EVO 2.0 Box

SPHERA EVO 2.0
Invisible

SPHERA EVO 2.0

SQKN-YEE 1 TC + MiSAN-YEE 1 S 2.1÷8.1

Wall-mounted air-to-water split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional)
- Smart Grid ready
- €-Switch

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Backup heater (optional)
- Eurovent
- Keymark

HEALTH
- Eco-friendly refrigerant
- Renewable energy

CONVENIENCE
- Weekly schedule
- Boiler integration
- Integrated DHW tank

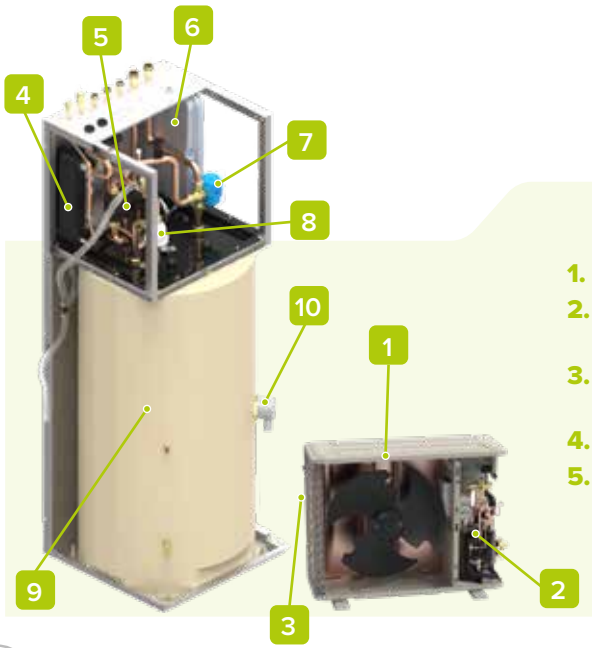
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring
- User interface / thermostat

TOP SYSTEM EFFICIENCY ErP 55°C A++ L A+

- ✓ System hot water production at 65°C with the outdoor air up to 5°C, at 60°C with the outdoor air down to -15°C
- ✓ Energy efficiency at the highest level
- ✓ Designed not to disturb, operating very quietly
- ✓ Suitable for every need, thanks to the dual version with 190-litre or 250-litre DHW storage tank
- ✓ Compact outdoor unit requiring very little installation space

Everything under control

The discreet and effective warning LED on the front of the unit indicates the unit's operating status in real time.
If the LED is pulsing white the unit is in stand-by or operating normally, if the LED is orange with quick pulsing there is a fault.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter
9. 190L/250L DHW tank with coil
10. 2kW DHW safety heater

configurations

DHW STORAGE:

ACS190 DHW storage 190L
ACS250 DHW storage 250L

OUTDOOR UNIT POWER SUPPLY (size 6.1÷8.1):

220M Power supply 230/1/50
400TN Power supply 400/3/50+N

AUXILIARY SYSTEM HEATER:

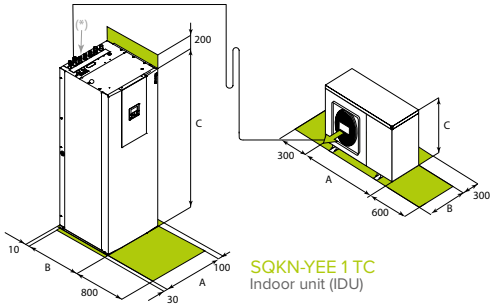
- No heater
EH24 2 kW integration electric heater
EH3 3 kW integration electric heater
EH6 6 kW integration electric heater
EH9 9 kW integration electric heater

accessories

	**ACSA250X**	250L additional domestic hot water storage tank
	**SOLX**	Drain-back solar integration for domestic hot water
	**KCSX**	Secondary circuit kit (1-litre circuit breaker + pump)
	**KIRE2HLX**	2 zones: external kit, high temperature + low temperature (mixed)
	KIRE2HX	2 zones: external kit, high temperature
	**DIX**	1-litre circuit breaker
	**DI50X**	50-litre circuit breaker
	**ACI40X**	40L system inertial storage tank *(s. 2.1÷5.1)*
	**ACI60X**	60-litre system inertial storage tank
	**COFX**	Casing sheets for the inertial storage cover

	**KCCEX**	External boiler connection kit
	**SFCSTX**	Additional probe for cascade function
	**DTX**	Auxiliary condensate collection tray
	**APAVX**	Kit of antivibration mounts for floor installation
	**ASTFX**	Kit of antivibration mounts for wall bracket installation
	**KSIPX**	Kit with wall fixing brackets
	**HID-TCBX**	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	**HID-TCNX**	White soft touch chronothermostat, with temperature control and management via App / Voice control
	**SWCX**	SwitchConnect radio receiver

dimensions and connections



MiSAN-YEE
Outdoor unit (ODU)

SQKN-YEE 1 TC
Indoor unit (IDU)

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

(*) Water and gas connections

technical data

Size (220M)					2.1	3.1	4.1	5.1	6.1	7.1	8.1
					190L 250L	190L 250L	190L 250L	190L 250L	250L	250L	250L
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,42	5,21	5,31	5,01	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	3,16	3,00	3,23	3,07	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,93	3,83	3,95	3,86	3,80	3,65	3,60
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	6,08	5,24	5,12	4,77	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-	3,50	3,09	3,33	3,09	2,75	2,55	2,45
DHW	Net tank capacity			l	190 250	190 250	190 250	190 250	250	250	250
	Water mixed at 40°C (V40)[1]			l	204 269	204 269	204 269	204 269	269	269	269
	Heating time			h:min	2:30 2:25	2:30 2:25	2:08 2:05	2:08 2:05	1:46	1:46	1:46
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.542	2.833	3.824	4.749	6.793	7.380	7.915
		SCOP		-	3,32	3,54	3,72	3,73	3,56	3,52	3,48
		ηs (seasonal output)		%	130	138	146	146	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.542	2.833	3.824	4.749	6.793	7.380	7.915
		SCOP		-	5,13	5,15	5,32	5,27	5,00	4,91	4,89
		ηs (seasonal output)		%	202	203	210	208	196	193	193
	DHW	Energy class		-	**A+** **A+**	**A+** **A+**	**A+** **A+**	**A+** **A+**	**A+**	**A+**	**A+**
		DHW profile		-	L XL	L XL	L XL	L XL	XL	XL	XL
Indoor unit					**A**	**A**	**A**	**A**	**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°				230/50/1			
Water flow-rate			Nominal	l/s	0,21	0,30	0,41	0,49	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	31,2	36,5	33,1	31,0	25,7	31,7	22,6
Expansion tank capacity				l				8			
Minimum system water content				l			40			60	
Sound power				dB(A)				41			
Sound pressure @1m				dB(A)				26			
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°				230/50/1			
Sound power				dB(A)	55	57	58	60	63	64	66
Sound pressure @1m				dB(A)	42	44	45	47	50	51	53
Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C				25 / 65			
		Cooling	Minimum / Maximum	°C				5 / 25			
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C				-25 / 43			
		Cooling	Minimum / Maximum	°C				-5 / 43			
		DHW	Minimum / Maximum	°C				-25 / 43			

Size					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)			600x1.774x615 (190L) / 600x2.084x615 (250L)				600x2.084x615		
	Outdoor unit	Length(A) x Height(C) x Depth(B)			986 x 712 x 426		1.104 x 866 x 523		1.104 x 866 x 523		
Weight	Indoor unit				359 (190L) / 419 (250L)				421		
	Outdoor unit				58		77		112		
Max / min equivalent length		L		m				30 / 2			
Max difference in level ODU / IDU		H		m				25			
Refrigerant precharge				type/GWP				R-32 / 675			
				kg/m	1,5 / 15		1,65 / 15		1,84 / 15		
				CO_2 tons	1,05		1,11		1,24		
Additional refrigerant charge[1]				g/m	20				38		
External diameters	Refrigerant pipe	Liquid		inch	1/4"				3/8"		
		Gas		inch				5/8"			
	Indoor unit	Water (system)		inch				1"			
		Water (DHW)		inch				3/4"			

(1) Check in the manual if the indoor unit requires a minimum installation surface

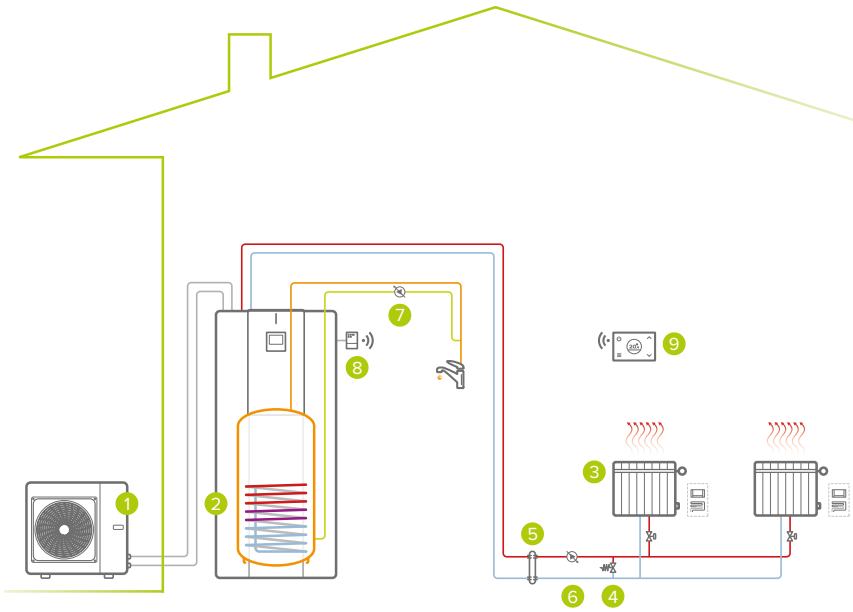
Size (400TN)					6.1	7.1	8.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	5,00	4,70	4,55
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,13	2,82	2,74
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-	2,75	2,55	2,45
DHW	Net tank capacity			l	250	250	250
	Water mixed at 40°C (V40)[1]			l	269	269	269
	Heating time			h:min	1:46	1:46	1:46
Electrical power for meter sizing				kW	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	3,56	3,52	3,48
		ηs (seasonal output)		%	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	5,00	4,91	4,89
		ηs (seasonal output)		%	196	193	193
	DHW	Energy class		-	**A+**	**A+**	**A+**
		DHW profile		-	XL	XL	XL
Indoor unit					**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1	
Water flow-rate			Nominal	l/s	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	25,7	31,7	22,6
Expansion tank capacity				l		8	
Minimum system water content				l		60	
Sound power				dB(A)		41	
Sound pressure @1m				dB(A)		26	
Outdoor unit					**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		400/50/3+N	
Sound power				dB(A)	63	64	66
Sound pressure @1m				dB(A)	50	51	55
Operating range							
Water supply temperature		Heating	Minimum / Maximum	°C		25 / 65	
		Cooling	Minimum / Maximum	°C		5 / 25	
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C		-25 / 43	
		Cooling	Minimum / Maximum	°C		-5 / 43	
		DHW	Minimum / Maximum	°C		-25 / 43	

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl[3] EVO system control

(1) Data according to EN 16147: amount of water at 40°C with the same enthalpy content as the water coming out of the Boiler at a temperature higher than 40°C

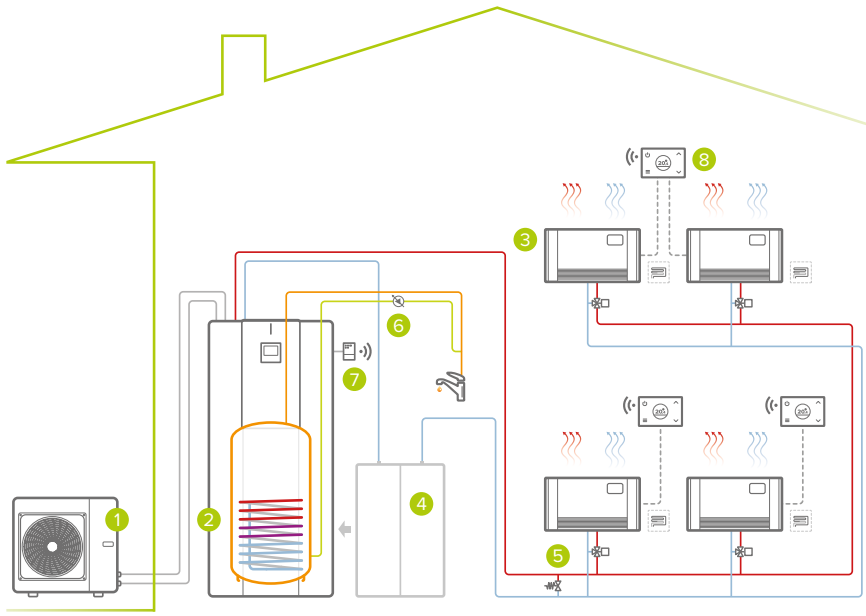
system diagrams



Single area system: Heating/DHW

1. outdoor unit
2. indoor unit
3. heating area (radiators / fan coils / radiant)
4. bypass*
5. hydraulic separator (optional)
6. secondary circuit pump*
7. DHW recirculation pump*
8. SwitchConnect Wi-Fi receiver (optional)
9. HID-TConnect Wi-Fi chronothermostat (optional)

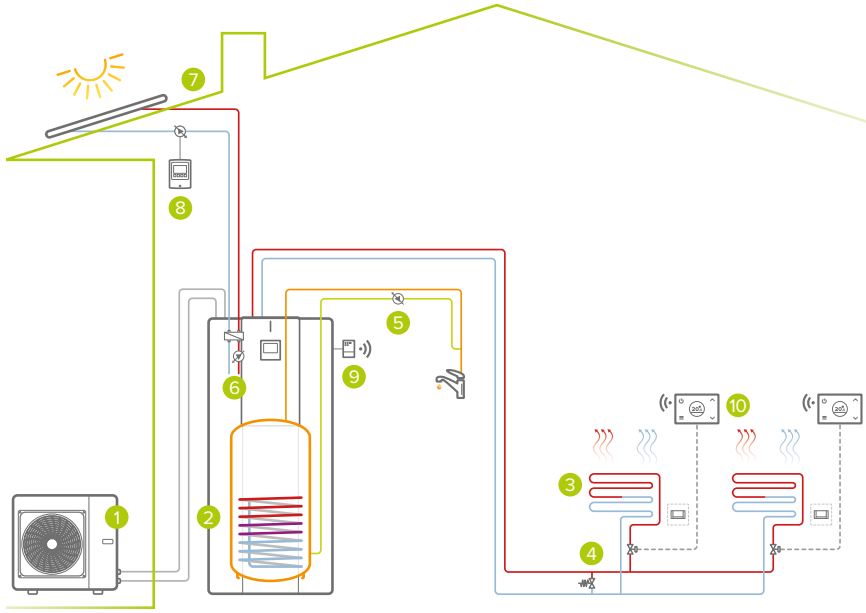
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating/cooling area (fan coils / radiant)
4. system inertial storage (optional)
5. bypass*
6. DHW recirculation pump*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

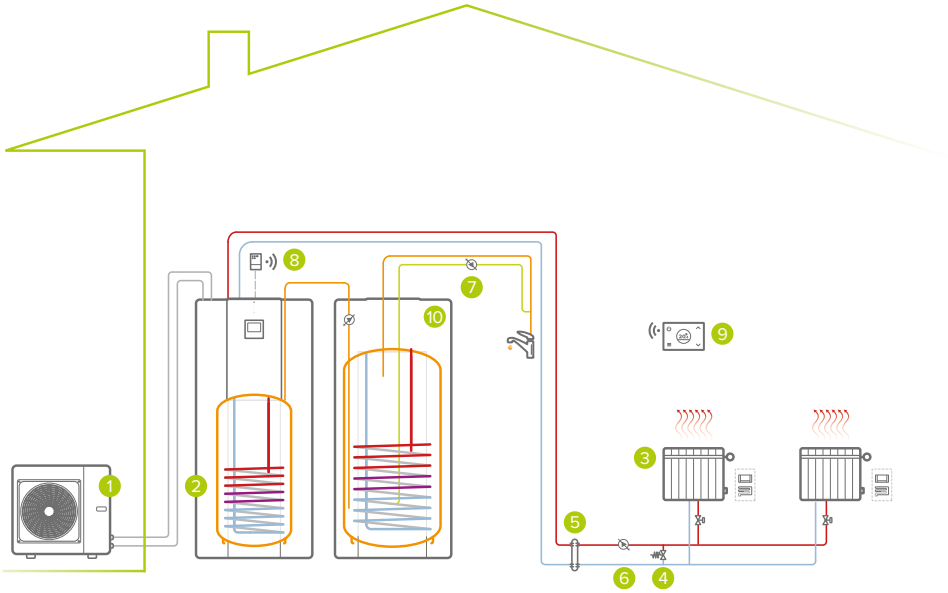
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating / cooling area (fan coils / radiant)
4. bypass*
5. DHW recirculation pump*
6. solar connection kit (optional)
7. ELFOSun solar thermal (optional)
8. solar circulation kit (optional)
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

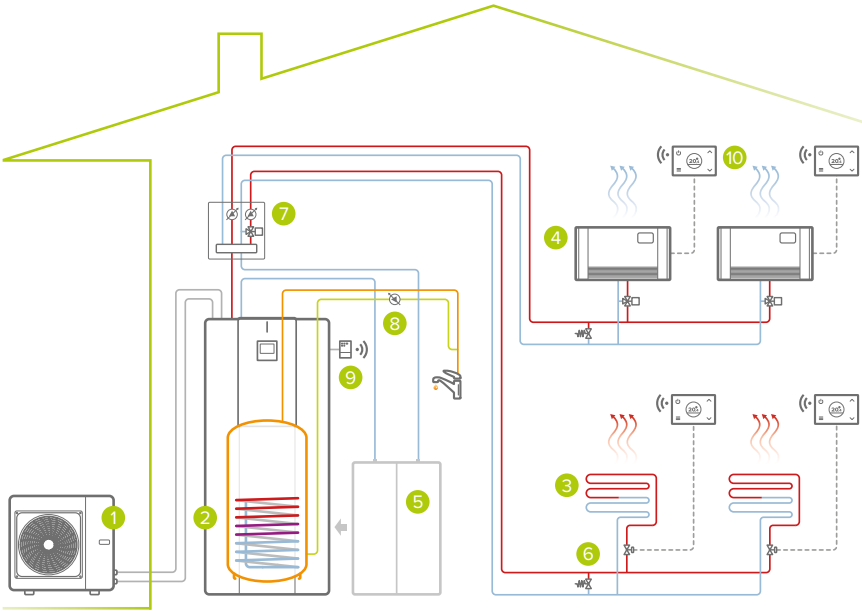
*from external supply



Single area system: Heating/DHW

1. outdoor unit
2. indoor unit
3. heating area (radiators / fan coils / radiant)
4. bypass*
5. hydraulic separator (optional)
6. secondary circuit pump*
7. DHW recirculation pump*
8. SwitchConnect Wi-Fi receiver (optional)
9. HID-TConnect Wi-Fi chronothermostat (optional)
10. 250L system inertial storage tank (optional)

*from external supply



Two-area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating area (radiant)
4. cooling area (fan coils)
5. system inertial storage (optional)
6. bypass*
7. kit for managing 2 areas (optional)
8. DHW recirculation pump*
9. kit for managing 2 areas (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

Note: solar connection kit and booster kit can coexist

*from external supply

SPHERA EVO 2.0 Box

SQKN-YEE 1 BC + MiSAN-YEE 1 S 2.1÷8.1

Wall-mounted air-to-water split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING

- Solar integration (optional - DHW tank)
- Cascade
- Smart Grid ready
- €-Switch

COMFORT

- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY

- Backup heater (optional)
- Eurovent
- Keymark

HEALTH

- Eco-friendly refrigerant (R-32)
- Renewable energy

CONVENIENCE

- Weekly schedule
- Boiler integration

MANAGEMENT AND CONNECTIVITY

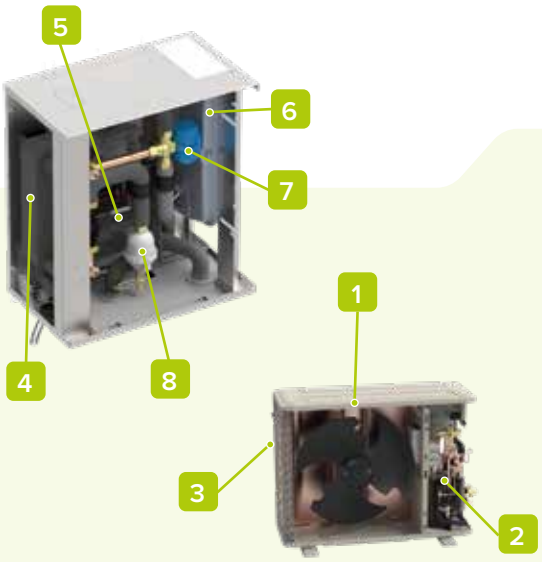
- Potential-free contact
- Modbus port (MOD)
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring
- User interface / thermostat

ErP TOP SYSTEM EFFICIENCY 55°C A++ 35°C A+++

- ✓ Smaller size: can be installed in a stairwell, store cupboard, laundry room or inside a kitchen cabinet
- ✓ Energy efficiency at the highest level
- ✓ Designed not to disturb, operating very quietly
- ✓ Can be combined with DHW boilers of a volume suitable for the application in which it is to be installed
- ✓ Up to 6 units can be connected in cascade, for demands up to 100 kW

Ideal with AQUA PLUS

SPHERA EVO Box 2.0 is an excellent alternative for installations where it is not possible to install the tower or uncased version.
Combined with AQUA Plus, the heat pump for domestic hot water production, SPHERA EVO Box 2.0 offers the advantage of a system that provides simultaneous heating or cooling and domestic hot water production.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter

configurations

DHW STORAGE:

ACS190 DHW storage 190L
ACS250 DHW storage 250L

OUTDOOR UNIT POWER SUPPLY (size 6.1÷8.1):

220M Power supply 230/1/50
400TN Power supply 400/3/50+N

AUXILIARY SYSTEM HEATER:

- No heater
EH24 2 kW integration electric heater
EH3 3 kW integration electric heater
EH6 6 kW integration electric heater
EH9 9 kW integration electric heater

accessories

	**ACS200X**	200-litre domestic hot water storage tank
	ACS300X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	**SCS08X**	0.8 m² solar exchanger for flange installation
	SCS12X	1.2 m² solar exchanger for flange installation
	**KCSX**	Secondary circuit kit (1-litre circuit breaker + pump)
	**KIRE2HLX**	2 zones: external kit, high temperature + low temperature
	KIRE2HX	2 zones: external kit, high temperature
	**DIX**	1-litre circuit breaker
	**DI50X**	50-litre circuit breaker
	**ACI40X**	40L system inertial storage tank *(s. 2.1÷5.1)*
	**ACI60X**	60-litre system inertial storage tank

	**KCCEX**	External boiler connection kit
	**SFCSTX**	Additional probe for cascade function
	**DTX**	Auxiliary condensate collection tray
	**APAVX**	Kit of antivibration mounts for floor installation
	**ASTFX**	Kit of antivibration mounts for wall bracket installation
	**KSIPX**	Kit with wall fixing brackets
	**HID-TCBX**	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	**HID-TCNX**	White soft touch chronothermostat, with temperature control and management via App / Voice control
	**SWCX**	SwitchConnect radio receiver

technical data

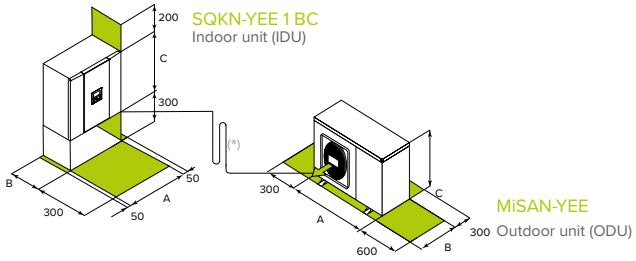
Size (220M)					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,42	5,21	5,31	5,01	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	3,16	3,00	3,23	3,07	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,93	3,83	3,95	3,86	3,80	3,65	3,60
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	6,08	5,24	5,12	4,77	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	-	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal		3,50	3,09	3,33	3,09	2,75	2,55	2,45
Electrical power for meter sizing				kW	2,20	2,50	3,30	3,60	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-	3,32	3,54	3,72	3,73	3,56	3,52	3,48
		ηs (seasonal output)		%	130	138	146	146	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-	5,13	5,15	5,32	5,27	5,00	4,91	4,89
		ηs (seasonal output)		%	202	203	210	208	196	193	193
Indoor unit					**A**	**A**	**A**	**A**	**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Water flow-rate			Nominal	l/s	0,21	0,30	0,41	0,49	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	31,2	36,5	33,1	31,0	25,7	31,7	22,6
Expansion tank capacity				l	8						
Minimum system water content				l	40					60	
Sound power			Nominal	dB(A)	41						
Sound pressure @1m			Nominal	dB(A)	26						
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Sound power				dB(A)	55	57	58	60	63	64	66
Sound pressure @1m				dB(A)	42	44	45	47	50	51	53
Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C	25 / 65						
		Cooling	Minimum / Maximum	°C	5 / 25						
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C	-25 / 43						
		Cooling	Minimum / Maximum	°C	-5 / 43						
		DHW	Minimum / Maximum	°C	-25 / 43						

Size (400TN)					6.1	7.1	8.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,80	3,65	3,60
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	-	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal		2,75	2,55	2,45
Electrical power for meter sizing				kW	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	3,56	3,52	3,48
		ηs (seasonal output)		%	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	5,00	4,91	4,89
		ηs (seasonal output)		%	196	193	193
Indoor unit					**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1		
Water flow-rate			Nominal	l/s	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	25,7	31,7	22,6
Expansion tank capacity				l	8		
Minimum system water content				l	60		
Sound power			Nominal	dB(A)	41		
Sound pressure @1m			Nominal	dB(A)	26		
Outdoor unit					**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	400/50/3+N		
Sound power				dB(A)	63	64	66
Sound pressure @1m				dB(A)	50	51	53
Operating range							
Water supply temperature		Heating	Minimum / Maximum	°C	25 / 65		
		Cooling	Minimum / Maximum	°C	5 / 25		
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C	-25 / 43		
		Cooling	Minimum / Maximum	°C	-5 / 43		
		DHW	Minimum / Maximum	°C	-25 / 43		

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations UE 811/2013 - 813/2013 - 2016/2281)

dimensions and connections



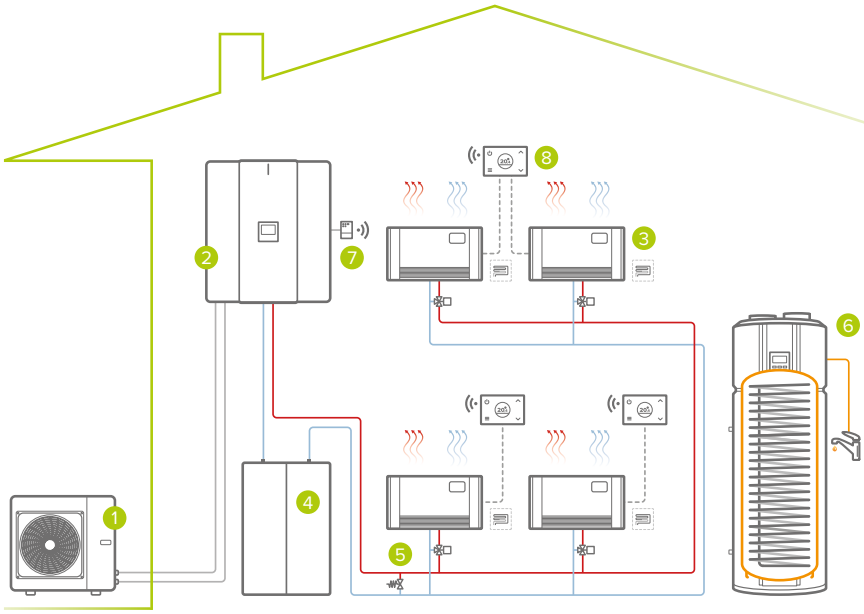
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

(*) Water and gas connections

Size				2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)		547x604x386						
	Outdoor unit	Length(A) x Height(C) x Depth(B)		986 x 712 x 426		1.104 x 866 x 523		1.104 x 866 x 523		
Weight	Indoor unit			52				54		
	Outdoor unit			58		77		112		
Max / min equivalent length		L	m	30 / 2						
Max difference in level ODU / IDU		H	m	25						
Refrigerant precharge				R-32 / 675						
			kg/m	1,5 / 15		1,65 / 15		1,84 / 15		
			CO_2 tons	1,05		1,11		1,24		
Additional refrigerant charge[2]			g/m	20				38		
External diameters	Refrigerant pipe	Liquid	inch	1/4"				3/8"		
		Gas	inch	5/8"						
	Indoor unit	Water (System)	inch	1"						
		Water (DHW)	inch	3/4"						

(1) Check in the manual if the indoor unit requires a minimum installation surface

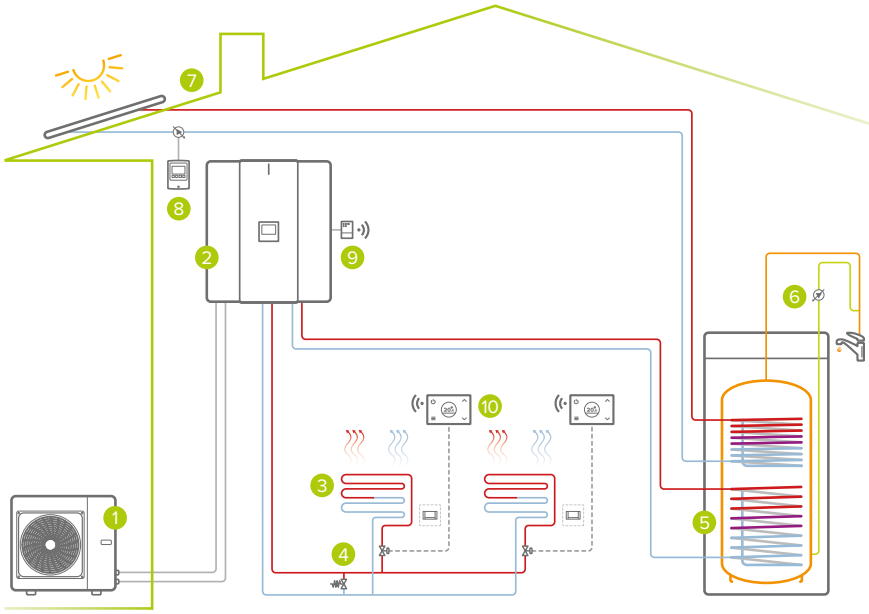
system diagrams



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating/cooling area (fan coils / radiant)
4. system inertial storage (optional)
5. bypass*
6. DHW heat pump - AQUA
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

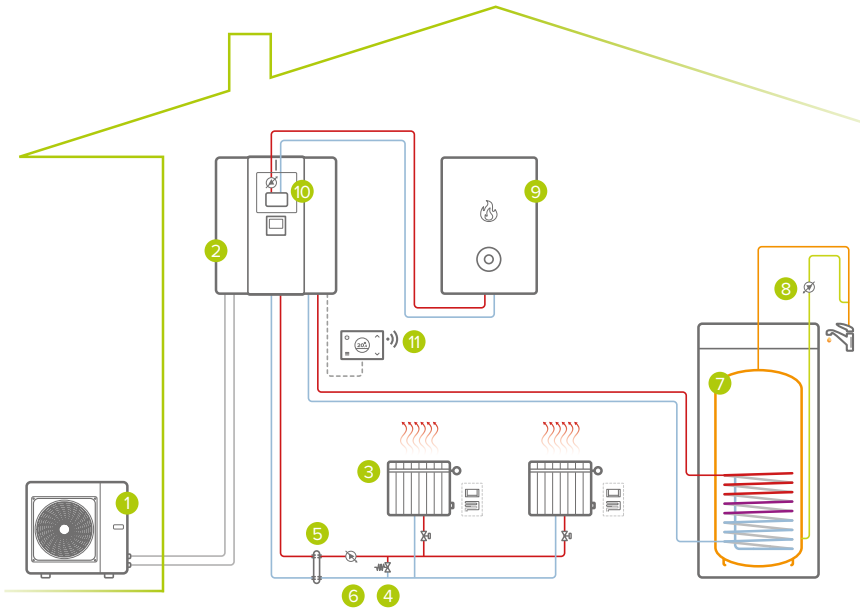
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating/cooling area (fan coils / radiant)
4. bypass*
5. DHW tank with solar predisposition - AQUA
6. DHW recirculation pump*
7. ELFOSun solar thermal (optional)
8. solar circulation kit (optional)
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

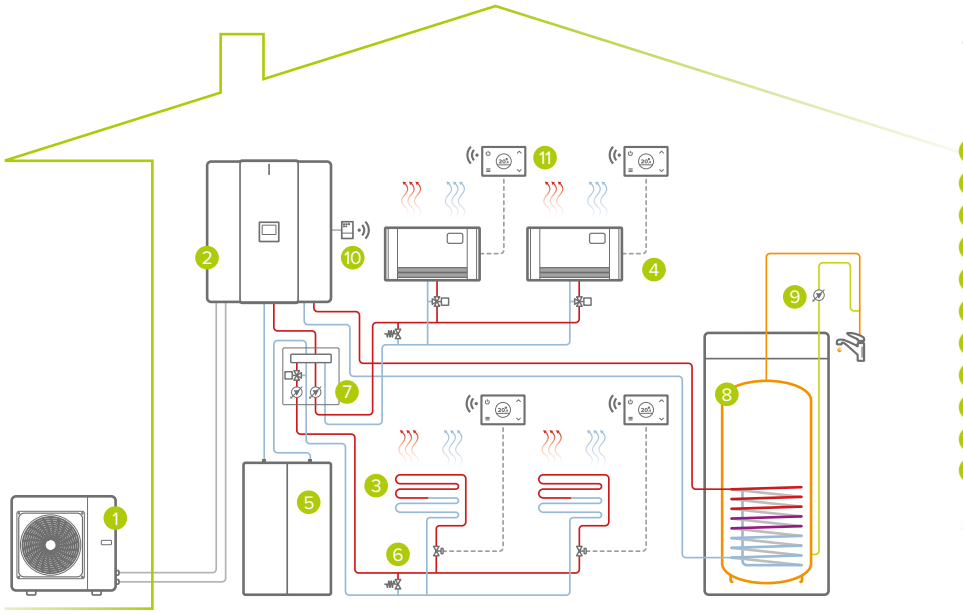
*from external supply



Single area system: heating/DHW

1. outdoor unit
2. indoor unit
3. heating area (radiators / fan coils / radiant)
4. bypass*
5. hydraulic separator (optional)
6. secondary circuit pump*
7. DHW tank (optional)
8. DHW recirculation pump*
9. 2-pipe boiler
10. kit for external boiler management (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

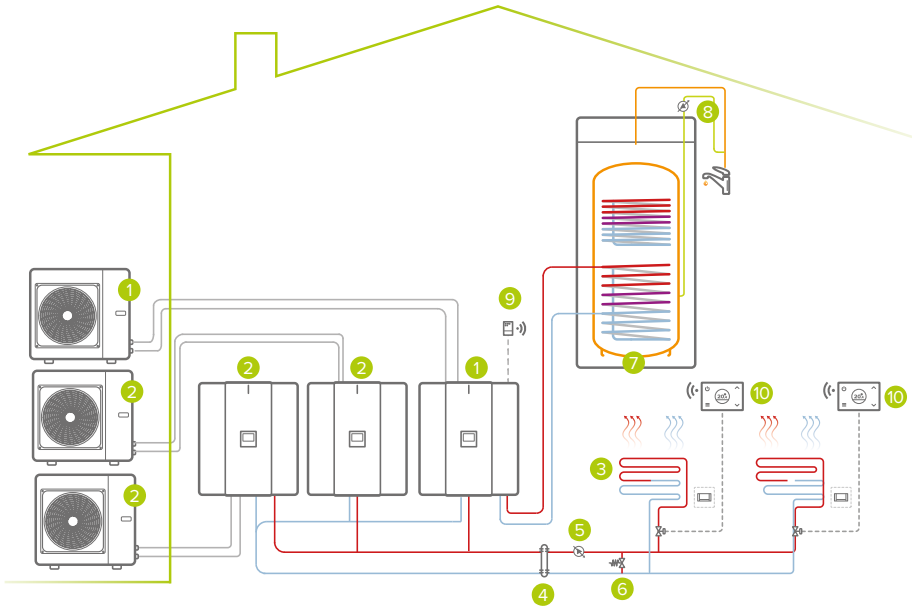
*from external supply



Two-area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. low temperature heating/cooling area (radiant)
4. high temperature heating/cooling area (fancoil)
5. system inertial storage (optional)
6. bypass*
7. kit for managing 2 areas (optional)
8. DHW tank (optional)
9. DHW recirculation pump*
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

Note: solar connection kit and booster kit can coexist
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit + indoor unit (Master)
2. outdoor unit + indoor unit (Slave)
3. heating/cooling area (fan coils / radiant)
4. hydraulic separator (optional)
5. secondary circuit pump*
6. bypass*
7. DHW tank - AQUA
8. DHW recirculation pump*
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

SPHERA EVO 2.0 Invisible

SQKN-YEE 1 IC + MiSAN-YEE 1 S 2.1÷5.1

Uncased air-to-water split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING: Solar integration (optional); Smart Grid ready; €-Switch

COMFORT: Heating Cooling; DHW; Silent; High temperature

RELIABILITY: Backup heater (optional); Eurovent; Keymark

HEALTH: Eco-friendly refrigerant; Renewable energy

CONVENIENCE: Weekly schedule; Integrated DHW tank

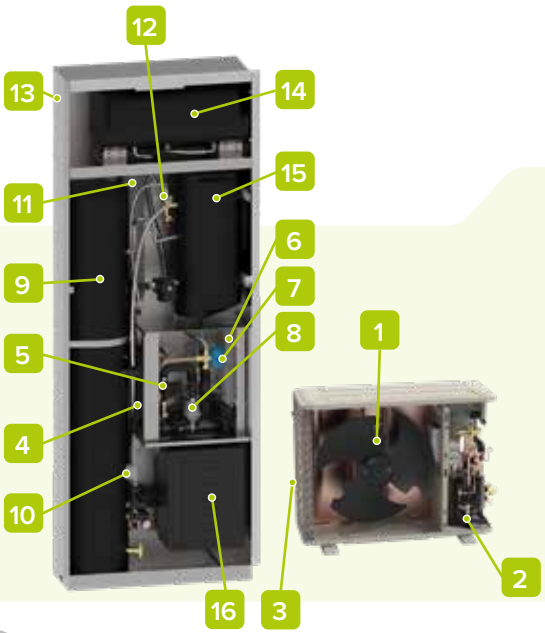
MANAGEMENT AND CONNECTIVITY: Potential-free contact; Modbus port; Wi-fi Control; ELFOControl management; Clivet Eye monitoring; User interface / thermostat

TOP SYSTEM EFFICIENCY ErP 55°C A++ L A+

- ✓ System hot water production at 65°C with the outdoor air up to 5°C, at 60°C with the outdoor air down to -15°C
- ✓ Space-saving: completely outdoor installation with uncased wall-mounted unit only 36cm deep
- ✓ It adapts to every need: solar kit / inertial storage kit / additional storage tank / configurable boiler
- ✓ Components and uncased cabinet with telescopic frame can be supplied separately
- ✓ Compact outdoor unit requiring very little installation space

Using the space well

SPHERA EVO 2.0 Invisible is the ideal choice for all homes that do not have a technical room and which need to make the unit invisible by embedding it in the wall.
The cabinet has an adjustable telescopic frame and can be painted to make the unit disappear completely.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter
9. 150 L DHW tank with coil
10. 2 kW DHW safety heater
11. 8 L DHW expansion tank
12. Anti-scalding valve
13. Cabinet with adjustable telescopic frame
14. System inertial storage kit (optional)
15. Additional 50 L DHW storage tank (optional)
16. Kit for managing 2 areas (optional)

configurations

PUMP:

-	Standard pump
1PUM	Single pump with larger available head

AUXILIARY SYSTEM HEATER:

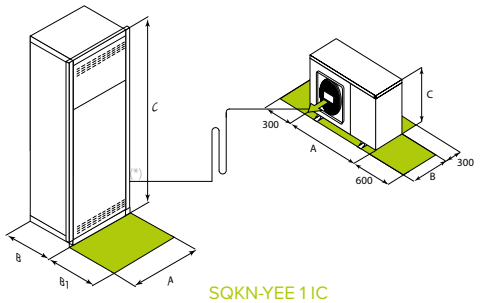
-	No heater
EH2	2 kW integration electric heater
EH4	4 kW integration electric heater
EH6	6 kW integration electric heater
EH9	9 kW integration electric heater

accessories

	ADIX	Recessed storage unit with jigs for fittings
	ACS150X	150-litre domestic hot water storage tank
	ADIAX	Recessed storage unit for additional DHW accumulation
	ACSA150X	Additional 150-litre domestic hot water storage
	ACSA50X	Additional 50-litre domestic hot water storage
	SHWT	150L domestic hot water storage tank with solar coil
	KCVEX	Circulation kit: circulation group, control unit, expansion tank
	KPRSX	DHW recirculation pump kit
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIRE2HLX	2 zones: high temperature + low temperature (mixed)
	KIRE2HX	2 zones: both at high temperature
	AC50X	50-litre inertial storage tank for indoor installation
	ACE50X	50-litre inertial storage tank for outdoor installation

	ADI50X	Recessed storage unit for external inertial accumulation
	DTX	Auxiliary condensate collection tray
	APAVX	Kit of antivibration mounts for floor installation
	ASTFX	Kit of antivibration mounts for wall bracket installation
	KSIPX	Kit with wall fixing brackets
	HID-TCBX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	SwitchConnect radio receiver

dimensions and connections



MiSAN-YEE
Outdoor unit (ODU)

SQKN-YEE 1 IC
Indoor unit (IDU)

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

(*) Gas and water connections

Size					2.1	3.1	4.1	5.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)			1.036 x 2.210 x 360			
	Outdoor unit	Length(A) x Height(C) x Depth(B)			986 x 712 x 426		1.104 x 866 x 523	
Weight	Indoor unit				315			
	Outdoor unit				58		77	
Max / min equivalent length		L		m	30 / 2			
Max difference in level ODU / IDU		H		m	25			
Refrigerant precharge				type/GWP	R32 / 675			
				kg / m	1,5 / 15		1,65 / 15	
				CO_2 tons	1,05		1,11	
Additional refrigerant charge[1]				g/m	20		38	
External diameters	Refrigerant pipe	Liquid		inch	1/4"		3/8"	
		Gas		inch	5/8"			
	Indoor unit	Water (system)		inch	1"			
		Water (DHW)		inch	3/4"			

(1) Check in the manual if the indoor unit requires a minimum installation surface

technical data

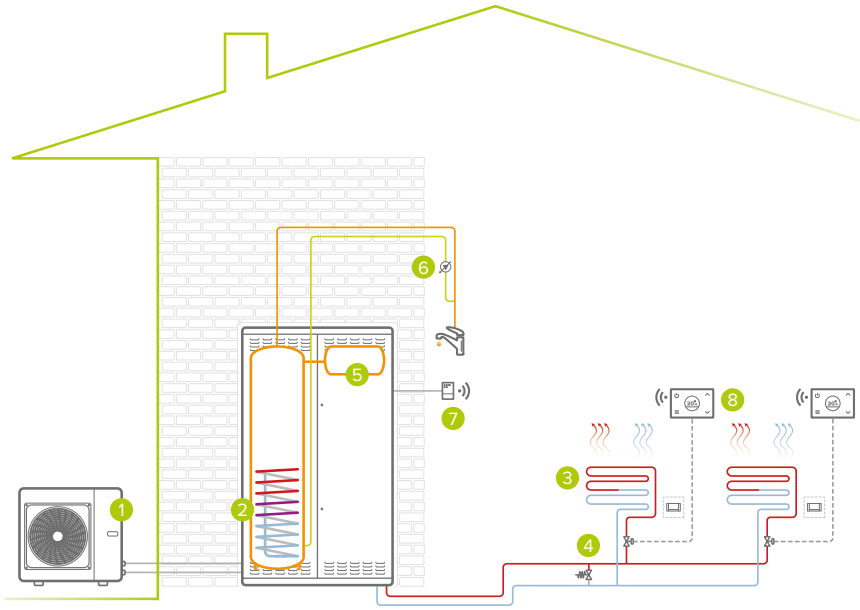
Size					2.1	3.1	4.1	5.1
Heating	Capacity	*Water 35/30°C - Outdoor unit 7°C*	Nominal / Maximum	kW	**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**
	COP		Nominal	-	5,42	5,21	5,31	5,01
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30
	COP		Nominal	-	3,16	3,00	3,23	3,07
	Capacity	*Water 45/40°C - Outdoor unit 7°C*	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30
	COP		Nominal	-	3,93	3,83	3,95	3,86
Cooling	Capacity	*Water 18/23°C - Outdoor unit 35°C*	Nominal / Maximum	kW	**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**
	EER		Nominal	-	6,08	5,24	5,12	4,77
	Capacity	*Water 7/12°C - Outdoor unit 35°C*	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10
	EER		Nominal	-	3,50	3,09	3,33	3,09
DHW	Net tank capacity			l		143		
	Water mixed at 40°C (V40)[1]			l		188		
	Heating time			h:min	02:11	02:11	01:47	01:47
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749
		SCOP		-	3,32	3,54	3,72	3,73
		ηs (seasonal output)		%	130	138	146	146
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749
		SCOP		-	5,13	5,15	5,32	5,27
		ηs (seasonal output)		%	202	203	210	208
	DHW	Energy class		-	**A+**	**A+**	**A+**	**A+**
		DHW profile		-	L	L	L	L
Indoor unit					**A**	**A**	**A**	**A**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1		
Water flow-rate			Nominal	l/s	0,21	0,30	0,41	0,49
Pump available pressure			Nominal	kPa	31,2	36,5	33,1	31,0
Expansion tank capacity				l		8		
Minimum system water content				l		40		
Sound power				dB(A)		41		
Sound pressure @1m				dB(A)		26		
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1		
Sound power				dB(A)	55	57	58	60
Sound pressure @1m				dB(A)	42	44	45	47
Operating range								
Water supply temperature		Heating	Minimum / Maximum	°C		25 / 65		
		Cooling	Minimum / Maximum	°C		5 / 25		
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C		-25 / 43		
		Cooling	Minimum / Maximum	°C		-5 / 43		
		DHW	Minimum / Maximum	°C		-25 / 43		

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl3 EVO system control

(1) Data according to EN 16147: amount of water at 40°C with the same enthalpy content as the water coming out of the Boiler at a temperature higher than 40°C

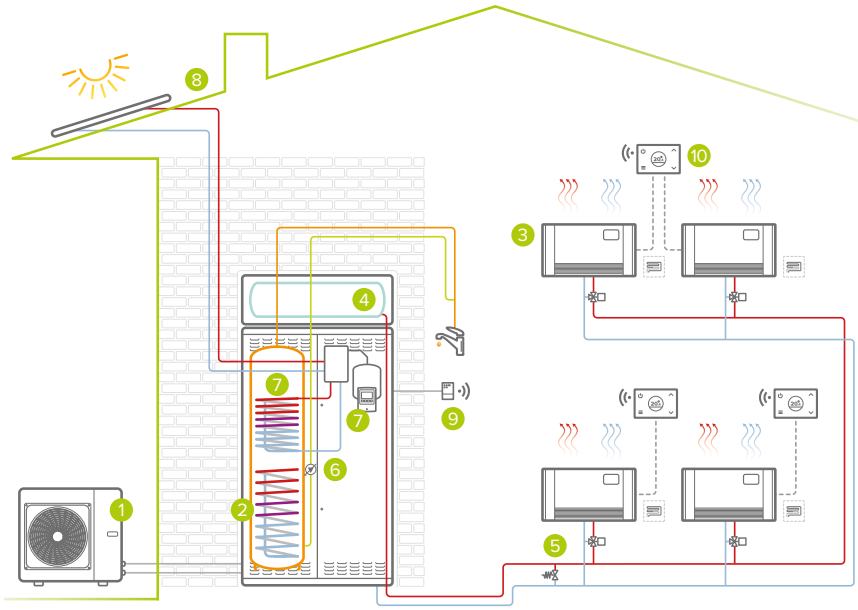
system diagrams



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating/cooling area (fancoil / radiant)
4. bypass*
5. additional DHW tank (optional configuration)
6. DHW recirculation pump*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

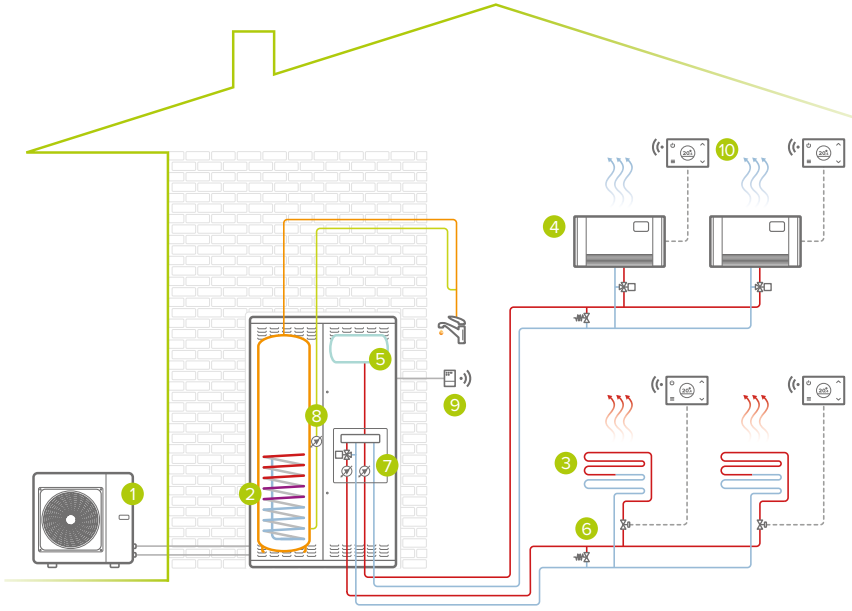
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating/cooling area (fancoil / radiant)
4. system inertial storage (optional)
5. bypass*
6. DHW recirculation pump*
7. solar connection kit (optional configuration)
8. ELFOSun solar thermal (optional)
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

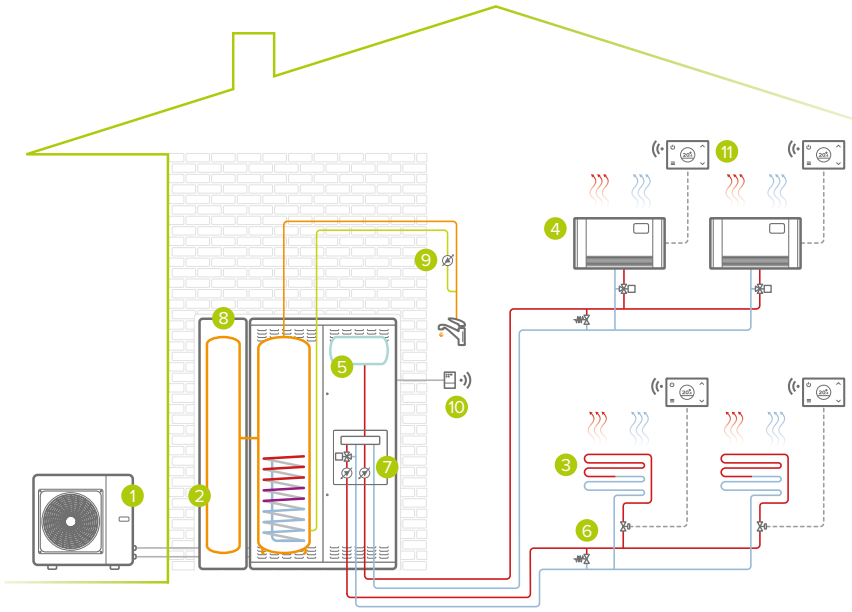
*from external supply



Two-area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating area (radiant)
4. cooling area (fancoil)
5. system inertial storage (optional configuration)
6. bypass*
7. kit for managing 2 areas (optional configuration)
8. DHW recirculation pump*
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Two-area system: heating/cooling/DHW

1. outdoor unit
2. indooor unit
3. low temperature heating/cooling area (radiant)
4. high temperature heating/cooling area (fancoil)
5. system inertial storage (optional configuration)
6. bypass*
7. kit for managing 2 areas (optional configuration)
8. additional DHW storage tank (optional)
9. DHW recirculation pump*
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

FULL ELECTRIC HEAT PUMPS: MONOBLOCK

ELFOEnergy
Edge EVO

NEW

Edge EVO 2.0 - EXC

ELFOEnergy Edge EVO

WSAN-YMi 21÷141

Size 91-101-121-141 to exhaustion

Air-to-water packaged monobloc heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional - DHW tank)
- Cascade (size. 91÷141)

COMFORT
- Heating Cooling
- DHW
- Silent

RELIABILITY
- Backup heater (optional)
- Eurovent
- Keymark

HEALTH
- Eco-friendly refrigerant
- Renewable energy

CONVENIENCE
- Weekly schedule
- Boiler integration

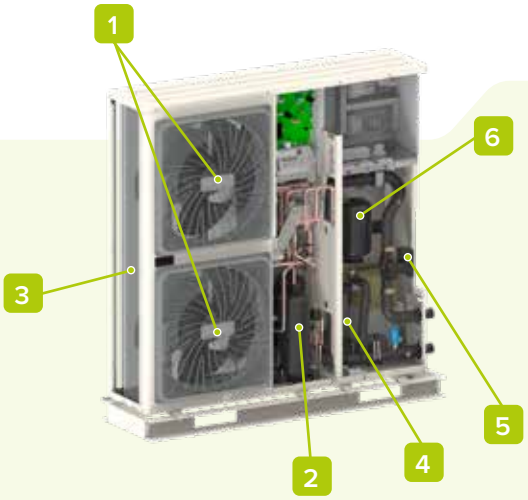
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- User interface/ thermostat
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

TOP SYSTEM EFFICIENCY ErP 55°C A++ 35°C A+++

- ✓ Space saving: installed outdoors, no indoor unit is required
- ✓ Comfort even in harsh climates: optional 3/4.5 kW auxiliary heater
- ✓ Simple installation: all hydraulic components are already on board and no F-GAS licence is required for start-up
- ✓ Can be combined with DHW tanks of a volume suitable for the application in which it is to be installed
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

Management via the App

ELFOEnergy Edge EVO is managed as standard with the dedicated MSmartLife APP, available for Google Play and the App Store. This is used to set the main functions of the unit, such as changing the set-point (water supply for each area or ambient air, if the user interface is set by the thermostat) or scheduling.
The App also shows the energy consumption of Heating / Cooling / DHW / Auxiliary system heater / DHW heater. The data are displayed in graphs that can be daily, weekly, monthly or yearly.
By entering a few reference parameters, it provides an estimate of operating costs and savings compared to a gas boiler system.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank

configurations

UNIT POWER SUPPLY (size 61÷81):

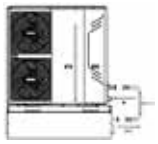
230M	Power supply 230/1/50
400TN	Power supply 400/3/50+N

AUXILIARY SYSTEM HEATER (size 61÷81, only in direct shipping):

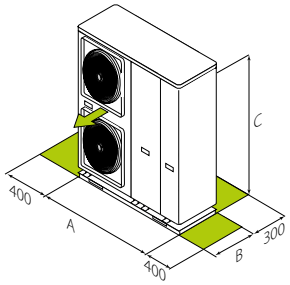
-	No electrical heater
IBH	Back-up electrical heater

accessories

	KTFLX	Hose kit for connection to the chiller/heat pump
	ACS200X	200-litre domestic hot water storage tank
	ACS300X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	SCS08X	0.8 m² solar exchanger for flange installation *(for ACS200X e ACS300X)*
	SCS12X	1.2 m² solar exchanger for flange installation *(for ACS500X)*
	QERAX	Connection electrical panel of the DHW storage heater
	3DHWX	Three-way valve for domestic hot water
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIR2HLX	2 zones: external kit, high temperature + low temperature (mixed)
	KIR2HX	2 zones: external kit, high temperature
	DIX	1-litre circuit breaker
	DI50X	50-litre circuit breaker

	KSAX	100-litre circuit breaker
	T1BX	Probe for auxiliary heating source T1B
	TANKX	Buffer tank
	KTCAMX	Piping kit for the connection to the buffer tank on supply water side
	KTCARX	Piping kit for the connection to the buffer tank on return water side
	IBHX	Back-up electrical heater (size 21-81)
	HID-TCBX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON/OFF

dimensions and connections



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

Size (230M)			21	31	41	61	71	81
Dimensions	Length(A) x Height (C) x Depth(B)		1.210x945x402			1.404x1.414x405		
Weight		kg	99			178		
Refrigerant charge		type/GWP	R-32 / 675					
		kg	2			2,8		
		CO_2 tons	1,4			1,9		
External diameters	Water	inch	1"			1 1/4"		

Size (400TN)			61	71	81	91	101	121	141
Dimensions	Length(A) x Height (C) x Depth(B)		1.404x1.414x405			1.129x1.558x440			
Weight		kg	172			177			
Refrigerant charge		type/GWP	R-32 / 675						
		kg	2,8			5			
		CO_2 tons	1,9			3,4			
External diameters	Water	inch	1 1/4"			1 1/4"			

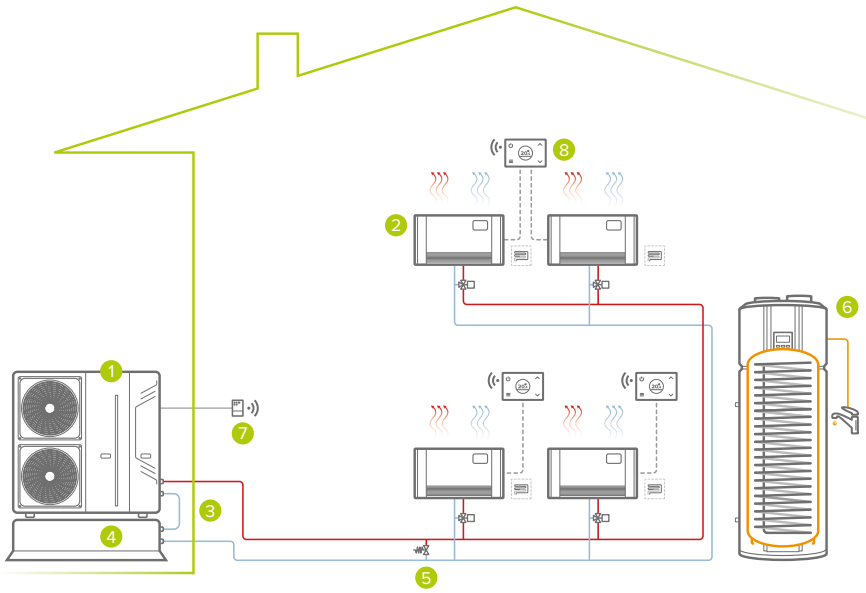
Size (230M)					21	31	41	61	71	81
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,7 / 6,7**	**6,7 / 8,7**	**8,6 / 10,6**	**12,3 / 14,3**	**14,1 / 16,5**	**16,3 / 18,1**
	COP		Nominal	-	5,00	4,94	4,60	4,81	4,60	4,45
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	3,4 / 4,8	4,8 / 6,3	6,2 / 7,8	8,9 / 10,4	10,2 / 12,3	11,8 / 13,6
	COP		Nominal	-	4,06	4,00	3,72	3,90	3,73	3,60
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,8 / 6,9	6,7 / 8,8	8,6 / 10,5	12,4 / 14,3	14,1 / 16,4	16,2 / 18,0
	COP		Nominal	-	3,60	3,57	3,44	3,53	3,47	3,43
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,6 / 6,3**	**6,5 / 8,1**	**8,0 / 9,8**	**12,2 / 14,5**	**14,0 / 16,1**	**15,5 / 17,6**
	EER		Nominal	-	4,82	4,65	4,16	4,78	4,52	4,26
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	4,9 / 6,4	6,3 / 8,1	8,0 / 9,1	10,9 / 13,2	12,9 / 14,8	13,8 / 15,5
	EER		Nominal	-	2,98	2,77	2,53	2,92	2,78	2,65
Electrical power for meter sizing				kW	3,5	3,5	3,5	6,5	6,5	6,5
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	4.203	4.203	4.770	8.164	8.724	9.216
		SCOP		-	3,23	3,24	3,22	3,23	3,26	3,27
		ηs (seasonal output)		%	127%	127%	126%	126%	128%	128%
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	3.071	3.071	3.844	5.726	6.819	7.687
		SCOP		-	4,48	4,49	4,51	4,30	4,35	4,30
		ηs (seasonal output)		%	176%	176%	177%	169%	168%	169%
Indoor unit					**21**	**31**	**41**	**61**	**71**	**81**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1					
Water flow-rate		*Water 35/30°C - Outdoor air 7°C*	Nominal	l/s	0,22	0,31	0,38	0,58	0,67	0,74
Pump available pressure			Nominal	kPa	61	50	38	41	30	20
Minimum system water content				l		20			40	
Expansion tank capacity				l		2			5	
Sound power			Minimum / Nominal	dB(A)	59 / 61	60 / 64	62 / 67	63 / 68	63 / 71	65 / 71
Sound pressure @1m			Minimum / Nominal	dB(A)	46 / 49	49 / 52	50 / 55	49 / 54	47 / 55	50 / 56
Operating range										
Water supply temperature		Heating	Minimum / Maximum	°C	30 / 60					
		Cooling	Minimum / Maximum	°C	5 / 25					
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C	-25 / 35					
		Cooling	Minimum / Maximum	°C		-5 / 43			-5 / 46	
		DHW	Minimum / Maximum	°C	-25 / 43					

Size (400TN)					61	71	81	91	101	121	141
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**12,3 / 14,3**	**14,1 / 16,5**	**16,3 / 18,1**	**18,0 / 21,9**	**22,0 / 26,0**	**26,0 / 29,5**	**30,1 / 31,6**
	COP		Nominal	-	4,84	4,63	4,49	4,70	4,40	4,08	3,91
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	8,9 / 10,4	10,2 / 12,3	11,8 / 13,6	18,0 / 18,0	21,0 / 21,0	22,0 / 22,0	23,0 / 23,6
	COP		Nominal	-	3,90	3,73	3,60	2,70	2,60	2,50	2,45
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	12,4 / 14,3	14,1 / 16,4	16,2 / 18,0	18,0 / 22,1	22,0 / 26,1	26,0 / 29,6	30,0 / 31,6
	COP		Nominal	-	3,59	3,54	3,45	3,50	3,40	3,10	2,90
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**12,2 / 14,5**	**14,0 / 16,1**	**15,5 / 17,6**	**18,5 / 19,8**	**23,0 / 23,9**	**27,0 / 29,8**	**31,0 / 35,5**
	EER		Nominal	-	4,83	4,50	4,27	4,75	4,60	4,30	4,00
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	10,9 / 13,2	12,9 / 14,8	13,8 / 15,5	17,0 / 18,0	21,0 / 21,7	26,0 / 26,7	29,5 / 29,5
	EER		Nominal	-	2,93	2,80	2,66	3,05	2,95	2,70	2,55
Electrical power for meter sizing				kW	6,5	6,5	6,5	10,6	12,5	13,8	14,5
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A+**	**A+**
		Annual energy consumption		kWh/year	8.164	8.724	9.216	11.375	14.390	11.489	14.165
		SCOP		-	3,23	3,26	3,27	3,21	3,22	3,14	3,14
		ηs (seasonal output)		%	126%	128%	128%	125%	126%	123%	123%
	Heating 35°C	Energy class		-	**A++**	**A++**	**A++**	**A+++**	**A+++**	**A+++**	**A++**
		Annual energy consumption		kWh/year	5.726	6.819	7.687	8.086	10.180	11.489	14.165
		SCOP		-	4,30	4,35	4,30	4,60	4,53	4,50	4,19
		ηs (seasonal output)		%	169%	168%	169%	181%	178%	177%	165%
Outdoor unit					**61**	**71**	**81**	**91**	**101**	**121**	**141**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	400/50/3+N						
Water flow-rate		*Water 35/30°C - Outdoor air 7°C*	Nominal	l/s	0,58	0,67	0,74	0,88	1,1	1,29	1,48
Pump available pressure			Nominal	kPa	41	30	20	100	89	74	54
Minimum system water content				l				40			
Expansion tank capacity				l		5			8		
Sound power			Minimum / Nominal	dB(A)	63 / 68	65 / 71	66 / 71	65 / 70	66 / 72	68 / 74	69 / 77
Sound pressure @1m			Minimum / Nominal	dB(A)	49 / 54	50 / 56	51 / 56	50/57	51/59	53/61	54 / 63
Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C	30 / 60						
		Cooling	Minimum / Maximum	°C	5 / 25						
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C	-25 / 35						
		Cooling	Minimum / Maximum	°C	-5 / 46						
		DHW	Minimum / Maximum	°C	-25 / 43						

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

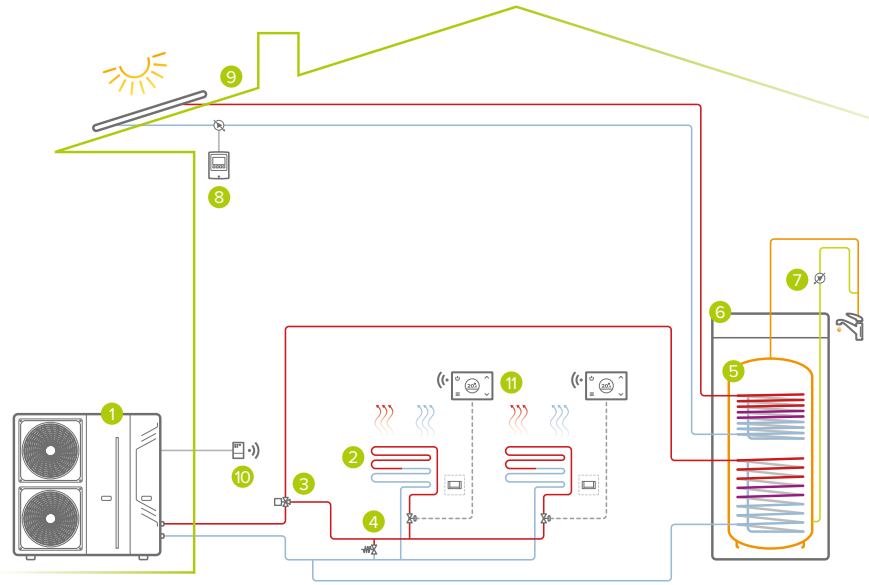
system diagrams



Single area system: heating/cooling/DHW

1. outdoor unit
2. heating/cooling area (fan coils / radiant)
3. system inertial storage connection kit (optional)
4. system inertial storage (optional)
5. bypass*
6. DHW heat pump - AQUA
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

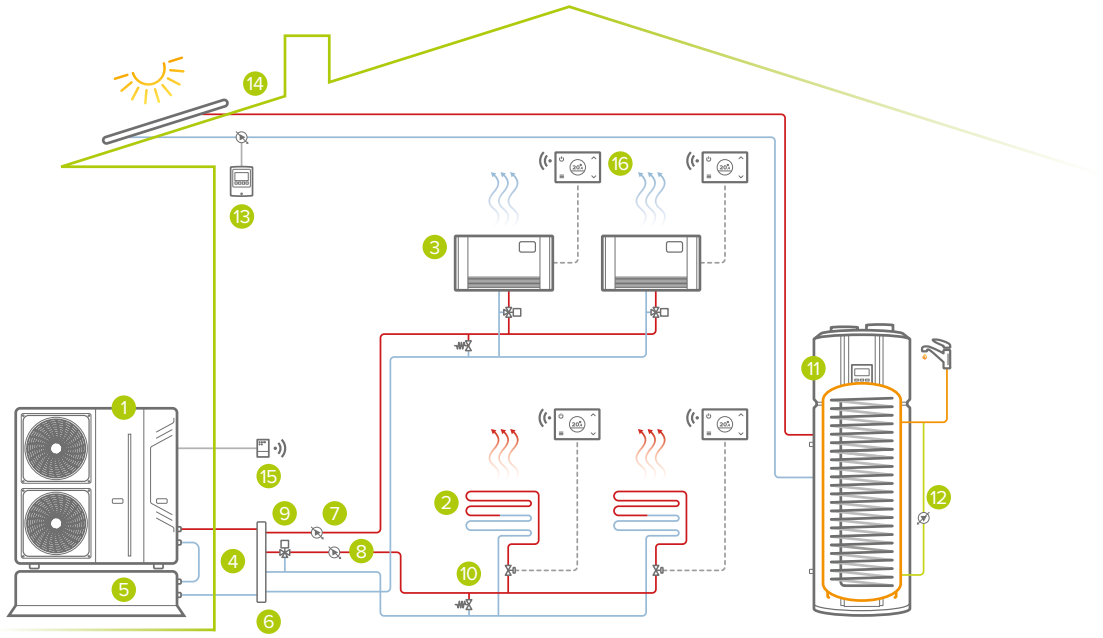
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. heating/cooling area (fan coils / radiant)
3. 3-way switching valve (optional)
4. bypass*
5. DHW tank with solar predisposition (optional)
6. boiler kit connection QERAX (optional)
7. DHW recirculation pump*
8. solar circulation kit (optional)
9. ELFOSun solar thermal (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

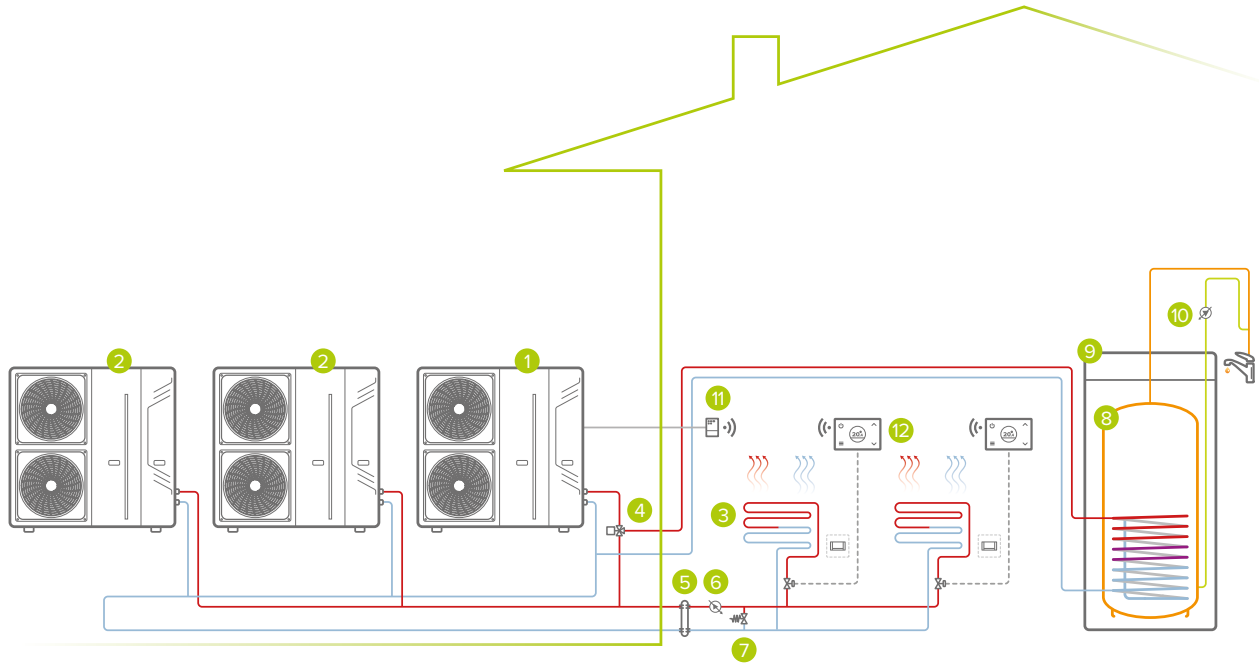
*from external supply



Two-area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. heating area (radiant)
3. cooling area (fan coils)
4. system inertial storage connection kit (optional)
5. system inertial storage (optional)
6. circuit breaker (optional)
7. high temperature secondary circuit pump*
8. low temeprature secondary circuit pump*
9. 3-way mechanical mixing valve *
10. bypass*
11. DHW heat pump with solar predisposition - AQUA
12. DHW recirculation pump*
13. solar circulation kit (optional)
14. ELFOSun solar thermal (optional)
15. SwitchConnect Wi-Fi receiver (optional)
16. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system:
heating/cooling/DHW (only for size 91÷141)

1. outdoor unit (Master)
2. outdoor unit (Slave)
3. heating/cooling area (fan coils / radiant)
4. 3-way switching valve (optional)
5. hydraulic separator (optional)
6. secondary circuit pump*
7. bypass*
8. DHW tank (optional)
9. boiler kit connection QERAX (optional)
10. DHW recirculation pump*
11. SwitchConnect Wi-Fi receiver (optional)
12. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

Edge EVO 2.0 - EXC

WiSAN-YME 1 S 2.1÷14.1

Air-to-water packaged monobloc heat pump for heating, cooling and domestic hot water production

ENERGY SAVING

- Solar integration (optional - DHW tank)
- Cascade
- Smart Grid ready
- €-Switch

COMFORT

- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY

- Backup heater (optional)
- Eurovent
- Keymark

HEALTH

- Eco-friendly refrigerant
- Renewable energy

CONVENIENCE

- Weekly schedule
- Boiler integration

MANAGEMENT AND CONNECTIVITY

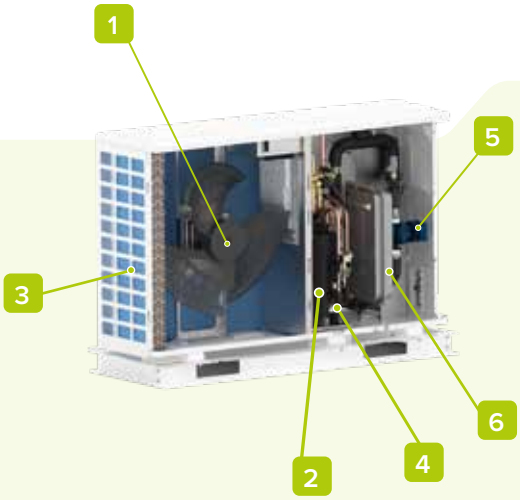
- Potential-free contact
- User interface/ thermostat
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

TOP SYSTEM EFFICIENCY ErP 55°C A++ 35°C A+++

- ✓ Space saving: installed outdoors, no indoor unit is required
- ✓ Designed for harsh climates: excellent performance at low temperatures and optional 3 to 9kW auxiliary heaters
- ✓ High temperature distribution can be used: water up to 65°C
- ✓ Modular: combines up to 6 units in cascade for power up to 180kW
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

Highly efficient even in winter

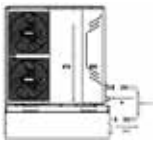
Edge EVO 2.0 - EXC is suitable for all climates and conditions. It is designed to be efficient and provide high temperature water even in harsh winters, down to -25°C: in particular, it can produce water at 60°C with the outdoor air down to -15°C.
For even tougher applications, an additional electric heater can be selected to ensure that there is no loss of performance even under the most extreme conditions.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank

accessories

	KTFLX	Hose kit for connection to the chiller/heat pump
	FDMX	Magnetic dirt separator filter
	VAGX	System freeze protection kit in the absence of electricity
	ACS200X	200-litre domestic hot water storage tank
	ACS399X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	ACS1000X	1000-litre domestic hot water storage tank
	ACS10SX	1000L domestic hot water storage tank with double coil for solar thermal connection
	SCS08X	0.8 m² solar exchanger for flange installation *(for ACS200X e ACS300X)*
	SCS12X	1.2 m² solar exchanger for flange installation *(for ACS500X)*
	QERAMX	Electrical panel for single-phase heater connection on DHW storage tank
	QERATX	Electrical panel for three-phase heater connection on DHW storage tank
	3DHWX	Three-way valve for domestic hot water
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIR2HLX	2 zones: external kit, high temperature + low temperature (mixed)
	KIRHX	2 zones: external kit, high temperature
	DIX	1-litre circuit breaker
	DI50X	50-litre circuit breaker (to exhaustion)
	DI22-50X	50L circuit breaker (2 pairs of supply connectors / 2 pairs of return connectors)
	DI100X	100-litre circuit breaker
	T1BX	Probe for auxiliary heating source T1B

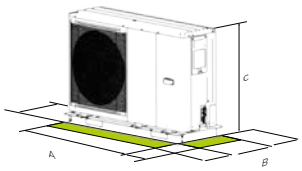
	TANKX	Buffer tank
	KTCAMX	Piping kit for the connection to the buffer tank on supply water side
	KTCARX	Piping kit for the connection to the buffer tank on return water side
	PCSX	Secondary circuit pump
	PCS2X	Oversized secondary circuit pump
	PRSX	DHW recirculation pump
	IBHMX	single-phase back-up electric heater (2/4/6kW)
	IBHTX	three-phase back-up electric heater (3/6/9kW)
	DTX	Auxiliary condensate collection tray
	APAVX	Kit of antivibration mounts for floor installation
	AMMX	Kit of antivibration anti-seismic mounts for floor installation
	ASTFX	Kit of antivibration mounts for wall bracket installation
	KSIPX	Kit with wall fixing brackets
	HID-TCBX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON/OFF

configurations

UNIT POWER SUPPLY (size 6.1÷8.1):

230M Power supply 230/1/50
400TN Power supply 400/3/50+N

dimensions and connections



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

Back: 300 mm
Right side: 500mm (2.1÷8.1) / 600mm (9.1÷14.1)
Left side: 500mm (2.1÷8.1) / 300mm (9.1÷14.1)
Front: 1000mm (2.1÷3.1) / 1500mm (5.1÷8.1) / 3000mm (9.1÷14.1)

Size (230M)			**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Dimensions	Length(A) x Height (C) x Depth(B)		1.295x792x429		1.385x945x526		1.385x945x526		
Weight		kg	121		148		170		
Refrigerant charge		type/GWP	R-32 / 675						
		kg	1,4				1,75		
		CO_2 tons	0,95				1,18		
External diameters	Water	inch	1"				1 1/4"		

Size (400TN)			**6.1**	**7.1**	**8.1**	**9.1**	**10.1**	**12.1**	**14.1**
Dimensions	Length(A) x Height (C) x Depth(B)		1.385x945x526			1.129x1.558x440			
Weight		kg	188			206			
Refrigerant charge		type/GWP	R-32 / 675						
		kg	1,75			5			
		CO_2 tons	1,18			3,4			
External diameters	Water	inch	1 1/4"			1 1/4"			

Size (230M)					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal	kW	**4,20**	**6,35**	**8,40**	**10,00**	**12,10**	**14,50**	**15,90**
	COP		Nominal	-	5,10	4,95	5,15	4,95	4,95	4,60	4,50
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal	kW	4,70	6,00	7,00	8,00	10,00	12,00	13,10
	COP		Nominal	-	3,10	3,00	3,20	3,05	3,00	2,85	2,70
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal	kW	4,30	6,30	8,10	10,00	12,30	14,10	16,00
	COP		Nominal	-	3,80	3,70	3,85	3,75	3,70	3,60	3,50
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal	kW	**4,50**	**6,50**	**8,30**	**9,90**	**12,00**	**13,50**	**14,90**
	EER		Nominal	-	5,50	4,80	5,05	4,55	3,95	3,60	3,40
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal	kW	4,70	7,00	7,45	8,20	11,50	12,40	14,00
	EER		Nominal	-	3,45	3,00	3,35	3,25	2,75	2,50	2,50
Electrical power for meter sizing				kW	3,50	3,50	6,50	6,50	6,50	6,50	6,50
Seasonal efficiency Medium climate		Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
	Heating 55°C	Annual energy consumption		kWh/year	2.749	3.348	4.064	4.541	6.916	6.917	7.213
		SCOP		-	3,31	3,52	3,36	3,49	3,46	3,46	3,46
		ηs (seasonal output)		%	129	138	131	137	135	135	135
		Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
	Heating 35°C	Annual energy consumption		kWh/year	2.354	2.849	3.223	3.649	5.156	5.157	6.011
		SCOP		-	4,85	4,95	5,21	5,19	4,81	4,81	4,72
		ηs (seasonal output)		%	191	195	205	205	189	189	186

Indoor unit					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Power supply	Voltage/Frequency/Phases			V/Hz/n°				230/50/1			
Water flow-rate		*Water 35/30°C - Outdoor air 7°C*	Nominal	l/s	0,22	0,33	0,36	0,39	0,55	0,59	0,67
Pump available pressure			Nominal	kPa	85,2	82,2	76,4	67,9	59,9	59,9	47,6
Minimum system water content				l		20				40	
Expansion tank capacity				l				8			
Sound power			Nominal	dB(A)	55	58	59	60	65	65	68
Sound pressure @1m			Nominal	dB(A)	41	44	45	45	50	50	53

Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C				30 / 65			
		Cooling	Minimum / Maximum	°C				5 / 25			
		DHW	Minimum / Maximum	°C				30 / 60			
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C				-25 / 35			
		Cooling	Minimum / Maximum	°C				-5 / 43			
		DHW	Minimum / Maximum	°C				-25 / 43			

Size (400TN)					6.1	7.1	8.1	9.1	10.1	12.1	14.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal	kW	**12,10**	**14,50**	**15,90**	**18,00**	**22,00**	**26,00**	**30,00**
	COP		Nominal	-	4,95	4,60	4,50	4,70	4,40	4,08	3,91
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal	kW	10,00	12,00	13,10	18,00	21,00	22,00	23,00
	COP		Nominal	-	3,00	2,85	2,70	2,70	2,60	2,50	2,45
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal	kW	12,30	14,10	16,00	18,00	22,00	26,00	30,00
	COP		Nominal	-	3,70	3,60	3,50	3,50	3,40	3,10	2,90
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal	kW	**12,00**	**13,50**	**14,90**	**18,50**	**23,00**	**27,00**	**31,00**
	EER		Nominal	-	3,95	3,60	3,40	4,75	4,60	4,30	4,00
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal	kW	11,50	12,40	14,00	17,00	21,00	26,00	29,50
	EER		Nominal	-	2,75	2,50	2,50	3,05	2,95	2,70	2,55
Electrical power for meter sizing				kW	6,50	6,50	6,50	10,60	12,50	13,80	14,50
Seasonal efficiency Medium climate		Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A+**	**A+**
	Heating 55°C	Annual energy consumption		kWh/year	7.214	7.894	7.895	11.396	14.363	17.116	19.552
		SCOP		-	3,46	3,41	3,41	3,21	3,23	3,16	3,14
		ηs (seasonal output)		%	135	133	133	125	126	123	123
		Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A++**
	Heating 35°C	Annual energy consumption		kWh/year	6.012	6.803	6.805	8.077	10.167	11.513	14.372
		SCOP		-	4,72	4,62	4,62	4,61	4,54	4,50	4,20
		ηs (seasonal output)		%	186	182	182	181	179	177	165

Outdoor unit					6.1	7.1	8.1	9.1	10.1	12.1	14.1
Power supply	Voltage/Frequency/Phases			V/Hz/n°				400/50/3+N			
Water flow-rate		*Water 35/30°C - Outdoor air 7°C*	Nominal	l/s	0,55	0,59	0,67	0,81	1,00	1,24	1,41
Pump available pressure			Nominal	kPa	47,6	33,1	33,1	101,9	94,6	78,8	59,4
Minimum system water content				l		40				60	
Expansion tank capacity				l				8			
Sound power			Nominal	dB(A)	65	65	68	70	72	74	77
Sound pressure @1m			Nominal	dB(A)	50	50	53	57	59	61	63

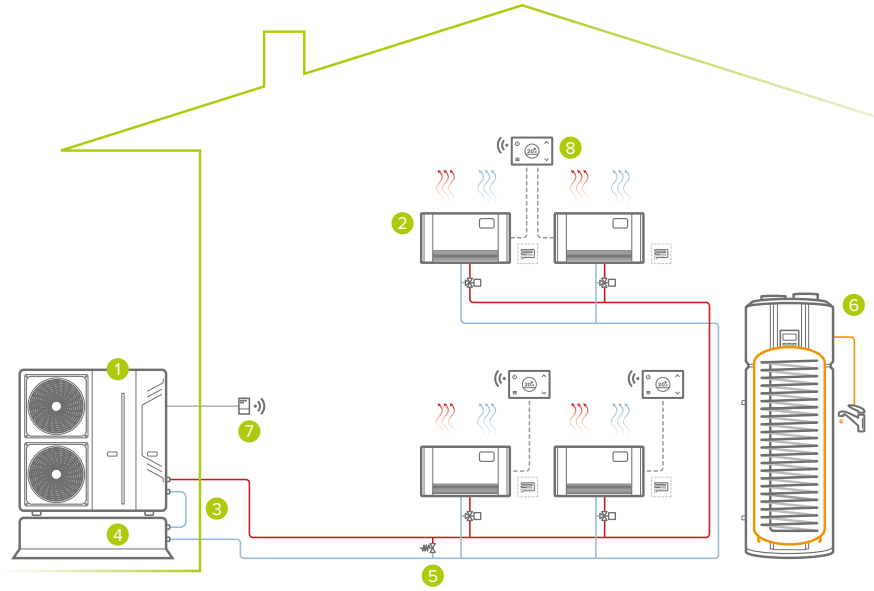
Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C		30 / 65				30 / 60	
		Cooling	Minimum / Maximum	°C				5 / 25			
		DHW	Minimum / Maximum	°C				30 / 60			
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C				-25 / 35			
		Cooling	Minimum / Maximum	°C		-5 / 43				-5 / 46	
		DHW	Minimum / Maximum	°C				-25 / 43			

PRELIMINARY DATA

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

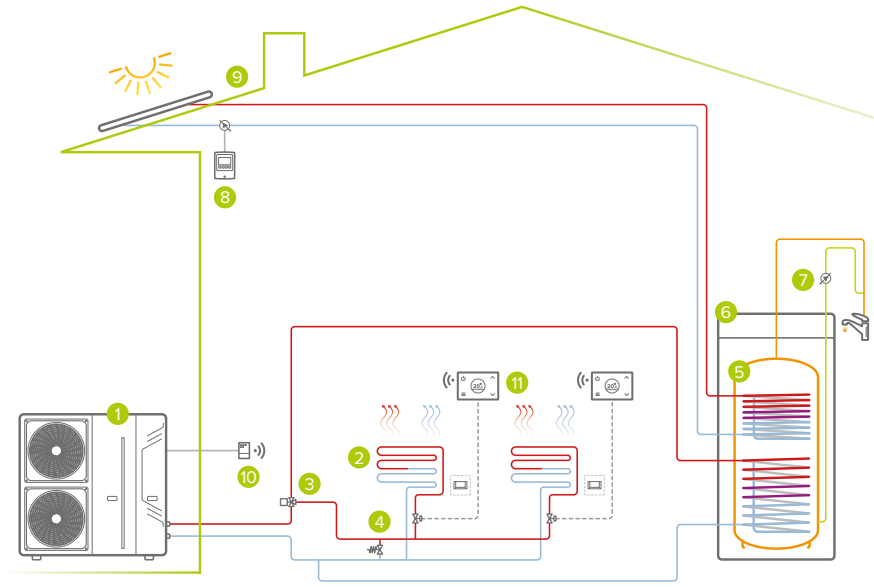
system diagrams



Single area system: heating/cooling/DHW

1. outdoor unit
2. heating/cooling area (fan coils / radiant)
3. system inertial storage connection kit (optional)
4. system inertial storage (optional)
5. bypass*
6. DHW heat pump - AQUA
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

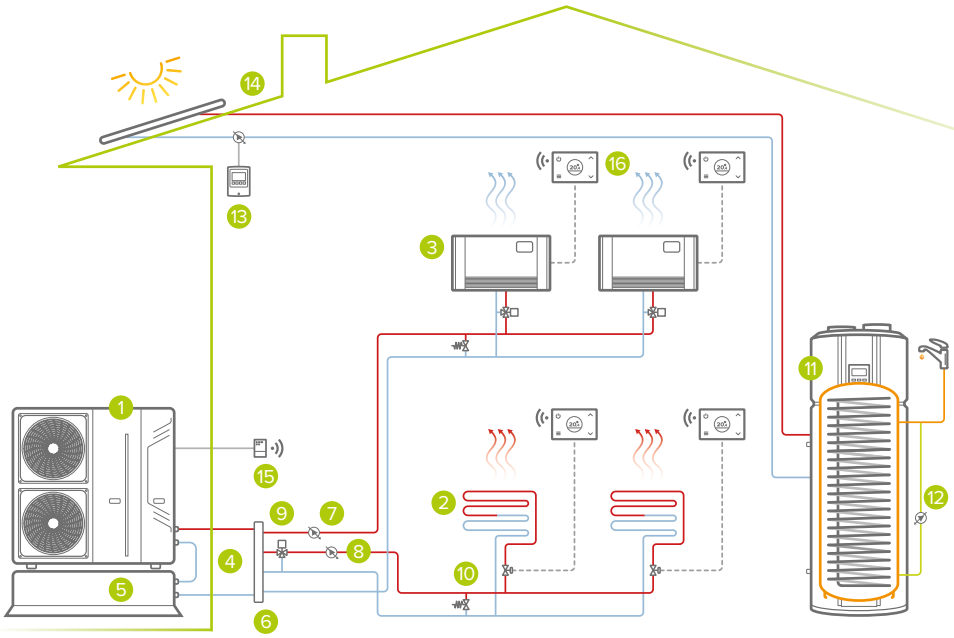
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. heating/cooling area (fan coils / radiant)
3. 3-way switching valve (optional)
4. bypass*
5. DHW tank with solar predisposition (optional)
6. boiler kit connection QERAX (optional)
7. DHW recirculation pump*
8. solar circulation kit (optional)
9. ELFOSun solar thermal (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

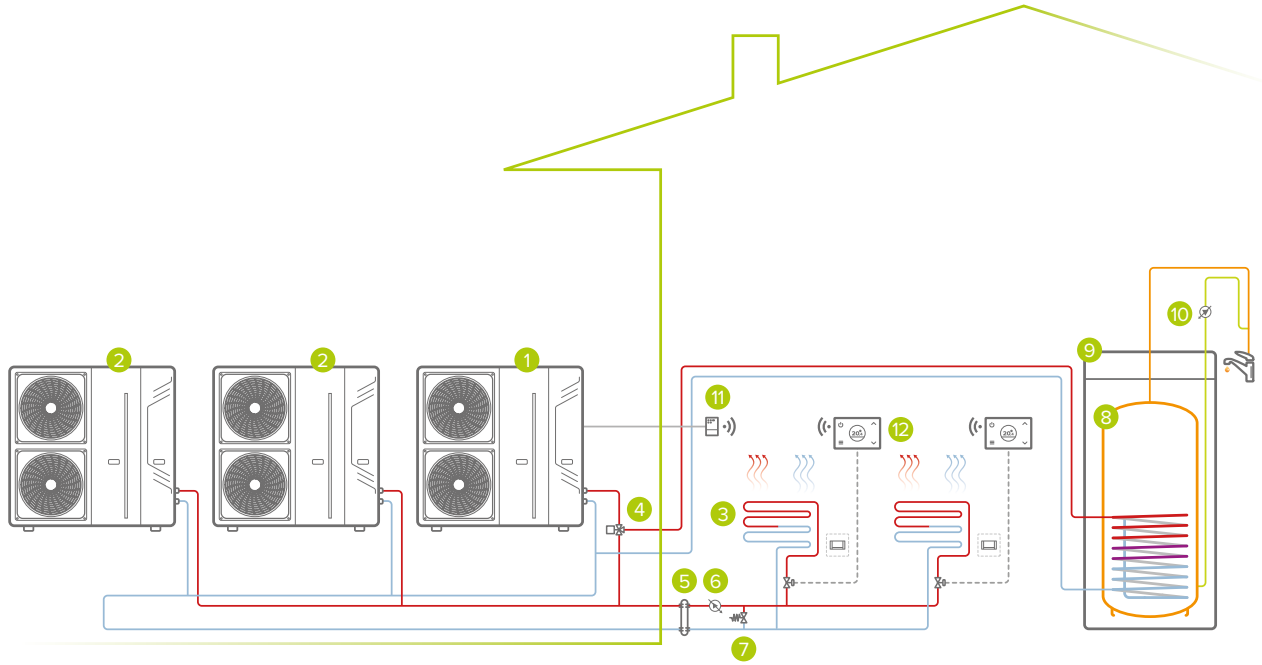
*from external supply



Two-area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. heating area (radiant)
3. cooling area (fan coils)
4. system inertial storage connection kit (optional)
5. system inertial storage (optional)
6. circuit breaker (optional)
7. high temperature secondary circuit pump*
8. low temeprature secondary circuit pump*
9. 3-way mechanical mixing valve*
10. bypass*
11. DHW heat pump with solar predisposition - AQUA
12. DHW recirculation pump*
13. solar circulation kit (optional)
14. ELFOSun solar thermal (optional)
15. SwitchConnect Wi-Fi receiver (optional)
16. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit (Master)
2. outdoor unit (Slave)
3. heating/cooling area (fan coils / radiant)
4. 3-way switching valve (optional)
5. hydraulic separator (optional)
6. secondary circuit pump*
7. bypass*
8. DHW tank (optional)
9. boiler kit connection QERAX (optional)
10. DHW recirculation pump*
11. SwitchConnect Wi-Fi receiver (optional)
12. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

HYBRID HEAT PUMPS: SPLIT

NEW

SPHERA EVO 2.0
EASYHybrid Box

NEW

SPHERA EVO 2.0
EASYHybrid T

SPHERA EVO 2.0
Box Hybrid

SPHERA EVO 2.0
Hybrid

SPHERA EVO 2.0
Invisible Hybrid

SPHERA EVO 2.0 EASYHybrid Box

SQKN-YEE 1 BH + MiSAN-YEE 1 S

Wall-mounted air-to-water hybrid split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional - DHW tank)
- Cascade
- Smart Grid ready
- €-Switch

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Eurovent

HEALTH
- Eco-friendly refrigerant

CONVENIENCE
- Weekly schedule
- Contemporaneity
- Instant DHW

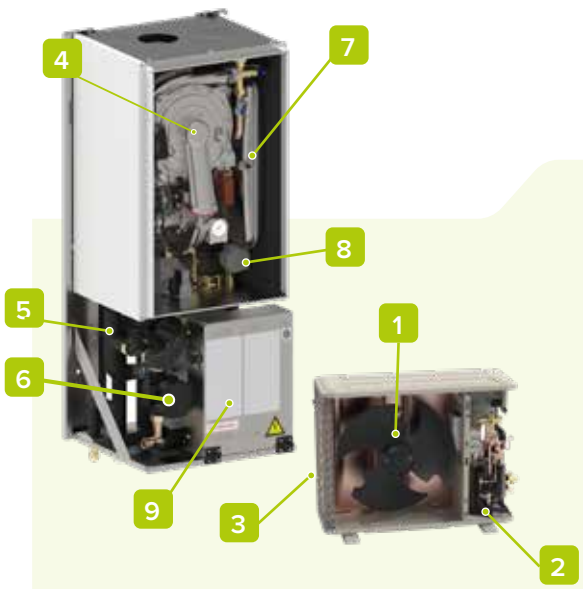
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

TOP SYSTEM EFFICIENCY
ErP 55°C A++ XL A

- ✓ Integrated heat pump and condensing boiler solution
- ✓ Compatible with a radiator system: water temperature up to 80°C
- ✓ Perfect for replacing a boiler: designed with similar overall dimensions
- ✓ 24 or 34 kW boiler to fulfil all requirements, with instant DHW production
- ✓ Simultaneous heating and cooling operation and DHW supply

The €/Switch function

SPHERA EVO 2.0 EASYHybrid Box has a function that can be selected directly from the interface, which makes it possible to calculate the resource (heat pump and/or boiler) that is able to fulfil the heat demand with the lowest economic cost in every operating condition. To use the €-Switch function, simply enter the cost per kWh of electricity and the cost per m^3 of methane gas from the energy provider's supply contract, and define the main type of terminals in the building (radiant panel, fan coil, radiator).



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Condensing boiler
5. Gas/water plate exchanger
6. Inverter DC high efficiency pump
7. 8L system expansion tank
8. 3-way valve
9. Electrical control panel

dimensions and connections

Size					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)	mm		450x1.100x420				547x604x386		
	Outdoor unit	Length(A) x Height(C) x Depth(B)	mm		1.008x712x426		1.118x865x523		1.118x864x523		
Weight	Indoor unit		kg		70				81		
	Outdoor unit		kg		58		77		112		
Max / min equivalent length		L	m					30 / 2			
Max difference in level ODU / IDU		H	m			25				20	
Refrigerant precharge[1]			type/GWP					R-32 / 675			
			kg / m		1,50 / 15		1,65 / 15			1.84 / 15	
			CO_2 tons		1,05		1,1			1,24	
Additional refrigerant charge			g/m		20				38		
External diameters	Refrigerant pipe	Liquid	inch		1/4"				3/8"		
		Gas	inch					5/8"			
	Indoor unit	Water (system)	inch					1"			
		Water (DHW)	inch					1/2"			
	Boiler	Gas	inch					3/4"			
		Intake air	mm					100			
		Exhaust gas	mm					60			

(1) Check in the manual if the indoor unit requires a minimum installation surface

technical data

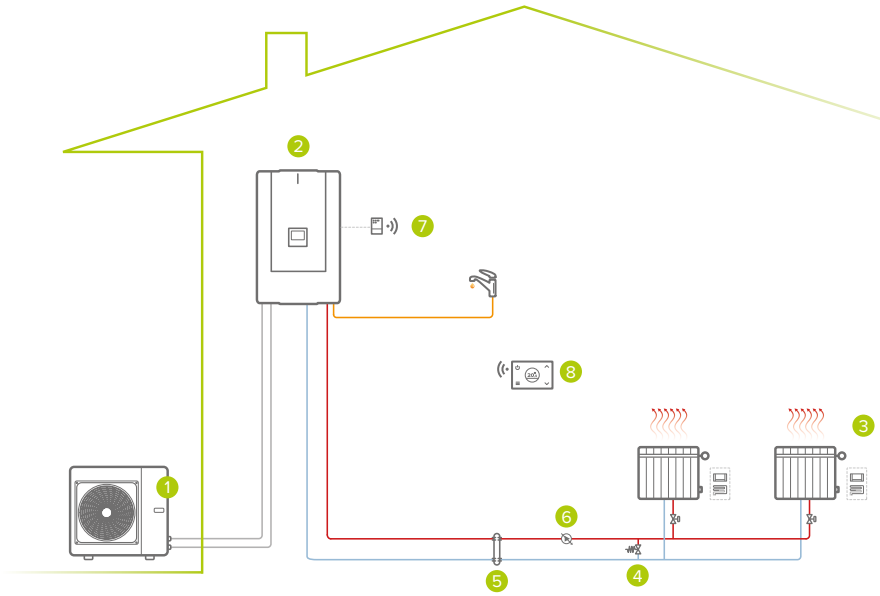
Size (220M)						2.1	3.1	4.1	5.1	6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW		**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-		5,42	5,21	5,31	5,01	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW		4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-		3,16	3,00	3,23	3,07	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW		4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-		3,93	3,83	3,95	3,86	3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW		**22,94**	**22,94**	**22,94**	**22,94**	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%		97,60	97,60	97,60	97,60	98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW		**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-		6,08	5,24	5,12	4,77	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW		4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-		3,50	3,09	3,33	3,09	2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW		**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min		11,5	11,5	11,5	11,5	16	16	16
Electrical power for meter sizing				kW		2,20	2,50	3,30	3,60	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-		**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year		2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-		3,32	3,54	3,72	3,73	3,56	3,52	3,48
		ηs (seasonal output)		%		130	138	146	146	139	138	136
	Heating 35°C	Energy class		-		**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year		2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-		5,13	5,15	5,32	5,27	5,00	4,91	4,89
		ηs (seasonal output)		%		202	203	210	208	196	193	193
	DHW (Boiler)	Energy class		-		**A**	**A**	**A**	**A**	**A**	**A**	**A**
		DHW profile		-		XL	XL	XL	XL	XL	XL	XL
Indoor unit						**A**	**A**	**A**	**A**	**B**	**C**	**D**
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1			
Water flow-rate			Nominal	l/s		0,21	0,30	0,41	0,49	0,57	0,67	0,75
Pump available pressure			Nominal	kPa		31,2	36,5	33,1	31,0	25,7	31,7	22,6
Expansion tank capacity				l					8			
Minimum system water content				l				40			60	
Sound power				dB(A)					41			
Sound pressure @1m				dB(A)					26			
Boiler												
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1			
Power input				W				38			78	
Sound power				dB(A)					52			
Outdoor unit						**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1			
Sound power				dB(A)		55	57	58	60	63	64	66
Sound pressure @1m				dB(A)		42	44	45	47	50	51	53
Operating range												
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C					25 / 65			
		Boiler	Minimum / Maximum	°C					25 / 80			
	Cooling	-	Minimum / Maximum	°C					5 / 25			
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C					-25 / 43			
		Boiler	Minimum / Maximum	°C					-25 / 35			
	Cooling	-	Minimum / Maximum	°C					-5 / 43			
	DHW	Heat pump	Minimum / Maximum	°C					-25 / 43			
		Boiler	Minimum / Maximum	°C					-25 / 43			

Size (400TN)					6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	**10,49 / 13,85**	**12,23 / 14,09**	**13,43 / 14,33**
	COP		Nominal	-	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%	98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-	2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW	**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min	16	16	16
Electrical power for meter sizing				kW	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	3,56	3,52	3,48
		ηs (seasonal output)		%	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	5,00	4,91	4,89
		ηs (seasonal output)		%	196	193	193
	DHW (Boiler)	Energy class		-	**A**	**A**	**A**
		DHW profile		-	XL	XL	XL
Indoor unit					**B**	**C**	**D**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1	
Water flow-rate			Nominal	l/s	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	25,7	31,7	22,6
Expansion tank capacity				l		8	
Minimum system water content				l		60	
Sound power				dB(A)		41	
Sound pressure @1m				dB(A)		26	
Boiler							
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1	
Power input				W		78	
Sound power				dB(A)		52	
Outdoor unit					**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		400/50/3+N	
Sound power				dB(A)	63	64	66
Sound pressure @1m				dB(A)	50	51	53
Operating range							
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C		25 / 65	
		Boiler	Minimum / Maximum	°C		25 / 80	
	Cooling	-	Minimum / Maximum	°C		5 / 25	
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C		-25 / 43	
		Boiler	Minimum / Maximum	°C		-25 / 35	
	Cooling	-	Minimum / Maximum	°C		-5 / 43	
	DHW	Heat pump	Minimum / Maximum	°C		-25 / 43	
		Boiler	Minimum / Maximum	°C		-25 / 43	

PRELIMINARY DATA

Data according to EN 14511:2018 and EN 14825:2016

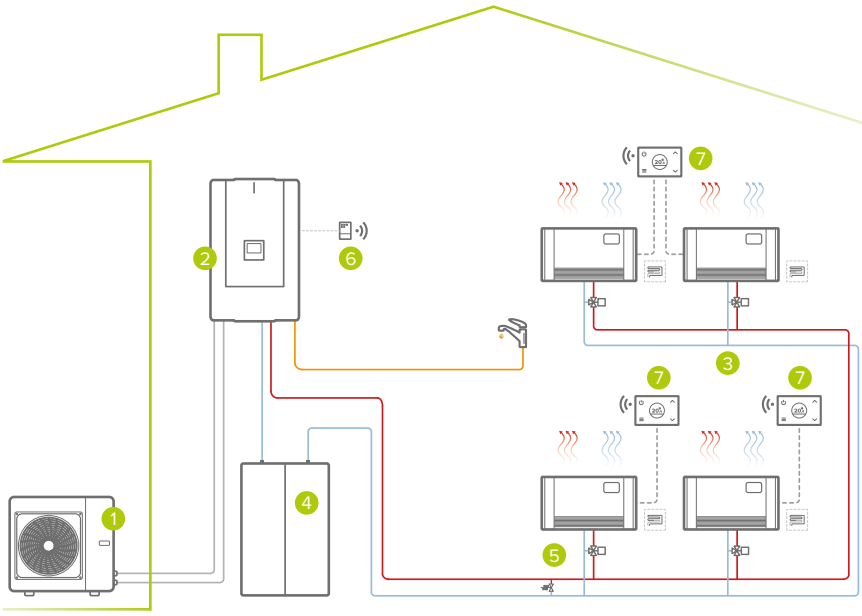
The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).



Single area system: heating/DHW

1. outdoor unit
2. indoor hybrid unit
3. heating area (radiator / fan coils / radiant)
4. bypass*
5. hydraulic separator (optional)
6. secondary circuit pump*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

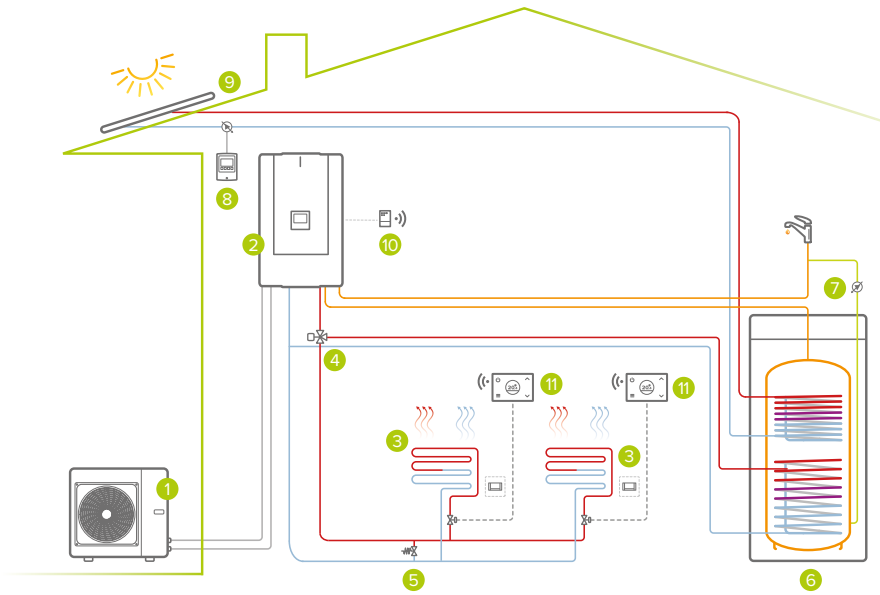
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor hybrid unit
3. heating/cooling area (fan coils / radiant)
4. system inertial storage tank (optional)
5. bypass*
6. SwitchConnect Wi-Fi receiver (optional)
7. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor hybrid unit
3. heating/cooling area (fan coils / radiant)
4. 3-way switching valve (optional)
5. bypass*
6. DHW tank with solar predisposition (optional)
7. DHW recirculation pump*
8. solar circulation kit (optional)
9. ELFOSun solar thermal (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

SPHERA EVO 2.0 EASYHybrid T

SQKN-YEE 1 BH + MiSAN-YEE 1 S

Air-to-water hybrid split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional)
- Smart Grid ready
- €-Switch

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Eurovent

HEALTH
- Eco-friendly refrigerant

CONVENIENCE
- Weekly schedule
- Integrated DHW tank
- Instant DHW

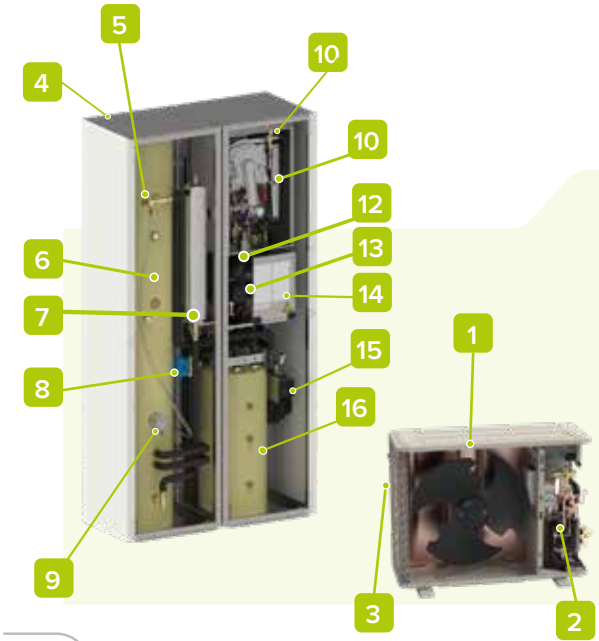
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

ErP TOP SYSTEM EFFICIENCY 55°C A++ L A+

- ✓ Optimised to maximise energy savings without sacrificing comfort
- ✓ Compatible with a radiator system: water temperature up to 80°C
- ✓ Customisable with numerous kits for a complete, yet discreet, central heating plant
- ✓ Connectivity and the APP to keep the system under control
- ✓ Domestic hot water volume can be increased to up to 300 litres

Flexible and compact

SPHERA EVO 2.0 EASYHybrid T has the indoor Box unit fitted into modular units, so you can create the perfect solution for your system. Each module can be created and customised with all the necessary components for an efficient and reliable system, all inside a compact cabinet with an appearance that blends in with the environment in which it is installed.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Double cabinet
5. DHW pressure relief valve
6. 150-litre DHW boiler with coil
7. 8-litre DHW expansion tank
8. DHW 3-way valves
9. 2kW DHW safety heater
10. Condensing boiler
11. 8-litre system expansion tank
12. Plate exchanger
13. Inverter DC high efficiency pump
14. Electrical control panel
15. 1-zone booster kit (optional)
16. System inertial storage kit (optional)

dimensions and connections

Size					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)	mm				1.100x2.100x500				
	Outdoor unit	Length(A) x Height(C) x Depth(B)	mm		1.008x712x426		1.118x865x523		1.118x864x523		
Weight	Indoor unit		kg				325				
	Outdoor unit		kg		58		77		112		
Max / min equivalent length		L	m				30 / 2				
Max difference in level ODU / IDU		H	m		25		51		20		
Refrigerant precharge[1]			type/GWP				R-32 / 675				
			kg / m		1,50/15		1,65 / 15		1,84/15		
			CO_2 tons		1,05		1,11		1,24		
Additional refrigerant charge			g/m				38				
External diameters	Refrigerant pipe	Liquid	inch		1/4"				3/8"		
		Gas	inch				5/8"				
	Indoor unit	Water (system)	inch				1"				
		Water (DHW)	inch				3/4"				
	Boiler	Gas	inch				3/4"				
		Intake air	mm				100				
		Exhaust gas	mm				60				

PRELIMINARY DATA

(1) Check in the manual if the indoor unit requires a minimum installation surface

technical data

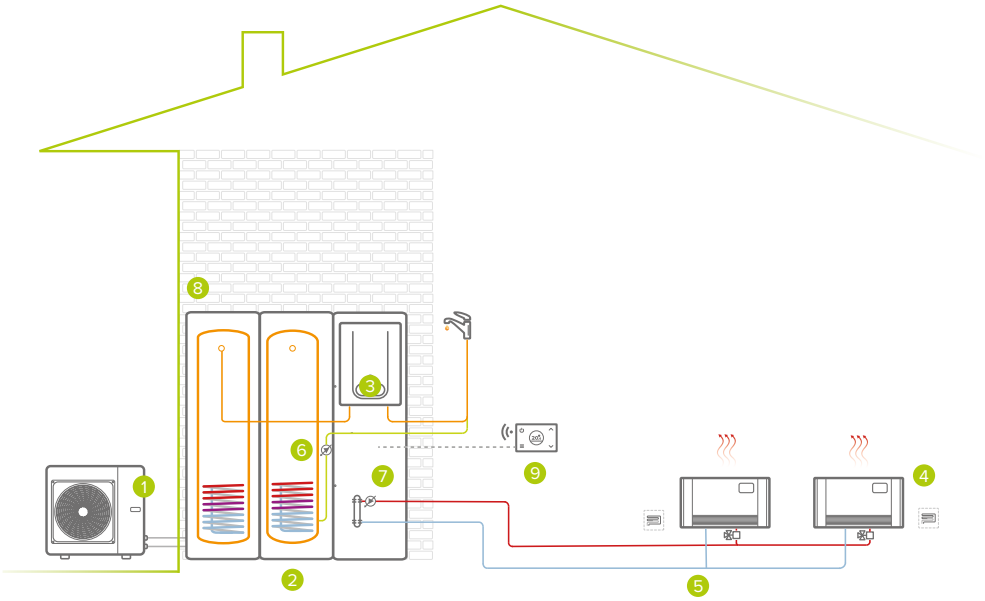
Size (220M)						2.1	3.1	4.1	5.1	6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW		**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-		5,42	5,21	5,31	5,01	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW		4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-		3,16	3,00	3,23	3,07	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW		4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-		3,93	3,83	3,95	3,86	3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW		**22,94**	**22,94**	**22,94**	**22,94**	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%		97,60	97,60	97,60	97,60	98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW		**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-		6,08	5,24	5,12	4,77	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW		4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-		3,50	3,09	3,33	3,09	2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW		**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min		11,5	11,5	11,5	11,5	16	16	16
Electrical power for meter sizing				kW		2,20	2,60	3,30	3,60	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-		**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year		2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-		3,32	3,54	3,72	3,73	3,56	3,52	3,48
		ηs (seasonal output)		%		130	138	146	146	139	138	136
	Heating 35°C	Energy class		-		**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year		2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-		5,13	5,15	5,32	5,27	5,00	4,91	4,89
		ηs (seasonal output)		%		202	203	210	208	196	193	193
	DHW (Boiler)	Energy class		-		**A**	**A**	**A**	**A**	**A**	**A**	**A**
		DHW profile		-		XL	XL	XL	XL	XL	XL	XL
Indoor unit						**A**	**A**	**A**	**A**	**B**	**C**	**D**
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1			
Water flow-rate			Nominal	l/s		0,21	0,30	0,41	0,49	0,57	0,67	0,75
Pump available pressure			Nominal	kPa		31,2	36,5	33,1	31,0	25,7	31,7	22,6
Expansion tank capacity				l					8			
Minimum system water content				l				40			60	
Sound power				dB(A)					41			
Sound pressure @1m				dB(A)					26			
Boiler												
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1			
Power input				W				38			78	
Sound power				dB(A)					52			
Outdoor unit						**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1			
Sound power				dB(A)		55	57	58	60	63	64	66
Sound pressure @1m				dB(A)		42	44	45	47	50	51	53
Operating range												
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C					25 / 65			
		Boiler	Minimum / Maximum	°C					25 / 80			
	Cooling	-	Minimum / Maximum	°C					5 / 25			
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C					-25 / 43			
		Boiler	Minimum / Maximum	°C					-25 / 35			
	Cooling	-	Minimum / Maximum	°C					-5 / 43			
	DHW	Heat pump	Minimum / Maximum	°C					-25 / 43			
		Boiler	Minimum / Maximum	°C					-25 / 43			

Size (400TN)					6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%	98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-	2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW	**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min	16	16	16
Electrical power for meter sizing				kW	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	3,56	3,52	3,48
		ηs (seasonal output)		%	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	5,00	4,91	4,89
		ηs (seasonal output)		%	196	193	193
	DHW (Boiler)	Energy class		-	**A**	**A**	**A**
		DHW profile		-	XL	XL	XL
Indoor unit					**B**	**C**	**D**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1	
Water flow-rate			Nominal	l/s	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	25,7	31,7	22,6
Expansion tank capacity				l		8	
Minimum system water content				l		60	
Sound power				dB(A)		41	
Sound pressure @1m				dB(A)		26	
Boiler							
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1	
Power input				W		78	
Sound power				dB(A)		52	
Outdoor unit					**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		400/50/3 + N	
Sound power				dB(A)	63	64	66
Sound pressure @1m				dB(A)	50	51	53
Operating range							
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C		25 / 65	
		Boiler	Minimum / Maximum	°C		25 / 80	
	Cooling	-	Minimum / Maximum	°C		5 / 25	
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C		-25 / 43	
		Boiler	Minimum / Maximum	°C		-25 / 35	
	Cooling	-	Minimum / Maximum	°C		-5 / 43	
	DHW	Heat pump	Minimum / Maximum	°C		-25 / 43	
		Boiler	Minimum / Maximum	°C		-25 / 43	

PRELIMINARY DATA

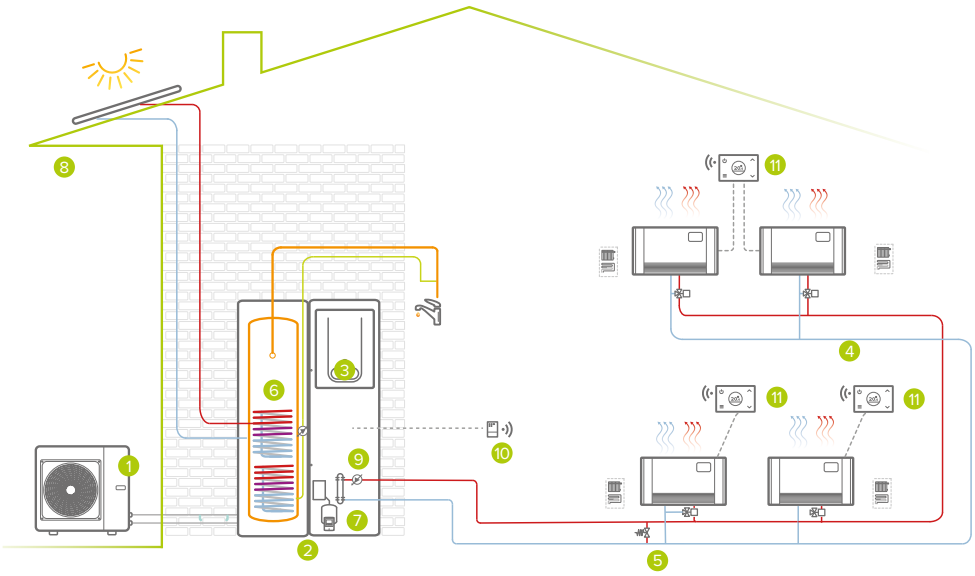
Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).



Single area system: heating/DHW

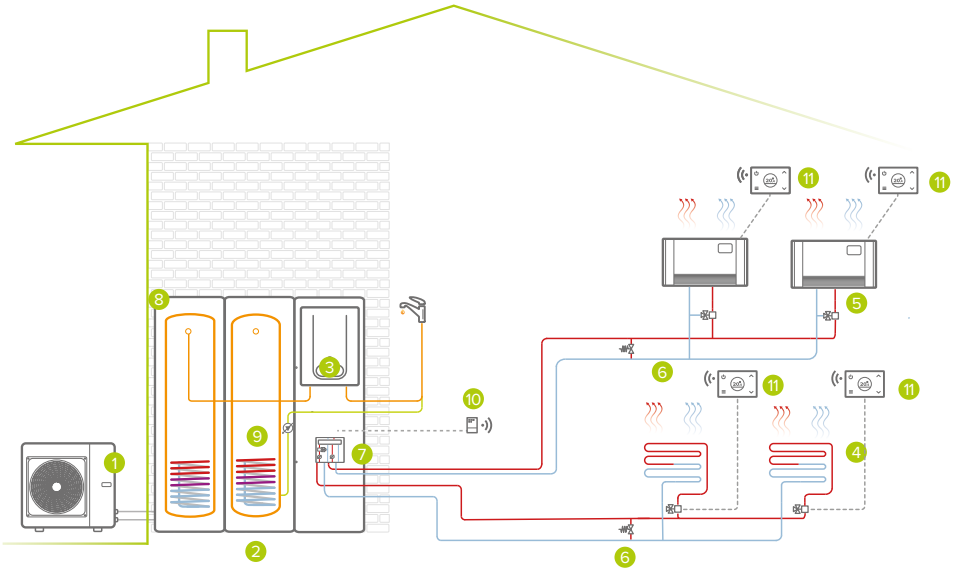
1. outdoor unit
2. indoor unit
3. hybrid module (heat pump / boiler)
4. heating area (radiator / fan coils / radiant)
5. bypass*
6. secondary circuit kit (optional)
7. DHW recirculation pump
8. additional DHW tank
9. HID-TConnect Wi-Fi chronothermostat (optional)



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. hybrid module (heat pump / boiler)
4. heating area (radiator / fan coils / radiant)
5. bypass*
6. DHW recirculation pump*
7. solar connection kit (optional)
8. ELFOSun solar thermal (optional)
9. secondary circuit kit (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Two-area system: heating/cooling/DHW

1. outdoor unit
2. indoor hybrid unit
3. hybrid module (heat pump / boiler)
4. heating/cooling area (radiator / fan coils / radiant)
5. heating area (radiator / fan coils / radiant)
6. bypass*
7. Two-zone management kit (optional configuration)
8. additional DHW tank (optional)
9. DHW recirculation pump*
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

SPHERA EVO 2.0 Box Hybrid

SQKN-YEE 1 BC + MiSAN-YEE 1 S + GAS BOILER 2.1÷8.1

Wall-mounted air-to-water hybrid split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional - DHW tank)
- Smart Grid ready
- Cascade
- €-Switch

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Eurovent
- Keymark

HEALTH
- Eco-friendly refrigerant

CONVENIENCE
- Weekly schedule
- Contemporaneity
- Instant DHW

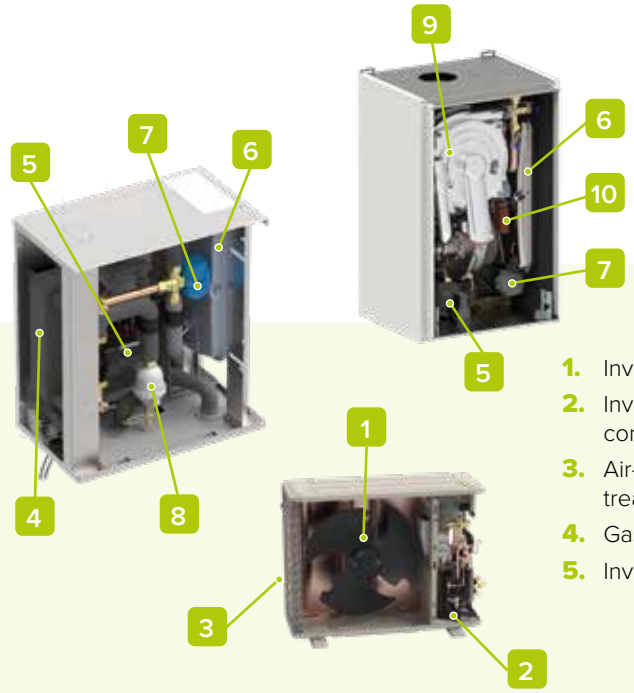
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring
- User interface/ thermostat

ErP TOP SYSTEM EFFICIENCY 55°C A++ XL A

- ✓ Ideal for replacing old systems while keeping existing radiators
- ✓ Simultaneous production of DHW and cooling/heating
- ✓ It does not need to be coupled to a tank if DHW is produced by the boiler
- ✓ It uses renewable solar thermal energy by coupling to ELFOSun (can be connected to the boiler)
- ✓ Up to 6 units can be connected in cascade, for demands up to 100 kW

Without a thought

SPHERA EVO 2.0 Box Hybrid is the solution designed for upgrading old generators without having to alter the system. The system is in fact extremely versatile and able to adapt to whatever already exists: it simply replaces the generator that produces Heating and Domestic Hot Water, improving comfort and efficiency, but without much thought.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter
9. Combustion/water exchanger
10. Electric fan

configurations

PUMP:

-	Standard pump
1PUM	Single pump with larger available head

UNIT POWER SUPPLY (size 6.1÷8.1):

220M	Power supply 230/1/50
400TN	Power supply 400/3/50+N

4-PIPE BOILER

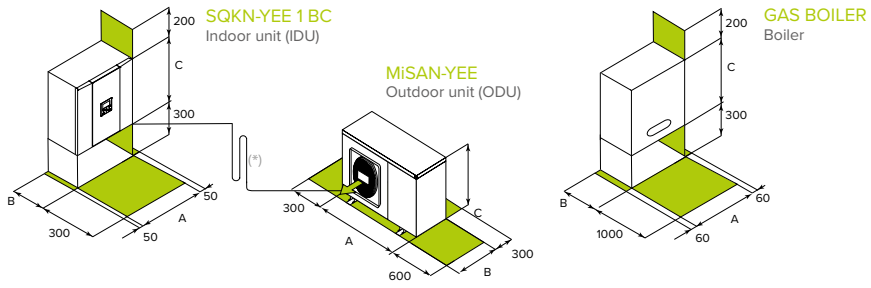
HYSO24	24kW boiler
HYSO34	34kW boiler

accessories

	ACS200X	200-litre domestic hot water storage tank
	ACS300X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	SCS08X	0.8 m² solar exchanger for flange installation *(for ACS200X e ACS300X)*
	SCS12X	1.2 m² solar exchanger for flange installation *(for ACS500X)*
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIRE2HLX	2 zones: external kit, high temperature + low temperature
	KIRE2HX	2 zones: external kit, high temperature
	DIX	1-litre circuit breaker
	DI50X	50-litre circuit breaker
	ACI40X	40L system inertial storage tank *(s. 2.1÷5.1)*
	ACI60X	60-litre system inertial storage tank
	SFCSTX	Additional probe for cascade function
	KSDFX	Splitter for boiler smoke discharge
	KCSAFX	Coaxial fitting for smoke discharge and intake (ø60/100)
	KITKX	Coaxial system for adjustable smoke discharge and intake (ø 60/100

	KITAK50X	Coaxial system for adjustable smoke discharge and intake (ø 80/125)
	KAS80X	Smoke intake and discharge fittings, 80 mm diameter
	KTCGPLX	Kit to convert boiler from methane to LPG
	DTX	Auxiliary condensate collection tray
	APAVX	Kit of antivibration mounts for floor installation
	ASTFX	Kit of antivibration mounts for wall bracket installation
	KSIPX	Kit with wall fixing brackets
	KISX	Simplified installation kit with fittings for Sphera EVO 2.0 Box Hybrid
	HID-TCBX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	SwitchConnect radio receiver

dimensions and connections



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

(*) Gas and water connections

technical data

Size (230M)					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,42	5,21	5,31	5,01	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	3,16	3,00	3,23	3,07	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,93	3,83	3,95	3,86	3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW	**22,94**	**22,94**	**22,94**	**22,94**	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%	97,60	97,60	97,60	97,60	98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	6,08	5,24	5,12	4,77	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-	3,50	3,09	3,33	3,09	2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW	**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min	11,5	11,5	11,5	11,5	16	16	16
Electrical power for meter sizing				kW	2,20	2,50	3,30	3,60	5,40	5,70	6,10
Seasonal efficiency Medium climate		Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
	Heating 55°C	Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-	3,32	3,54	3,72	3,73	3,56	3,52	3,48
		ηs (seasonal output)		%	130	138	146	146	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-	5,13	5,15	5,32	5,27	5,00	4,91	4,89
		ηs (seasonal output)		%	202	203	210	208	196	193	193
	DHW (Boiler)	Energy class		-	**A**	**A**	**A**	**A**	**A**	**A**	**A**
		DHW profile		-	XL	XL	XL	XL	XL	XL	XL
Indoor unit					**A**	**A**	**A**	**A**	**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Water flow-rate			Nominal	l/s	0,21	0,30	0,41	0,49	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	31,2	36,5	33,1	31,0	25,7	31,7	22,6
Expansion tank capacity				l	8						
Minimum system water content				l	40					60	
Sound power				dB(A)	41						
Sound pressure @1m				dB(A)	26						
Boiler											
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Power input				W	38					78	
Sound power				dB(A)	52						
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Sound power				dB(A)	55	57	58	60	63	64	66
Sound pressure @1m				dB(A)	42	44	45	47	50	51	53
Operating range											
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C	25 / 65						
		Boiler	Minimum / Maximum	°C	25 / 80						
	Cooling	-	Minimum / Maximum	°C	5 / 25						
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C	-25 / 43						
		Boiler	Minimum / Maximum	°C	-25 / 35						
	Cooling	-	Minimum / Maximum	°C	-5 / 43						
	DHW	Heat pump	Minimum / Maximum	°C	-25 / 43						
		Boiler	Minimum / Maximum	°C	-25 / 43						

Size					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)	mm		547x604x386				547x604x386		
	Outdoor unit	Length(A) x Height(C) x Depth(B)	mm		986x712x426		1.004x866x523		1.004x866x523		
	Boiler	Length(A) x Height(C) x Depth(B)	mm		410x642x307				410x642x330		
Weight	Indoor unit		kg		50				68		
	Outdoor unit		kg		58		77		112		
	Boiler		kg		35				44		
Max / min equivalent length		L	m		30 / 2						
Max difference in level ODU / IDU		H	m		25				20		
Refrigerant precharge[1]			type/GWP		R-32 / 675						
			kg / m		1,50 / 15		1,65 / 15		1.84 / 15		
			CO_2 tons		1,05		1,1		1,24		
Additional refrigerant charge			g/m		20				38		
External diameters	Refrigerant pipe	Liquid	inch		1/4"				3/8"		
		Gas	inch		5/8"						
	Indoor unit	Water (system)	inch		1"						
		Water (DHW)	inch		1/2"						
	Boiler	Gas	inch		3/4"						
		Intake air	mm		100						
		Exhaust gas	mm		60						

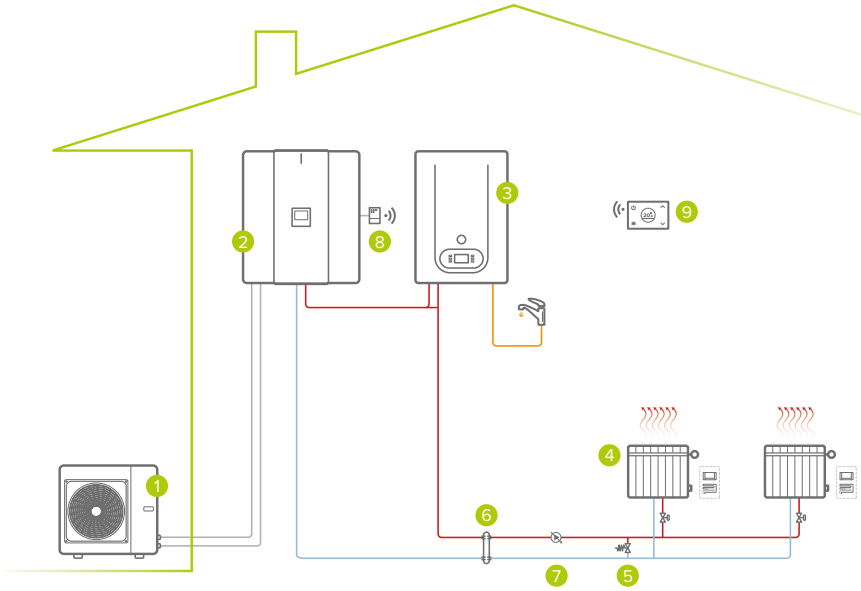
(1) Check in the manual if the indoor unit requires a minimum installation surface

Size (400TN)						6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW		**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-		5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW		10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-		3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW		12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-		3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW		**33,35**	**33,35**	**33,35**
	Performance		Nominal	%		98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW		**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-		4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW		11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-		2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW		**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min		16	16	16
Electrical power for meter sizing				kW		5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-		**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year		6.793	7.380	7.915
		SCOP		-		3,56	3,52	3,48
		ηs (seasonal output)		%		139	138	136
	Heating 35°C	Energy class		-		**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year		6.793	7.380	7.915
		SCOP		-		5,00	4,91	4,89
		ηs (seasonal output)		%		196	193	193
	DHW (Boiler)	Energy class		-		**A**	**A**	**A**
		DHW profile		-		XL	XL	XL
Indoor unit						**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1	
Water flow-rate			Nominal	l/s		0,57	0,67	0,75
Pump available pressure			Nominal	kPa		25,7	31,7	22,6
Expansion tank capacity				l			8	
Minimum system water content				l			60	
Sound power				dB(A)			41	
Sound pressure @1m				dB(A)			26	
Boiler								
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1	
Power input				W			78	
Sound power				dB(A)			52	
Outdoor unit						**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1	
Sound power				dB(A)		63	64	66
Sound pressure @1m				dB(A)		50	51	53
Operating range								
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C			25 / 65	
		Boiler	Minimum / Maximum	°C			25 / 80	
	Cooling	-	Minimum / Maximum	°C			5 / 25	
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C			-25 / 43	
		Boiler	Minimum / Maximum	°C			-25 / 35	
	Cooling	-	Minimum / Maximum	°C			-5 / 43	
	DHW	Heat pump	Minimum / Maximum	°C			-25 / 43	
		Boiler	Minimum / Maximum	°C			-25 / 43	

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl3 EVO system control

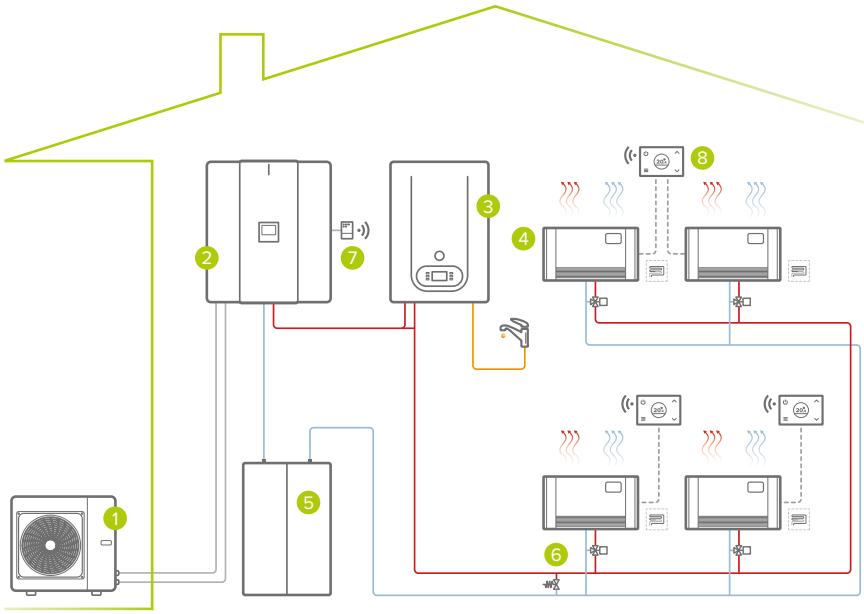
system diagrams



Single area system: heating/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating area (radiator / fan coils / radiant)
5. bypass*
6. hydraulic separator (optional)
7. secondary circuit pump*
8. SwitchConnect Wi-Fi receiver (optional)
9. HID-TConnect Wi-Fi chronothermostat (optional)

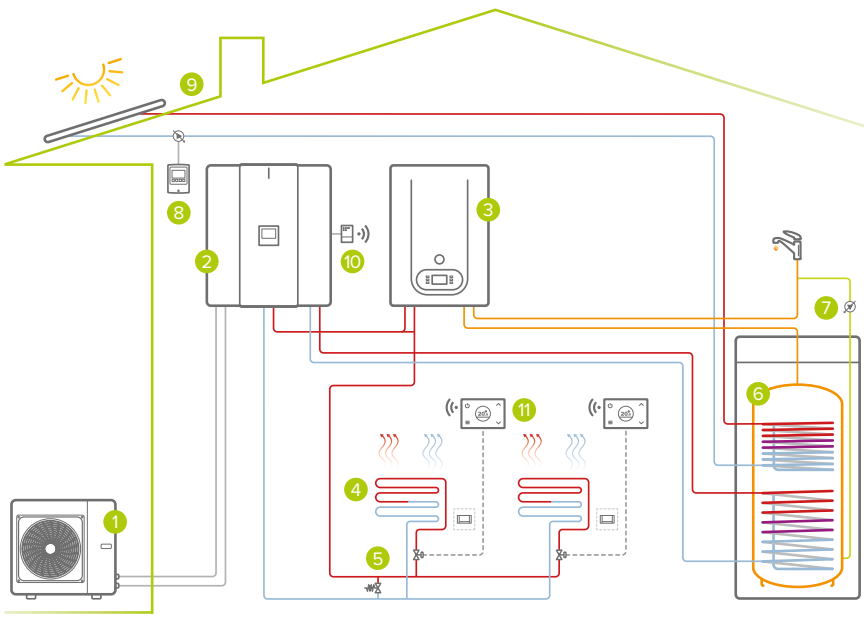
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating/cooling area (fan coils / radiant)
5. system inertial storage tank (optional)
6. bypass*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating/cooling area (fan coils / radiant)
5. bypass*
6. DHW tank with solar predisposition (optional)
7. DHW recirculation pump*
8. solar circulation kit (optional)
9. ELFOSun solar thermal (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

SPHERA EVO 2.0 Hybrid

SQKN-YEE 1 TC + MISAN-YEE 1 S + GAS BOILER 2.1 - 8.1

Air-to-water hybrid split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional - DHW tank)
- Smart Grid ready
- Cascade
- €-Switch

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Eurovent
- Keymark

HEALTH
- Eco-friendly refrigerant

CONVENIENCE
- Weekly schedule
- Contemporaneity
- Instant DHW

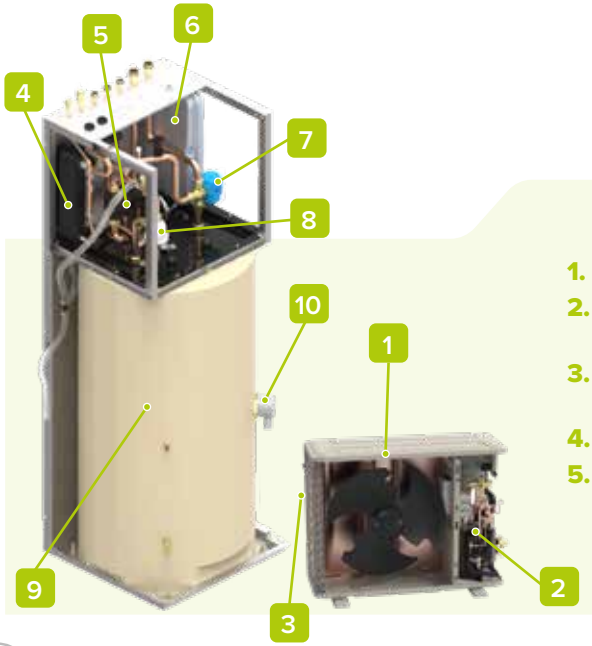
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring
- User interface/ thermostat

TOP SYSTEM EFFICIENCY ErP 55°C A++ XL A

- ✓ Ideal combination of heat pump and boiler
- ✓ Hot water guaranteed with the utmost efficiency
- ✓ Designed not to disturb, operating very quietly
- ✓ Simultaneous operation and domestic hot water supply
- ✓ Wide series of accessories for a complete system

More and more renewables

Sphera EVO 2.0 Tower Hybrid can be used, in addition to traditional gas (Methane/LPG), with renewable sources such as air for heating and cooling and the sun for the production of domestic hot water.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter
9. 190L/250L DHW tank with coil
10. 2kW DHW safety heater

configurations

DHW STORAGE:

ACS190 DHW storage 190L
ACS250 DHW storage 250L

UNIT POWER SUPPLY (size 6.1÷8.1):

220M Power supply 230/1/50
400TN Power supply 400/3/50+N

PUMP:

- Standard pump
1PUM Single pump with larger available head

4-PIPE BOILER

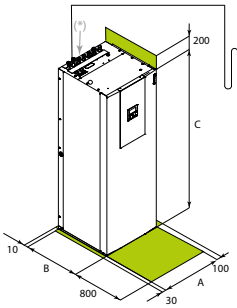
HYSO24 24kW boiler
HYSO34 34kW boiler

accessories

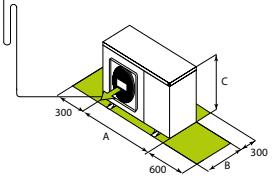
	**ACSA250X**	250L additional domestic hot water storage tank
	**SOLX**	Drain-back solar integration for domestic hot water
	**KCSX**	Secondary circuit kit (1-litre circuit breaker + pump)
	**KIRE2HLX**	2 zones: external kit, high temperature + low temperature (mixed)
	KIRE2HX	2 zones: external kit, high temperature
	**DIX**	1-litre circuit breaker
	**DI50X**	50-litre circuit breaker
	**ACI40X**	40L system inertial storage tank *(s. 2.1÷5.1)*
	**ACI60X**	60-litre system inertial storage tank
	**COFX**	Casing sheets for the inertial storage cover
	**SFCSTX**	Additional probe for cascade function
	**KSDFX**	Splitter for boiler smoke discharge

	**KCSAFX**	Coaxial fitting for smoke discharge and intake (ø60/100)
	**KITKX**	Coaxial system for adjustable smoke discharge and intake (ø 60/100)
	**KITAK50X**	Coaxial system for adjustable smoke discharge and intake (ø 80/125)
	**KAS80X**	Smoke intake and discharge fittings, 80 mm diameter
	**KTCGPLX**	Kit to convert boiler from methane to LPG
	**DTX**	Auxiliary condensate collection tray
	**APAVX**	Kit of antivibration mounts for floor installation
	**ASTFX**	Kit of antivibration mounts for wall bracket installation
	**KSIPX**	Kit with wall fixing brackets
	**HID-TCBX**	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	**HID-TCNX**	White soft touch chronothermostat, with temperature control and management via App / Voice control
	**SWCX**	SwitchConnect radio receiver

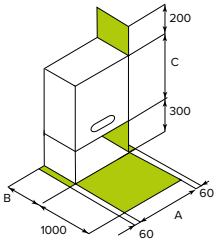
dimensions and connections



SQKN-YEE 1 TC
Indoor unit (IDU)



MiSAN-YEE
Outdoor unit (ODU)



GAS BOILER
Boiler

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

(*) Water and gas connections

technical data

Size (220M)					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,32 / 6,26**	**6,18 / 7,41**	**8,30 / 9,11**	**10,09 / 10,3**	**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-	5,42	5,21	5,31	5,01	5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-	3,16	3,00	3,23	3,07	3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-	3,93	3,83	3,95	3,86	3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW	**22,94**	**22,94**	**22,94**	**22,94**	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%	97,60	97,60	97,60	97,60	98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,55 / 6,88**	**6,44 / 7,65**	**8,10 / 11,13**	**10,00 / 12,03**	**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-	6,08	5,24	5,12	4,77	4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-	3,50	3,09	3,33	3,09	2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW	**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**2,90 / 23,50**	**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min	11,5	11,5	11,5	11,5	16	16	16
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60	5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-	3,32	3,54	3,72	3,73	3,56	3,52	3,48
		ηs (seasonal output)		%	130	138	146	146	139	138	136
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915
		SCOP		-	5,13	5,15	5,32	5,27	5,00	4,91	4,89
		ηs (seasonal output)		%	202	203	210	208	196	193	193
	DHW (Boiler)	Energy class		-	**A**	**A**	**A**	**A**	**A**	**A**	**A**
		DHW profile		-	XL	XL	XL	XL	XL	XL	XL
Indoor unit					**A**	**A**	**A**	**A**	**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Water flow-rate			Nominal	l/s	0,21	0,30	0,41	0,49	0,57	0,67	0,75
Pump available pressure			Nominal	kPa	31,2	36,5	33,1	31,0	25,7	31,7	22,6
Expansion tank capacity				l	8						
Minimum system water content				l	40					60	
Sound power				dB(A)	41						
Sound pressure @1m				dB(A)	26						
Boiler											
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Power input				W	38					78	
Sound power				dB(A)	52						
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Sound power				dB(A)	55	57	58	60	63	64	66
Sound pressure @1m				dB(A)	42	44	45	47	50	51	53
Operating range											
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C	25 / 65						
		Boiler	Minimum / Maximum	°C	25 / 80						
	Cooling	-	Minimum / Maximum	°C	5 / 25						
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C	-25 / 43						
		Boiler	Minimum / Maximum	°C	-25 / 35						
	Cooling	-	Minimum / Maximum	°C	-5 / 43						
	DHW	Heat pump	Minimum / Maximum	°C	-25 / 43						
		Boiler	Minimum / Maximum	°C	-25 / 43						

Size					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)	mm		547x604x386				547x604x386		
	Outdoor unit	Length(A) x Height(C) x Depth(B)	mm		986x712x426		1.004x866x523		1.004x866x523		
	Boiler	Length(A) x Height(C) x Depth(B)	mm		410x642x307				410x642x330		
Weight	Indoor unit		kg		50				68		
	Outdoor unit		kg		58		77		112		
	Boiler		kg		35				44		
Max / min equivalent length		L	m					30 / 2			
Max difference in level ODU / IDU		H	m		25				20		
Refrigerant precharge[1]			type/GWP					R-32 / 675			
			kg / m		1,50 / 15		1,65 / 15		1.84 / 15		
			CO_2 tons		1,05		1,1		1,24		
Additional refrigerant charge			g/m		20				38		
External diameters	Refrigerant pipe	Liquid	inch		1/4"				3/8"		
		Gas	inch					5/8"			
	Indoor unit	Water (system)	inch					1"			
		Water (DHW)	inch					1/2"			
	Boiler	Gas	inch					3/4"			
		Intake air	mm					100			
		Exhaust gas	mm					60			

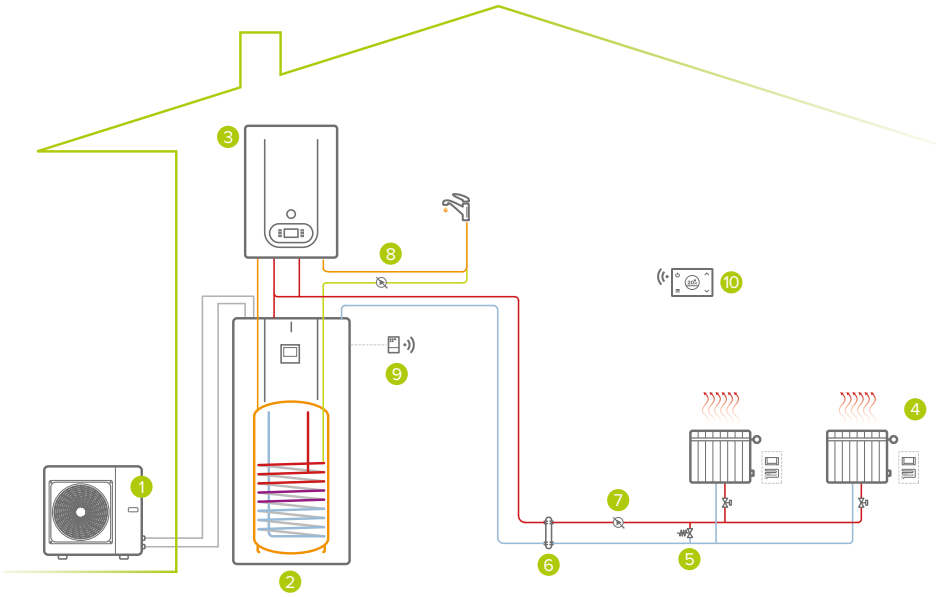
(1) Check in the manual if the indoor unit requires a minimum installation surface

Size (400TN)						6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW		**12,13 / 14,60**	**14,51 / 15,5**	**16,01 / 16,80**
	COP		Nominal	-		5,00	4,70	4,55
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW		10,49 / 13,85	12,23 / 14,09	13,43 / 14,33
	COP		Nominal	-		3,13	2,82	2,74
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW		12,30 / 14,50	14,00 / 15,70	16,01 / 16,60
	COP		Nominal	-		3,80	3,65	3,60
Heating (Boiler)	Nominal heating capacity (LHV)	*Water 80/60°C*	Nominal	kW		**33,35**	**33,35**	**33,35**
	Performance		Nominal	%		98,08	98,08	98,08
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW		**12,06 / 15,02**	**13,79 / 15,30**	**14,84 / 16,38**
	EER		Nominal	-		4,02	3,70	3,65
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW		11,16 / 11,80	11,72 / 12,86	12,88 / 14,20
	EER		Nominal	-		2,75	2,55	2,45
DHW	Power	-	Minimum / Maximum	kW		**4,10 / 34,00**	**4,10 / 34,00**	**4,10 / 34,00**
	Specific flow rate	Water with ΔT=30°C in 10 minutes		l/min		16	16	16
Electrical power for meter sizing				kW		5,40	5,70	6,10
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-		**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year		6.793	7.380	7.915
		SCOP		-		3,56	3,52	3,48
		ηs (seasonal output)		%		139	138	136
	Heating 35°C	Energy class		-		**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year		6.793	7.380	7.915
		SCOP		-		5,00	4,91	4,89
		ηs (seasonal output)		%		196	193	193
	DHW (Boiler)	Energy class		-		**A**	**A**	**A**
		DHW profile		-		XL	XL	XL
Indoor unit						**B**	**B**	**B**
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1	
Water flow-rate			Nominal	l/s		0,57	0,67	0,75
Pump available pressure			Nominal	kPa		25,7	31,7	22,6
Expansion tank capacity				l			8	
Minimum system water content				l			60	
Sound power				dB(A)			41	
Sound pressure @1m				dB(A)			26	
Boiler								
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1	
Power input				W			78	
Sound power				dB(A)			52	
Outdoor unit						**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°			400/50/3+N	
Sound power				dB(A)		63	64	66
Sound pressure @1m				dB(A)		50	51	53
Operating range								
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C			25 / 65	
		Boiler	Minimum / Maximum	°C			25 / 80	
	Cooling	-	Minimum / Maximum	°C			5 / 25	
Operating range (outdoor air)	Heating	Heat pump	Minimum / Maximum	°C			-25 / 43	
		Boiler	Minimum / Maximum	°C			-25 / 35	
	Cooling	-	Minimum / Maximum	°C			-5 / 43	
	DHW	Heat pump	Minimum / Maximum	°C			-25 / 43	
		Boiler	Minimum / Maximum	°C			-25 / 43	

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl3 EVO system control

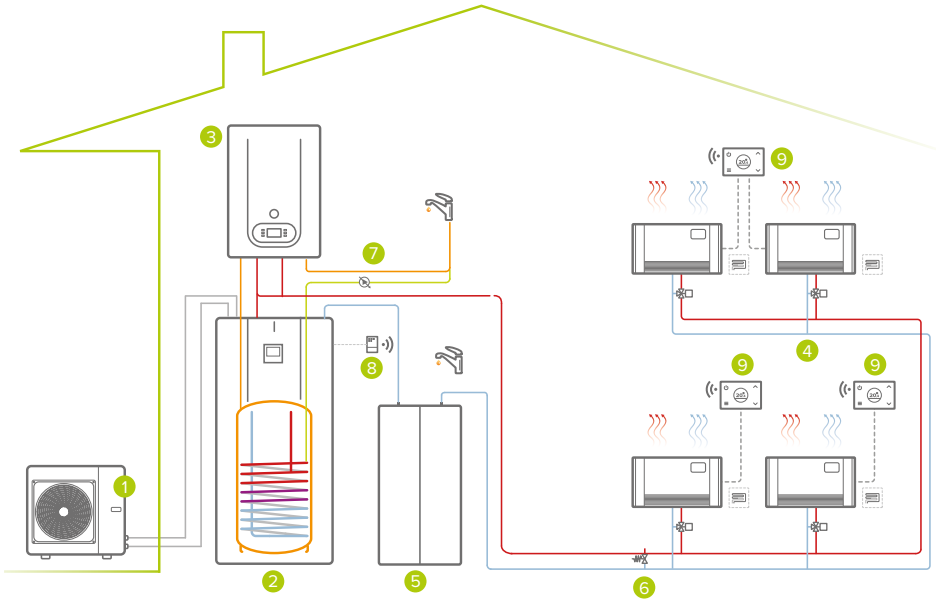
system diagrams



Single area system: heating/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating area (radiator / fan coils / radiant)
5. bypass*
6. hydraulic separator (optional)
7. secondary circuit pump*
8. DHW recirculation pump*
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

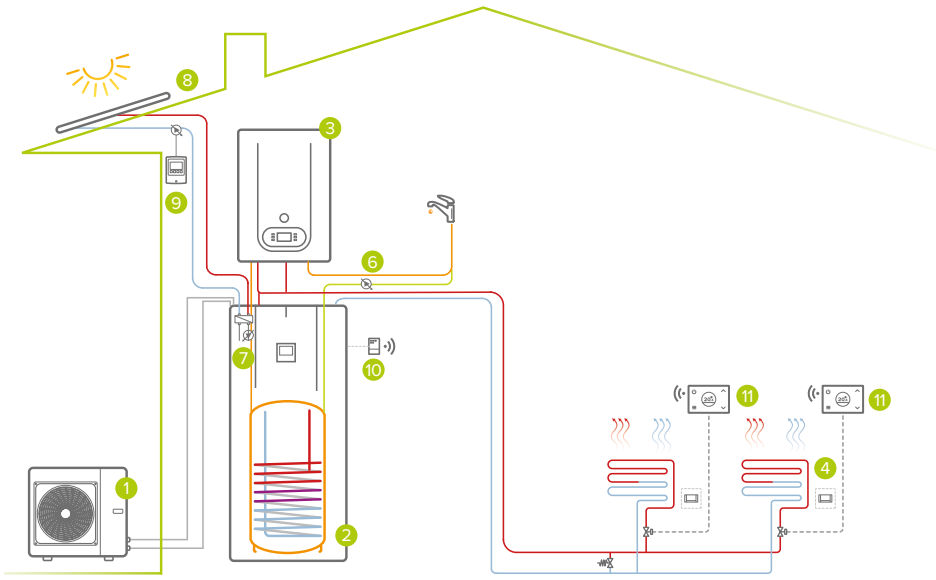
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating/cooling area (fan coils / radiant)
5. system inertial storage (optional)
6. bypass*
7. DHW recirculation pump* (optional)
8. SwitchConnect Wi-Fi receiver (optional)
9. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating/cooling area (fan coils / radiant)
5. bypass*
6. DHW recirculation pump* (optional)
7. solar connection kit (optional)
8. ELFOSun solar thermal (optional)
9. solar circulation kit (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

SPHERA EVO 2.0 Invisible Hybrid

SQKN-YEE 1 IC + MiSAN-YEE 1 S + CCGIX 2.1÷5.1

Uncased air-to-water hybrid split heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional)
- Smart Grid ready
- €-Switch

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Eurovent
- Keymark

HEALTH
- Eco-friendly refrigerant

CONVENIENCE
- Weekly schedule
- Integrated DHW tank

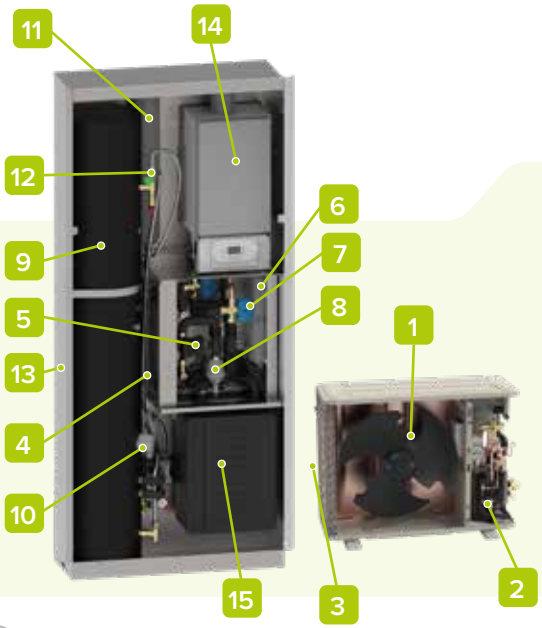
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring
- User interface/ thermostat

ErP TOP SYSTEM EFFICIENCY 55°C A++ L A+

- ✓ Space-saving: completely outdoor installation with uncased wall-mounted unit only 36 cm deep
- ✓ It adapts to every need: solar kit / inertial storage kit / additional storage tank / configurable booster kits
- ✓ Components and uncased cabinet with telescopic frame can be supplied separately
- ✓ 24 kW boiler fuelled by methane or LPG, with coaxial or split smoke discharge
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

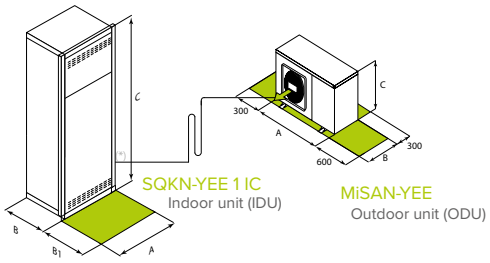
Using the space well

SPHERA EVO 2.0 Invisible Hybrid is the ideal choice for all homes that do not have a technical room and which need to make the unit invisible by embedding it in the wall.
The cabinet has an adjustable telescopic frame and can be painted to make the unit disappear completely.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter
9. 150L DHW tank with coil
10. 2kW DHW safety heater
11. 8L DHW expansion tank
12. Anti-scalding valve
13. Cabinet with adjustable telescopic frame
14. Boiler
15. Kit for managing 2 areas (optional)

dimensions and connections



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

(*) Water and gas connections

Size				2.1	3.1	4.1	5.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)	mm	950x2.250x360			
	Outdoor unit	Length(A) x Height(C) x Depth(B)	mm	1.008x712x426		1.118x865x523	
	Boiler	Length(A) x Height(C) x Depth(B)	mm	410x642x307 (23.2)			
Weight	Indoor unit		kg	325			
	Outdoor unit		kg	58		67	
	Boiler		kg	35 (23.2)			
Max / min equivalent length		L	m	30 / 2			
Max difference in level ODU / IDU		H	m	25			
Refrigerant precharge[1]			type/GWP	R-32 / 675			
			kg / m	1,50 / 15		1,65 / 15	
			CO_2 tons	1,05		1,11	
Additional refrigerant charge			g/m	20		38	
External diameters	Refrigerant pipe	Liquid	inch	1/4"		3/8"	
		Gas	inch	5/8"			
	Indoor unit	Water (system)	inch	1"			
		Water (DHW)	inch	3/4"			

(1) Check in the manual if the indoor unit requires a minimum installation surface

accessories

	ADIX	Recessed storage unit with jigs for fittings
	ACS150X	150-litre domestic hot water storage tank
	ADIAX	Recessed storage unit for additional DHW accumulation
	ACSA150X	Additional 150-litre domestic hot water storage
	ACSA50X	Additional 50-litre domestic hot water storage
	SHWT	150L domestic hot water storage tank with solar coil
	KCVEX	Circulation kit: circulation group, control unit, expansion tank
	KPRSX	DHW recirculation pump kit
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIRE2HLX	2 zones: high temperature + low temperature (mixed)
	KIRE2HX	2 zones: both at high temperature
	AC50X	50-litre inertial storage tank for indoor installation
	ACE50X	50-litre inertial storage tank for outdoor installation

	ADI50X	Recessed storage unit for external inertial accumulation
	CCGIX	Integration condensing boiler
	KSDFX	Splitter for boiler smoke discharge
	KAS80X	Smoke intake and discharge fittings, 80 mm diameter
	KTCGPLX	Kit to convert boiler from methane to LPG
	DTX	Auxiliary condensate collection tray
	APAVX	Kit of antivibration mounts for floor installation
	ASTFX	Kit of antivibration mounts for wall bracket installation
	KSIPX	Kit with wall fixing brackets
	HID-TCBX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	SwitchConnect radio receiver

configurations

PUMP:

- Standard pump
- **1PUM** Single pump with larger available head

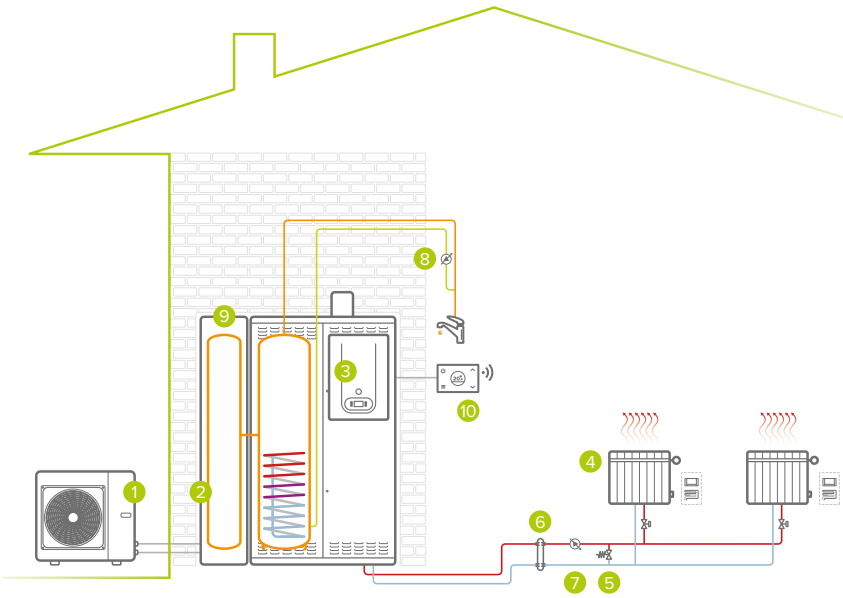
technical data

Size					**2.1**	**3.1**	**4.1**	**5.1**
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,32 / 6,26**	**6,18 /7,41**	**8,30 / 9,11**	**10,09 / 10,3**
	COP		Nominal	-	5,42	5,21	5,31	5,01
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30
	COP		Nominal	-	3,16	3,00	3,23	3,07
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30
	COP		Nominal	-	3,93	3,83	3,95	3,86
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,55 / 6,88**	**6,44 / 7,65**	**810 / 11,13**	**10,00 / 12,03**
	EER		Nominal	-	6,08	5,24	5,12	4,77
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10
	EER		Nominal	-	3,50	3,09	3,33	3,09
Boiler 23.2	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW		**22,94**		
	Performance		Nominal	%		97.6		
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749
		SCOP		-	3,32	3,54	3,72	3,73
		ηs (seasonal output)		%	130	138	146	146
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749
		SCOP		-	5,13	5,15	5,32	5,27
		ηs (seasonal output)		%	202	203	210	208
	DHW	Energy class			**A+**	**A+**	**A+**	**A+**
		DHW profile		-	L	L	L	L
Indoor unit					**A**	**A**	**A**	**A**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1		
Water flow-rate			Nominal	l/s	0,21	0,30	0,41	0,49
Pump available pressure			Nominal	kPa	31,2	36,5	33,1	31,0
Expansion tank capacity				l		8		
Minimum system water content				l		40		
Sound power				dB(A)		41		
Sound pressure @1m				dB(A)		26		
Boiler								
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1		
Power input				W		38		
Sound power				dB(A)		52		
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1		
Sound power				dB(A)	55	58	58	60
Sound pressure @1m				dB(A)	42	44	45	47
Operating range								
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C		25 / 65		
		Boiler	Minimum / Maximum	°C		12 / 70		
	Cooling	-	Minimum / Maximum	°C		5 / 25		
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C		-25 / 43		
		Boiler	Minimum / Maximum	°C		-25 / 35		
	Cooling	-	Minimum / Maximum	°C		-5 / 43		
	DHW	Heat pump	Minimum / Maximum	°C		-25 / 43		
		Boiler	Minimum / Maximum	°C		-25 / 43		

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl3 EVO system control

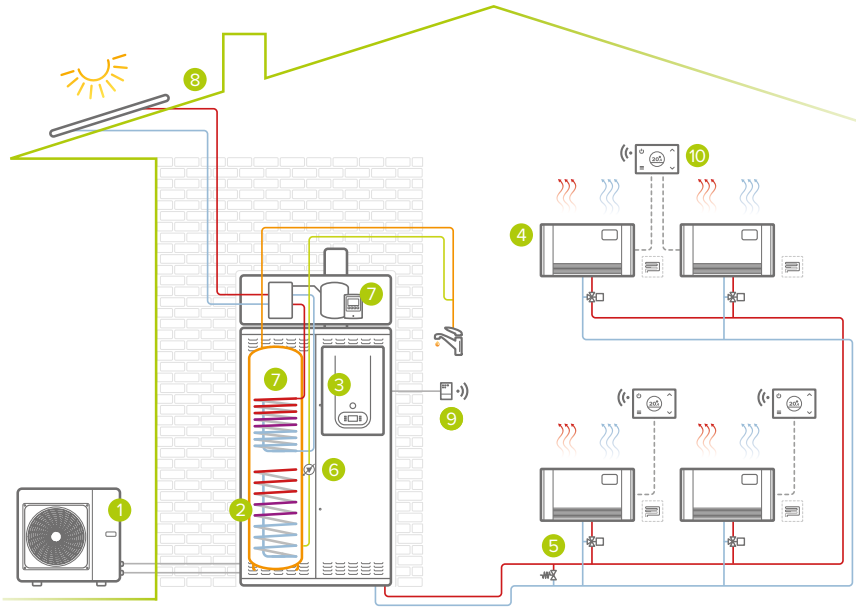
system diagrams



Single area system: heating/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating area (radiator / fan coils / radiant)
5. bypass*
6. hydraulic separator (optional)
7. secondary circuit pump*
8. DHW recirculation pump*
9. additional DHW tank (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

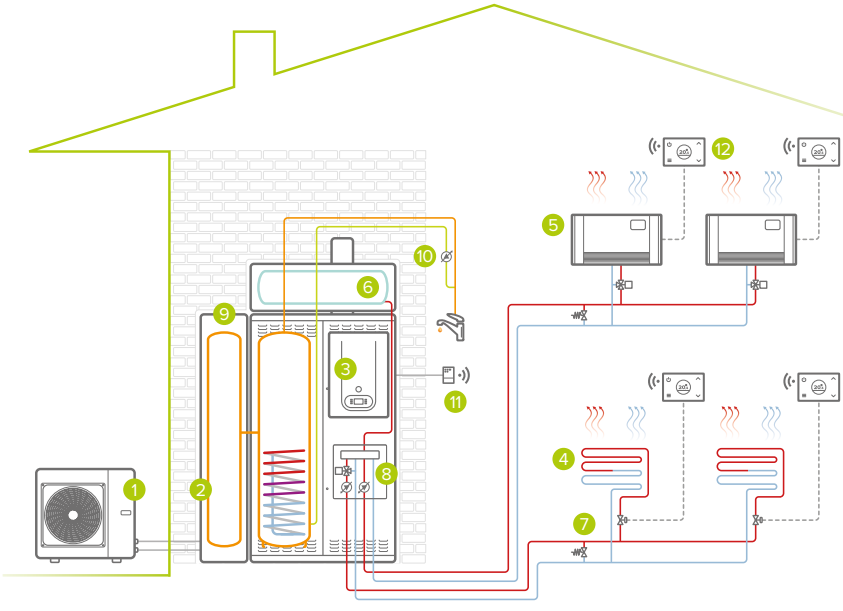


Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. heating/cooling area (fan coils / radiant)
5. bypass*
6. DHW recirculation pump* (optional)
7. solar connection kit (optional)
8. ELFOSun solar thermal (optional)
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

Note:
- flue to be fitted on the side or back
- external solar connection kit available on request

*from external supply



Two-area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. boiler
4. low temperature heating/cooling area (radiant)
5. hight temperature heating/cooling area (fan coils)
6. system inertial storage (optional)
7. bypass*
8. kit for managing 2 areas (optional configuration)
9. additional DHW tank (optional)
10. DHW recirculation pump*
11. SwitchConnect Wi-Fi receiver (optional)
12. HID-TConnect Wi-Fi chronothermostat (optional)

flue to be fitted on the side or back
*from external supply

HYBRID HEAT PUMPS: MONOBLOCK

ELFOEnergy Edge EVO Hybrid

NEW

Edge EVO 2.0 - EXC Hybrid

ELFOEnergy Edge EVO Hybrid

WSAN-YMi + GAS BOILER 2.1÷8.1

Air-to-water packaged monobloc hybrid heat pump for heating, cooling and domestic hot water production

ENERGY SAVING
- Solar integration (optional - DHW tank)
- Smart Grid ready

COMFORT
- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY
- Eurovent
- Keymark

HEALTH
- Eco-friendly refrigerant

CONVENIENCE
- Weekly schedule
- Contemporaneity
- Instant DHW

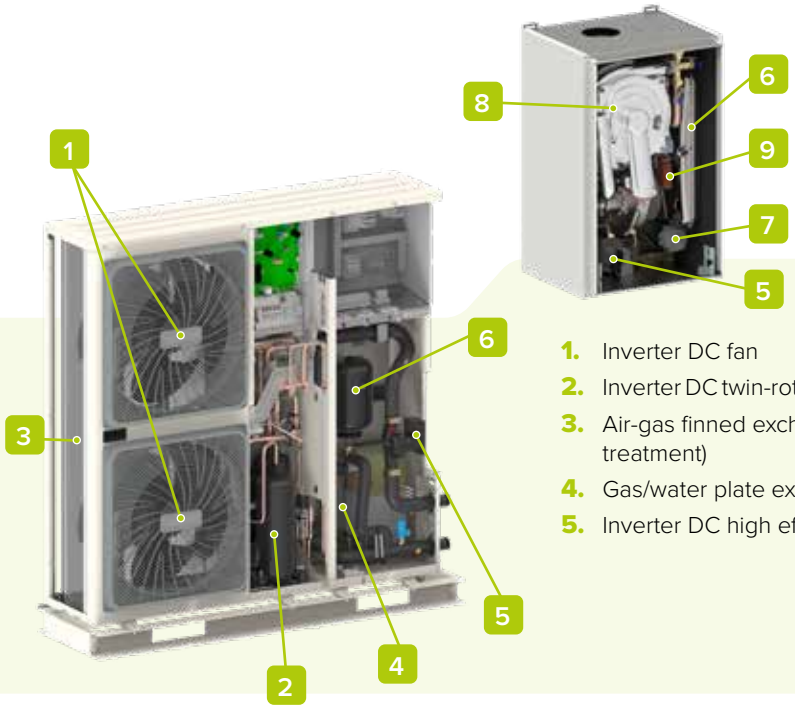
MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- User interface / thermostat
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

TOP SYSTEM EFFICIENCY ErP 55°C A++ XL A

- ✓ Ideal for replacing old systems while keeping existing radiators
- ✓ Simultaneous production of DHW and cooling/heating
- ✓ It does not need to be coupled to a tank if DHW is produced by the boiler
- ✓ It uses renewable solar thermal energy by coupling to ELFOSun (can be connected to the boiler)
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

Without a thought

ELFOEnergy Edge EVO Hybrid is the solution designed for upgrading old generators without having to alter the system. The system is in fact extremely versatile and able to adapt to whatever already exists: it simply replaces the generator that produces Heating and Domestic Hot Water, improving comfort and efficiency, but without much thought.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Combustion/water exchanger
9. Electric fan

configurations

UNIT POWER SUPPLY (size 6.1÷8.1):

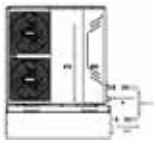
230M	Power supply 230/1/50
400TN	Power supply 400/3/50+N

4-PIPE BOILER:

HYSO24	24kW boiler
HYSO34	34kW boiler

accessories

	KTFLX	Hose kit for connection to the chiller/heat pump
	ACS200X	200-litre domestic hot water storage tank
	ACS300X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	SCS08X	0.8 m² solar exchanger for flange installation *(for ACS200X e ACS300X)*
	SCS12X	1.2 m² solar exchanger for flange installation *(for ACS500X)*
	QERAX	Connection electrical panel of the DHW storage heater
	3DHWX	Three-way valve for domestic hot water
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIR2HLX	2 zones: external kit, high temperature + low temperature (mixed)
	KIR2HX	2 zones: external kit, high temperature
	DIX	1-litre circuit breaker
	DI50X	50-litre circuit breaker
	KSAX	100-litre circuit breaker
	T1BX	Probe for auxiliary heating source T1B

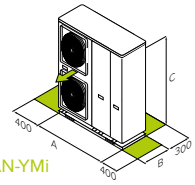
	TANKX	Buffer tank
	KTCAMX	Piping kit for the connection to the buffer tank on supply water side
	KTCARX	Piping kit for the connection to the buffer tank on return water side
	KSDFX	Splitter for boiler smoke discharge
	KCSAFX	Coaxial fitting for smoke discharge and intake (ø60/100)
	KITKX	Coaxial system for adjustable smoke discharge and intake (ø 60/100)
	KITAK50X	Coaxial system for adjustable smoke discharge and intake (ø 80/125)
	KAS80X	Smoke intake and discharge fittings, 80 mm diameter
	KTCGPLX	Kit to convert boiler from methane to LPG
	HID-TCBX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON/ OFF

technical data

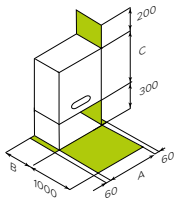
Size (230M)					2.1	3.1	4.1	6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**4,7 / 6,7**	**6,7 / 8,7**	**8,6 / 10,6**	**12,3 / 14,3**	**14,1 / 16,5**	**16,3 / 18,1**
	COP		Nominal	-	5,00	4,94	4,60	4,81	4,60	4,45
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	3,4 / 4,8	4,8 / 6,3	6,2 / 7,8	8,9 / 10,4	10,2 / 12,3	11,8 / 13,6
	COP		Nominal	-	4,06	4,00	3,72	3,90	3,73	3,60
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	4,8 / 6,9	6,7 / 8,8	8,6 / 10,5	12,4 / 14,3	14,1 / 16,4	16,2 / 18,0
	COP		Nominal	-	3,60	3,57	3,44	3,53	3,47	3,43
Boiler 23.4	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW		**22,70**			**-**	
	Performance		Nominal	%		96,60			-	
	DWH power		Minimum / Maximum	kW		**2,90 / 23,50**			-	
	DWH specific flow rate	*Water with ΔT=30°C in 10 minutes*	-	l/min		11,50			-	
Boiler 34.4	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW				**33,35**		
	Performance		Nominal	%				98,08		
	DWH power		Minimum / Maximum	kW				**4,10 / 34,00**		
	DWH specific flow rate	*Water with ΔT=30°C in 10 minutes*	-	l/min				16		
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**4,6 / 6,3**	**6,5 / 8,1**	**8,0 / 9,8**	**12,2 / 14,5**	**14,0 / 16,1**	**15,5 / 17,6**
	EER		Nominal	-	4,82	4,65	4,16	4,78	4,52	4,26
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	4,9 / 6,4	6,3 / 8,1	8,0 / 9,1	10,9 / 13,2	12,9 / 14,8	13,8 / 15,5
	EER		Nominal	-	2,98	2,77	2,53	2,92	2,78	2,65
Electrical power for meter sizing				kW	3,50	3,50	3,50	6,50	6,50	6,50
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	4.203	4.203	4.770	8.164	8.724	9.216
		SCOP		-	3,23	3,24	3,22	3,23	3,26	3,27
		ηs (seasonal output)		%	127%	127%	126%	126%	128%	128%
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	3.071	3.071	3.844	5.726	6.819	7.687
		SCOP		-	4,48	4,49	4,51	4,30	4,35	4,30
		ηs (seasonal output)		%	176%	176%	177%	169%	168%	169%
	DHW (Boiler)	Energy class		-	**A**	**A**	**A**	**A**	**A**	**A**
		DHW profile		-	XL	XL	XL	XL	XL	XL
Boiler										
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1			
Power input				W			78			
Sound power				dB(A)			52			
Outdoor unit					**2.1**	**3.1**	**4.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1			
Water flow-rate			Nominal	l/s	0,22	0,31	0,38	0,58	0,67	0,74
Available pressure pump			Nominal	kPa	61	50	38	41	30	20
Minimum system water content				l		20			40	
Expansion tank capacity				l		2			5	
Sound power				dB(A)	59 / 61	60 / 64	62 / 67	63 / 68	63 / 71	65 / 71
Sound pressure @1m				dB(A)	46 / 49	49 / 52	50 / 55	49 / 54	47 / 55	50 / 56
Operating range										
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C			30 / 60			
		Boiler	Minimum / Maximum	°C			12 / 60			
	Cooling	-	Minimum / Maximum	°C			5 / 25			
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C			-25 / 35			
		Boiler	Minimum / Maximum	°C			-25 / 35			
	Cooling	-	Minimum / Maximum	°C		-5 / 43			-5 / 46	
	DHW	Heat pump	Minimum / Maximum	°C			-25 / 43			
		Boiler	Minimum / Maximum	°C			-25 / 43			

Data according to EN 14511:2018 and EN 14825:2016 The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

dimensions and connections



WSAN-YMi



GAS BOILER
Boiler

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

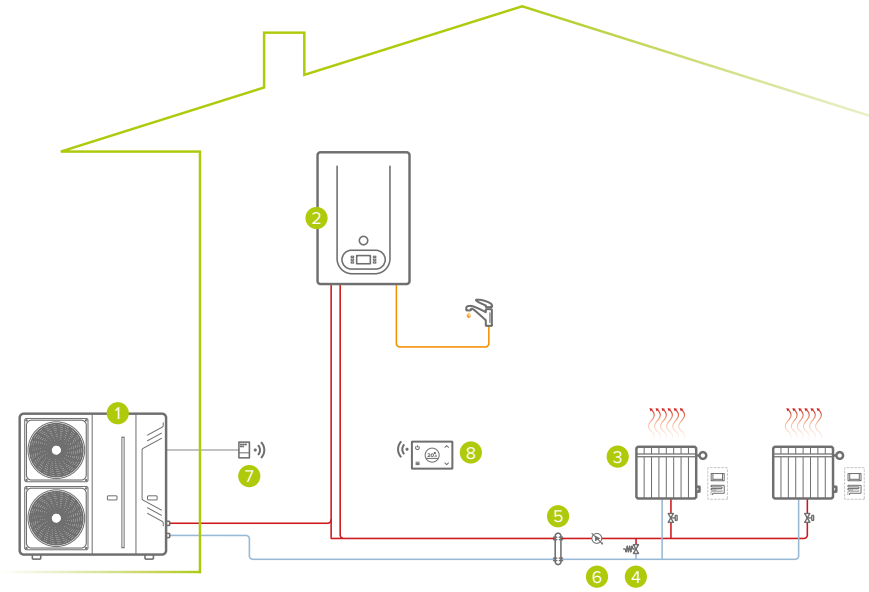
Size (230M)				2.1	3.1	4.1	6.1	7.1	8.1
Dimensions	Heat pump	Length(A) x Height(C) x Depth(B)	mm	1.210x945x402				1.404x1.414x405	
	Boiler	Length(A) x Height(C) x Depth(B)	mm	410x642x307 (24.4) / 410x642x330 (34.4)					
Weight	Heat pump		kg	99				178	
	Boiler		kg	35 (24.4) / 44 (34.4)					
Refrigerant charge			type/GWP	R-32 / 675					
			kg	2				2,8	
			CO_2 tons	1,4				1,9	
External diameters	Heat pump	Water	inch	1"				1 1/4"	
	Boiler	Water (DHW)	inch	1/2"					
		Gas	inch	3/4"					
		Intake air	mm	100					
		Exhaust gas	mm	60					

Size (400TN)					6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal / Maximum	kW	**12,3 / 14,3**	**14,1 / 16,5**	**16,3 / 18,1**
	COP		Nominal	-	4,84	4,63	4,49
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal / Maximum	kW	8,9 / 10,4	10,2 / 12,3	11,8 / 13,6
	COP		Nominal	-	3,90	3,73	3,60
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal / Maximum	kW	12,4 / 14,3	14,1 / 16,4	16,2 / 18,0
	COP		Nominal	-	3,59	3,54	3,45
Boiler 23.4	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW		-	
	Performance		Nominal	%		-	
	DWH power		Minimum / Maximum	kW		-	
	DWH specific flow rate	*Water with ΔT=30°C in 10 minutes*	-	l/min		-	
Boiler 34.4	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW		**33,35**	
	Performance		Nominal	%		98,08	
	DWH power		Minimum / Maximum	kW		**4,10 / 34,00**	
	DWH specific flow rate	*Water with ΔT=30°C in 10 minutes*	-	l/min		16	
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal / Maximum	kW	**12,2 / 14,5**	**14,0 / 16,1**	**15,5 / 17,6**
	EER		Nominal	-	4,83	4,50	4,27
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal / Maximum	kW	10,9 / 13,2	12,9 / 14,8	13,8 / 15,5
	EER		Nominal	-	2,93	2,80	2,66
Electrical power for meter sizing				kW	6,50	6,50	6,50
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	8.164	8.724	9.216
		SCOP		-	3,23	3,26	3,27
		ηs (seasonal output)		%	126%	128%	128%
	Heating 35°C	Energy class		-	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	5.726	6.819	7.687
		SCOP		-	4,30	4,35	4,30
		ηs (seasonal output)		%	169%	168%	169%
	DHW (Boiler)	Energy class		-	**A**	**A**	**A**
		DHW profile		-	XL	XL	XL
Boiler							
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230/50/1	
Power input				W		78	
Sound power				dB(A)		52	
Outdoor unit					**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°		400/50/3+N	
Water flow-rate			Nominal	l/s	0,58	0,67	0,74
Available pressure pump			Nominal	kPa	41	30	20
Minimum system water content				l		40	
Expansion tank capacity				l		5	
Sound power				dB(A)	63 / 68	65 / 71	66 / 71
Sound pressure @1m				dB(A)	49 / 54	50 / 56	51 / 56
Operating range							
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C		30 / 60	
		Boiler	Minimum / Maximum	°C		12 / 60	
	Cooling	-	Minimum / Maximum	°C		5 / 25	
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C		-25 / 35	
		Boiler	Minimum / Maximum	°C		-25 / 35	
	Cooling	-	Minimum / Maximum	°C		-5 / 46	
	DHW	Heat pump	Minimum / Maximum	°C		-25 / 43	
		Boiler	Minimum / Maximum	°C		-25 / 43	

Alimentazione standard: G20 (gas Metano 100%). Alimentazione con kit opzionale: G30 / G31 (gas GPL)

Size (400TN)				6.1	7.1	8.1
Dimensions	Heat pump	Length(A) x Height(C) x Depth(B)	mm		1.404x1.414x405	
	Boiler	Length(A) x Height(C) x Depth(B)	mm		410x642x330	
Weight	Heat pump		kg		172	
	Boiler		kg		44	
Refrigerant charge			type/GWP		R-32 / 675	
			kg		2,8	
			CO_2 tons		1,9	
External diameters	Heat pump	Water	inch		1 1/4"	
	Boiler	Water (DHW)	inch		1/2"	
		Gas	inch		3/4"	
		Intake air	mm		100	
		Exhaust gas	mm		60	

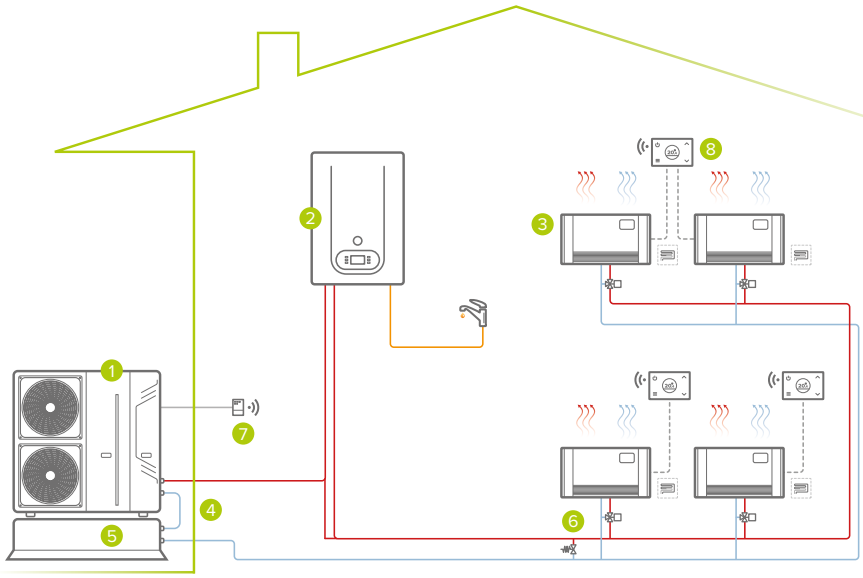
system diagrams



Single area system: heating/DHW

1. outdoor unit
2. boiler
3. heating area (radiator / fan coils / radiant)
4. bypass*
5. hydraulic separator (optional)
6. secondary circuit pump*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

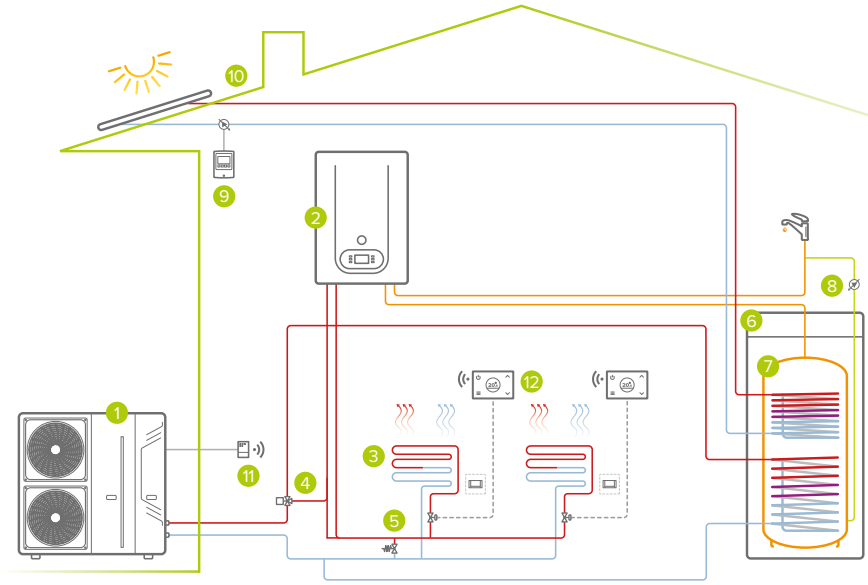
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. boiler
3. heating/cooling area (fan coils / radiant)
4. system inertial storage connection kit (optional)
5. system inertial storage (optional)
6. bypass*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. boiler
3. heating / cooling area (fan coils / radiant)
4. 3-way switching valve (optional)
5. bypass*
6. boiler connection kit QERAX (optional)
7. DHW heat pump with solar predisposition (optional)
8. DHW recirculation pump*
9. solar circulation kit (optional)
10. ELFOSun solar thermal (optional)
11. SwitchConnect Wi-Fi receiver (optional)
12. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

Edge EVO 2.0 - EXC Hybrid

WiSAN-YME 1 S + GAS BOILER 2.1÷14.1

Air-to-water packaged monobloc hybrid heat pump for heating, cooling and domestic hot water production

ENERGY SAVING

- Solar integration (optional - DHW tank)
- Smart Grid ready
- Cascade
- €-Switch

COMFORT

- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY

- Eurovent
- Keymark

HEALTH

- Eco-friendly refrigerant

CONVENIENCE

- Weekly schedule
- Contemporaneity
- Instant DHW

MANAGEMENT AND CONNECTIVITY

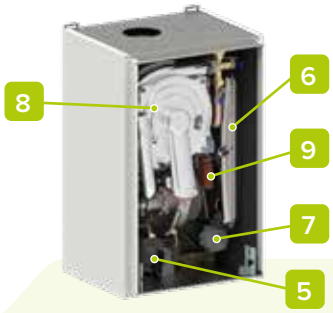
- Potential-free contact
- User interface / thermostat
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

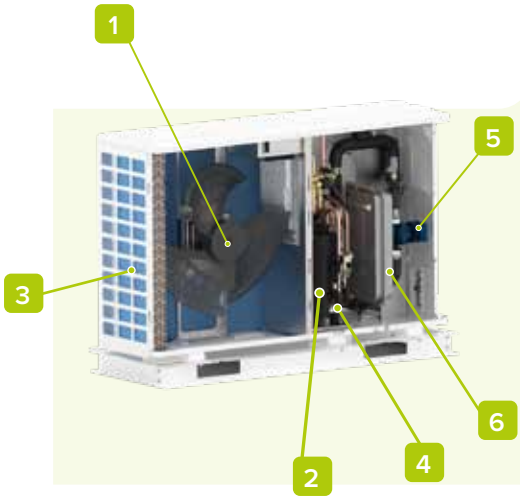
ErP TOP SYSTEM EFFICIENCY 55°C A++ XL A

- ✓ €/Switch function: the unit simulates the operating conditions of the two generators and uses either a heat pump or a boiler depending on savings
- ✓ Simultaneous production of DHW and cooling/heating
- ✓ It does not need to be coupled to a tank if DHW is produced by the boiler
- ✓ It uses renewable solar thermal energy by coupling to ELFOSun (can be connected to the boiler)
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

Without a thought

Edge EVO 2.0 - EXC Hybrid is the solution designed for upgrading old generators without having to alter the system. The system is in fact extremely versatile and able to adapt to whatever already exists: it simply replaces the generator that produces Heating and Domestic Hot Water, improving comfort and efficiency, but without much thought.





1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Combustion/water exchanger
9. Electric fan

configurations

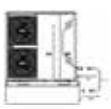
UNIT POWER SUPPLY (size 6.1÷8.1):

230M	Power supply 230/1/50
400TN	Power supply 400/3/50+N

4-PIPE BOILER:

HYSO24	24kW boiler
HYSO24	34kW boiler
N.A.	75kW boiler
N.A.	115kW boiler

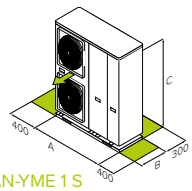
accessories

	KTFLX	Hose kit for connection to the chiller/heat pump
	FDMX	Magnetic dirt separator filter
	VAGX	System freeze protection kit in the absence of electricity
	ACS200X	200-litre domestic hot water storage tank
	ACS399X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	ACS1000X	1000-litre domestic hot water storage tank
	ACS10SX	1000L domestic hot water storage tank with double coil for solar thermal connection
	SCS08X	0.8 m² solar exchanger for flange installation *(for ACS200X e ACS300X)*
	SCS12X	1.2 m² solar exchanger for flange installation *(for ACS500X)*
	QERAMX	Electrical panel for single-phase heater connection on DHW storage tank
	QERATX	Electrical panel for three-phase heater connection on DHW storage tank
	3DHWX	Three-way valve for domestic hot water
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIR2HLX	2 zones: external kit, high temperature + low temperature (mixed)
	KIRHX	2 zones: external kit, high temperature
	DIX	1-litre circuit breaker
	DI50X	50-litre circuit breaker (to exhaustion)
	DI22-50X	50L circuit breaker (2 pairs of supply connectors / 2 pairs of return connectors)
	DI100X	100-litre circuit breaker
	T1BX	Probe for auxiliary heating source T1B
	TANKX	Buffer tank
	KTCAMX	Piping kit for the connection to the buffer tank on supply water side
	KTCARX	Piping kit for the connection to the buffer tank on return water side
	PCSX	Secondary circuit pump
	PCS2X	Oversized secondary circuit pump
	PRSX	DHW recirculation pump
	KSDFX	Splitter for boiler smoke discharge
	KCSAFX	Coaxial fitting for smoke discharge and intake (ø60/100)
	KITKX	Coaxial system for adjustable smoke discharge and intake (ø 60/100)
	KITAK50X	Coaxial system for adjustable smoke discharge and intake (ø 80/125)
	KAS80X	Smoke intake and discharge fittings, 80 mm diameter
	KTCGPLX	Kit to convert boiler from methane to LPG
	DTX	Thermostat-based drain pan
	APAVX	Kit of antivibration mounts for floor installation
	AMMX	Kit of antivibration anti-seismic mounts for floor installation
	ASTFX	Kit of antivibration mounts for wall bracket installation
	KSIPX	Kit with wall fixing brackets
	HID-TCBX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON/OFF

technical data

Size (230M)					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal	kW	**4,2**	**6,4**	**8,4**	**10,0**	**12,1**	**14,5**	**15,9**
	COP		Nominal	-	5,10	4,95	5,15	4,95	4,95	4,60	4,50
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal	kW	4,7	6,0	7,0	8,0	10,0	12,0	13,1
	COP		Nominal	-	3,10	3,00	3,20	3,05	3,00	2,85	2,70
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal	kW	4,3	6,3	8,1	10,0	12,3	14,1	16,0
	COP		Nominal	-	3,80	3,70	3,85	3,75	3,70	3,60	3,50
Boiler	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW	**22,70**	**22,70**	**22,70**	**22,70**	**33,35**	**33,35**	**33,35**
	Performance		Nominal	%	96,70	96,70	96,70	96,70	98,02	98,02	98,02
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal	kW	4,5	6,5	8,3	9,9	12,0	13,5	14,9
	EER		Nominal	-	5,50	4,80	5,05	4,55	3,95	3,60	3,40
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal	kW	4,7	7,0	7,5	8,2	11,5	12,4	14,0
	EER		Nominal	-	3,45	3,00	3,35	3,25	2,75	2,50	2,50
Electrical power for meter sizing				kW	3,50	3,50	6,50	6,50	6,50	6,50	6,50
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.749	3.348	4.064	4.541	6.916	6.917	7.213
		SCOP		-	3,31	3,52	3.36	3,49	3,46	3,46	3,46
		ηs (seasonal output)		%	129	138	131	137	135	135	135
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.354	2.849	3.223	3.649	5.156	5.157	6.011
		SCOP		-	4,85	4,95	5,21	5,19	4,81	4,81	4,72
		ηs (seasonal output)		%	191	195	205	205	189	189	186
Boiler					**24.4**		**34.4**		**75.2**		**115.2**
DHW (Boiler)	DWH power		Maximum	kW	22,70		33,35		72,83		110,69
	DWH specific flow rate	*Water with ΔT=30°C in 10 minutes*	-	l/min	10,84		15,93		34,79		52,88
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Power input				W	78				216		
Sound power				dB(A)	52						
Seasonal efficiency Medium climate	DHW (Boiler)	Energy class		-	A		A		-		-
		DHW profile		-	XL		XL		-		-
Outdoor unit					**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1						
Water flow-rate			Nominal	l/s	0,20	0,30	0,40	0,48	0,58	0,69	0,76
available pressure pump			Nominal	kPa	85,2	82,2	76,4	67,9	59,9	59,9	47,6
Minimum system water content				l	20				40		
Expansion tank capacity				l	8						
Sound power				dB(A)	55	58	59	60	65	65	68
Sound pressure @1m				dB(A)	41	44	45	45	50	50	53
Operating range											
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C	30 / 65						
		Boiler	Minimum / Maximum	°C	30 / 75						
	Cooling	-	Minimum / Maximum	°C	5 / 25						
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C	-25 / 35						
		Boiler	Minimum / Maximum	°C	-25 / 35						
	Cooling	-	Minimum / Maximum	°C	-5 / 43						
	DHW	Heat pump	Minimum / Maximum	°C	-25 / 43						
		Boiler	Minimum / Maximum	°C	-25 / 43						

dimensions and connections



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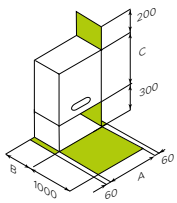


GAS BOILER
Boiler

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

Size (230M)				2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Heat pump	Length(A) x Height(C) x Depth(B)	mm	1.295x792x429		1.385x945x526				
Weight	Heat pump		kg	121		148			170	
Refrigerant charge			type/GWP	R-32 / 675						
			kg	1,40					1,75	
			CO_2 tons	0,95					1,18	
External diameters	Heat pump	Water	inch	1"				1 1/4"		

Size (400TN)					6.1	7.1	8.1	9.1	10.1	12.1	14.1
Heating (Heat pump)	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal	kW	**12,1**	**14.5**	**15,9**	**18,0**	**22,0**	**26,0**	**30,0**
	COP		Nominal	-	4,95	4,60	4,50	4,70	4,40	4,08	3,91
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal	kW	10,0	12,0	13.1	18,0	21,0	22,0	23,0
	COP		Nominal	-	3,00	2,85	2,70	2,70	2,60	2,50	2,45
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal	kW	12,3	14,1	16,0	18,0	22,0	26,0	30,0
	COP		Nominal	-	3,70	3,60	3,50	3,50	3,40	3,10	2,90
Boiler	Nominal heatig capacity (LHV)	*Water 80/60°C*	Nominal	kW	**33,35**	**33,35**	**33,35**	**72,83**	**72,83**	**72,83**	**72,83**
	Performance		Nominal	%	98,02	98,02	98,02	97,30	97,30	97,30	97,30
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal	kW	12,0	13,5	14,9	18,5	23,0	27,0	31,0
	EER		Nominal	-	3,95	3,60	3,40	4,75	4,60	4,30	4,00
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal	kW	11,5	12,4	14,0	17,0	21,0	26,0	29,5
	EER		Nominal	-	2,75	2,50	2,50	3,05	2,95	2,70	2,55
Electrical power for meter sizing				kW	6,50	6,50	6,50	10,60	12,50	13,80	14,50
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A+**	**A+**
		Annual energy consumption		kWh/year	7.214	7.894	7.895	11.396	14.363	17.116	19.552
		SCOP		-	3,46	3,41	3,41	3,21	3,23	3,16	3,14
		ηs (seasonal output)		%	135	133	133	125	126	123	123
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A++**
		Annual energy consumption		kWh/year	6.012	6.803	6.805	8.077	10.167	11.513	14.372
		SCOP		-	4,72	4,62	4,62	4,61	4,54	4,50	4,20
		ηs (seasonal output)		%	186	182	182	181	179	177	165

Boiler					24.4	34.4	75.2	115.2
DHW (Boiler)	DWH power		Maximum	kW	22,70	33,35	72,83	110,69
	DWH specific flow rate	*Water with ΔT=30°C in 10 minutes*	-	l/min	10,84	15,93	34,79	52,88
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1			
Power input				W	78		216	
Sound power				dB(A)	52			
Seasonal efficiency Medium climate	DHW (Boiler)	Energy class		-	A	A	-	-
		DHW profile		-	XL	XL	-	-

Outdoor unit					6.1	7.1	8.1	9.1	10.1	12.1	14.1
Power supply	Voltage/Frequency/Phases			V/Hz/n°	400/50/3+N						
Water flow-rate			Nominal	l/s	0,58	0,69	0,76	0,86	1.05	1,24	1,43
available pressure pump			Nominal	kPa	47,6	33,1	33,1	101,9	94,6	78,8	59,4
Minimum system water content				l	40				60		
Expansion tank capacity				l	8						
Sound power				dB(A)	65	65	68	70	72	74	77
Sound pressure @1m				dB(A)	50	50	53	57	59	61	63

Operating range											
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C	30 / 65				30 / 60		
		Boiler	Minimum / Maximum	°C	30 / 75						
	Cooling	-	Minimum / Maximum	°C	5 / 25						
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C	-25 / 35						
		Boiler	Minimum / Maximum	°C	-25 / 35						
	Cooling	-	Minimum / Maximum	°C	-5 / 43				-5 / 46		
	DHW	Heat pump	Minimum / Maximum	°C	-25 / 43						
		Boiler	Minimum / Maximum	°C	-25 / 43						

PRELIMINARY DATA

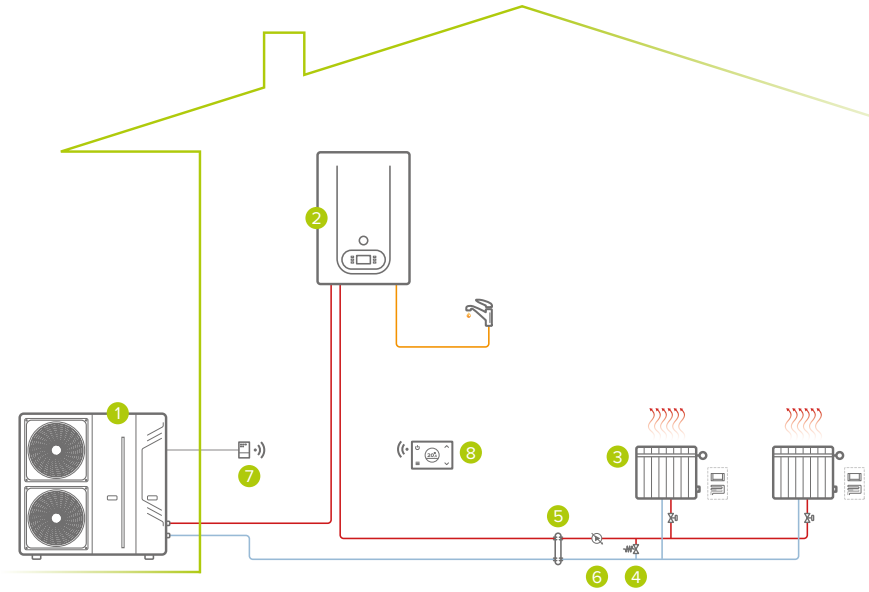
Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281)

Size (400TN)				6.1	7.1	8.1	9.1	10.1	12.1	14.1
Dimensions	Heat pump	Length(A) x Height(C) x Depth(B)	mm	1.385x945x526			1.129x558x440			
Weight	Heat pump		kg	188			206			
Refrigerant charge			type/GWP	R-32 / 675						
			kg	1,75			5			
			CO_2 tons	1,18			3,4			
External diameters	Heat pump	Water	inch	1 1/4"						

Boiler				24.4	34.4	75.2	115.2
Dimensions		Length(A) x Height(C) x Depth(B)	mm	410x642x307	410x642x330	670x642x485	
Weight			kg	35	44	67	79
External diameters		Water	inch	3/4"		1 1/2"	
		Water (DHW)	inch	1/2"		-	-
		Gas	inch	3/4"		1"	
		Intake air	mm	80			
		Exhaust gas	mm	80			

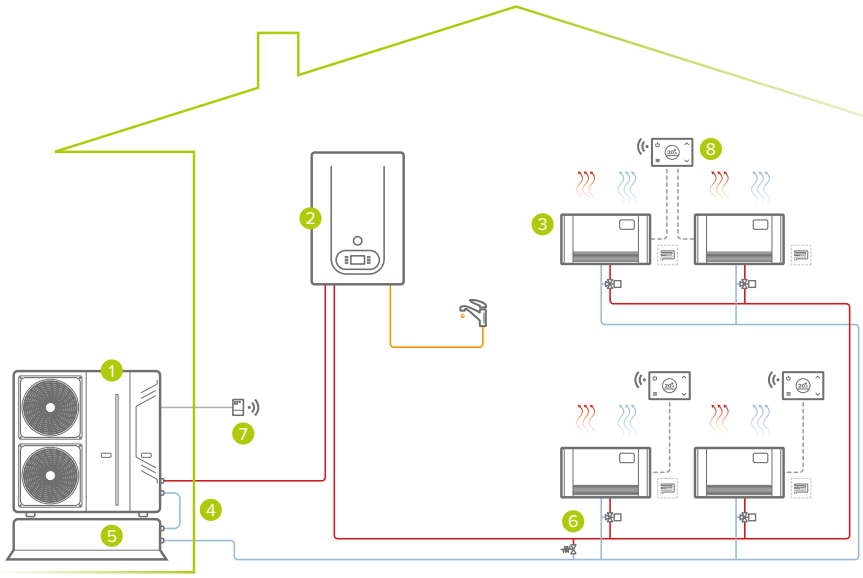
system diagrams



Single area system: heating/DHW

1. outdoor unit
2. boiler
3. heating area (radiator / fan coils / radiant)
4. bypass*
5. hydraulic separator (optional)
6. secondary circuit pump*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

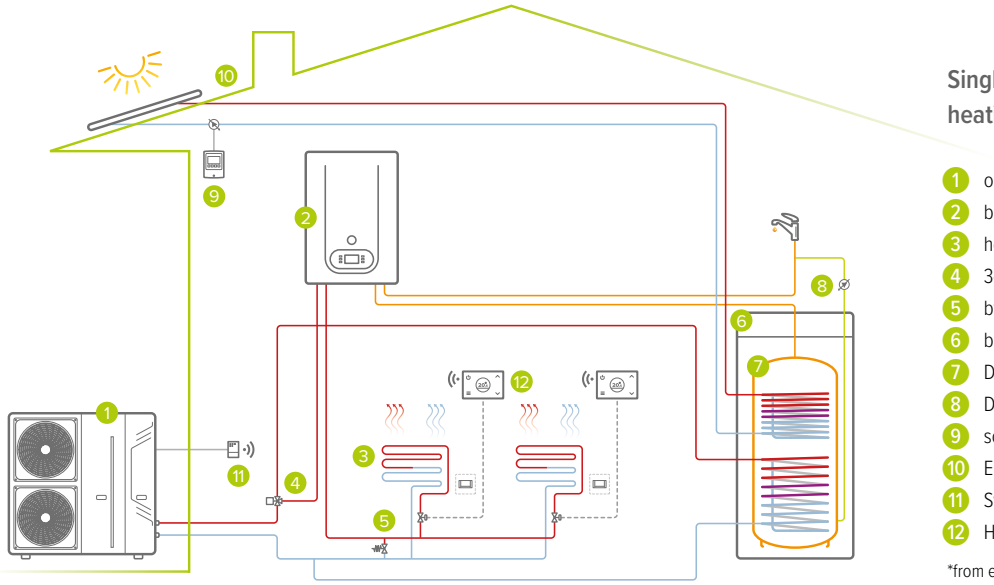
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. boiler
3. heating/cooling area (fan coils / radiant)
4. system inertial storage connection kit (optional)
5. system inertial storage (optional)
6. bypass*
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

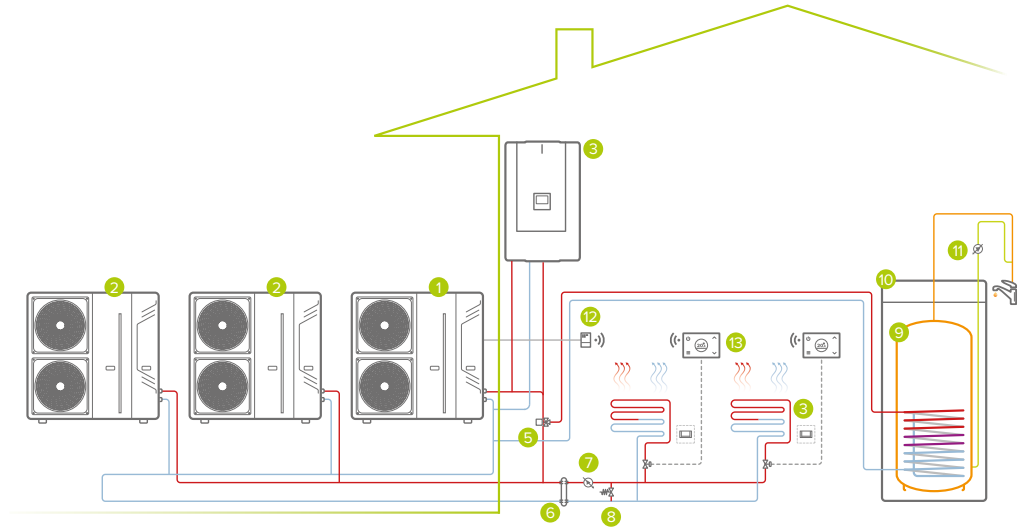
*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit
2. boiler
3. heating / cooling area (fan coils / radiant)
4. 3-way switching valve (optional)
5. bypass*
6. boiler connection kit QERAX (optional)
7. DHW heat pump with solar predisposition (optional)
8. DHW recirculation pump*
9. solar circulation kit (optional)
10. ELFOSun solar thermal (optional)
11. SwitchConnect Wi-Fi receiver (optional)
12. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

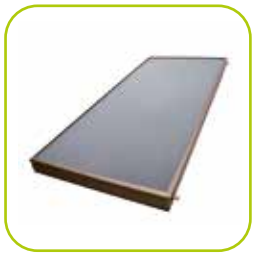


Single area system: heating/cooling/DHW

1. outdoor unit (Master)
2. indoor unit (Slave)
3. condensing boiler
4. heating/cooling area (fan coils / radiant)
5. 3-way switching valve (optional)
6. hydraulic separator (optional)
7. secondary circuit pump*
8. bypass*
9. DHW tank - AQUA
10. QERAX boiler connection kit (optional)
11. DHW recirculation pump*
12. SwitchConnect Wi-Fi receiver (optional)
13. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply

ACCESSORY PRODUCTS TO HEAT PUMPS



ELFOSun²

Tanks

ELFOSun²

BLUhx+

Flat-plate solar thermal collector
for combination with domestic hot water production systems

RELIABILITY

Keymark

HEALTH

Renewable energy

- ✓ It uses renewable energy and contributes greatly to the increase in the building's energy class
- ✓ It can be combined in series and is ideal for empty and pressurised systems
- ✓ One of the most efficient solutions on the market, 100% made in Italy
- ✓ Installation with specific kit for either a pitched or flat roof or uncased in the roof
- ✓ Tempered prismatic glass surface to capture maximum sunlight and resist weathering

Ideal with AQUA Plus and DHW Tanks

ELFOSun is designed to supply the coil of a tank for domestic hot water production.
Combined with AQUA Plus, the heat pump for domestic hot water production, or with specific Tank versions for Heat Pumps, ELFOSun uses the free thermal contribution of solar energy.
It is essential to upgrade old residential heating systems and, depending on the case, increase the building's energy efficiency by up to two classes.

technical data

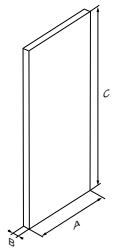
Size				**BLUhx+**
Number of collectors	Set	-		1
	Maximum (in a series)	-		5
Installation		-		Horizontal / Sloping
Roof slope		°	Minimum / Maximum	15 / 45
Surface	gross	m²		2,523
	opening	m²		2,401
	absorber	m²		2,400
Performances	η_{COL} - collector efficiency	-		66%
	η_0 - zero loss collector efficiency	-		0,797
	a_1 - thermal dispersion coefficient	W/m²K		3,18
	a_2 - temperature report / thermal dispersion coefficient	W/m²K²		0,008
Stagnant temperature		°C	Maximum	204
Operating pressure		bar	Maximum	6
Water content		l		1,7
Panel water flow		l/min	Nominal	2,17
Absorptance		%		95
Emittance		%		5
Circulation group[1]				**KCVE**
Power supply	Voltage/Frequency/Phases	V/Hz/n°		230/50/1
		-		Independent
Pump	Panel water flow	l/min	Minimum / Maximum	1 / 13
	Maximum power absorption	W		45

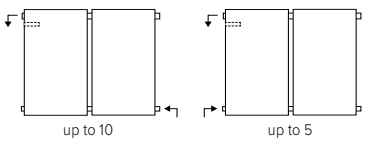
The Product complies with the European ErP Directive (UE Regulations 811/2013 - 813/2013)
(1) Control unit for indoor installation

accessories

	1CSPX	No. of 1 H1TX flat Solar collector at high efficiency
	2CSPX	No. of 2 H1TX flat Solar collectors at high efficiency
	3CSPX	No. of 3 H1TX flat Solar collectors at high efficiency
	KFTI1X	Fixing systems for pitched roofs for the 1-collector installation
	KFTI2X	Fixing systems for pitched roofs for the 2-collector installation
	KFTI3X	Fixing systems for pitched roofs for the 3-collector installation
	KFSP1X	Fixing systems for flat surfaces for the 1-collector installation
	KFSP2X	Fixing systems for flat surfaces for the 2-collector installation
	KFSP3X	Fixing systems for flat surfaces for the 3-collector installation
	KFIN1X	Uncased fixing systems for the 1-collector installation
	KFIN2X	Uncased fixing systems for the 2-collector installation
	KFIN3X	Uncased fixing systems for the 3-collector installation
	KCVE	Circulation kit : circulation group, control unit, expansion tank
	GP10X	Concentrated propylene glycol 10-litres

dimensions and connections





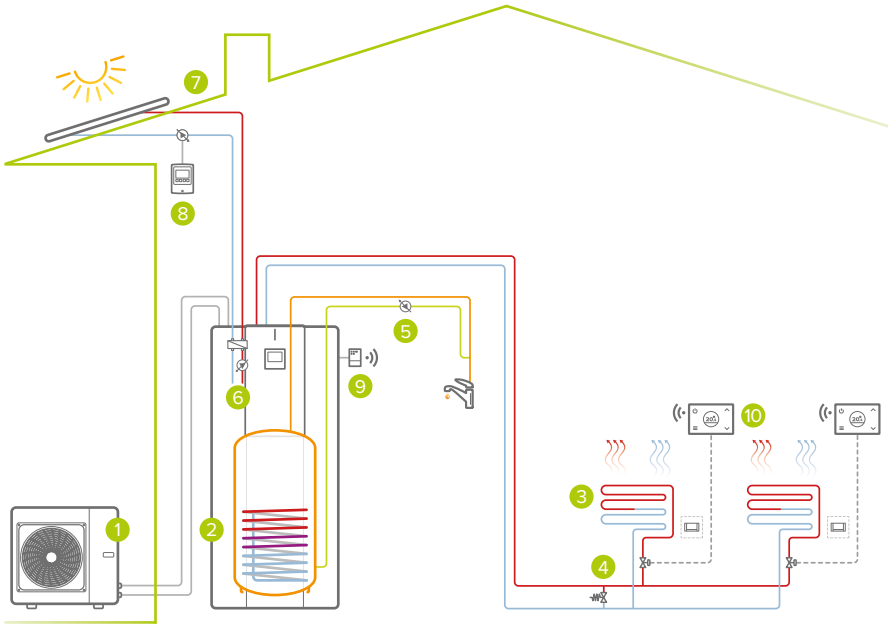
Collector connections

Fast copper connection

21 mm female ogive for copper (with hydraulic kit)

Size				BLUhx+
Dimensions	Solar collector	Length(A) x Height (C) x Depth(B)	mm	1.987x1.270x100
	Controller	Length(A) x Height (C) x Depth(B)	mm	115x86x45
Weight	Solar collector		kg	42
	Controller		kg	0,45
	Circulation group		kg	4,2
External diameters	Solar collector		mm	22
	Circulation group		inch	3/4"

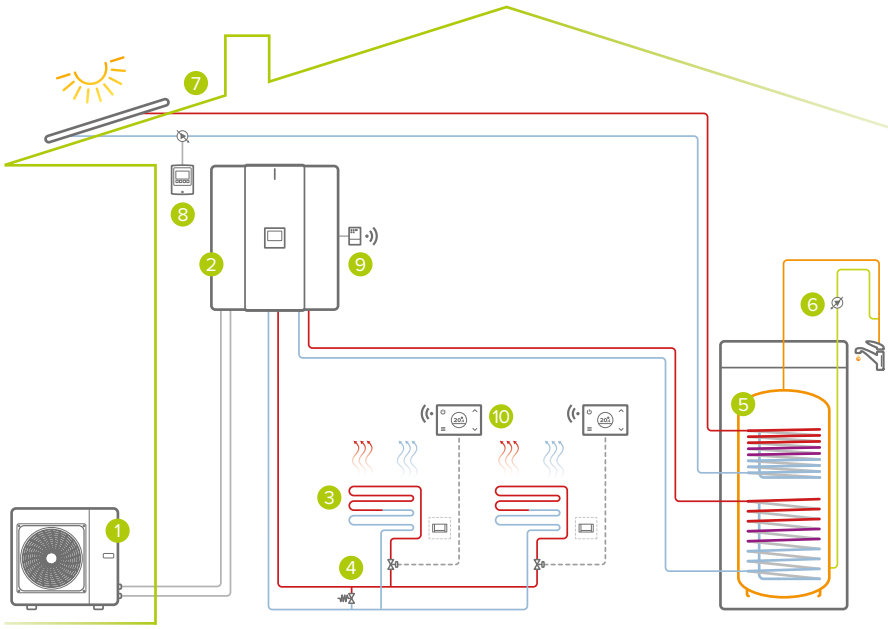
system diagrams



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating / cooling area (fan coils / radiant)
4. bypass*
5. DHW recirculation pump*
6. solar connection kit (optional)
7. ELFOSun solar thermal (optional)
8. solar circulation kit (optional)
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

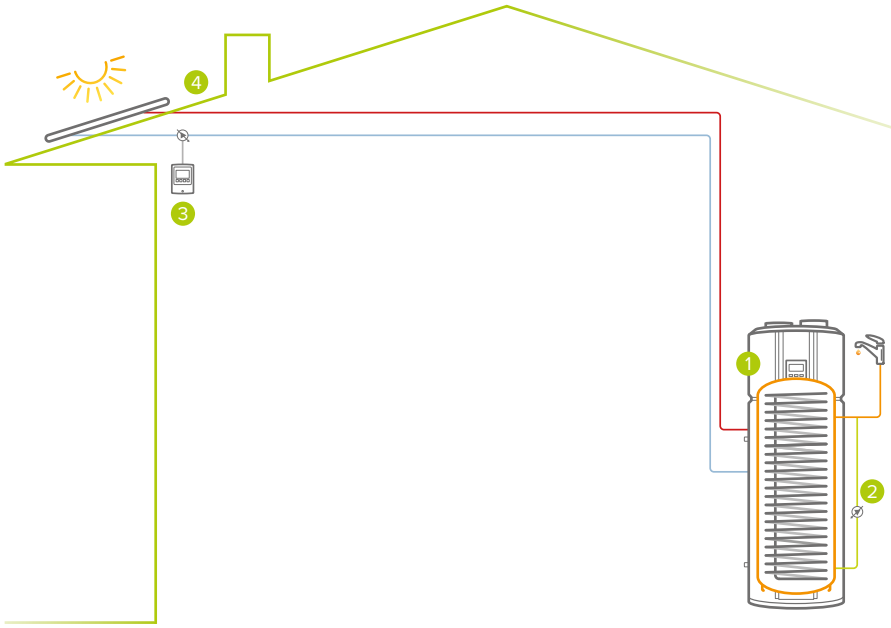
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating / cooling area (fan coils / radiant)
4. bypass*
5. DHW heat pump with solar predisposition (optional)
6. DHW recirculation pump*
7. ELFOSun solar thermal (optional)
8. solar circulation kit (optional)
9. SwitchConnect Wi-Fi receiver (optional)
10. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



DHW production system

1. DHW heat pump with solar predisposition - AQUA
2. DHW recirculation pump*
3. solar circulation kit (optional)
4. ELFOSun solar thermal (optional)

*from external supply

DHW TANKS

Domestic hot water tanks for heat pumps

ENERGY SAVING — Solar integration (optional)

COMFORT — DHW

RELIABILITY — Backup heater

CONVENIENCE — Integrated DHW tank

- ✓ Additional pipe coil for connection to solar thermal ELFOSun (optional)
- ✓ Inspection flange
- ✓ Magnesium anodic protection
- ✓ Carbon steel tank with vitrification treatment
- ✓ 70 mm rigid polyurethane insulation

NEW

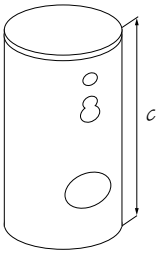
Size			ACS200X	ACS300X	ACS500X	ACS1000X
Performance	Net water volume	l	196	273	475	930
	Energy efficiency class	-	B	B	B	C
	Maximum water temperature	°C	95			
	Insulation: Material / Medium thickness[1]	mm	PU / 70			PU / 100
	Thermal dispersions	W/K	1,13	1,40	1,78	4,05
	Electric heater	kW	2			3
Quantity of exchangers		-	1			
Bottom pipe coil	Superficie	m²	1,5	1,8	2,2	3,5
	Internal volume	l	8,6	10,4	12,7	12,7
	Heat exchange[2]	kW	36	44	55	88
	Water flow rate	[m³/h]	1,6	1,9	2,4	2,1
	Pressure drop	kPa	4	7	12,1	51,8
Maximum operating pressure		bar	10			

Data according to DIN 4708 / EN 12897 / EN 15332

(1) PU = Polyurethane

(2) Water pipe coil 60/50°C / water tank 10/45°C

dimensions and connections



Size			ACS200X	ACS300X	ACS500X	ACS1000X
Dimensions	Ø x Height(C)	mm	640x1.215	640x1.615	790x1.705	990x1.830
Weight	*Unladen*	kg	77	98	128	224
External diameters	DHW supply	inch		1"		1" 1/4
	DHW return	inch		1"		1" 1/4
	Return pipe coil	inch		1/2"		1"
	Supply upper pipe coil	inch		1"		1" 1/4
	Return bottom pipe coil / drain	inch		1"		1" 1/4
	Recirculating	inch		1/2"		1"

TERMINAL UNITS

Terminal units for the distribution

of heating and cooling at home

MOOD

ELFORoom²

AURA (AC/DC)

ELFOSpace BOX3

NEW

NEBULA MP (AC/DC)

NEW

NEBULA HP (AC/DC)

MOOD
CFW-2 1÷5

Wall-mounted fan coil with DC motor for heating and cooling

COMFORT

Heating Cooling | Dehumidification | Follow Me (optional KJR-90D) | Anti cold air | Temperature compensation

HEALTH

High density filter

MANAGEMENT AND CONNECTIVITY

Potential-free contact | Remote control | Wired control (optional) | Centralised control (optional) | Modbus port | ELFOControl management | Input 0-10 V | Generator demand

RELIABILITY

Eurovent

CONVENIENCE

Auto Restart

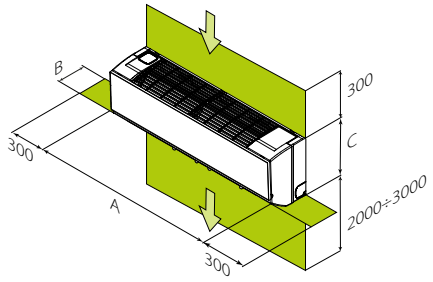
- ✓ Standard supplied with 3-way ON/OFF valves and potential-free contact for generator demand
- ✓ Quiet and efficient, thanks to the fan's brushless DC motor
- ✓ Standard supplied infrared remote control
- ✓ Standard supplied input contact for 0-10V management
- ✓ Management via Modbus port with connection to BMS system or ELFOControl

TERMINAL UNITS

Management with ELFOControl

Mood can be connected to ELFOControl[3] EVO, the touch-screen centraliser that coordinates the entire system intelligently and efficiently to always ensure the utmost comfort at the lowest possible cost.
By connecting the fan coils to this central "brain", the heat diffusion system can be managed with "room by room" temperature control by turning the individual thermostats with temperature and humidity control (where available) or directly on the terminal units, changing their speed and reducing consumption. The temperature in the house will certainly be more consistent and controlled, for maximum comfort.
It is also possible to create and manage dual emitter systems: fan coils for cooling and radiant panels for heating.

dimensions and connections



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

Size			1	2	3	4	5
Dimensions	Length(A) x Height(C) x Depth(B)	mm	915x290x233			1.072x315x237	
Weight		kg	12,7			15,1	14,9
External diameter	Water	inch	3/4"				
	Condensate drain	mm	20				

accessories

	KJR90X	KJR90 electronic room control for wall installation
	KJR150X	Indoor units' group controller
	CCM30BX	Touch-key indoor units' centralized controller
	CCM09	Wired centraliser with weekly scheduler (to exhaustion)
	CCM-180A/WS	Wired centralizer with 6.2" touchscreen display with weekly scheduler NEW
	CCM-270A/WS	Wired centralizer with 10.1" touchscreen display with weekly scheduler NEW

	CCM18UX	Modbus protocol for up to 16 fancoil units (gateway)
	CCM18X	Modbus protocol for up to 64 fancoil units (gateway)
	CCM08X	BACnet Gateway (to exhaustion)
	IMMP-BAC(A)	BACnet Gateway and IMMPRO gateway
	LONGW64	LonWorks Gateway for up to 64 fancoil units (to exhaustion)
	GW-LON(A)	LonWorks Gateway for up to 32 fancoil units
	KNXX	KNX Gateway, for single indoor unit (to exhaustion)

technical data

Size					1	2	3	4	5
Cooling	Total yeld	*Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed*		kW	**2,70**	**2,91**	**3,81**	**4,47**	**4,87**
	Sensible yeld			kW	2,15	2,33	3,18	3,67	4,11
	Water flow-rate			l/h	480	510	670	770	850
	Water pressur drop			kPa	31,6	37,2	56,8	41,2	50,7
Heating	Yeld	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**2,12**	**3,23**	**4,3**	**4,84**	**5,26**
	Water flow-rate			l/h	480	510	670	770	850
	Water pressur drop			kPa	37,5	40,6	61,9	43,7	51,7
	Yeld	*Water 50°C/cooling water flow-rate Ambient air 20°C Maximum ventilation speed*		kW	3,29	3,76	5,08	5,68	6,31
	Water flow-rate			l/h	480	510	670	770	850
	Water pressur drop			kPa	31,6	37,2	56,8	41,2	50,7
Power input			Minimum / Maximum	W	9/11	8/14	14/31	12/22	16/33
Operating pressure			Maximum	bar			16		
Airflow[1]			Minimum / Nominal / Maximum	m³/h	400 / 454 / 492	413 / 485 / 585	590 / 689 / 825	634 / 741 / 634	717 / 849 / 979
Sound power			Minimum / Maximum	dB(A)	39/44	35/44	47/57	42/50	47/56
Sound pressure @1m			Minimum / Maximum	dB(A)	27/32	23/32	35/45	30/38	35/44
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1		

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

ELFORoom²

ELFORoom² 003.0÷017.0

Floor- or ceiling-mounted narrow fan coil with DC motor for heating and cooling

COMFORT

Heating Cooling · Dehumidification · Follow Me · Anti cold air · Temperature compensation

HEALTH

High density filter · Air purification

MANAGEMENT AND CONNECTIVITY

Potential-free contact · Wired control · Centralised control (optional) · Modbus port · ELFOControl management · input 0-10 V · Generator demand

RELIABILITY

Eurovent

CONVENIENCE

Auto Restart

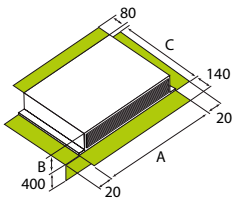
- ✓ Suitable for any installation: vertical or horizontal, cased or uncased
- ✓ Quiet and efficient, thanks to the fan's brushless DC motor
- ✓ Potential-free contact for generator demand and management with potential-free contact input or 0-10V input
- ✓ Optional germicidal UV lamp for air purification
- ✓ Management via Modbus port with connection to BMS system or ELFOControl

TERMINAL UNITS

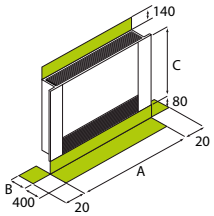
Ready for anything

ELFORoom² is highly flexible, thanks to the availability of many accessories that enhance its potential.
The unit can be managed with the on-board control, with LCD display and very discreet, with external thermostat, ON/OFF input via potential-free contact or input with 0-10V signal.
Multiple ELFORoom² units can also be grouped together in mini-networks of up to 9 units with master/slave management by thermostat or by ELFOControl³ EVO centraliser or BMS with Modbus protocol.
The rest of the optional equipment is designed to facilitate installation: feet for fixing to the ground, recessed fan coil / grid kit to make uncased installations invisible, telescopic or 90° plenum for ducting.

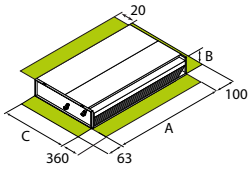
dimensions and connections



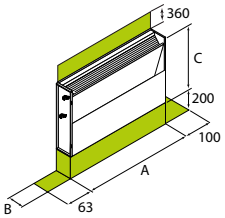
ELFORoom² OUTVOT
Cased unit



ELFORoom² OUTVL-OUTVOT
Cased unit



ELFORoom² INVOT
Uncased unit



ELFORoom² INVOT
Uncased unit

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

Size				003.0	005.0	011.0	015.0	017.0
Dimensions	Cased unit	Length(A) x Height(C) x Depth(B)	mm	737x579x130	937x579x130	1.137x579x130	1.337x579x130	1.537x579x130
	Uncased unit	Length(A) x Height(C) x Depth(B)	mm	527x586x130	727x586x130	927x586x130	1.127x586x130	1.327x586x130
Weight	Cased unit		kg	17	20	23	26	29
	Uncased unit		kg	9	12	15	18	21
External diameter		Water	inch	3/4"				
		Condensate drain	mm	14				

configurations

BASIC CONFIGURATION:

OUTVL	Vertical cased with LCD display, continuous modulation DC motor, RS485 interface and built-in thermostat
OUTVOT	Vertical - Horizontal cased with continuous modulation DC motor, RS485 interface without built-in thermostat
OUTRAD	Vertical cased with continuous modulation DC motor, RS485 interface with built-in thermostat and ventilated radiant plate
INVOT	Vertical - Horizontal uncased with continuous modulation DC motor, RS485 interface without built-in thermostat

TYPE OF INSTALLATION:

-	2-pipe
B4T	4-pipe

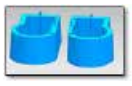
ELECTRONIC:

-	From selected configuration
CSEMP	Simplified electronic control with 4 speeds DC motor, built-in thermostat without RS485 interface (with option: OUTVL - OUTRAD)
SC3V	DC motor modulation electronic board for matching to 3 speeds thermostats
SC010	DC motor modulation electronic board for matching to 0-10V thermostats

AIR PURIFICATION:

-	Standard
UV	UV germicidal lamp kit with support

accessories

	KASPX	Return plenum kit
	GRA1X	Air outflow grille
	PR90MX	90° air outlet plenum
	PMSTX	Telescopic upper supply plenum kit
	GMX	Outlet grille
	BACKVX	Rear painted panel for cased units
	PCIX	Uncased closure panel
	CSFIX	Formwork for uncased installation
	KPDX	Plinth kit

	FXPPX	Floor fixing brackets kit
	KV3VBX	3-way valve kit with electrothermal head and balancing
	KV3B4X	3-way valve kit with electrothermal head and balancing for 4-pipe system (Available only with B4T)
	KCMDX	Motor connection cables for unit with couplings on the right
	HIDE1X	Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - 3 speeds)
	HIDE2X	Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - Cool/Heat - 3 speeds)
	HIDE3X	Electro-mechanical thermostat for wall installation with built-in temperature probe ()
	HIDT3X	Electronic thermostat for wall installation with display and built-in humidity / temperature probes
	HIDT6X	Electronic thermostat for wall installation with built-in temperature probe

technical data

Size					003.0	005.0	011.0	015.0	017.0
Cooling	Total yield	*Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed*		kW	**0,91**	**2,12**	**2,81**	**3,3**	**3,71**
	Sensible yield			kW	0,73	1,72	2,11	2,71	2,90
	Water flow-rate			l/h	160	360	480	570	640
	Water pressure drop			kPa	12	8	17	18	21
Heating	Yield	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**1,02**	**2,21**	**3,01**	**3,81**	**4,32**
	Water flow-rate			l/h	180	380	530	660	750
	Water pressure drop			kPa	9	9	19	21	23
	Yield	*Water 50°C/cooling water flow-rate Ambient air 20°C Maximum ventilation speed*		kW	1,2	2,59	3,6	4,53	5,1
	Water flow-rate			l/h	156	364	482	566	637
	Water pressure drop			kPa	12	8	17	18	21
Power input			Minimum / Maximum	W	5 / 11	4 / 19	6 / 20	5 / 29	5 / 33
Oerating pressure			Maximum	bar			10		
Airflow[1]			Minimum / Nominal / Maximum	m³/h	49 / 91 / 146	124 / 210 / 294	194 / 318 / 438	302 / 410 / 567	364 / 479 / 663
Sound power			Minimum / Maximum	dB(A)	33 / 51	35 / 53	36 / 54	36 / 55	37 / 57
Sound pressure @1m			Minimum / Maximum	dB(A)	24 / 41	25 / 42	26 / 44	26 / 46	28 / 47
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1		

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

AURA

CFFC / CFFU / CFFAC / CFFAU 1÷12

Floor- or ceiling-mounted fan coil with 3-speed motor for heating and cooling

COMFORT

- Heating Cooling
- Dehumidification
- Follow Me
- Anti cold air (CFF)
- Temperature compensation (CFF)

HEALTH

- High density filter

MANAGEMENT AND CONNECTIVITY

- Potential-free contact
- Wired control
- Centralised control (optional)
- Modbus port (CFF)(CFFA optional) *on the control for the AC version*
- ELFOControl management *on the control for the AC version*
- input 0-10 V
- Generator Demand

RELIABILITY

- Eurovent

CONVENIENCE

- Auto Restart *on the control for the AC version*

- Sleek and elegant design, suitable for blending into any environment
- Suitable for any installation: vertical or horizontal, cased or uncased
- Quiet and efficient, thanks to the brushless DC fan motor (CFF series)
- Full series: 12 sizes from 1.6kW to 8.3kW, ideal for houses or hotel rooms
- Can be adapted on-site to have fittings on the right side as well
- Management via Modbus port (in the optional control for AC versions) with connection to BMS system or ELFOControl

Dedicated control

CFF SERIES

AURA with inverter DC fan motor is compatible with the innovative, specially designed KJRP-75A user interface. The control can either be installed on board the unit (for cased versions) or remotely on the wall (also with optional 2m extension lead). It has a touch screen, back-light and 7-speed control + AUTO. The interface also has a temperature sensor: with the Follow-me function, the unit can be controlled according to the temperature read by this probe, replacing the temperature that would be detected as standard when the unit is restarted.

CFFA SERIES

AURA CFFA with 3-speed fan motor is compatible with the optional specially designed KJRP-86A user interface.The control can either be installed on board the unit (for cased versions) or remotely on the wall (with optional back box), It has a touch screen, back-light and 3 speed control + AUTO and ON/OFF timer. The control is equipped with a Modbus port for connection with ELFOControl or with BMS managers operating with this protocol.

configurations

TYPE OF INSTALLATION:

CAS	With casing for vertical or horizontal installation
UNC	Uncased for vertical or horizontal installation

TYPE OF INSTALLATION:

CC2	2-pipe
CC4	4-pipe

AIR RETURN:

R3	Downward
RF	Front

HYDRAULIC CONNECTIONS NEW:

DX	Pipes connection on the right
SX	Pipes connection on the left

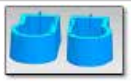
BUILT-IN VALVES NEW:

-	not required
3V2	Three-way valve kit for 2-pipe "on/off" system
3V4	Three-way valve kit for 4-pipe "on/off" system

BUILT-IN THERMOSTAT NEW:

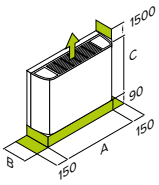
NOHMI	not required
HMIDM	KJRP-75 control mounted on board (only for versions DC CFFC)NEW
HMIAM	KJRP-86 control mounted on board (only for versions AC CFFAC)NEW

accessories

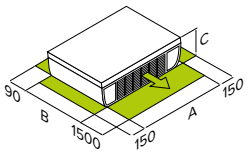
	BRVHX	Auxiliary condensate collection tray for vertical/horizontal installation
	KDPX	Plinth kit
	3V2DX	3-way ON/OFF valves kit for 2-pipe system (3V2DX for right side fittings / 3V2SX for left side fittings)
	3V2SX	
	3V4DX	3-way ON/OFF valves kit for 4-pipe system (3V4DX for right side fittings / 3V4SX for left side fittings)
	3V4SX	
	HMIFACX	KJRP-86A wired controller for on-board or wall installation (only AC version)
	BOXX	Wall installation with concealed box KJRP-86A
	HMIFDCX	KJRP-75A wired controller for on-board or wall installation (only DC version)
	EXTENX	KJRP-75 Wired Control Connection Cable Extension (2m)
	HIDT9X	Electro-mechanical thermostat for semi-uncased wall installation with display and built-in temperature probe (for AC version, 2-ON/OFF valves management, 3-point valve management, Modbus port)

	KJR90X	KJR-90D electronic room control for wall installation (only DC version)
	KJR150X	Indoor units group controller (only DC version)
	CCM30BX	Centralized controller with case (only DC version)
	CCM09	Wired centraliser with weekly scheduler (to exhaustion)
	CCM-180A/WS	Wired centralizer with 6.2" touchscreen display with weekly scheduler NEW
	CCM-270A/WS	Wired centralizer with 10.1" touchscreen display with weekly scheduler NEW
	CCM18UX	Modbus protocol for up to 16 fancoil units (gateway)
	CCM18X	Modbus protocol for up to 64 fancoil units (gateway)
	CCM08X	BACnet Gateway (to exhaustion)
	IMMP-BAC(A)	BACnet Gateway and IMMPRO gateway
	LONGW64	LonWorks Gateway for up to 16 fancoil units (to exhaustion)
	GW-LON(A)	LonWorks Gateway for up to 32 fancoil units
	KNXX	KNX Gateway, for single indoor unit (to exhaustion)

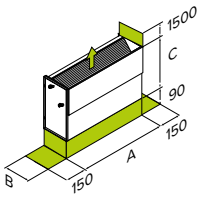
dimensions and connections



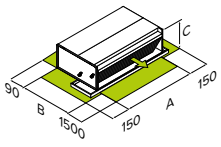
CFF / CFFA CAS
Cased unit



CFF / CFFA CAS
Cased unit



CFF / CFFA UNC
Uncased unit



CFF / CFFA UNC
Uncased unit

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

Size				1	2	3	4	5	6
Dimensions	Cased unit	Length(A) x Height(C) x Depth(B)	mm	790x495x200	790x495x200	1.020x495x200	1.020x495x200	1.240x495x200	1.240x495x200
	Uncased unit	Length(A) x Height(C) x Depth(B)	mm	628x200x455	628x200x455	858x200x455	858x200x455	1.078x200x455	1.078x200x455
Weight	Cased unit	CFF	kg	18	18,5	21,5	22	25,5	26,5
		CFFA	kg	16,3	16,7	20,0	20,8	24,0	25,4
	Uncased unit	CFF	kg	11,8	12,1	13,9	14,8	17,3	18,2
		CFFA	kg	11,6	12,0	13,9	14,8	17,3	18,2
External diameters		Water	inch	3/4"					
		Condensate drain	mm	18,5					

Size				7	8	9	10	11	12
Dimensions	Cased unit	Length(A) x Height(C) x Depth(B)	mm	1.240x495x200	1.240x495x200	1.360x495x200	1.360x495x200	1.360x591x200	1.360x591x200
	Uncased unit	Length(A) x Height(C) x Depth(B)	mm	1.078x200x455	1.078x200x455	1.198x200x455	1.198x200x455	1.198x200x551	1.198x200x551
Weight	Cased unit	CFF-	kg	25,5	26,5	28,5	29,5	32,5	34,5
		CFFA	kg	25,5	26,3	27,3	28,5	31,7	34,0
	Uncased unit	CFF	kg	17,3	18,2	19,6	20,8	23,1	24,3
		CFFA	kg	17,9	18,8	20,5	21,7	24,0	25,2
External diameters		Water	inch	3/4"					
		Condensate drain	mm	18,5					

Size - CFFC / CFFU (unit with DC inverter motor)					1	2	3	4	5	6
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed*		kW	**1,50**	**1,95**	**2,35**	**2,85**	**3,50**	**3,90**
	Sensible capacity			kW	1,14	1,42	1,79	2,06	2,65	2,9
	Water flow-rate			l/h	260	330	400	490	600	670
	Water pressure drop			kPa	13,9	27,2	13,3	26	34,1	37,4
Heating	Capacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**1,57**	**2,05**	**2,60**	**2,95**	**3,80**	**4,00**
	Water flow-rate			l/h	270	350	450	510	650	700
	Water pressure drop			kPa	15,1	25,3	14,3	24,4	35,1	36,5
	Capacity	*Water 50°C/cooling water flow Ambient air 20°C Maximum ventilation speed*		kW	1,91	2,21	3,13	3,51	4,33	4,71
	Water flow-rate			l/h	260	330	400	490	600	670
	Water pressure drop			kPa	13,9	27,2	13,3	26	34,1	37,4
Power input			Minimum / Maximum	W	8 / 15	9 / 20	7 / 17	8 / 20	10 / 26	11 / 29
Operating pressure			Maximum	bar	16					
Airflow[1]			Minimum / Nominal / Maximum	m³/h	150 / 170 / 255	150 / 210 / 255	190 / 315 / 400	190 / 300 / 425	340 / 470 / 595	310 / 450 / 595
Sound power			Minimum / Maximum	dB(A)	34 / 47	38 / 52	29 / 43	29 / 46	36 / 52	39 / 52
Sound pressure @1m			Minimum / Maximum	dB(A)	21 / 34	25 / 39	18 / 29	19 / 32	23 / 38	30 / 40
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1					

Size - CFFC / CFFU (unit with DC inverter motor)					7	8	9	10	11	12
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed*		kW	**4,30**	**4,85**	**5,60**	**6,35**	**7,35**	**8,25**
	Sensible capacity			kW	3,25	3,63	4,62	4,98	5,87	6,12
	Water flow-rate			l/h	740	830	960	1.090	1.270	1.430
	Water pressure drop			kPa	54,2	54,3	50,7	32,8	44,1	71,4
Heating	Capacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**4,70**	**5,25**	**6,00**	**7,05**	**8,05**	**8,70**
	Water flow-rate			l/h	810	910	1.040	1.220	1.390	1.510
	Water pressure drop			kPa	54,3	53,4	55,5	37,6	46,9	62,6
	Capacity	*Water 50°C/cooling water flow Ambient air 20°C Maximum ventilation speed*		kW	5,18	5,55	7,33	8,37	9,61	10,63
	Water flow-rate			l/h	740	830	960	1.090	1.270	1.430
	Water pressure drop			kPa	54,2	54,3	50,7	32,8	44,1	71,4
Power input			Minimum / Maximum	W	14 / 50	15 / 52	17 / 96	19 / 92	22 / 113	22 / 102
Operating pressure			Maximum	bar	16					
Airflow[1]			Minimum / Nominal / Maximum	m³/h	410 / 580 / 790	420 / 600 / 800	505 / 855 / 1.190	530 / 875 / 1.190	685 / 1.015 / 1.360	680 / 980 / 1.300
Sound power			Minimum / Maximum	dB(A)	43 / 59	43 / 59	45 / 64	46 / 62	49 / 63	47 / 63
Sound pressure @1m			Minimum / Maximum	dB(A)	30 / 46	30 / 45	31 / 50	31 / 50	33 / 51	33 / 50
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1					

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

Size CFFAC / CFFAU (AC motor unit with three speeds)					1	2	3	4	5	6
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed*		kW	**1,65**	**2,25**	**2,65**	**3,05**	**3,85**	**4,20**
	Sensible capacity			kW	1,25	1,65	2,05	2,23	2,91	3,05
	Water flow-rate			l/h	280	390	450	520	660	720
	Water pressure drop			kPa	15,8	33,2	18,0	26,7	38,2	41,2
Heating	Capacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**1,85**	**2,35**	**3,05**	**3,15**	**4,10**	**4,30**
	Water flow-rate			l/h	320	400	520	540	710	740
	Water pressure drop			kPa	15,1	33,2	17,6	23,3	35,5	37,2
	Capacity	*Water 50°C/cooling water flow. Ambient air 20°C Maximum ventilation speed*		kW	1,94	2,56	3,33	4,13	4,67	4,93
	Water flow-rate			l/h	283	386	454	523	660	720
	Water pressure drop			kPa	15,8	33,2	18,0	26,7	38,2	41,2
Power input			Minimum / Maximum	W	14 / 35	15 / 40	14 / 47	14 / 47	19 / 51	19 / 51
Operating pressure			Maximum	bar	16					
Airflow[1]			Minimum / Nominal / Maximum	m³/h	142/165/255	139/192/255	180/273/400	184/284/425	319/447/595	319/450/595
Sound power			Minimum / Maximum	dB(A)	34 / 47	39 / 53	31 / 46	32 / 47	36 / 52	37 / 52
Sound pressure @1m			Minimum / Maximum	dB(A)	21 / 35	27 / 42	18 / 34	19 / 34	23 / 39	31 / 40
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1					

Size CFFAC / CFFAU (AC motor unit with three speeds)					7	8	9	10	11	12
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed*		kW	**4,65**	**5,35**	**6,00**	**6,75**	**7,35**	**8,25**
	Sensible capacity			kW	3,58	3,96	4,83	5,09	5,63	6,08
	Water flow-rate			l/h	800	920	1.030	1.160	1.260	1.410
	Water pressure drop			kPa	56,9	61,5	53,8	40,3	45,4	64,7
Heating	Capacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**5,20**	**5,70**	**6,15**	**7,15**	**8,20**	**8,50**
	Water flow-rate			l/h	890	980	1050	1230	1410	1460
	Water pressure drop			kPa	56,7	60,9	57,9	42,2	44,6	62,0
	Capacity	*Water 50°C/cooling water flow. Ambient air 20°C Maximum ventilation speed*		kW	5,89	6,35	7,59	7,91	8,77	9,27
	Water flow-rate			l/h	797	917	1020	1150	1260	1410
	Water pressure drop			kPa	56,9	61,5	53,8	40,3	45,4	64,7
Power input			Minimum / Maximum	W	34 / 91	35 / 91	68 / 123	64 / 110	83 / 123	82 / 118
Operating pressure			Maximum	bar	16					
Airflow[1]			Minimum / Nominal / Maximum	m³/h	392 / 560 / 790	404 / 574 / 800	555 / 855 / 1.190	591 / 885 / 1.150	782/1.088/1.300	836/1.132/1.300
Sound power			Minimum / Maximum	dB(A)	43 / 59	43 / 59	45 / 64	46 / 62	50 / 63	50 / 63
Sound pressure @1m			Minimum / Maximum	dB(A)	31 / 48	31 / 47	33 / 50	33 / 50	36 / 51	37 / 50
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1					

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

ELFOSpace BOX3

CFK 007.0÷041.0

4-way cassette fan coil with DC motor for heating and cooling

COMFORT

Heating Cooling

Dehumidification

Follow Me (optional KJR-90D)

Anti cold air

Temperature compensation

RELIABILITY

Condensate drain pump

HEALTH

High density filter

MANAGEMENT AND CONNECTIVITY

Remote control

Wired control (optional)

Centralised control (optional)

Modbus port

ELFOControl management

RELIABILITY

Eurovent

CONVENIENCE

Auto Restart

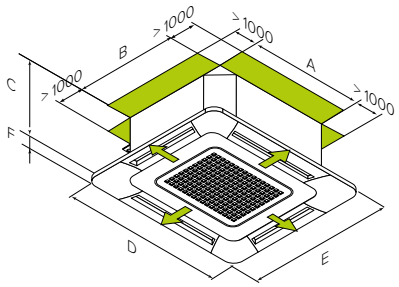
- New functions: management with potential-free contact input or 0-10V input, alarm output
- Quiet and efficient, thanks to the fan's brushless DC motor
- Standard supplied infrared remote control
- Standard supplied condensate drain pump on board
- Management via Modbus port with connection to BMS system or ELFOControl

Efficient and quiet

ELFOSpace BOX3 is standard supplied with a brushless DC motor fan, featuring advanced high efficiency technology that ensures low noise levels and consistent and precise control of the room temperature. Thanks to this, they are suitable for many applications in commercial and industrial sectors but also for particular situations such as hospitals or airports.

The power consumption of fan coils with brushless DC ventilation motor is reduced by up to 60% compared to corresponding models with asynchronous motor, while the noise level is 2÷5 dB(A) lower, making the environment more comfortable with lower costs.

dimensions and connections



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

Size				007.0	011.0	015.0	021.0	031.0	041.0
Dimensions	Unit	Length(A) x Height(C) x Depth(B)	mm	575x261x575	575x261x575	575x261x575	840x230x840	840x300x840	840x300x840
	Panel	Length(D) x Height(F) x Depth(E)	mm	647x50x647	647x50x647	647x50x647	950x45x950	950x45x950	950x45x950
Weight	Unit + Panel (2-pipe)		kg	16,5+2,5	16,5+2,5	16,5+2,5	23+6	27+6	27+6
	Unit + Panel (4-pipe)		kg	16,7+2,5	16,7+2,5	16,7+2,5	27,5+6	30+6	30+6
External diameter		Water	inch	3/4"					
		Condensate drain	mm	25				32	

configurations

TYPE OF SYSTEM:

CC2 2-pipe

CC4 4-pipe

accessories

	**KJR90X**	KJR90 electronic room control for wall installation
	**KJR150X**	Indoor units' group controller
	**CCM30BX**	Touch-key indoor units' centralized controller
	**CCM09**	Wired centraliser with weekly scheduler (to exhaustion)
	**CCM-180A/WS**	Wired centralizer with 6.2" touchscreen display with weekly scheduler NEW
	**CCM-270A/WS**	Wired centralizer with 10.1" touchscreen display with weekly scheduler NEW
	**CCM18UX**	Modbus protocol for up to 16 fancoil units (gateway)
	CCM18X	Modbus protocol for up to 64 fancoil units (gateway)

	**CCM08X**	BACnet Gateway (to exhaustion)
	GW-LON(A)	BACnet Gateway e IMMPRO gateway
	**LONGW64**	LonWorks Gateway for up to 64 fancoil units (to exhaustion)
	GW-LON(A)	LonWorks Gateway for up to 32 fancoil units
	**KNXX**	KNX Gateway, for single indoor unit (to exhaustion)

technical data

Size					**007.0**	**011.0**	**015.0**	**021.0**	**031.0**	**041.0**
Cooling	Total capacity	*Water 7/12°C* *Ambient air 27°C/19°C wb* *Maximum ventilation speed*		kW	**2,98**	**3,96**	**4,20**	**5,93**	**7,87**	**11,19**
	Sensible capacity			kW	2,49	3,20	3,45	5,00	6,68	9,04
	Water flow-rate			l/h	530	700	750	1050	1440	1960
	Water pressure drop			kPa	10,0	11,5	12,3	23,8	22,3	36,6
Heating	Capacity	*Water 45/40°C* *Ambient air 20°C* *Maximum ventilation speed*		kW	**2,61**	**4,08**	**4,95**	**6,06**	**9,16**	**8,98**
	Water flow-rate			l/h	640	830	870	1.300	1.730	2.350
	Water pressure drop			kPa	12,1	9,2	9,4	25,9	28,8	49,2
	Capacity	*Water 50°C/cooling water flow* *Ambient air 20°C* *Maximum ventilation speed*		kW	4,01	4,78	5,76	8,42	10,92	14,92
	Water flow-rate			l/h	530	700	750	1050	1440	1960
	Water pressure drop			kPa	10,0	11,5	12,3	19,2	22,3	36,6
Power input			Minimum / Maximum	W	5/15	9/28	21/43	20/41	45/85	39/126
Operating pressure			Maximum	bar	16					
Airflow[1]			Minimum / Nominal / Maximum	m³/h	322 / 429 / 535	381 / 477 / 610	494 / 611 / 781	768/980/1.175	1.236/1.371/1.581	1.198/1.415/1.871
Sound power			Minimum / Maximum	dB(A)	39 / 51	42 / 54	44 / 55	45 / 55	53 / 60	51 / 64
Sound pressure @1m			Minimum / Maximum	dB(A)	27 / 39	30 / 42	32 / 43	33 / 43	41 / 48	39 / 49
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1					

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

NEBULA MP

DU-MP / DUA-MP 13-44

Ducted medium-pressure fan coil with 3-speed motor or DC motor for heating and cooling

COMFORT
- Heating Cooling
- Dehumidification
- Anti cold air

RELIABILITY
- Eurovent

CONVENIENCE
- Auto Restart

HEALTH
- High density filter

MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- 0-10 V input
- Modbus port (in the thermostat)
- ELFOControl management (in the thermostat)

- ✓ Extremely slim, can easily be installed even in space-restricted false ceilings
- ✓ Quiet and efficient, thanks to the fan's brushless DC motor
- ✓ Wide range of accessories and configurations to fulfil all installation requirements
- ✓ Universal unit for vertical or horizontal installation
- ✓ Management via Modbus port with connection to BMS system or ELFOControl[3] EVO

Fully Configurable

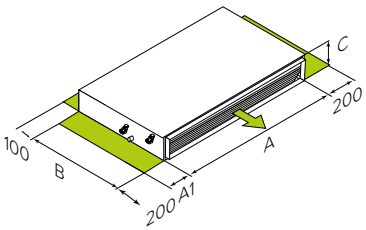
Nebula fulfils all installation requirements: it comes with a full selection of factory-made configurations and accessories that can be supplied separately.

Selection Software

Fan coil Web

Dedicated selection software allows you to explore, simulate and select each app, finding the perfect solution for each system. It also includes the selection of accessories and controls, which suitably complete the supply.
Address: http://webapps5.unilab.eu/clivet

dimensions and connections



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

Size		DUA-MP		13	14	23	24	33	34	43	44
Dimensions	Unit	Lenght (A)	mm	700	700	920	920	920	920	1.140	1.140
		Height (C)	mm	225	225	225	225	225	225	255	255
		Depth (B)	mm	550	550	550	550	550	550	580	580
Weight	CC2		kg	14,7	15,5	19,2	20,1	19,8	20,7	27,7	29,5
	CC4		kg	15,9	16,7	20,7	21,6	21,3	22,2	29,9	31,7

Size		DU-MP		13	14	23	24	33	34	43	44
Dimensions	Unit	Lenght (A)	mm	700	700	920	920	1.140	1.140	1.140	1.140
		Height (C)	mm	225	225	225	225	255	255	255	255
		Depth (B)	mm	550	550	550	550	580	580	580	580
Weight	CC2		kg	18,7	19,6	22,4	24,2	29,5	30,6	31,2	33,2
	CC4		kg	19,8	20,7	23,7	25,5	31,4	32,5	33,1	35,1

configurations

TYPE OF SYSTEM:

CC2	2-pipe
CC4	4-pipe

AIR RETURN:

R3	Air return from below
RB	Air return from behind

HYDRAULIC CONNECTIONS NEW:

DX	Right side fittings
SX	Left side fittings

BUILT-IN VALVES NEW:

-	not required
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

CONDENSATE DRAIN PUMP:

-	not required
CDP	built-in pump

AUXILIARY TRAY:

-	not required
BRO	built-in tray (for horizontal installation)

accessories

	PRAX	Straight return plenum
	PR90AX	90° return plenum
	PCCRAX	Return plenum with round fittings
	PRMX	Straight supply plenum
	P90MAX	90° supply plenum
	PCCMAX	Supply plenum with round fittings
	CDPX	Condensate drain pump
	2V2X	3-way ON/OFF valves kit for 2-pipe system (3V2DX for right side fittings / 3V2SX for left side fittings)
	3V2X	
	2V4X	3-way ON/OFF valves kit for 4-pipe system (3V4DX for right side fittings / 3V4SX for left side fittings)
	3V4X	
	BROX	Horizontal auxiliary tray

	HIDE2X	Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - Cool/Heat - 3 speeds)
	HIDE3X	Electro-mechanical thermostat for wall installation with built-in temperature probe (Auto mode - auto speed))
	HIDT9X	Electro-mechanical thermostat for semi-uncased wall installation with display and built-in temperature probe (for AC version, 2-ON/OFF valves management, 3-point valve management, Modbus port)
	HIDT8X	Electro-mechanical thermostat for wall installation with display and built-in temperature probe (DC fan control, Auto/ECO/Cool/Heat mode - Auto/3 speeds)
	HIDT10X	Electro-mechanical thermostat for semi-uncased wall installation with display and built-in temperature probe (DC fan control, 2-ON/OFF valves management, 3-point valve management, Modbus port)

Size					13	14	23	24	33	34	43	44
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°C wb Maximum ventilation speed*		kW	**2,62**	**2,98**	**3,61**	**4,05**	**5,53**	**6,28**	**6,69**	**7,80**
	Sensible capacity			kW	1,94	2,14	2,67	2,87	4,07	4,47	5,03	5,66
	Water flow-rate			l/h	462	524	634	709	975	1.102	1.178	1.367
	Water pressure drop			kPa	19,6	10,8	15,6	22,9	26,3	19,6	36,5	29,4
Heating	Cpacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**2,90**	**3,14**	**3,78**	**3,58**	**5,95**	**6,42**	**7,33**	**8,22**
	Water flow-rate			l/h	504	546	658	720	1.037	1.119	1.277	1.432
	Water pressure drop			kPa	19,7	10,1	14,5	20,5	25,3	17,4	36,2	27,5
Power input			Minimum / Maximum	W	21/73	17/70	20/80	19/79	33/151	30/151	46/167	46/163
Operating pressure			Maximum	bar	8							
Airflow[1]			Nominal	m³/h	360	360	428	480	730	730	1.030	1.030
Headroom available at high speed			-	Pa	78	80	78	77	80	80	77	75
Sound power			Minimum / Maximum	dB(A)	49/64	49/63	50/63	49/62	54/67	54/67	56/68	56/68
Sound pressure @1m			Minimum / Maximum	dB(A)	43/58	43/57	44/57	43/56	48/61	48/61	50/62	50/62
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230 / 50 / 1							

PRELIMINARY DATA

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

Size					13	14	23	24	33	34	43	44
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°C wb Maximum ventilation speed*		kW	**1,57**	**1,14**	**2,35**	**2,68**	**3,18**	**3,75**	**5,53**	**7,25**
	Sensible capacity			kW	1,11	1,06	1,67	1,85	2,32	2,63	4,58	5,22
	Water flow-rate			l/h	283	310	473	541	565	663	1.095	1.284
	Water pressure drop			kPa	15,9	4,1	35,0	10,2	13,3	15,0	32,8	24,6
Heating	Cpacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**1,39**	**1,18**	**1,84**	**2,76**	**3,45**	**3,45**	**5,78**	**7,28**
	Water flow-rate			l/h	243	326	414	481	601	658	1.211	1.268
	Water pressure drop			kPa	15,9	4,1	35,0	10,2	13,3	15,0	32,8	24,6
Power input			Minimum / Maximum	W	37/67	37/67	39/100	39/100	71/110	71/110	156/228	156/228
Operating pressure			Maximum	bar	8							
Airflow[1]			Nominal	m³/h	170	130	230	230	510	510	807	1.030
Headroom available at high speed			-	Pa	55	55	65	65	55	55	55	55
Sound power			Minimum / Maximum	dB(A)	52/62	52/62	53/64	53/64	56/62	56/62	57/66	57/66
Sound pressure @1m			Minimum / Maximum	dB(A)	46/56	46/56	47/58	47/58	50/56	50/56	51/60	51/60
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230 / 50 / 1							

PRELIMINARY DATA

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

NEBULA HP

DU-HP / DUA-HP 13-64

Ducted medium-pressure fan coil with 3-speed motor or DC motor for heating and cooling

COMFORT
- Heating Cooling
- Dehumidification
- Anti cold air

RELIABILITY
- Eurovent

CONVENIENCE
- Auto Restart

HEALTH
- High density filter

MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- 0-10 V input
- Modbus port (in the thermostat)
- ELFOControl management (in the thermostat)

- ✓ Extremely slim, can easily be installed even in space-restricted false ceilings
- ✓ Quiet and efficient, thanks to the fan's brushless DC motor
- ✓ Wide range of accessories and configurations to fulfil all installation requirements
- ✓ Universal unit for vertical or horizontal installation
- ✓ Management via Modbus port with connection to BMS system or ELFOControl[3] EVO

Fully Configurable

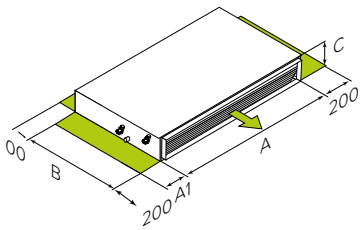
Nebula fulfils all installation requirements: it comes with a full selection of factory-made configurations and accessories that can be supplied separately.

Selection Software

Fan coil Web

Dedicated selection software allows you to explore, simulate and select each app, finding the perfect solution for each system. It also includes the selection of accessories and controls, which suitably complete the supply.
Address: http://webapps5.unilab.eu/clivet

dimensions and connections



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

Size		DUA-HP		13	14	23	24	33	34	43	44	53	54	63	64
Dimensions	Unit	Lenght (A)	mm	590		700		920		1.030		1.390		1.550	
		Height (C)	mm	580						650		680		760	
		Depth (B)	mm	299						369		399		449	
Weight	CC2		kg	23	24,1	27,6	28,7	39,3	40,4	47,4	49	60	63	84,7	88,2
	CC4		kg	24,2	25,3	28,9	30	40,8	41,9	49,4	51	63,5	66,5	89,1	92,6

Size		DU-HP		13	14	23	24	33	34	43	44	53	54	63	64
Dimensions	Unit	Lenght (A)	mm	590		700		920		1.030		1.390		1.550	
		Height (C)	mm	580						650		680		760	
		Depth (B)	mm	299						369		399		449	
Weight	CC2		kg	23	24,1	29,1	30,2	40,8	41,9	52,9	54,5	64	67	75,2	78,7
	CC4		kg	24,2	25,3	30,4	31,5	42,3	43,4	54,9	56,5	67,5	70,5	79,6	83,1

configurations

TYPE OF SYSTEM:

CC2	2-pipe
CC4	4-pipe

AIR RETURN:

R3	Air return from below
RB	Air return from behind

HYDRAULIC CONNECTIONS NEW:

DX	Right side fittings
SX	Left side fittings

BUILT-IN VALVES NEW:

-	not required
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

CONDENSATE DRAIN PUMP:

-	not required
CDP	built-in pump

AUXILIARY TRAY:

-	not required
BRO	built-in tray (for horizontal installation)

accessories

	PRAX	Straight return plenum
	PR90AX	90° return plenum
	PCCRAX	Return plenum with round fittings
	PRMX	Straight supply plenum
	P90MAX	90° supply plenum
	PCCMAX	Supply plenum with round fittings
	CDPX	Condensate drain pump
	2V2X	3-way ON/OFF valves kit for 2-pipe system (3V2DX for right side fittings / 3V2SX for left side fittings)
	3V2X	
	2V4X	3-way ON/OFF valves kit for 4-pipe system (3V4DX for right side fittings / 3V4SX for left side fittings)
	3V4X	
	BROX	Horizontal auxiliary tray

	HIDE2X	Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - Cool/Heat - 3 speeds)
	HIDE3X	Electro-mechanical thermostat for wall installation with built-in temperature probe (Auto mode - auto speed)
	HIDT9X	Electro-mechanical thermostat for semi-uncased wall installation with display and built-in temperature probe (for AC version, 2-ON/OFF valves management, 3-point valve management, Modbus port)
	HIDT8X	Electro-mechanical thermostat for wall installation with display and built-in temperature probe (DC fan control, Auto/ECO/Cool/Heat mode - Auto/3 speeds)
	HIDT10X	Electro-mechanical thermostat for semi-uncased wall installation with display and built-in temperature probe (DC fan control, 2-ON/OFF valves management, 3-point valve management, Modbus port)

Size					13	14	23
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°C wb Maximum ventilation speed*		kW	**3,08**	**3,45**	**4,70**
	Sensible capacity			kW	2,48	2,69	4,06
	Water flow-rate			l/h	538	591	832
	Water pressure drop			kPa	44,3	22,7	35,1
Heating	Cpacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**3,31**	**3,59**	**4,92**
	Water flow-rate			l/h	529	626	857
	Water pressure drop			kPa	41,2	20,6	36,5
Power input			Minimum / Maximum	W	19/60	19/60	46/147
Operating pressure			Maximum	bar		8	
Airflow[1]			Nominal	m³/h	480	450	960
Headroom available at high speed			-	Pa	78	78	68
Sound power			Minimum / Maximum	dB(A)	49/62	49/62	59/69
Sound pressure @1m			Minimum / Maximum	dB(A)	41/54	41/54	51/61
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230 / 50 / 1	

PRELIMINARY DATA

The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

Size					13	14	23
Cooling	Total capacity	*Water 7/12°C Ambient air 27°C/19°C wb Maximum ventilation speed*		kW	**2,99**	**3,49**	**4,68**
	Sensible capacity			kW	2,39	2,67	4,04
	Water flow-rate			l/h	532	600	842
	Water pressure drop			kPa	43,3	23,0	35,8
Heating	Cpacity	*Water 45/40°C Ambient air 20°C Maximum ventilation speed*		kW	**3,27**	**3,65**	**5,53**
	Water flow-rate			l/h	570	635	963
	Water pressure drop			kPa	40,2	21,1	37,4
Power input			Minimum / Maximum	W	49/113	49/113	140/228
Operating pressure			Maximum	bar		8	
Airflow[1]			Nominal	m³/h	455	450	900
Headroom available at high speed			-	Pa	85	85	71
Sound power			Minimum / Maximum	dB(A)	52/64	52/64	58/71
Sound pressure @1m			Minimum / Maximum	dB(A)	44/56	44/56	50/63
Power supply	Voltage/Frequency/Phases			V/Hz/n°		230 / 50 / 1	

PRELIMINARY DATA

The Product is compliant with the Erp (regulation 2016/2281)

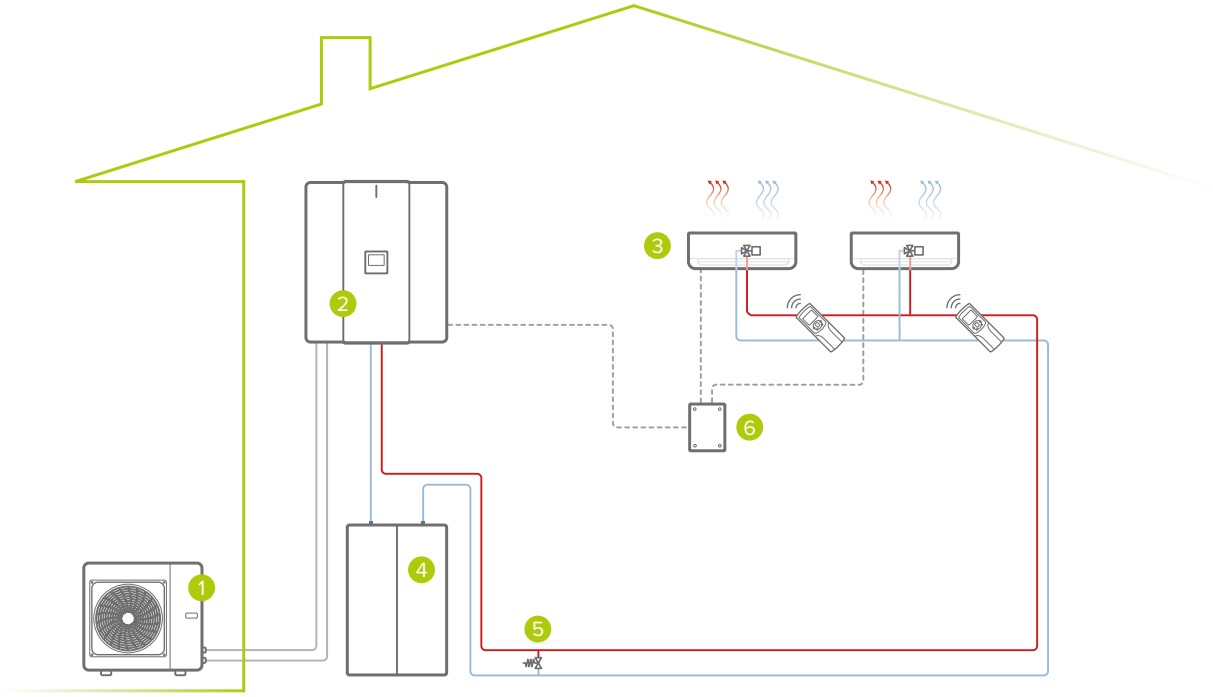
Sound levels tested in an anechoic chamber according to ISO 3744

(1) With clean filters

24	33	34	43	44	53	54	63	64
5,75	**6,92**	**8,45**	**10,46**	**13,03**	**16,50**	**19,15**	**21,09**	**25,71**
4,79	6,12	7,15	9,67	11,66	15,79	16,71	20,33	22,35
987	1.230	1.450	1.871	2.235	2.931	3.286	3.619	4.411
28,5	38,5	37,2	34,4	28,5	35,4	22,2	30,9	31,6
6,30	**8,19**	**9,29**	**12,89**	**15,05**	**19,07**	**21,83**	**24,58**	**28,91**
1.098	1.186	1.619	1.794	2.621	3.323	3.802	4.283	5.037
28,4	41,2	37,1	39,2	31,0	38,6	23,6	34,2	32,8
46/147	44/245	44/245	99/418	99/418	86/674	86/674	112/1.160	112/1.160
				8				
915	1.229	1.320	2.270	2.195	3.150	3.050	4.465	4.380
68	86	86	68	68	60	60	71	71
59/69	57/72	57/72	64/75	64/75	63/80	63/80	65/84	65/84
51/61	49/64	49/64	56/67	56/67	55/72	55/72	57/76	57/76
				230 / 50 / 1				

24	33	34	43	44	53	54	63	64
5,77	**7**	**8,63**	**10,3**	**12,84**	**15,82**	**18,49**	**21,94**	**26,82**
4,66	6,22	7,07	9,5	10,94	14,10	15,37	20,08	22,59
990	1.248	1.480	1.855	2.203	2.715	3.172	3.764	4.602
28,7	39,5	38,5	34,0	27,7	32,9	20,8	33,0	34,0
6,32	**8,33**	**9,51**	**12,8**	**14,79**	**18,16**	**20,96**	**25,71**	**30,35**
1.102	1.451	1.657	2.231	2.577	3.165	3.651	4.481	5.287
28,5	42,4	38,7	38,7	30,1	35,5	22,0	37,0	35,7
140/228	144/274	144/274	284/515	284/515	499/878	499/878	1.410/1.760	1.410/1.760
				8				
885	1.270	1.255	2.450	2.390	3.200	3.160	4.900	4.860
71	82	82	73	73	80	80	60	60
58/71	52/70	52/70	64/76	64/76	69/79	69/79	78/83	78/83
50/63	44/62	44/62	56/68	56/68	61/71	69/71	70/75	70/75
				230 / 50 / 1				

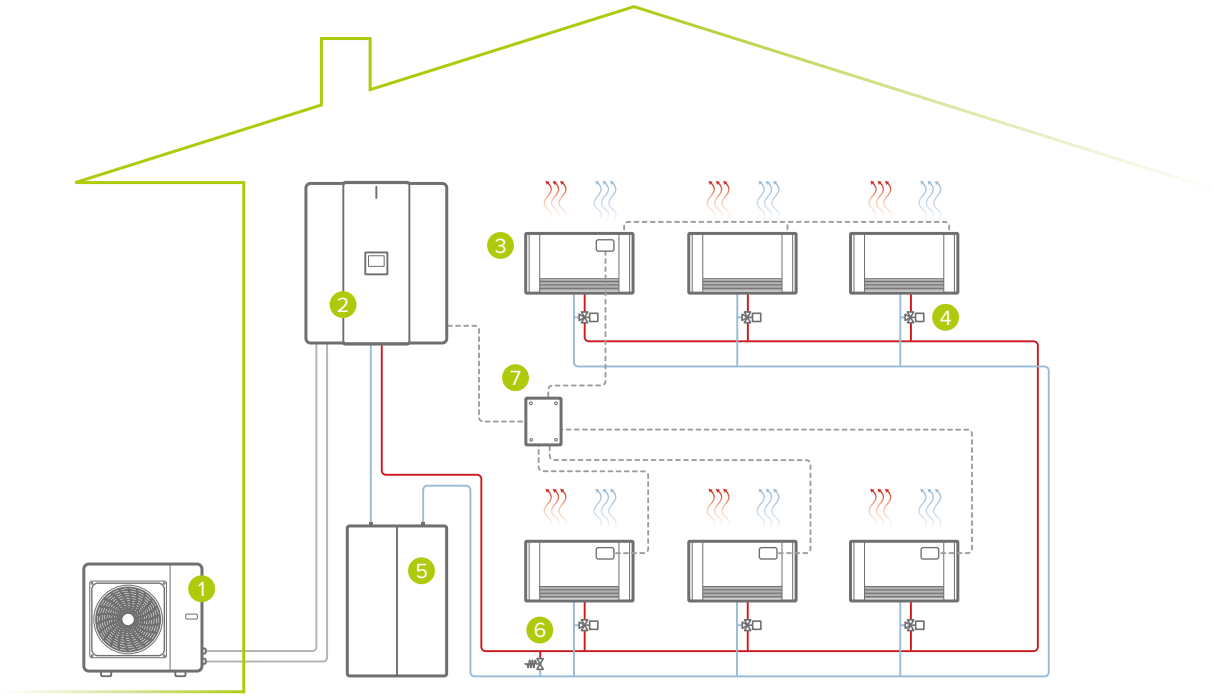
SYSTEM DIAGRAMS



Single area system: heating/cooling

1. outdoor unit
2. indoor unit
3. heating / cooling area (fan coils)
4. system inertial storage (optional)
5. bypass*
6. box for signal to generator *

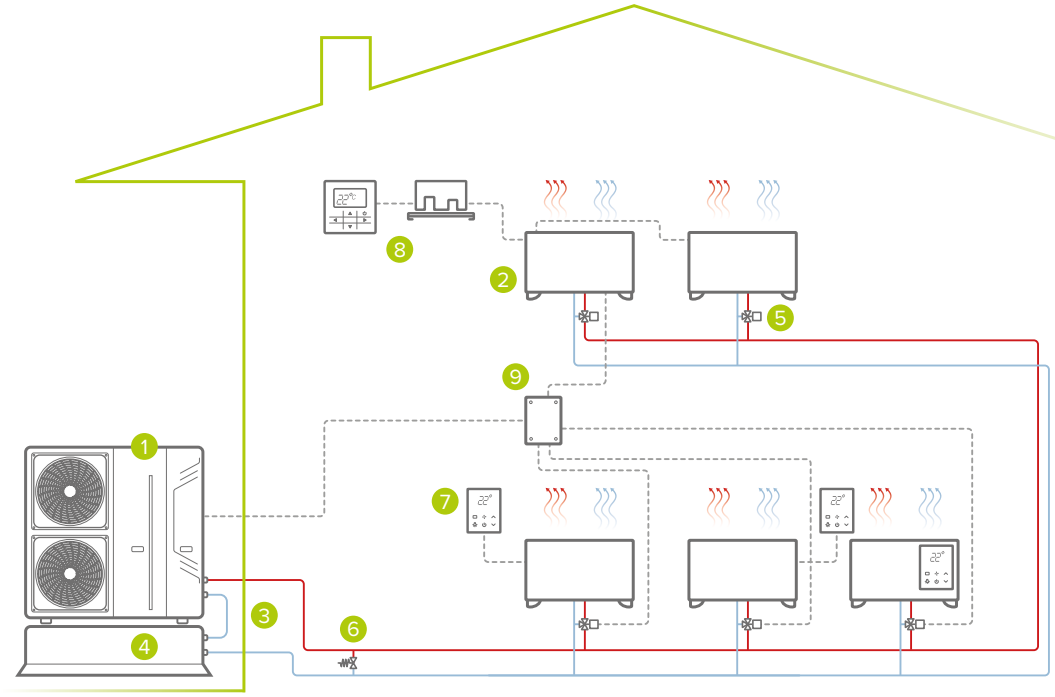
*from external supply



Single area system: heating/cooling

1. outdoor unit
2. indoor unit
3. heating / cooling area (fan coils)
4. 3-way valve kit (optional)
5. system inertial storage (optional)
6. bypass*
7. box for signal to generator*

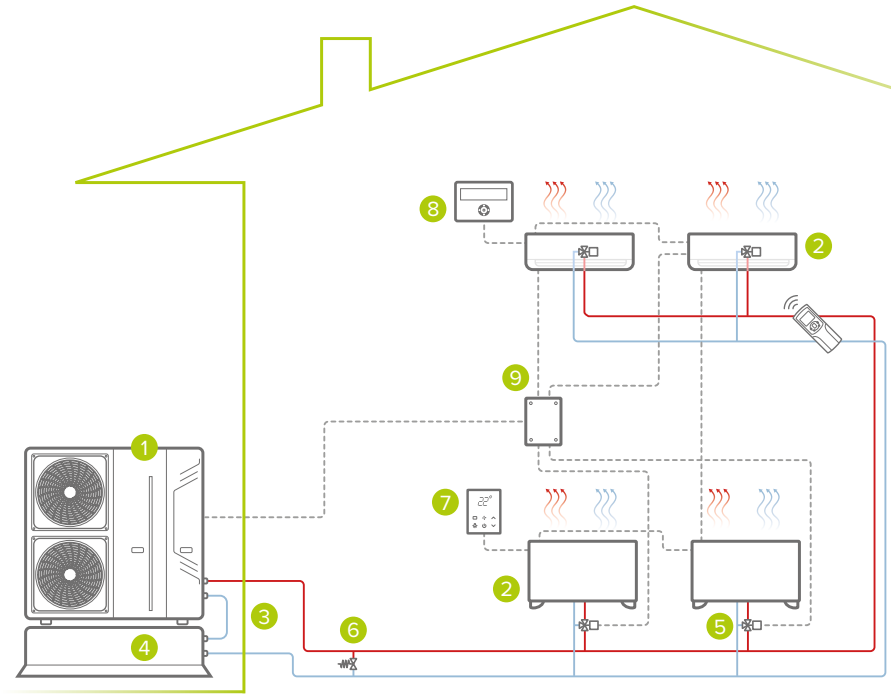
Note: if valves kits are not present in the terminal unit, the heat pump needs to be always operating



Single area system: heating/cooling

1. outdoor unit
2. heating / cooling area (fan coils)
3. system inertial storage tank connection kit (optional)
4. system inertial storage (optional)
5. 3-way valve kit (optional)
6. bypass*
7. wired control (optional)
8. signal diffuser (optional)
9. box for signal to generator *

Note: if valves kits are not present in the terminal unit, the heat pump needs to be always operating
*from external supply



Single area system: heating/cooling

1. outdoor unit
2. heating / cooling area (fan coils)
3. system inertial storage tank connection kit (optional)
4. system inertial storage (optional)
5. 3-way valve kit (optional)
6. bypass*
7. wired control (optional)
8. centralizer (optional)
9. box for signal to generator*

Note: if valves kits are not present in the terminal unit, the heat pump needs to be always operating
*from external supply

DHW HEAT PUMPS (Domestic Hot Water)

Heat pumps

for the production of domestic hot water

AQUA Plus

AQUA PLUS

SWAN-2 190÷300

Packaged monoblock heat pump for domestic hot water production

ENERGY SAVING: Solar integration (optional); Smart Grid ready
COMFORT: DHW
RELIABILITY: Backup heater; Keymark
HEALTH: Renewable energy
CONVENIENCE: Integrated DHW tank
MANAGEMENT AND CONNECTIVITY: Potential-free contact; Modbus port; ELFOControl management

ErP TOP SYSTEM EFFICIENCY 190 L A+ 300 XL A+

- ✓ Advanced connectivity: management via the App or via the Modbus port with ELFOControl[3] EVO included as standard
- ✓ New standard supplied equipment: electronic anode, Smart Grid and Photovoltaic contacts and external fan
- ✓ Standard version or version with additional solar collector for combination with ELFOSun
- ✓ Operation with heat pump only with the outdoor air between -7°C and 43°C
- ✓ Market-leading A+ efficiency class

HEAT PUMPS FOR DHW

dimensions and connections

Size			190	300	190S	300S
Dimensions	Length x Height x Depth	mm	610x1.830x560	700x1.930x650	610x1.830x560	700x1.930x650
Weight		kg	287	412	310	434
Refrigerant charge		type/GWP	R134a / 1.430			
		kg	1,1	1,5	1,1	1,5
		CO_2 tons	1,57	2,15	1,57	2,15
External diameter	Air	mm	160	190	160	190
	Water	inch	3/4"			
	Condensate drain	mm	10			
	Solar	inch	-	-	3/4"	3/4"

technical data

Size					190	300	190S	300S
DHW	Heating capacity		*Water 10/53°C Outdoor air 14°C DB/87% UR*	kW	**1,59**	**2,16**	**1,59**	**2,16**
	COP			-	3,69	3,97	3,69	3,97
	Heating time			h:min	05:41	06:31	05:41	06:31
	Heating capacity		*Water 10/53°C Outdoor air 7°C DB/87% UR*	kW	**1,38**	**1,84**	**1,38**	**1,84**
	COP			-	3,29	3,46	3,29	3,46
	Heating time			h:min	06:40	07:40	06:40	07:40
	Nominal tank volume			l	176	284	168	272
Electrical power for meter sizing				kW	2,1	2,25	2,1	2,25
Power heater				kW	1,5			
Seasonal efficiency Medium climate	DHW	Energy class		-	**A+**	**A+**	**A+**	**A+**
		Annual energy consumption		kWh/year	890	1.356	890	1.356
		DHW profile		-	L	XL	L	XL
		ηs (seasonal output)		%	115	123	115	123

Unit				190	300	190S	300S
Airflow		Nominal	m³/h	270	414	270	414
Available pressure		Maximum	Pa	25			
Sound power		Maximum	dB(A)	51	53	51	53
Sound pressure @1m		Maximum	dB(A)	36,6	38,2	36,6	38,2
Storage tank	Insulation: Material / Medium thickness[1]			PU+ / 50mm			
Solar pipe coil	Surface		m²	-	-	1,1	1,3
Max. operation pressure			bar	10			
Power supply	Voltage/Frequency/Phases		V/Hz/n°	230/50/1			
Operating range							
Water temperature	Heat pump	Maximum	°C	70			
Operating range (Outdoor air)		Minimum / Maximum	°C	-20 / 43			

In according to EN 16147 with rigid Ø150 ducted product.

The Product complies with the European ErP Directive (UE Regulations UE 812/2013 - 814/2013)

(1) PU+ = Polyurethane foam

accessories

VENX Additional fan

COPX Accessory connection cables

CA200X Adapter to connect a Ø200mm air duct to a Ø190mm connection (for full kit, order 2 pieces)[NEW]

VMC (Controlled Mechanical Ventilation) WITH RECOVERY

Controlled Mechanical Ventilation (CMV)
for air renewal and purification with active
thermodynamic recovery, without unnecessary energy losses

ELFOFresh EVO

ELFOFresh²

ELFOFresh EVO

CPAN-YIN SIZE2

Mechanical ventilation unit with thermodynamic heat recovery

ENERGY SAVING
- Free Cooling / Heating

COMFORT
- Heating Cooling
- Dehumidification
- Silent

RELIABILITY
- Condensate drain pump

HEALTH
- High density filter
- Fresh air renewal
- Air purification
- Eco-friendly refrigerant
- Renewable energy

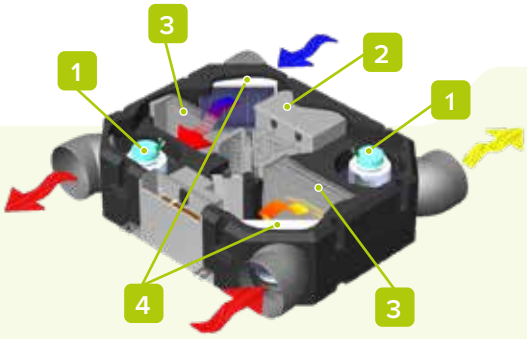
CONVENIENCE
- Weekly schedule

MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

- ✓ Innovative heat recovery system that alone fulfils over 85% of the building's demands
- ✓ Intake air humidity control: perfect for coupling with radiant panel cooling systems
- ✓ Purifies the air with the high efficiency electrostatic filter (optional)
- ✓ Inverter DC compressor and constant flow DC fan for the best modulation operation
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

Heats or cools for free

As well as renewing and purifying the ambient air, ELFOFresh EVO is a real support for the main heating and cooling generator. Alone, it can fulfil up to 85% of the thermal demands of the house, whereas a traditional passive recuperator can typically only contribute between 10% (in summer) and 45% (in winter). In spring or autumn, when the weather is mild, ELFOFresh EVO works mainly in Free Cooling / Heating: it only uses the thermal content of outdoor air for air conditioning, working at virtually zero cost (energy and economic). Chosen during design, ELFOFresh EVO allows a smaller generator to be used: less space and cheaper!



1. DC inverter fan with constant flow
2. Inverter DC rotary compressor
3. Air-gas finned exchanger
4. Air filter

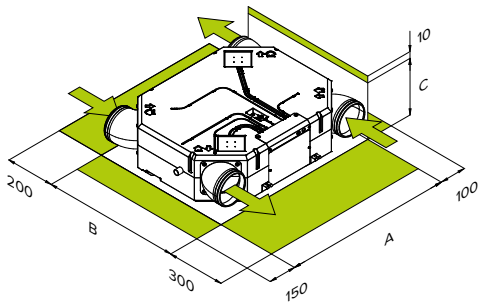
configurations

INSTALLATION TYPE:

-	Standard	EI	Cased

FIFD — Electronic filters with iFD technology (ISO 16890 ePM1 90%)

dimensions and connections



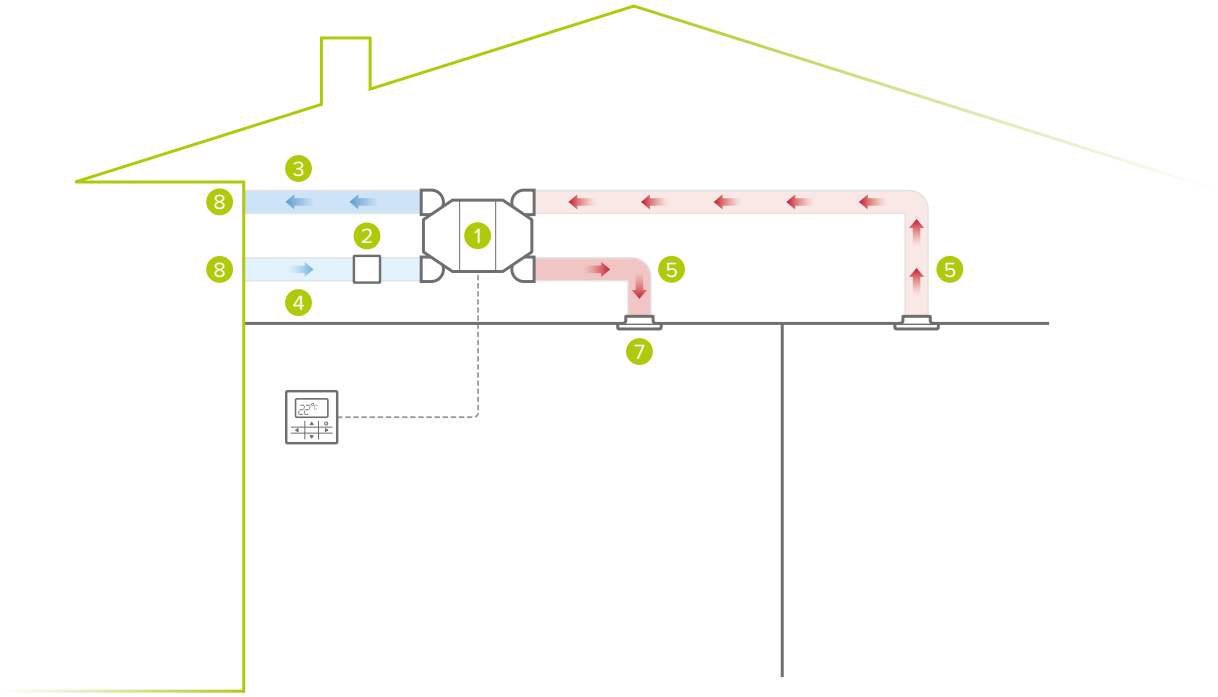
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

Size				**Size 2**
Dimensions	Length(A) x Height(C) x Depth(B)	mm		1.107x290x900
Weight		kg		44
Refrigerant charge		type / GWP		R-32 / 675
		kg		0,3
		CO_2 tons		0,2
External diameter	Air	mm		200
	Condensate drain	mm		32

technical data

Size					**Size 2**
Ventilation	Airflow		Minimum / Nominal / Maximum	m³/h	**125 / 270 / 320**
	Available pressure		Nominal / Maximum	Pa	50 / 120
	Renewal air		-	-	100%
	Filter type		-	-	Pleated filter
	Filtration class		-	-	PM10 50%
Winter recovery	Heating capacity	*Ambient air 20°C/50% UR Outdoor air 7°C/6°C WB*	Minimum / Nominal / Maximum	kW	**1,42 / 2,05 / 2,49**
	COP		Minimum / Nominal / Maximum	-	3,09 / 4,93 / 4,61
	Heating capacity	*Ambient air 20°C/50% UR Outdoor air -5°C/80% UR*	Minimum / Nominal / Maximum	kW	1,97 / 2,37 / 2,45
	COP		Minimum / Nominal / Maximum	-	4,93 / 6,50 / 7,66
Summer recovery	Cooling capacity	*Ambient air 26°C/50% UR Outdoor air 35°C/50% UR*	Minimum / Nominal / Maximum	kW	**1,57 / 1,92 / 2,23**
	EER		Minimum / Nominal / Maximum	-	4,34 / 3,5 / 2,77
Electrical power for meter sizing				kW	1,08
Power supply		Voltage/Frequency/Phases		V/Hz/n°	230/50/1
Sound power			Minimum / Maximum	dB(A)	47 / 58
Sound pressure @1m			Minimum / Maximum	dB(A)	34 / 45
Operating range					
Operating range (Indoor air)	Heating		Minimum / Maximum	°C	15 / 30
	Cooling		Minimum / Maximum	°C	16 / 30
Operating range (outdoor air)	Heating		Minimum / Maximum	°C	-15 / 28
	Cooling		Minimum / Maximum	°C	16 / 45

Data according to EN 14511: 2018 and referred to available pressure of 50 Pa.



Air renewal system

1. heat pump for ventilation with heat recovery
2. Electrostatic filter (optional)
3. Exhaust air duct (optional)
4. Fresh Air duct (optional)
5. intake air duct (optional)
6. Extracted air duct (optional)
7. Supply grille (optional)
8. Exhaust grille (optional)

Note: for the distribution system in detail see the ELFOAir section

ELFOFresh²
CPAN-U 500

Mechanical ventilation unit with thermodynamic heat recovery

ENERGY SAVING
- Free Cooling / Heating

COMFORT
- Heating Cooling
- Dehumidification

RELIABILITY
- Condensate drain pump (optional)
- Backup heater (optional)

HEALTH
- High density filter
- Fresh air renewal
- Air purification
- Renewable energy

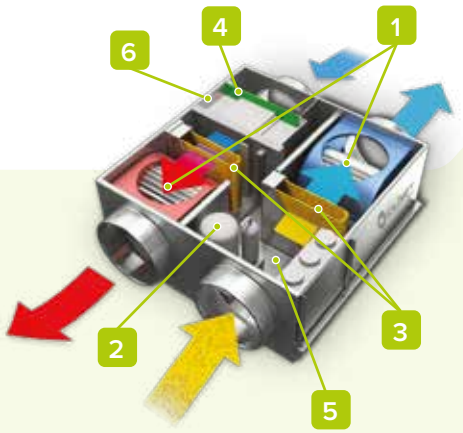
CONVENIENCE
- Weekly schedule

MANAGEMENT AND CONNECTIVITY
- Potential-free contact
- Modbus port
- ELFOControl management
- Clivet Eye monitoring

- ✓ Innovative heat recovery system that alone fulfils up to 80% of the building's demands
- ✓ Much more efficient than a traditional passive recuperator, especially in spring and autumn
- ✓ Humidity control: perfect for coupling with radiant panel cooling systems
- ✓ Purifies the air with the high efficiency electrostatic filter (optional)
- ✓ Designed for large environments, ideal for buildings from 350 to 600m²

Fresh air

ELFOFresh² expels the exhaust air and supplies purified, air-conditioned outdoor air. Harmful elements in the outdoor air are eliminated by the efficient filtration system, also active on fine dust and nanoparticles, which are the most dangerous to human health as they reach the alveoli of the lungs and from there enter the bloodstream.
The optional electrostatic filter makes outdoor air filtration even more efficient and simultaneously reduces ventilation and maintenance costs compared to traditional systems.



1. Inverter DC fan
2. Rotary compressor
3. Air-gas finned exchanger
4. Outdoor air filter
5. Exhaust air filter (optional)
6. Remote electrical panel

configurations

FUNCTIONALITY:

- Reversible heat pump

OHO Heating-only operation

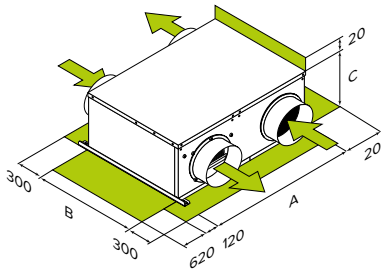
accessories

	FESX	Electronic filter kit
	FAEX	Kit of exhaust air filter
	CDPX	Condensed drain pump
	CMMBX	Serial communication module to supervisor (Modbus)
	EHPCX	Preheating elements in duct

	AL12X	Power supply unit for HID-Ti5 thermostats and HID-UR sensor
	HSE3MX	Immersed electrode steam humidifier for Elfofresh DN250
	HIDTI52BX	Temperature and humidity thermostat with touch screen display, for for uncased (box 503) or wall installation. Colour white
	HIDTI52NX	Temperature and humidity thermostat with touch screen display, for for uncased (box 503) or wall installation. Colour black

Note: see the ELFOAir section for the aeraulic distribution systems

dimensions and connections



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

Size			500
Dimensions	Length(A) x Height (C) x Depth(B)	mm	1.158x407x752
Weight		kg	92,5
Refrigerant charge		type / GWP	R-410A / 2088
		kg	1,45
		CO_2 tons	1,62
External diameter	Air	mm	250
	Condensate drain	mm	26

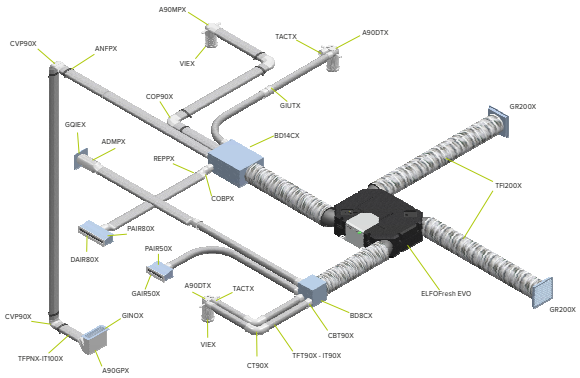
technical data

Size					500
Ventilation	Airflow		Nominal	m^3/h	**500**
	Available pressure		Nominal / Maximum	Pa	40 / 120
	Renewal air		-	-	100%
	Filters type		-	-	Folded filter
	Filtration class		-	-	Coarse 50%
Winter recovery	Heating capacity	*Ambient air 20°C/50% RH Outdoor unit 7°C/6°C WB*	Nominal	kW	**3,58**
	COP		Nominal	-	4,27
	Heating capacity	*Ambient air 20°C/50% RH Outdoor unit -5°C/80% RH*	Nominal	kW	3,74
	COP		Nominal	-	5,57
Summer recovery	Cooling cpacity	*Ambient air 26°C/50% RH Outdoor unit 35°C/50% RH*	Nominal	kW	**3,13**
	EER		Nominal	-	2,86
Electrical power for meter sizing				kW	1,51
Power supply		Voltage/Frequency/Phases		V/Hz/n°	400/50/3+N
Sound power			Nominal	dB(A)	62
Sound pressure @1m			Nominal	dB(A)	48
Operating range					
Operating range (Indoor air)	Heating		Minimum / Maximum	°C	16 / 28
	Cooling		Minimum / Maximum	°C	18 / 30
Operating range (outdoor air)	Heating[1]		Minimum / Maximum	°C	-15 / 25
	Cooling		Minimum / Maximum	°C	15 / 40

In according to EN 14511:2018 and refer to available pressure of 50 Pa. In cooling mode, the unit can operate with a reduced flow rate to guarantee a specific humidity of the injected air equal to the set-point humidity. in regions where the the outdoor temperature is lower than -5°C for an high numer of hours per year, it is recommanded to supply the kit of pre-heating ducted electric resistance EHPCX

ELFOAir

The air distribution system for ELFOFresh and ELFOPack



- Flexible in installation thanks to the use of flexible and usable ducts
- Simple in selecting the components and in the installation
- Air quality assured by the use of antistatic and antibacterial ducts
- Homogenous air diffusion thanks to the special diffusers AIRJET

ANTISTATIC AND ANTIBACTERIAL

The inner surface of the flexible ducts is lined with a special plastic film treated with silver ions that provides excellent antistatic and antibacterial properties and guarantees top hygiene levels of the treated air.
Furthermore the internal smooth surface of the ducts ensures low pressure drops and therefore reduces consumptions for ventilation.

accessories

Internal suction and supply grilles		DAIR50X	AIRJET 50/I supply diffuser - white frame and black inside
		DAIR80X	AIRJET 80/I supply diffuser - white frame and black inside
		GAIR50X	Intake grille + extractable filter AIRJET 50/A - white frame and black inside
		GAIR80X	Intake grille + extractable filter AIRJET 80/A - white frame and black inside
		PAIR50X	Suction/supply plenum with AIRJET 50 control damper - rear connection
		PAIR80X	Suction/supply plenum with AIRJET 80 control damper - rear connection
		GINOX	Suction/supply rectangular grill 350x130 mm stainless
		GIVEX	Suction/supply rectangular grill 350x130 mm white
		FREX	Filter for rectangular grilles 350x130 mm (5pz.)
		VIEX	Extraction/intake valve in ABS DN125 without air filter
		FT125X	Filter for DN125 valve (5pz.)
		GQIEX	Extraction/intake squared grill of DN125 joint with air filter
Round tube distribution (from the distribution box to outlet)		TFT90X	DN90 round flexible tube (Int. diam. 78mm) in a 20m. coil without insulation
		IT90X	Insulation in a 15mt. coil for DN90 round flexible tube
		CBT90X	Connector to distribution box for DN90 round tube
		GIUTX	Connecting joint for DN90 round tube
		CT90X	Printed curve of 90-degree angle for DN90 round tube
		A90DTX	90-degree adaptor, double DN90 round tube for DN125 valve
		TACTX	Blind plug for DN90 round tube (5pz.)
		ANFTX	DN90 seal O-Ring (10pz.)

Flat tube distribution (from the distribution box to outlet)		TFPNX	Flat flexible tube 132x52mm in a 20mt. coil without insulation
		IT100X	Insulation in a 20mt. coil for flat flexible tube 132x52
		COBPX	Connector to distribution box for flat tube
		GIUPX	Seal and connecting joint for flat tube (10pz.)
		CVP90X	Vertical 90-degree curve for flat tube
		COP90X	Horizontal 90-degree curve for flat tube
		CTP180X	Joint for 180-degree flat tube rotation
		A90MPX	90-degree adaptor, single tube for DN125 valve
		A90DPX	90-degree adaptor, double flat tube for DN125 valve
		ADMPX	Straight adaptor, single flat tube for DN125 valve
		A90GPX	90-degree adaptor, single flat tube for level grill
		TACPX	Blind plug for flat tube (5pz.)
		ANFPX	Fixing ring for flat tube (10pz.)
		REPPX	Flow controller for flat tube
		RTPTX	Round/flat tube connecting joint
External distribution (Ducts from the outside to the unit and from the unit to the distribution boxes)		BD8CX	Distribution box of DN150-200 joint with 8 connections
		BD14CX	Distribution box of DN200 joint with 14 connections
		TFIS150X	DN150 soundproofing insulated flexible tube in a 10mt. coil
		TFIS200X	DN200 soundproofing insulated flexible tube in a 10mt. coil
		TFIS250X	DN250 soundproofing insulated flexible tube in a 10mt. coil
		GR150X	Exhaust / return square wall grille with circular coupling DN150
		GR200X	Exhaust / return square wall grig with circular coupling DN200
		GR250X	Exhaust / return square wall grig with circular coupling DN250
		GF150X	F/F DN150 Joint
		GF200X	F/F DN200 Joint
		GF250X	F/F DN250 Joint
		R2015X	DN200-DN150 Reducer
		R2520X	DN250-DN200 Reducer
		DY200X	DN200-DN200-DN200 Y-branch
		DY250X	DN250-DN200-DN200 Y-branch
Air recirculation (ELFOPack only)		GPRX	Grill for recirculation air return plenum 325 x 175 mm white
		PRX	Soundproofed plenum for air recirculation
		CPRX	Manifold for air recirculation plenum DN150-200

SOLUTIONS

System control and all-in-one system solutions

HID-TConnect

ELFOControl

Clivet Solutions

HID-TConnect

Chronothermostat with temperature control and management via App / Voice control

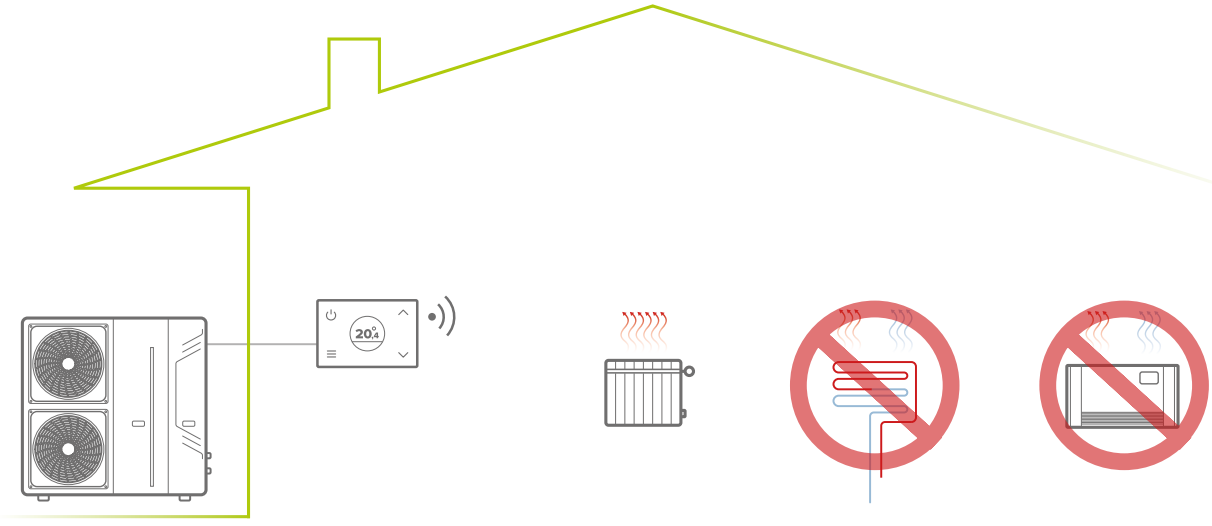
- ✓ Can be used with the heat pumps from the SPHERA EVO 2.0 or Edge EVO 2.0 series
- ✓ Touch-screen management via a thermostat, via App from your smartphone, via Alexa / Google Home with voice-activated control
- ✓ Manages the mode change or call in two areas (with the SwitchConnect accessory)
- ✓ Can be connected via Wi-Fi to create a wireless system (with the SwitchConnect accessory)
- ✓ Option of setting a limitable setpoint for installation in B&Bs or hotel rooms

Management via the App

HID-TConnect is managed as standard with the dedicated Clivet Home Connect APP, available for Google Play and the App Store. This is used to set the main functions, such as the ambient setpoint change or the weekly scheduling or you can check the temperature and consumption log.

Cabled connection to the generator

HID-TConnect can be cabled directly to the heat pump without additional accessories: ideal to manage a heat-only radiator system.

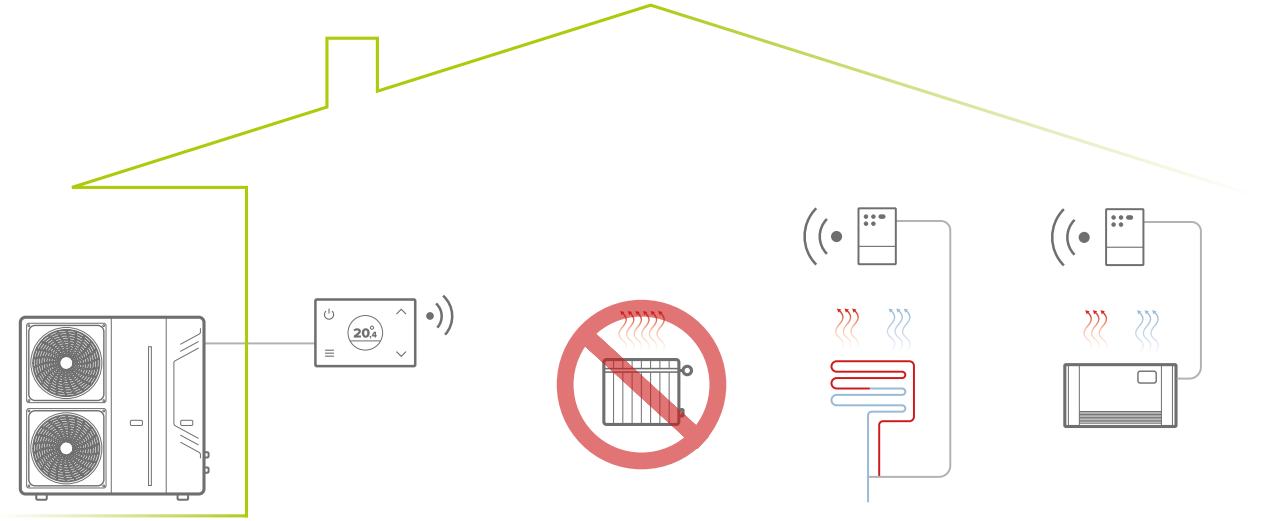


Note: mode change and distribution system management not available

SOLUTIONS

Cabled connection to the generator and Wi-Fi distribution connection

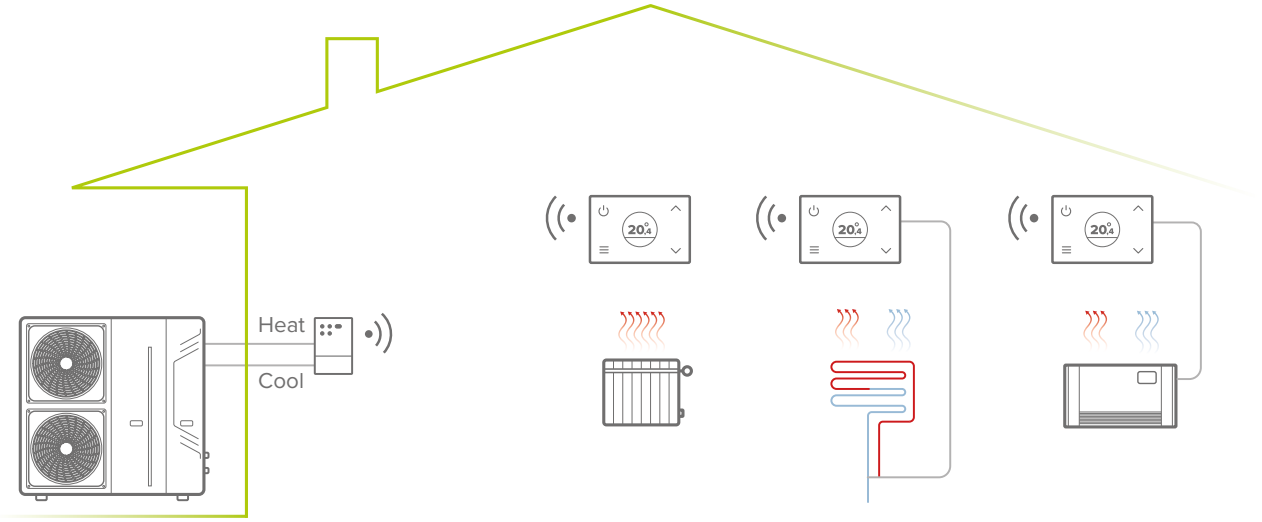
HID-TConnect can be cabled to the heat pump and communicate via Wi-Fi with up to 2 SwitchConnect accessories. Each of these accessories has a relay that can open/close the heads of a radiant system or remotely turn a fan coil ON/OFF.



Note: the mode change must be managed in the heat pump (from the user interface or the MSmartLife App).

Wi-Fi connection to the generator and cabled distribution connection

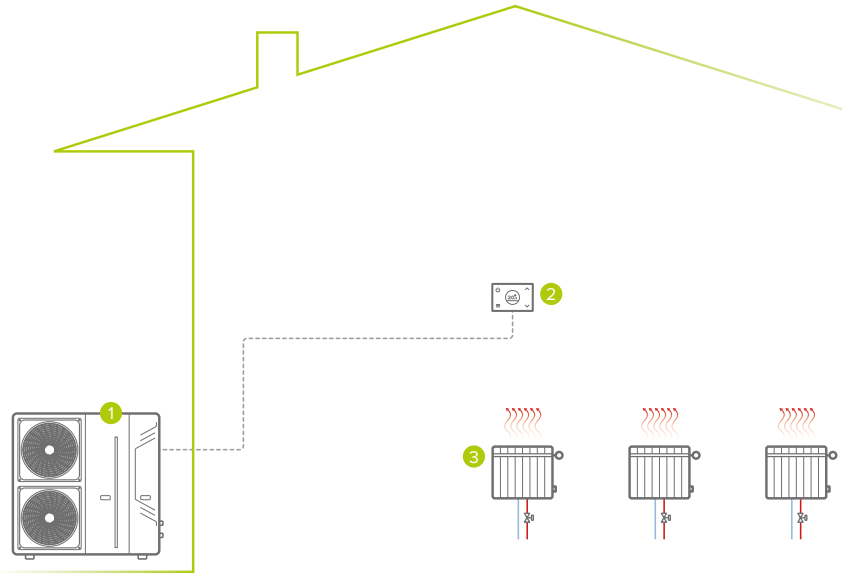
HID-TConnect can be connected via a cable and open/close the heads of a radiant system or remotely turn a fan coil ON/OFF. The signal of a single thermostat can manage several fan coils or radiant panels.
The request to the heat pump is made via Wi-Fi through SwitchConnect, which thanks to the double relay changes the generator mode (can only be managed via the App).
Each SwitchConnect can support up to 6 thermostats.



Note: in the event of conflicting heating / cooling requests, priority is given to cooling.

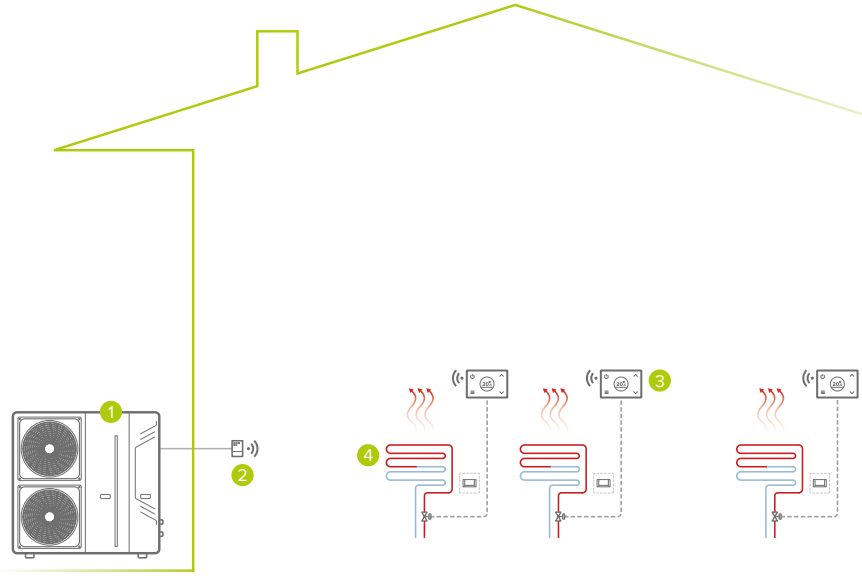
Clivet Eye

Cloud-based monitoring system for remote management from smartphones, tablets and PCs.



Single-area system, radiators, cabled connection to the generator

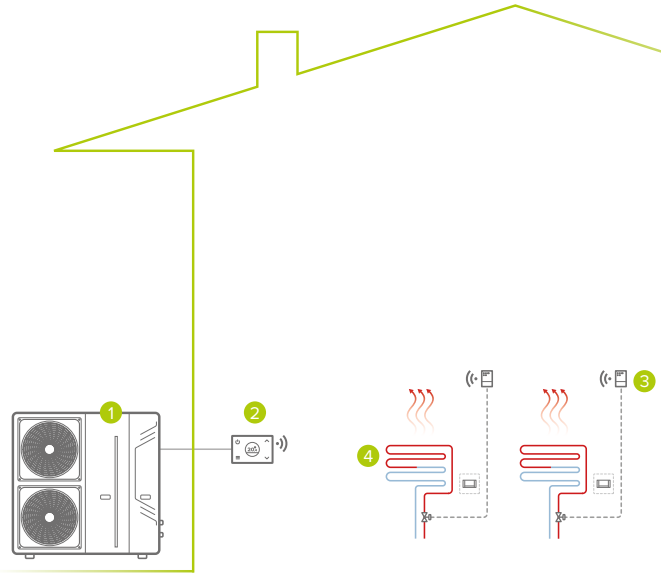
1. outdoor unit
2. HID-TConnect
3. radiator



Heat-only single-area system, radiant / terminal units, Wi-Fi connection to the generator and cabled distribution connection

1. outdoor unit
2. SwitchConnect
3. HID-TConnect
4. radiant floor

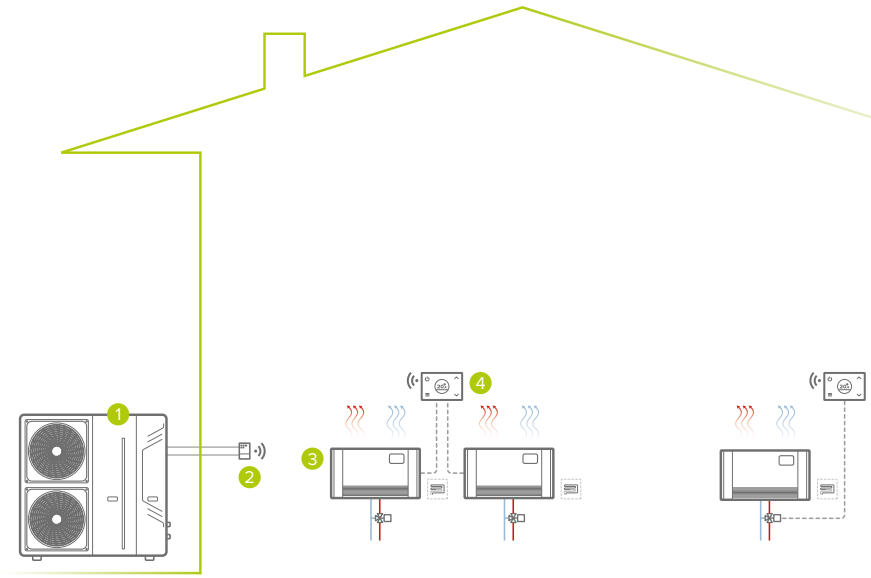
Note: can support up to 6 thermostats.



Heat-only single-area system, radiant / terminal units, cabled connection to the generator and Wi-Fi distribution connection

1. outdoor unit
2. HID-TConnect
3. SwitchConnect
4. radiant floor

Note: can support up to 2 SwitchConnect

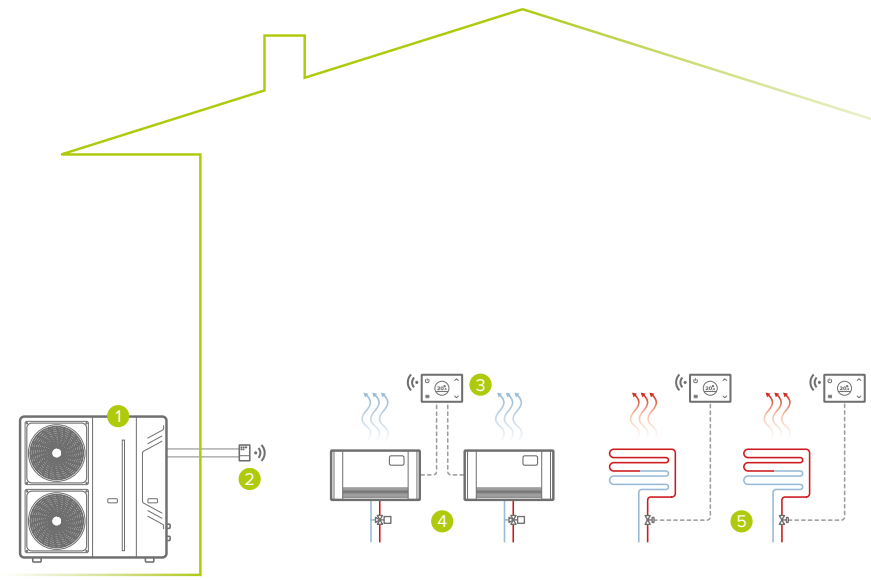


Heating/cooling dual area system, radiant / terminal units, Wi-Fi connection to the generator and cabled distribution connection

1. outdoor unit
2. SwitchConnect
3. fan coils
4. HID-TConnect

Note: can support up to 6 thermostats.

The thermostats must all be in heating or cooling mode. In the event of conflicting requests, priority is given to cooling



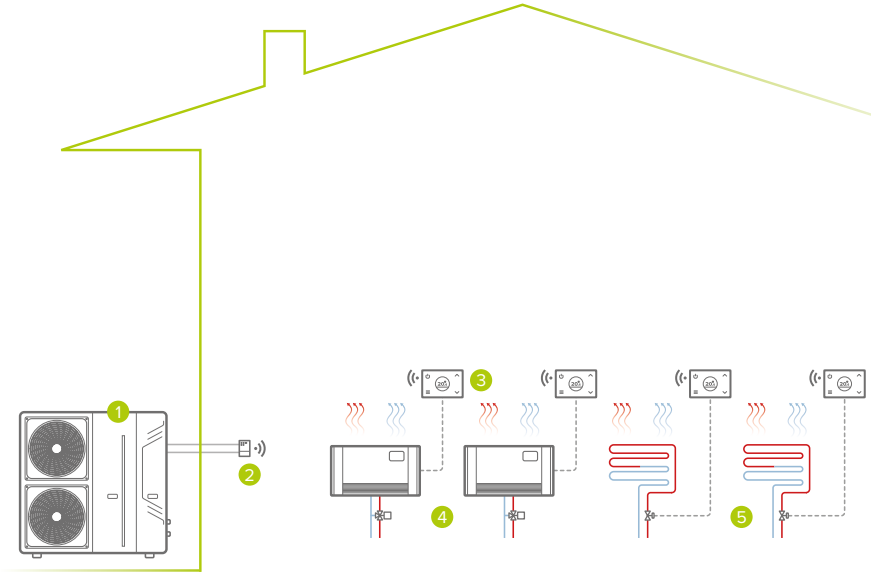
Dual emitter system, radiant / terminal units, Wi-Fi connection to the generator and cabled distribution connection

1. outdoor unit
2. SwitchConnect
3. HID-TConnect
4. fan coils
5. radiant floor

Note: can support up to 6 thermostats.

The mode must be changed directly on the unit

The thermostats must all be in heating or cooling mode. In the event of conflicting requests, priority is given to cooling



Heat-only dual-area system, radiant / terminal units, Wi-Fi connection to the generator and cabled distribution connection

1. outdoor unit
2. SwitchConnect
3. HID-TConnect
4. fan coils
5. radiant floor

Note: can support up to 6 thermostats.

The mode must be changed directly on the unit

The thermostats must all be in heating or cooling mode. In the event of conflicting requests, priority is given to cooling

ELFOControl³ EVO

Energy assistant for the air-conditioning system

- ✓ It manages up to 12 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 data display
- ✓ Option for remote monitoring and control of systems from a PC or APP

The whole system at your fingertips

ELFOControl³ EVO is a centralised supervision and management system for hydronic systems used for cooling, 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.

Energy management

ELFOCOntrol³ EVO guarantees top system performance thanks to the Class A energy classification according to the strictest requirements for the 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

ELFOControl³ EVO is 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

ELFOControl³ EVO 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.
Plus, ELFOFresh EVO makes it possible to replace the hydronic system mid-season to fulfil heating requirements, thus ensuring more energy is saved.

accessories

Home automation system connection		MIOTX	Clivet EYE: Cloud monitoring system for remote management from smartphones, tablets and PCs.	-
Home automation connection		DOMX	Device for connection with home automation systems	53 x 92 x 63 mm
Energy management		M1NRGX	Single-phase electricity meter with EIA-485 ModBUS serial	53 X 32 X 63 mm
Communication with the room thermostat for temperature and humidity control		HID-T6	Temperature only thermostat – wall installation	108 X 78 X 16mm
		HIDTI52NX	Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Colour black	121 x 94 x 19 mm
		HIDTI52BX	Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Colour white	121 x 94 x 19 mm
		HIDURX	Temperature and humidity sensor - built-in installation.	22 x 45 x 50 mm
Floor radiant panel management (heating and cooling), radiators, towel rail		BMZRX	Module to manage up to 6 HID thermostats and 6 control outputs, shut-off valves to feed radiant panels, radiators or heating furniture	157 x 90 x 60 mm 9 DIN modules
		AL12X	Power supply unit for HIDTi52 thermostats and HID-UR sensor	85 x 90 x 65 mm 4 DIN modules
		CMRSX	Module to manage up to 1 HID thermostat and 1 control output, shut-off valves to feed radiant panels, radiators or heating furniture	105 x 90 x 60 mm 6 DIN modules
Elements for the complete installation		CIECX	Allows recessed installation of ELFOControl³ EVO	154 x 92 x 70 mm
		CBSX	Shielded cable for the connection to all devices	Spool da 50 m
Dual temperature system		KGPRX	Management module of a mixing group	210 x 155 x 80 mm
Zone valve, circulating pump and remote consent management		MIOX	Module for management of substitution generator (boiler), zone valves or boosters and remote consent	70 x 85 x 65 mm Spool da 50 m

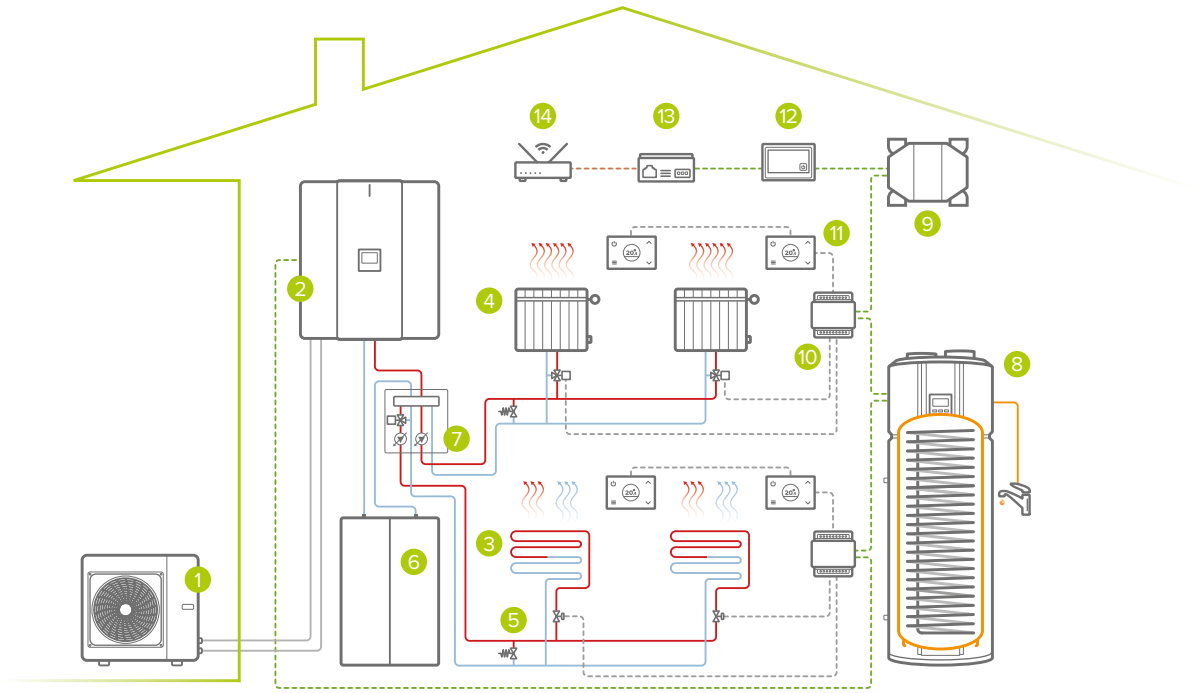
SPHERA includes all system elements such as domestic hot water production with 280 litres water storage tank and up to a maximum of two pumps for the secondary circuit, one with possible mixing valve. These components are already connected to the control of SPHERA and is therefore it is not necessary to use other control elements connected to ELFOControl³ EVO.

If the system, controlled by ELFOControl³ EVO. includes SPHERA, with a system that requires more pumps than the two internal, or one of the other Clivet heat pumps , the control of all components external to the heat pump must be managed with KGPRX and MIOX.

technical data

ELFOControl³ EVO		
Display dimensions	inches	7"
Display type		TFT color
Power supply voltage	Vdc	12
Power	VA	10
Protection rating		IP 20
Weight	kg	0,5

- ✓ Maximum of 12 climate areas
- ✓ 2 pipe system
- ✓ Maximum of 40 elements manageable
- ✓ Maximum of 1 heat pump: SPHERA EVO 2.0 , SPHERA EVO 2.0 Box, SPHERA EVO 2.0 Invisible, SPHERA EVO 2.0 EASYHybrid Box, SPHERA EVO 2.0 EASYHybrid T, SPHERA EVO 2.0 Box Hybrid, SPHERA EVO 2.0 Hybrid, SPHERA EVO 2.0 Invisible Hybrid, ELFOEnergy Edge EVO Hybrid, Edge EVO 2.0 EXC Hybrid, ELFOEnergy Edge EVO, Edge EVO 2.0. EXC
- ✓ Maximum 4 unit for mechanical ventilation: ELFOFresh EVO, ELFOFresh², ELFOFresh Large
- ✓ Hydronic terminal units: CFW-2, ELFORoom², AURA (AC), AURA (DC), CFK, Nebula MP, Nebula HP
- ✓ Maximum of 4 radiant modulesi - BMZRX
- ✓ Maximum of 3 mixed zones KGPRX
- ✓ Single zone module - CMRSX
- ✓ Input/Output Module - MIOX
- ✓ Maximum of 1 connection device with domotics - DOMX



Single area system: heating/cooling/DHW

1. outdoor unit
2. indoor unit
3. heating/cooling area (fan coils / radiant floor)
4. heating area (radiator)
5. bypass*
6. system inertial storage (optional)
7. 2-zone kit (optional)
8. DHW heat pump - AQUA Plus
9. ELFOFresh EVO
10. zone module (optional ELFOControl^3 EVO)
11. HIDT3X Thermostat (optional ELFOControl^3 EVO)
12. ELFOControl^3 EVO
13. Clivet EYE
14. home router*

*from external supply

CLIVET SOLUTIONS

TOP Solution - The complete system

Solution for new systems and renovations that allow for total comfort thanks to the installation of a complete system consisting of 5 elements:

- ✓ a heat pump for heating, cooling and the production of domestic hot water
- ✓ unit for air renewal and purification
- ✓ unit for heating and cooling distribution in the various rooms
- ✓ a control for easy management over the entire system even via the APP
- ✓ can be used with solar or photovoltaic panels.

This solution ensures **high comfort levels.**
Based on the different kinds of heat pump you can combine, you have solutions suitable for the various types of house.

EFFICIENT Solution - Heat pump

Clivet provides both **split and single-unit** Heat Pumps.

Features:

- ✓ heating
- ✓ cooling
- ✓ domestic hot water production
- ✓ connectivity
- ✓ designed for use with solar or photovoltaic panels
- ✓ suitable for distribution with fan coils, underfloor / wall / ceiling heating and radiators

Split heat pumps

SPHERA EVO is the series of split heat pumps that bring together all available features. They also include:

- ✓ uncased or cased installation
- ✓ wide range of capacities
- ✓ also available in the hybrid version with heat pump and boiler integrated in a single unit
- ✓ elegant HIGH-END design
- ✓ APP for full control around the clock, wherever you are

Monoblock heat pumps

ELFOEnergy EDGE EVO is the heat pump used to heat, cool and produce domestic hot water (in combination with a storage tank chosen to suit your needs: a 200, 300 or 500-litre one).
This is a heat pump that reaches excellent comfort levels with a focus on savings on the initial investment.

Clivet offers a range of solutions for every type of home and according to your needs.
Contact us to find out which solution is best adapted to your home.

Contact your distributor

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

ENERGY SAVING

Solar integration
Ideal for use with solar thermal systems

Smart Grid ready
Ideal for integration with Smart Grid technology

Free Cooling / Heating
Produces Cooling / Heating for free (under certain conditions)

nZEB
Designed for buildings with almost no energy consumption

Cascade
A number of units can be used in series to guarantee high loads

€-Switch
Regulates the generator for cost-effective operation

COMFORT

Heating/Cooling
Produces both Heating and Cooling

DHW
Produces Domestic Hot Water

Dehumidification
Removes humidity in the room

Follow Me
Temperature sensor built in the remote controller will sense its surrounding temperature

Silent
For more silent operation

Anti cold air
Prevents air from entering until the room is sufficiently warm

Temperature compensation
Considers the stratification of air to create a fairer temperature

High temperature
Produces heating at high temperature

RELIABILITY

Condensate drain pump
Disposes of condensate with a specific pump

Backup heater
Disposes of condensate with a specific pump

EUROVENT
Performance certified by the European body EUROVENT

Keymark
Performance certified by the European body CEN

HEALTH

High density filter
Filters air entering the room

Fresh air renewal
Exchanges the air inside with air from the outside

Air purification
Purifies incoming air (electrostatic filter / UV lamp)

Eco-friendly refrigerant
Uses refrigerant with low environmental impact

Renewable energy
Uses only renewable energy, with zero CO_2 emissions

CONVENIENCE

Weekly schedule
Weekly programmable settings (ON-OFF / temperature / ...)

Boiler integration
Setup for connection to a boiler (a new or existing one)

Contemporaneity
Produces Heating and Domestic Hot Water at the same time

Instant DHW
Quickly produces Domestic Hot Water on demand

Integrated DHW tank
Comprises a tank for the storage of Domestic Hot Water (DHW)

MANAGEMENT AND CONNECTIVITY

Potential-free contact
ON/OFF using a remote device

User interface / thermostat
The user interface can be used as a thermostat

Remote control
Managed with the remote control

Wired control
Managed with a wired control

Centralised control
Managed with a centraliser

Modbus port
It has an RS485 port

WiFi Control
Can be managed with an App

ELFOControl management
Can be managed with the ELFOControl smart centralised system

Clivet Eye monitoring
Can be monitored remotely with Clivet Eye

0-10 V Input

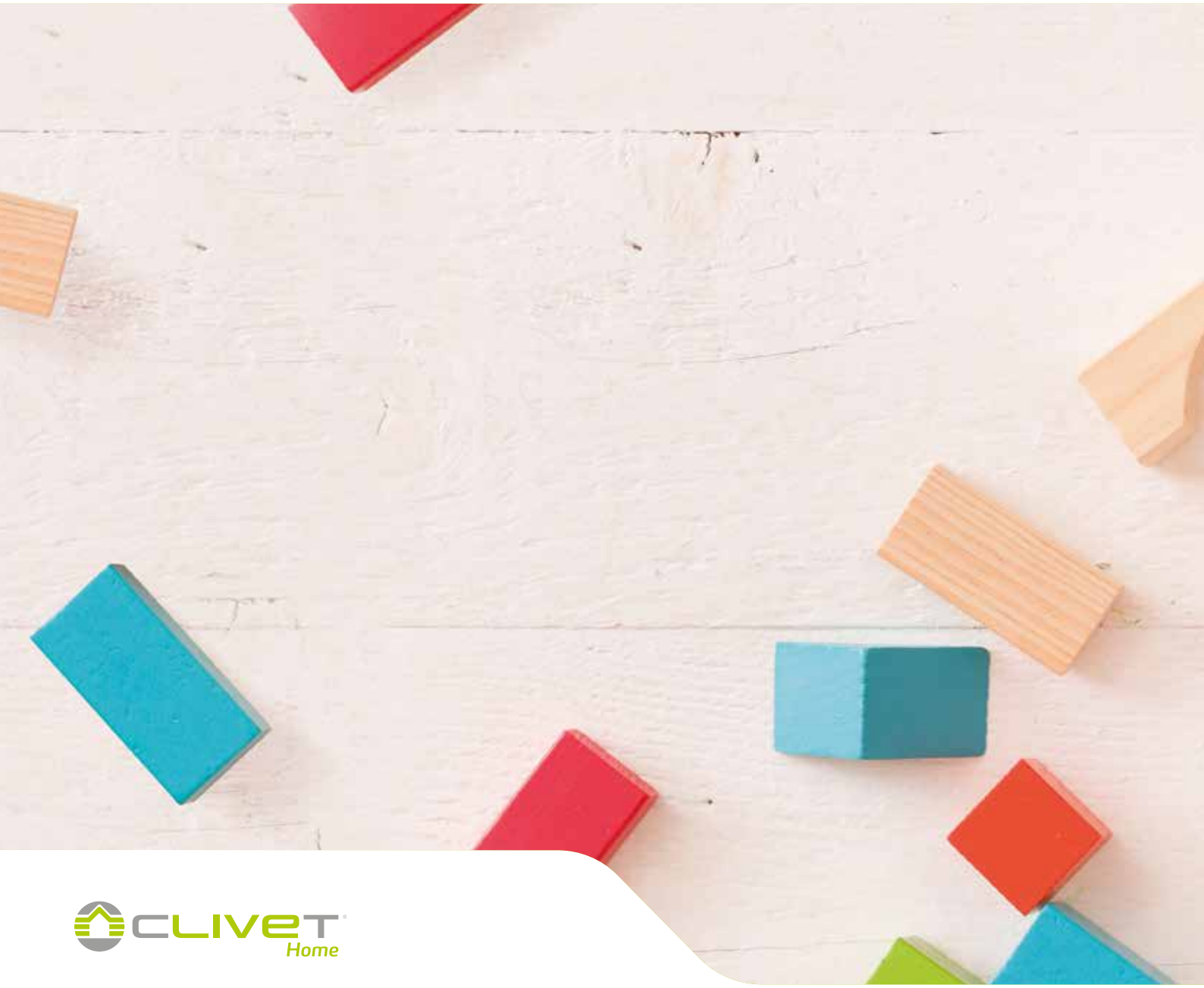
Generator-demand

FOR OVER 30 YEARS WE HAVE BEEN OFFERING SOLUTIONS TO ENSURE SUSTAINABLE COMFORT AND THE WELL-BEING OF PEOPLE AND THE ENVIRONMENT

www.clivet.com

MideaGroup
humanizing technology

Valid from: January 2022
DG21N007GB-00



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