







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 CO₂ 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



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.

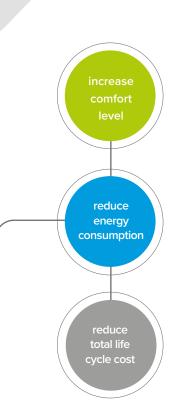


COMFORT FOR THE PLANET & PEOPLE

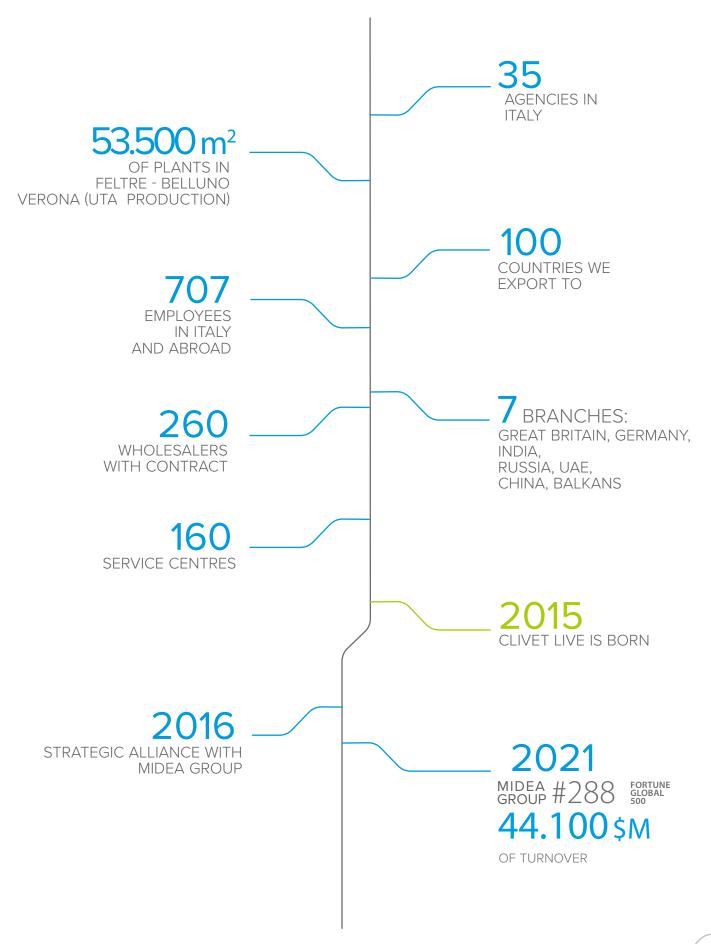
OUR VALUES

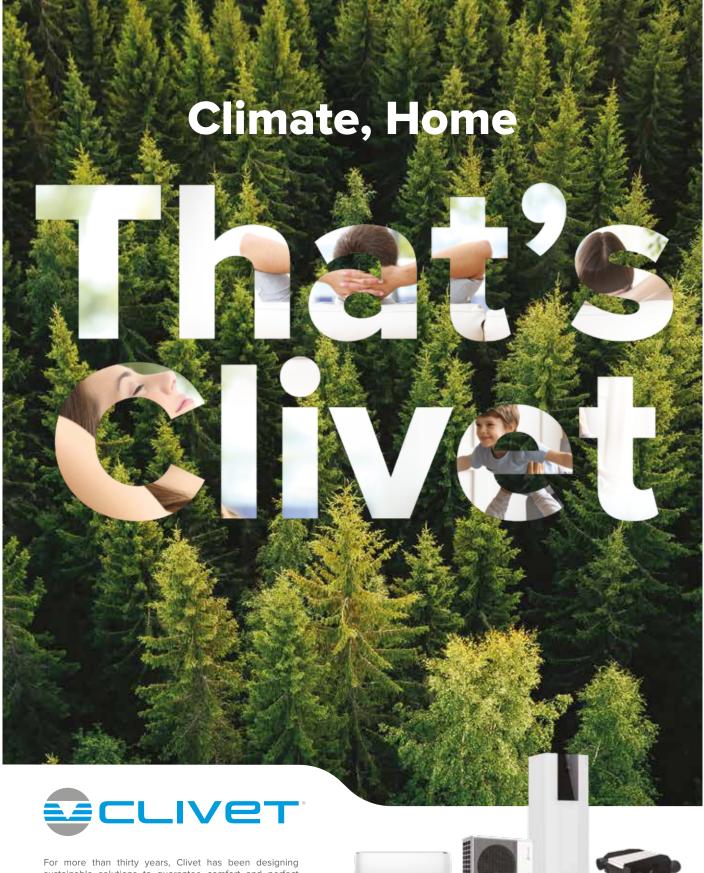
IN THE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SECTORS

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





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







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

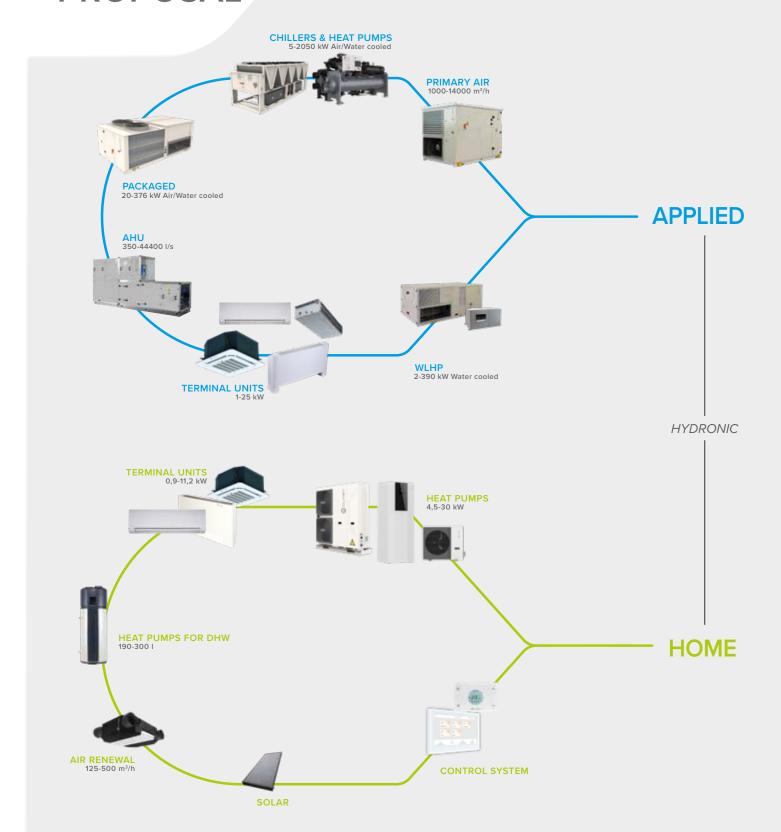
New electronic filter with IFD technology, installed inside the unit ensuring a high filtration efficiency of PM1 90%, and yet a more compact system.



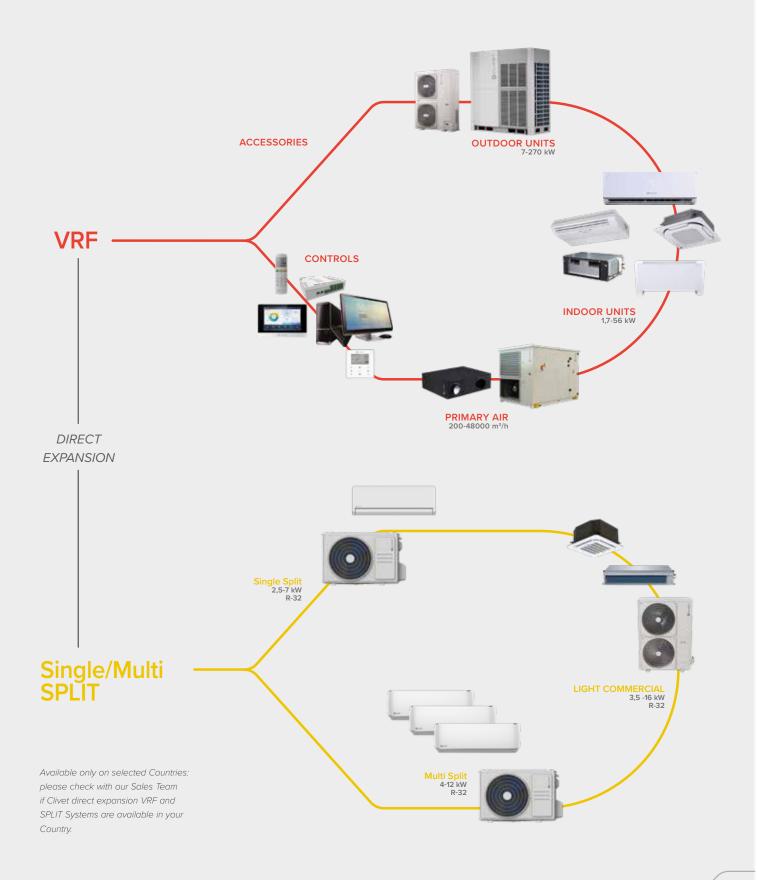


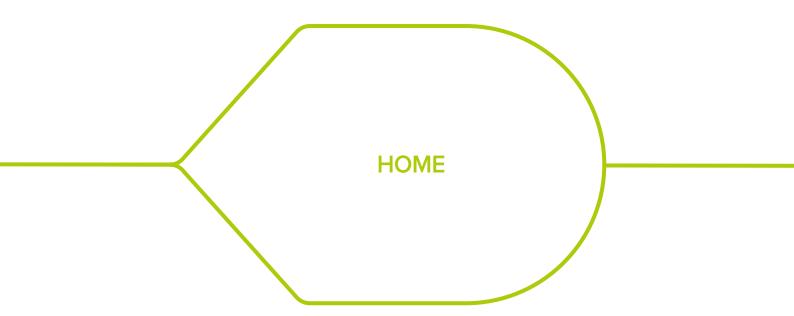
ALL TECHNOLOGIES FOR

A COMPLETE PROPOSAL



Heating, cooling, air renewal and domestic hot water production





The range Clivet HOME -

HEAT PUMPS

Full Electric Heat pumps



| S | plit |
|---|------|
| | N. |



SPHERA EVO 2.0









SPHERA EVO 2.0 Box









SPHERA EVO 2.0 Invisible





 $4 \div 10 \text{ kW}$





ELFOEnergy Edge EVO





4 ÷ 30 kW



PREVIEW 2022 Edge EVO 2.0 - EXC





4 ÷ 30 kW

Hybrid heat pumps

Split



PREVIEW 2022 SPHERA EVO 2.0 EASYHybrid Box







Integr. Boiler

4 ÷ 16 kW $23 \div 33 \text{ kW}^{\text{(boiler)}}$



PREVIEW 2022 SPHERA EVO 2.0 EASYHybrid T





8

4 ÷ 16 kW $23 \div 33 \text{ kW}$ (boiler)





SPHERA EVO 2.0 Box Hybrid





4 ÷ 16 kW



SPHERA EVO 2.0 Hybrid





 $23 \div 33 \text{ kW}^{\text{(boiler)}}$ 4 ÷ 16 kW



SPHERA EVO 2.0 Invisible Hybrid



Refrig.



 $23 \div 33 \text{ kW}^{\text{(boiler)}}$

Integr. Boiler

4 ÷ 10 kW

24 kW (boiler)

Monoblock



ELFOEnergy Edge EVO Hybrid





 $4 \div 16 \text{ kW}$ $23 \div 33 \text{ kW}^{\text{(boiler)}}$



PREVIEW 2022 Edge EVO 2.0 - EXC Hybrid





4 ÷ 16 kW 23 ÷ 115 kW (boiler)

TERMINAL UNIT MOOD 2,7 ÷ 4,9 kW DC Motor ELFORoom² $0.9 \div 3.7 \text{ kW}$ DC Motor 1 3 **AURA** 1,5 ÷ 8,3 kW AC Motor DC Motor **ELFOSpace BOX3** $3,0 \div 11,2 \text{ kW}$ DC Motor PREVIEW 2022 1/1/3 Nebula MP 1,6 ÷ 7,8 kW AC Motor DC Motor PREVIEW 2022 1 3 Nebula HP 3 ÷ 26,8 kW DC Motor

DHW HEAT PUMPS (Domestic Hot Water)





AQUA Plus



190 - 300

VMC (Controlled Mechanical Ventilation) WITH RECOVERY





ELFOFresh EVO







 $125 \div 320 \text{ m}^2/\text{h}$



ELFOFresh²



500 m²/h

CONTROL



HID-TConnect





ELFOControl³ EVO



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.

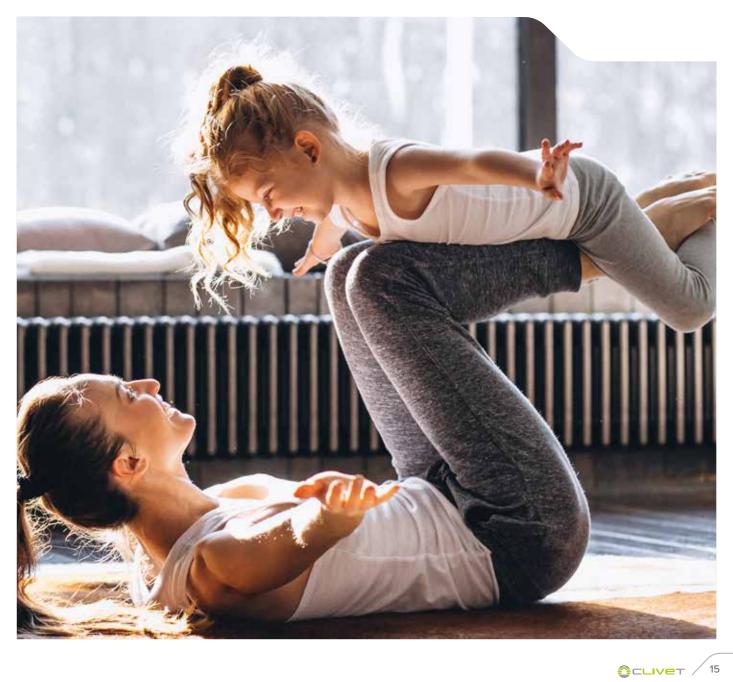


TAX Credit



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

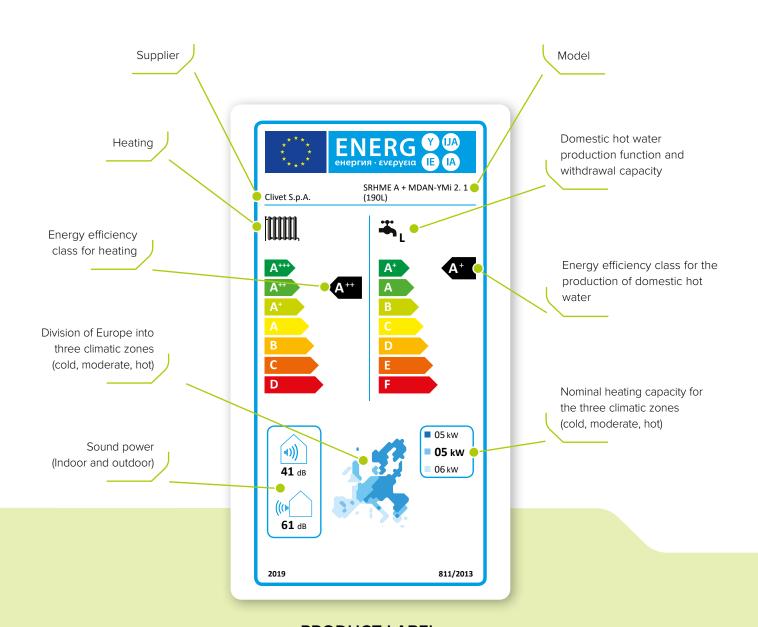
The Delegated Regulations on ErPs (Energy-related Products) came into force on 26 September 2015 and are aimed at reducing energy consumption and supporting the most efficient solutions.

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.

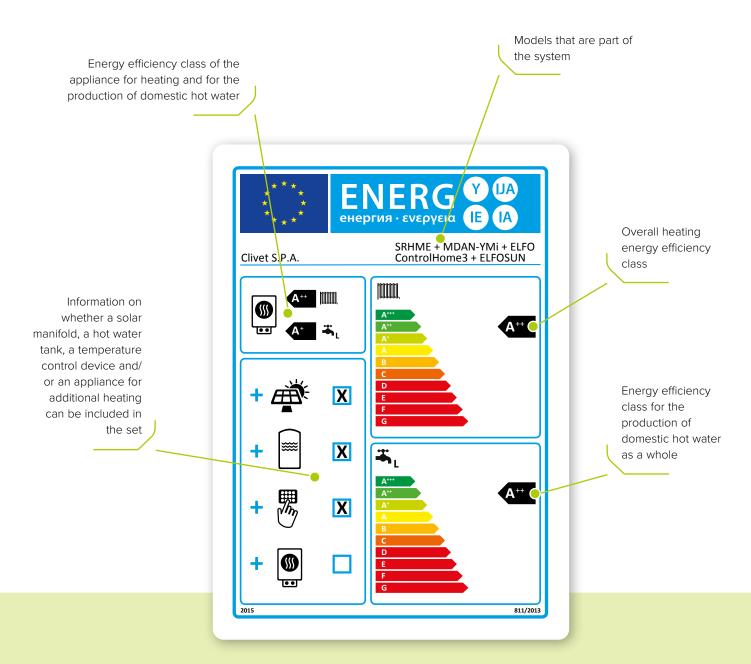


PRODUCT LABEL

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.





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.



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-theart 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





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

























CONVENIENCE























RELIABILITY







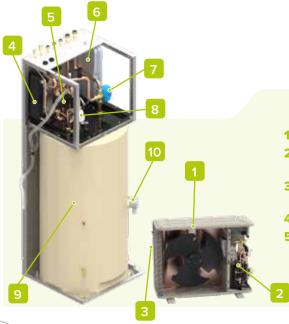
- ✓ System hot water production at 65°C with the outdoor air up to 5°C, at 60°C with the outdoor air down to -15°C
- ✓ Energy efficiency at the highest level
- ✓ Designed not to disturb, operating very quietly.
- ✓ Suitable for every need, thanks to the dual version with 190-litre or 250-litre DHW storage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





- 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:

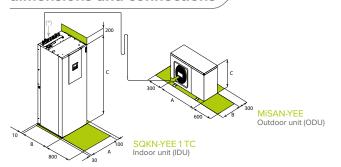
No heater

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 | 战 | KCCEX | External boiler connection kit |
|-----|----------|---|-------|----------|--|
| P | SOLX | Drain-back solar integration for domestic hot water | | SFCSTX | Additional probe for cascade function |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | IIII. | DTX | Auxiliary condensate collection tray |
| | KIRE2HLX | 2 zones: external kit, high temperature + low temperature (mixed) | 9 | APAVX | Kit of antivibration mounts for floor installation |
| | KIRE2HX | 2 zones: external kit, high temperature | | ASTFX | Kit of antivibration mounts for wall bracket installation |
| 1 | DIX | 1-litre circuit breaker | I | KSIPX | Kit with wall fixing brackets |
| 181 | DI50X | 50-litre circuit breaker | | HID-TCBX | Black soft touch chronothermostat, with temperature control and management via App / Voice |
| | ACI40X | 40L system inertial storage tank (s. 2.1÷5.1) | | | control |
| | ACI60X | 60-litre system inertial storage tank | | HID-TCNX | White soft touch chronothermostat, with temperature control and management via App / Voice control |
| | COFX | Casing sheets for the inertial storage cover | #: | 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.

(*) Water and gas connections

technical data

| Size (220M) | | | | | 2. | .1 | 3 | 8.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|--------------------------------|-------------------|----------------------------------|-------------------|----------------|-------------------|------------|------------|----------|---------------------|----------------------|-------------------|--------------------|--------------------|
| | | | | | 190L | 250L | 190L | 250L | 190L 250L | 190L 250L | 250L | 250L | 250L |
| | 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 | water 35/30°C - Outdoor air 7°C | Nominal | - | 5,4 | 12 | 5 | ,21 | 5,31 | 5,01 | 5,00 | 4,70 | 4,55 |
| Heating | 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 |
| Heating | COP | Water 35/30 C - Outdoor dir -7 C | Nominal | - | 3,1 | 6 | 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 | Water 43/40 C - Outdoor dir 7 C | Nominal | - | 3,9 | 93 | 3, | 83 | 3,95 | 3,86 | 3,80 | 3,65 | 3,60 |
| | 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 |
| Cooling | EER | Water 10/25 C - Outdoor all 55 C | Nominal | - | 6,0 |)8 | 5, | ,24 | 5,12 | 4,77 | 4,02 | 3,70 | 3,65 |
| Cooling | Capacity | Water 7/12°C - Outdoor air 35°C | Nominal / Maximum | kW | 4,26/ | 6,14 | | / 6,39 | 7,46 / 7,94 | | 11,16 / 11,80 | 11,72 / 12,86 | 12,88 / 14,20 |
| | EER | Water 7/12 C - Outdoor all 55 C | Nominal | - | 3,5 | | | 09 | 3,33 | 3,09 | 2,75 | 2,55 | 2,45 |
| | Net tank capacity | | | <u> </u> | | 250 | 190 | 250 | 190 250 | 190 250 | 250 | 250 | 250 |
| DHW | Water mixed at 40 | 0°C (V40)1 | | <u> </u> | | 269 | 204 | 269 | 204 269 | 204 269 | 269 | 269 | 269 |
| EL | Heating time | | | h:min | | 2:25 | 2:30 | 2:25 | 2:08 2:05 | | 1:46 | 1:46 | 1:46 |
| Electrical power for | meter sizing | E | | kW | 2,2 A + | | | 60 | 3,30 | 3,60 A ++ | 5,40 | 5,70 A++ | 6,10 A++ |
| | | Energy class | | - | | | | ++ | A++ | | A++ | | |
| | Heating 55°C | Annual energy consumption | | | | | Wh/yðei | | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | | SCOP | | - | 3,3 | | | 54 | 3,72 | 3,73 | 3,56 | 3,52 | 3,48 |
| | | ηs (seasonal output) | | % | 13 | | | 38 | 146 | 146 | 139 | 138 | 136 |
| Seasonal efficiency | | Energy class | | | A+- | | | +++ | A+++ | A+++ | A+++ | A+++ | A+++ |
| Medium climate | Heating 35°C | Annual energy consumption | | | | | Wh/y2ea | | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | | SCOP | | - | 5,1 | | | ,15 | 5,32 | 5,27 | 5,00 | 4,91 | 4,89 |
| | | ηs (seasonal output) | | % | 20 A + | <u>Α</u> + | A + | 03 | 210 A+ A+ | 208 A+ A + | 196 A + | 193 A + | 193 A + |
| | DHW | Energy class DHW profile | | | _ | XL | L | A+ XL | A+ XL | L XL | XL | XL | XL |
| 1 | | лн w ргоше | | | | | | | | | | | |
| Indoor unit | | | | | | ١. | | Δ | Α | Α | В | В | В |
| Power supply | Voltage/Frequenc | y/Phases | No. 2. d | V/Hz/n° | | 24 | _ | 20 | 0.44 | 230/50/1 | 0.57 | 0.67 | 0.75 |
| Water flow-rate | | | Nominal | I/s | 0,2 | | | 30 | 0,41 | 0,49 | 0,57 | 0,67 | 0,75 |
| Pump available pres | | | Nominal | kPa | 31, | ,2 | 31 | 6,5 | 33,1 | 31,0 8 | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | • | | | - | | | | 40 | ` | 8 | | 60 | |
| Minimum system wa | iter content | | | I I | | | | 41 |) | 41 | | 00 | |
| Sound power Sound pressure @1r | • | | | dB(A) dB(A) | | | | | | 26 | | | |
| Outdoor unit | II. | _ | | ub(A) | 2. | 4 | | 8.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
| | Valtage/Eroguene | w/Dhacas | | V/Hz/n° | | .1 | |). I | 4.1 | | 0.1 | 7.1 | 0.1 |
| Power supply | Voltage/Frequenc | yrridses | | | | - | | , | | 230/50/1 | <u></u> | C4 | CC |
| Sound prossure @1r | n | | | dB(A) | - 55 | | | 57 | 58 | 60 | 63 | 64 | 66 |
| Sound pressure @1r | | | | dB(A) | 42 | 2 | 4 | 14 | 45 | 47 | 50 | 51 | 53 |
| Operating range | | H P | M: / M | | | | | | | | | | |
| Water supply tempe | rature | Heating | Minimum / Maximum | °C | | | | | | 25 / 65 | | | |
| | | Cooling | Minimum / Maximum | °C | | | | | | 5 / 25 | | | |
| Operating range | | Heating | Minimum / Maximum | °C | | | | | | -25 / 43 | | | |
| (Outdoor air) | | Cooling | Minimum / Maximum | °C | | | | | | -5 / 43 | | | |
| · | | DHW | Minimum / Maximum | °C | | | | | | -25 / 43 | | | |

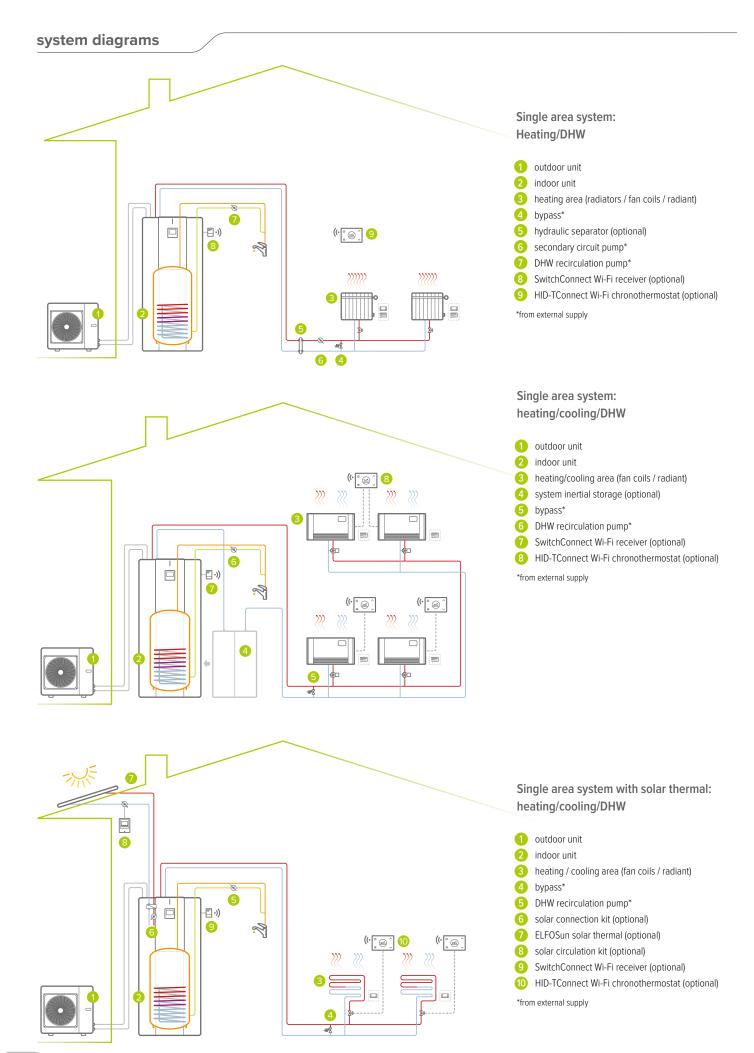
| Size | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|--|------------------|----------------------------------|----------------------|-----------|--------------|--------------|-------------|-----------|----------------|-----|
| Dimensions | Indoor unit | Length(A) x Height(C) x Depth(B) | | 600x1.774 | 4x615 (190L) | 600x2.084 | :615 (250L) | | 500x2.084x61 | 5 |
| Differsions | Outdoor unit | Length(A) x Height(C) x Depth(B) | | 986 x 7 | 12 x 426 | 1.104 x 8 | 866 x 523 | 1. | 104 x 866 x 52 | 3 |
| Weight | Indoor unit | | | | 359 (190L) | / 419 (250L) | | | 421 | |
| | Outdoor unit | | | 5 | 58 | | 77 | | 112 | |
| Max / min equivalent length | | L | m | | | | 30 / 2 | | | |
| Max difference in level ODU / IDU | | Н | m | | | | 25 | | | |
| | | | type/GWP | | R-32 / 675 | | | | | |
| Refrigerant precharge | | | kg/m | 1,5 | / 15 | 1,65 | 5 / 15 | 1,84 / 15 | | |
| | | | CO ₂ tons | 1, | 05 | 1 | ,11 | | 1,24 | |
| Additional refrigerant charge ¹ | | | g/m | 2 | 20 | | | 38 | | |
| | D-f-:t-: | Liquid | inch | 1/ | /4" | 3/8" | | | | |
| Futament dispersations | Refrigerant pipe | Gas | inch | | | | | | | |
| External diameters | I = d = = | Water (system) | inch | | 1" | | | | | |
| | Indoor unit | Water (DHW) | inch | | | | 3/4" | | | |

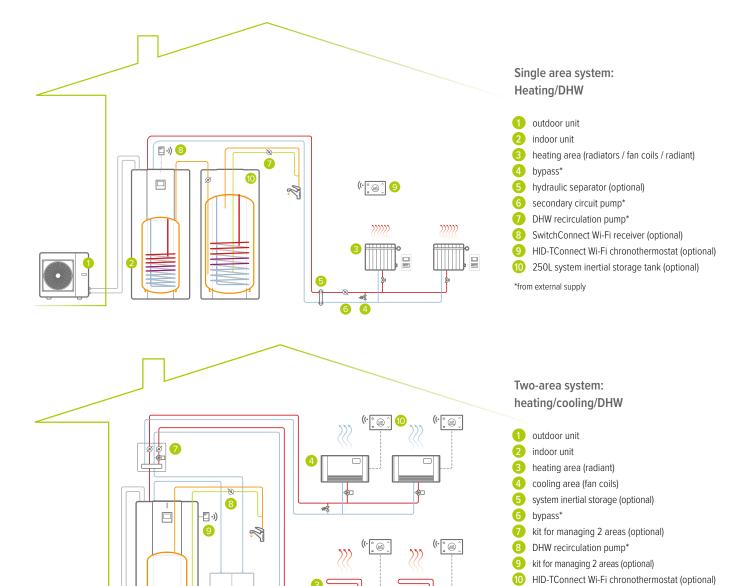
⁽¹⁾ Check in the manual if the indoor unit requires a minimum installation surface $% \left(1\right) =\left\{ 1\right\} =\left\{ 1\right\}$

| Size (400TN) | | | | | 6.1 | 7.1 | 8.1 |
|----------------------|-------------------|----------------------------------|-------------------|----------|---------------|---------------|---------------|
| | 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 | water 55/30 C - Outdoor dir / C | Nominal | | 5,00 | 4,70 | 4,55 |
| Haatina | Capacity | Water 35/30°C - Outdoor air -7°C | Nominal / Maximum | kW | 10,49 / 13,85 | 12,23 / 14,09 | 13,43 / 14,33 |
| Heating | COP | water 35/30 C - Outdoor air -/ C | 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 | water 45/40 C - Outdoor air 7 C | Nominal | - | 3,13 | 2,82 | 2,74 |
| | Capacity | Water 18/23°C - Outdoor air 35°C | Nominal / Maximum | kW | 12,06 / 15,02 | 13,79 / 15,30 | 14,84 / 16,38 |
| Cooling | EER | water 18/23 C - Outdoor uii 35 C | Nominal | - | 4,02 | 3,70 | 3,65 |
| Cooling | 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 | water //12 C - Outdoor air 35 C | Nominal | - | 2,75 | 2,55 | 2,45 |
| | Net tank capacity | | | ı | 250 | 250 | 250 |
| DHW | Water mixed at 40 | °C (V40)1 | | 1 | 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 |
| | - | Energy class | | - | A ++ | A++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| , | 55°C | SCOP | | - | 3,56 | 3,52 | 3,48 |
| | | ηs (seasonal output) | | % | 139 | 138 | 136 |
| Seasonal efficiency | | Energy class | | - | A+++ | A+++ | A+++ |
| | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 35°C | SCOP | | - | 5,00 | 4,91 | 4,89 |
| | | ηs (seasonal output) | | % | 196 | 193 | 193 |
| | DHW | Energy class | | - | A+ | A+ | A + |
| | DHW | DHW profile | | - | XL | XL | XL |
| Indoor unit | | | | | В | В | В |
| Power supply | Voltage/Frequence | y/Phases | | V/Hz/n° | | 230/50/1 | |
| Water flow-rate | | | Nominal | I/s | 0,57 | 0,67 | 0,75 |
| Pump available pres | sure | | Nominal | kPa | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | acity | | | I | | 8 | |
| Minimum system wa | iter content | | | ı | | 60 | |
| Sound power | | | | dB(A) | | 41 | |
| Sound pressure @1n | n | | | dB(A) | | 26 | |
| Outdoor unit | | | | | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequenc | y/Phases | | V/Hz/n° | | 400/50/3+N | |
| Sound power | | | | dB(A) | 63 | 64 | 66 |
| Sound pressure @1n | n | | | dB(A) | 50 | 51 | 55 |
| Operating range | | | | | | | |
| Water supply tempe | rature | Heating | Minimum / Maximum | °C | | 25 / 65 | |
| water supply tellipe | i utui C | Cooling | Minimum / Maximum | °C | | 5 / 25 | |
| Operating range | | Heating | Minimum / Maximum | °C | | -25 / 43 | |
| (Outdoor air) | | Cooling | Minimum / Maximum | °C | | -5 / 43 | |
| (Sataooi aii) | | 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





Note: solar connection kit and booster kit can coexist

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











COMFORT







(optional)





Solar integration (optional - DHW tank)







Cascade



CONVENIENCE 8 Boiler integration

MANAGEMENT AND CONNECTIVITY





式



















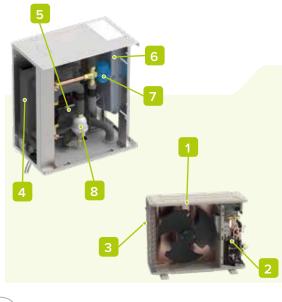
- ✓ Smaller size: can be installed in a stairwell, store cupboard, laundry room or inside a kitchen cabinet
- ✓ Energy efficiency at the highest level
- ✓ Designed not to disturb, operating very quietly.
- ✓ Can be combined with DHW boilers of a volume suitable for the application in which it is to be 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 DHW storage 250L ACS250

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 | 陆 | KCCEX | External boiler connection kit |
|----|----------|---|-------|----------|--|
| | ACS300X | 300-litre domestic hot water storage tank | | SFCSTX | Additional probe for cascade function |
| | ACS500X | 500-litre domestic hot water storage tank | H | DTX | Auxiliary condensate collection |
| | SCS08X | 0.8 m² solar exchanger for flange installation | | | tray |
| 6 | SCS12X | 1.2 m² solar exchanger for flange installation | | APAVX | Kit of antivibration mounts for floor installation |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | | ASTFX | Kit of antivibration mounts for wall |
| | KIRE2HLX | 2 zones: external kit, high temperature + low temperature | 1 | | bracket installation |
| | KIRE2HX | 2 zones: external kit, high temperature | 1 | KSIPX | Kit with wall fixing brackets |
| 1 | DIX | 1-litre circuit breaker | 500 | HID-TCBX | Black soft touch chronothermostat, with temperature control and management via App / Voice control |
| | DI50X | 50-litre circuit breaker | · @ · | LUD TONY | White soft touch chronothermostat, with temperature control and |
| | ACI40X | 40L system inertial storage tank (s. 2.1÷5.1) | | HID-TCNX | management via App / Voice control |
| | ACI60X | 60-litre system inertial storage tank | | SWCX | SwitchConnect radio receiver |

technical data

| Size (220M) | Canadi | | Naminal /A4: 1 | 1.347 | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|---|-----------------------|--------------------------------------|------------------------------|----------------------|----------------------------|-------------------------|--------------------------|-------------------------------|-----------------------|----------------------|-------------------------|
| | Capacity COP | Water 35/30°C - Outdoor air 7°C | Nominal / Maximum Nominal | kW | 5,42 | 6,18 / 7,41 5,21 | 8,30 / 9,11 5,31 | 10,09 / 10,3 5,01 | 12,13 / 14,60 5,00 | 14,51 / 15,5 4,70 | 16,01 / 16, 4,55 |
| | Capacity | | Nominal / Maximum | kW | 4,17 / 6,25 | | 7.33 / 8.35 | | | | 13,43 / 14, |
| Heating | СОР | Water 35/30°C - Outdoor air -7°C | 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 | | | 8,22 / 8,98 | | | | |
| | COP | | Nominal | | 3,93 | 3,83 | 3,95 | 3,86 | 3,80 | 3,65 | 3,60 |
| | Capacity EER | Water 18/23°C - Outdoor air 35°C | Nominal / Maximum Nominal | kW | 4,55 / 6,88 6,08 | 6,44 / 7,65 5,24 | 8,10 / 11,13 5,12 | 4,77 | 12,06 / 15,02 4,02 | 3,79 / 15,30 | 14,84 / 16 3,65 |
| Cooling | Capacity | | Nominal / Maximum | | 4,26 / 6,14 | | 7,46 / 7,94 | | - | 11,72 / 12,86 | 12,88 / 14 |
| | EER | Water 7/12°C - Outdoor air 35°C | Nominal | | 3,50 | 3,09 | 3,33 | 3,09 | 2,75 | 2,55 | 2,45 |
| Electrical power for I | meter sizing | | | kW | 2,20 | 2,50 | 3,30 | 3,60 | 5,40 | 5,70 | 6,10 |
| | | 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 |
| Seasonal efficiency | 55 C | SCOP ns (seasonal output) | | - % | 3,32 130 | 3,54 138 | 3,72 146 | 3,73 146 | 3,56 139 | 3,52 138 | 3,48 |
| Medium climate | | Energy class | | - | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A++- |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.91 |
| | 35°C | 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 |
| ndoor unit | | | | | Α | Α | Α | Α | В | В | В |
| Power supply | Voltage/Frequency | y/Phases | Name in al | V/Hz/n° | 0.21 | 0.20 | 0.41 | 230/50/1 | 0.57 | 0.67 | 0.75 |
| Water flow-rate Pump available pres | CUE | | Nominal Nominal | l/s kPa | 0,21 | 0,30 36,5 | 0,41 33,1 | 0,49 | 0,57 25,7 | 0,67 | 0,75 22,6 |
| Expansion tank capa | | | Noninal | _ KPd | 31,2 | 30,3 | 33,1 | 31,0 8 | 25,7 | 31,7 | 22,0 |
| Minimum system wa | | | | - i | | 4 | 10 | | | 60 | |
| Sound power | itor coment | | Nominal | dB(A) | | | | 41 | | | |
| Sound pressure @1m | n | | Nominal | dB(A) | | | | 26 | | | |
| Outdoor unit | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency | y/Phases | | V/Hz/n° | | | | 230/50/1 | | | |
| Sound power | | | | dB(A) | 55 | 57 | 58 | 60 | 63 | 64 | 66 |
| Sound pressure @1m | 1 | - | | dB(A) | 42 | 44 | 45 | 47 | 50 | 51 | 53 |
| Operating range | | | | | | | | | | | |
| Water supply temper | rature | Heating | Minimum / Maximum | °C | | | | 25 / 65 | | | |
| | | Cooling | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| Operating range | | Heating | Minimum / Maximum | °C | | | | -25 / 43 | | | |
| (Outdoor air) | | Cooling | Minimum / Maximum | °C | | | | -5 / 43 | | | |
| | | DHW | Minimum / Maximum | °C | | | | -25 / 43 | | | |
| Size (400TN) | | | | | | 6.1 | | 7.1 | | 8. | 1 |
| · · · · · · · · · · · · · · · · · · · | Capacity | Water 35/30°C - Outdoor air 7°C | Nominal / Maximum | kW | 12, | ,13 / 14,60 | | 14,51 / 15,5 | | 16,01/ | 16,80 |
| | СОР | water 35/30 C - Outdoor dir 7 C | Nominal | | | 5,00 | | 4,70 | | 4,5 | 5 |
| Heating | Capacity | Water 35/30°C - Outdoor air -7°C | Nominal / Maximum | kW | 10,4 | 49 / 13,85 | | 12,23 / 14,0 | 9 | 13,43 / | |
| J | COP | | Nominal / Maximum | kW | 12.5 | 3,13 | | 2,82 | | 2,7 | |
| | Capacity COP | Water 45/40°C - Outdoor air 7°C | Nominal / Maximum Nominal | KVV | 12,3 | 30 / 14,50 3,80 | | 14,00 / 15,7 3,65 | <u> </u> | 16,01/ | |
| | Capacity | | Nominal / Maximum | kW | 12.0 | 06 / 15,02 | | 13,79 / 15,3 | 80 | 14,84 / | |
| | EER | Water 18/23°C - Outdoor air 35°C | Nominal | - | | 4,02 | | 3,70 | | 3,6 | |
| Cooling | Capacity | W-4 7/1200 Outd 2500 | Nominal / Maximum | - | 11,1 | 16 / 11,80 | | 11,72 / 12,8 | 6 | 12,88 / | 14,20 |
| | EER | Water 7/12°C - Outdoor air 35°C | Nominal | | | 2,75 | | 2,55 | | 2,4 | 15 |
| Electrical power for | meter sizing | | | kW | | 5,40 | | 5,70 | | 6,1 | |
| | | Energy class | | | | A++ | | A++ | | A+ | |
| | Heating | Annual energy consumption | | kWh/year | | 6.793 | | 7.380 | | 7.9 | |
| C | 55°C | SCOP | | | | 3,56 | | 3,52 | | 3,4 | |
| Seasonal efficiency Medium climate | | ηs (seasonal output) Energy class | | <u>%</u> | | 139 A+++ | | 138 A+++ | | 130 A ++ | |
| mearum cilliate | Heating | Annual energy consumption | | kWh/year | | 6.793 | | 7.380 | | 7.9 | |
| | 35°C | SCOP | | ycui | | 5,00 | | 4,91 | | 4,8 | |
| | | ηs (seasonal output) | | % | | 196 | | 193 | | 19: | |
| Indoor unit | | | | | | В | | В | | В | |
| Power supply | Voltage/Frequence | y/Phases | | V/Hz/n° | | | | 230/50/1 | | | |
| Water flow-rate | | | Nominal | I/s | | 0,57 | | 0,67 | | 0,7 | '5 |
| Pump available pres | ssure | | Nominal | kPa | | 25,7 | | 31,7 | | 22, | ,6 |
| Expansion tank capa | - | | | I | | | | 8 | | | |
| | nter content | | No ordered | | | | | 60 | | | |
| | | | Nominal | dB(A) | | | | 41 | | | |
| Sound power | • | | Nominal | dB(A) | | <i>c</i> | | 26 | | | 4 |
| Sound power Sound pressure @1n | n | | | | | 6.1 | | 7.1 | NI . | 8. | 1 |
| Sound power Sound pressure @1n Outdoor unit | | v/Dhagas | | 1//11_/-0 | | | | 400/50/3+ | IN | | 3 |
| Sound power Sound pressure @1n Outdoor unit Power supply | n Voltage/Frequenc | y/Phases | | V/Hz/n° | | 62 | | | | ^^ | |
| Sound power Sound pressure @1n Outdoor unit Power supply Sound power | Voltage/Frequenc | y/Phases | | dB(A) | | 63 | | 64 | | 66 | |
| Sound power Sound pressure @1n Outdoor unit Power supply Sound power Sound pressure @1n | Voltage/Frequency | y/Phases | | | | 63 50 | | | | 66 53 | |
| Sound power Sound pressure @1n Outdoor unit Power supply Sound power Sound pressure @1n | Voltage/Frequency | | Minimum / Marian | dB(A) | | | | 64 51 | | | |
| Sound power Sound pressure @1n Outdoor unit Power supply Sound power Sound pressure @1n Operating range | Voltage/Frequenc | Heating | Minimum / Maximum | dB(A) dB(A) | | | | 64 51 25 / 65 | | | |
| Sound power Sound pressure @1n Outdoor unit Power supply Sound power Sound pressure @1n Operating range | Voltage/Frequenc | Heating Cooling | Minimum / Maximum | dB(A) dB(A) °C | | | | 64 51 25 / 65 5 / 25 | | | |
| Minimum system wa Sound power Sound pressure @1n Outdoor unit Power supply Sound power Sound pressure @1n Operating range Water supply temper (Outdoor air) | Voltage/Frequenc | Heating | | dB(A) dB(A) | | | | 64 51 25 / 65 | | | |

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

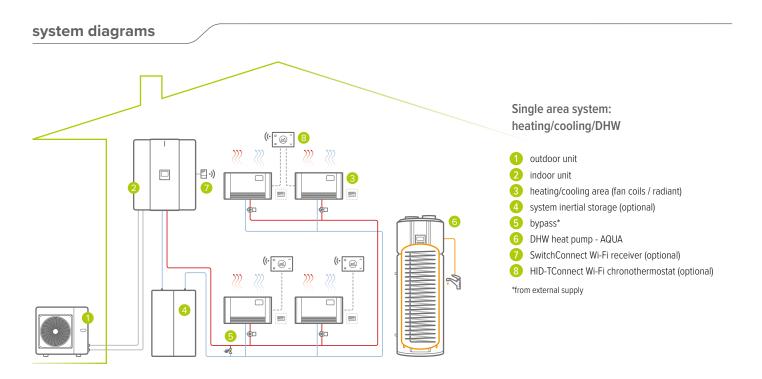


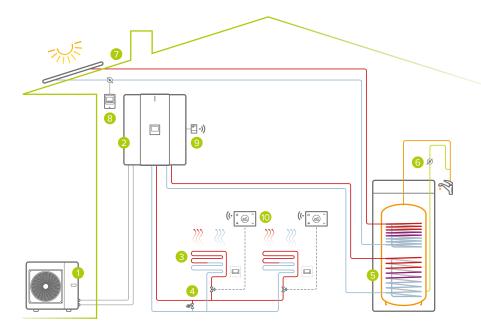
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

(*) 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 I | Depth(B) | | | | 547x604x38 | 6 | | | |
| Dilliensions | Outdoor unit | Length(A) x Height(C) x I | Depth(B) | 986 x 7 | 12 x 426 | 1.104 x 8 | 66 x 523 | 1.1 | 104 x 866 x 5 | 23 | |
| Weight | Indoor unit | | | | į | 52 | | | 54 | | |
| | Outdoor unit | | | 5 | 8 | 7 | 7 | | 112 | | |
| Max / min equivalent length | | L | m | | | | 30/2 | | | | |
| Max difference in level ODU / IDU | | Н | m | 25 | | | | | | | |
| | | | | | | | R-32 / 675 | | | | |
| Refrigerant precharge | | | kg/m | 1,5 | / 15 | 1,65 | 5 / 15 | | 1,84 / 15 | | |
| | | | CO ₂ tons | 1,0 |)5 | 1 | 11 | | 1,24 | | |
| Additional refrigerant charge ² | | | g/m | 2 | 0 | | | 38 | | | |
| | Defeirement wine | Liquid | inch | 1/4" 3/8" | | | | | | | |
| External diameters | Refrigerant pipe | Gas | inch | 5/8" | | | | | | | |
| | Indoor unit | Water (System) | inch | | | | 1" | | | | |
| | muoor unit | Water (DHW) | inch | 3/4" | | | | | | | |

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

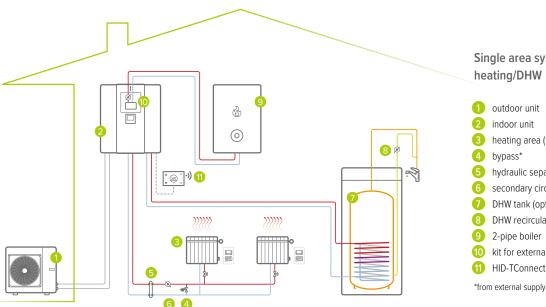




Single area system with solar thermal: heating/cooling/DHW

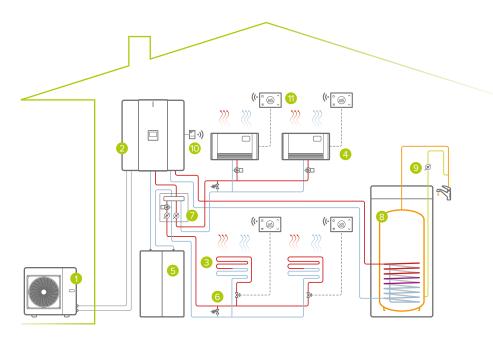
- 1 outdoor unit
- indoor unit
- heating/cooling area (fan coils / radiant)
- bypass*
- DHW tank with solar predisposition AQUA
- DHW recirculation pump*
- ELFOSun solar thermal (optional) 7
- solar circulation kit (optional) 8
- 9 SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat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

*from external supply



Single area system: heating/DHW

- heating area (radiators / fan coils / radiant)
- hydraulic separator (optional)
- secondary circuit pump*
- DHW tank (optional)
- DHW recirculation pump*
- kit for external boiler management (optional)
- 11 HID-TConnect Wi-Fi chronothermostat (optional)



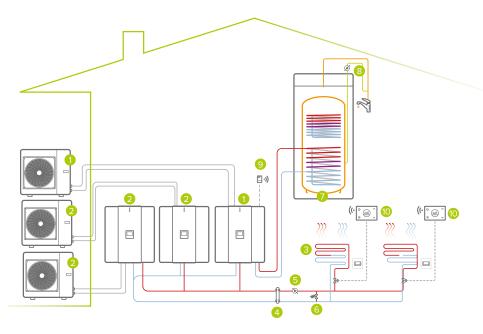
Two-area system: heating/cooling/DHW

- 1 outdoor unit
- 2 indoor unit
- 3 low temperature heating/cooling area (radiant)
- 4 high temperature heating/cooling area (fancoil)
- system inertial storage (optional)
- 6 bypass*

7

- kit for managing 2 areas (optional)
- DHW tank (optional) 8
- 9 DHW recirculation pump*
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)

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



Single area system: heating/cooling/DHW

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

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



















RELIABILITY

Backup heate

(optional)









(optional) CONVENIENCE









MOD Modbus





















- ✓ 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 wallmounted 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

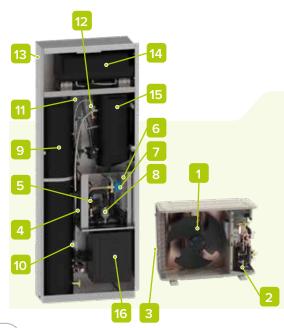
SPHERA EVO 2.0 Invisible is the ideal choice for all homes that do not have a technical room and which need to make the unit invisible by embedding it in the wall.

The cabinet has an adjustable telescopic frame and can be painted to make the unit disappear completely.









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

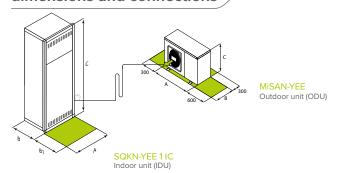
| | ADIX | Recessed storage unit with jigs for fittings | | ADI50X | Recessed storage unit for externa inertial accumulation |
|----|----------|--|---------|----------|--|
| 4 | ACS150X | 150-litre domestic hot water storage tank | | DTV | Auxiliary condensate collection |
| | ADIAX | Recessed storage unit for additional DHW accumulation | | DTX | tray |
| 1 | ACSA150X | Additional 150-litre domestic hot water storage | 9 | APAVX | Kit of antivibration mounts for floor installation |
| | ACSA50X | Additional 50-litre domestic hot water storage | | ASTFX | Kit of antivibration mounts for wall bracket installation |
| | SHWT | 150L domestic hot water storage tank with solar coil | I | KSIPX | Kit with wall fixing brackets |
| 7 | KCVEX | Circulation kit: circulation group, control unit, expansion tank | • 500 - | HID-TCBX | Black soft touch chronothermostat, with |
| | KPRSX | DHW recirculation pump kit | | | temperature control and management via App / Voice control |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | | HID-TCNX | White soft touch chronothermostat, with temperature control and management via App / Voice control |
| | KIRE2HLX | 2 zones: high temperature + low temperature (mixed) | 27 | SWCX | SwitchConnect radio receiver |
| | KIRE2HX | 2 zones: both at high temperature | | | SwitchConnect radio receiver |
| | AC50X | 50-litre inertial storage tank for indoor installation | | | |
| | | | | | |

50-litre inertial storage tank for

outdoor installation

ACE50X

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

| 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 | |
| Dillensions | Outdoor unit | Length(A) x Height(C) x Depth(B) | | 986 x 71 | 2 x 426 | 1.104 x 8 | 366 x 523 |
| Weight | Indoor unit | | | | 3′ | 15 | |
| weight | Outdoor unit | | | 58 | 3 | 7 | 77 |
| Max / min equivalent length | | L | m | | 30 | / 2 | |
| Max difference in level ODU / IDU | | Н | m | | 2 | 5 | |
| | | | type/GWP | | R32 | 675 | |
| Refrigerant precharge | | | kg/m | 1,5 / | 15 | 1,65 | 5 / 15 |
| | | | CO ₂ tons | 1,0 | 5 | 1 | ,11 |
| Additional refrigerant charge ¹ | | | g/m | 20 |) | 3 | 38 |
| | Defrigerent nine | Liquid | inch | 1/4 | " | 3. | /8" |
| External diameters | Refrigerant pipe | Gas | inch | | 5/ | 8" | |
| External diameters | ladaait | Water (system) | inch | | 1 | " | |
| | Indoor unit | Water (DHW) | inch | | 3/ | 4" | |

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

technical data

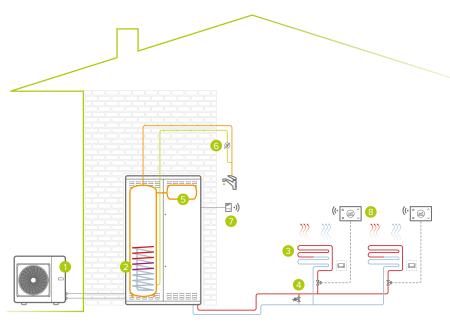
| Size | | | | | 2.1 | 3.1 | 4.1 | 5.1 |
|----------------------------------|------------------|-------------------------------------|-------------------|----------|--------------|-------------|---|---------------|
| | Capacity | W . 25/2000 O | Nominal / Maximum | kW | 4,32 / 6,26 | 6,18 / 7,41 | 8,30 / 9,11 | 10,09 / 10,3 |
| | COP | — Water 35/30°C - Outdoor unit 7°C | Nominal | - | 5,42 | 5,21 | 5,31 | 5,01 |
| Haatina | Capacity | W-t 25/20°C Outd 7°C | Nominal / Maximum | kW | 4,17 / 6,25 | 6,05 / 6,97 | 8,30 / 9,11 5,31 7,33 / 8,35 3,23 8,22 / 8,98 3,95 8,10 / 11,13 5,12 7,46 / 7,94 3,33 3 8 01:47 3,30 A++ 3,824 3,72 146 A+++ 3.824 5,32 210 A+ L A 50/1 0,41 33,1 6 6 4.1 550/1 58 45 | 8,20 / 9,30 |
| Heating | COP | — Water 35/30°C - Outdoor air -7°C | 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 | - Water 45/40 C - Outdoor unit 7 C | Nominal | - | 3,93 | 3,83 | 3,95 | 3,86 |
| | 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 |
| Cooling | EER | - Water 18/23 C - Outdoor unit 35 C | Nominal | - | 6,08 | 5,24 | 5,12 | 4,77 |
| Cooling | 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 | water 7/12 C - Outdoor unit 55 C | Nominal | - | 3,50 | 3,09 | 3,33 | 3,09 |
| | Net tank capacit | у | | I | | 1 | 43 | |
| DHW | Water mixed at 4 | 10°C (V40)1 | | I | | 1: | 88 | |
| | 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 |
| | | Energy class | | - | A ++ | A ++ | A++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 |
| | 55°C | SCOP | | - | 3,32 | 3,54 | 3,72 | 3,73 |
| | | ηs (seasonal output) | | % | 130 | 138 | 146 | 146 |
| Seasonal efficiency | | Energy class | | - | A +++ | A+++ | 3,72 146 A+++ | A +++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 |
| | 35°C | SCOP | | - | 5,13 | 5,15 | 5,32 | 5,27 |
| | | ηs (seasonal output) | | % | 202 | 203 | 210 | 208 |
| | DHW | Energy class | | - | A + | A + | A+ | A + |
| | υπw | DHW profile | | - | L | L | L | L |
| Indoor unit | | | | | Α | Α | Α | Α |
| Power supply | Voltage/Frequer | ncy/Phases | | V/Hz/n° | | 230 | /50/1 | |
| Water flow-rate | | • | Nominal | I/s | 0,21 | 0,30 | 0,41 | 0,49 |
| Pump available pres | ssure | | Nominal | kPa | 31,2 | 36,5 | 33,1 | 31,0 |
| Expansion tank cap | acity | | | | | | 8 | |
| Minimum system wa | ater content | | | · | | 4 | 10 | |
| Sound power | | | | dB(A) | | 4 | 41 | |
| Sound pressure @1r | n | | | dB(A) | | 2 | 26 | |
| Outdoor unit | | | | | 2.1 | 3.1 | 4.1 | 5.1 |
| Power supply | Voltage/Frequer | ncy/Phases | | V/Hz/n° | | 230 | /50/1 | |
| Sound power | | | | dB(A) | 55 | 57 | 58 | 60 |
| Sound pressure @1r | n | | | dB(A) | 42 | 44 | 45 | 47 |
| Operating range | • | | | | | | | |
| Water supply tempe | | Heating | Minimum / Maximum | °C | | 25 | / 65 | |
| water supply tellipe | ratule | Cooling | Minimum / Maximum | °C | | 5 / | / 25 | |
| Onorating range | | Heating | Minimum / Maximum | °C | | -25 | / 43 | |
| Operating range (Outdoor air) | | Cooling | Minimum / Maximum | °C | | -5 | / 43 | |
| (Outdoor all) | | DHW | Minimum / Maximum | °C | | -25 | 7 / 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 ELFO Control 3 EVO system control 2 EVO system control 2 EVO System Control 3 EVO System Contr

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

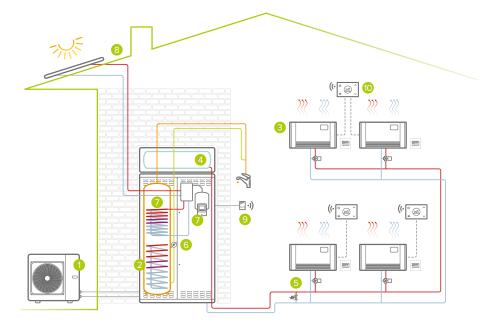
system diagrams



Single area system: heating/cooling/DHW

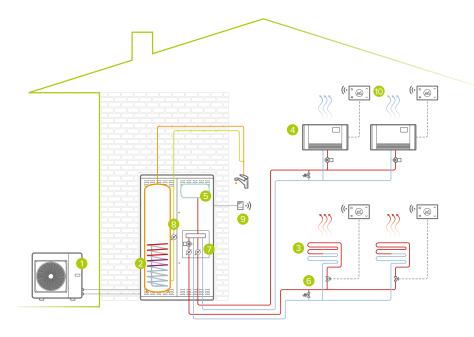
- outdoor unit
- 2 indoor unit
- heating/cooling area (fancoil / radiant)
- bypass*
- additional DHW tank (optional configuration)
- 6 DHW recirculation pump*
- SwitchConnect Wi-Fi receiver (optional)
- 8 HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



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

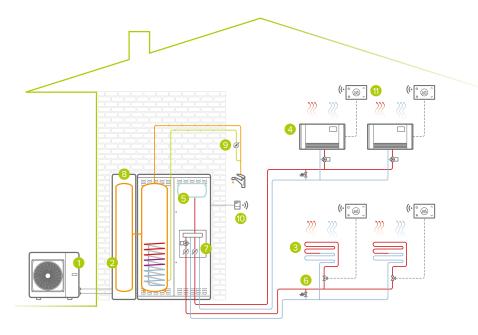
- 1 outdoor unit
- indoor unit
- heating/cooling area (fancoil / radiant)
- system inertial storage (optional)
- 6 bypass*
- 6 DHW recirculation pump*
- online solar connection kit (optional configuration)
- 8 ELFOSun solar thermal (optional)
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi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



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
- / kit for managing 2 areas (optional configuration)
- 8 DHW recirculation pump*
- 9 SwitchConnect Wi-Fi receiver (optional)
- 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)





FULL ELECTRIC HEAT PUMPS: MONOBLOCK



ELFOEnergy Edge EVO



Edge EVO 2.0 - EXC

ELFOEnergy Edge EVO

WSAN-YMi 21÷141

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

ENERGY SAVING











COMFORT

Heating Cooling



Backup heater

RELIABILITY





HEALTH



CONVENIENCE



Weekly schedule



integration



Potential-free contact



虱

User interface/















- √ 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 ELFOControl³ EVO included as standard

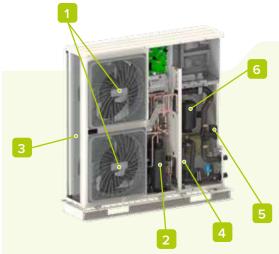
Management via the App

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 230/1/50400TN Power supply 400/3/50+N

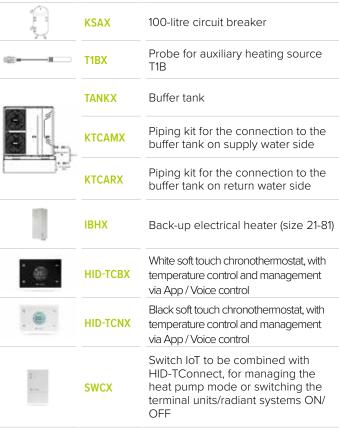
AUXILIARY SYSTEM HEATER (size 61÷81, only in direct shipping):

- No electrical heater

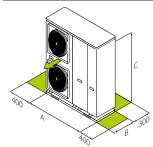
IBH Back-up electrical heater

accessories

| KTFLX Hose kit for connection to the chiller/heat pump 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) | |
|--|---------|
| ACS300X storage tank ACS300X 300-litre domestic hot water storage tank ACS500X 500-litre domestic hot water storage tank CS500X 0.8 m² solar exchanger for flange | |
| storage tank ACS500X SCS08X storage tank 500-litre domestic hot water storage tank 0.8 m² solar exchanger for flange | |
| storage tank 0.8 m² solar exchanger for flange | |
| MA SI SIIXI | |
| | |
| SCS12X 1.2 m² solar exchanger for flange installation (for ACS500X) | _ |
| QERAX Connection electrical panel of the DHW storage heater | |
| Three-way valve for domestic hot water | - (210) |
| Secondary circuit kit (1-litre circuit breaker + pump) | |
| XIR2HLX 2 zones: external kit, high temperature + low temperature (mixed) | |
| 2 zones: external kit, high temperature | 21 |
| DIX 1-litre circuit breaker | |
| DI50X 50-litre circuit breaker | |



dimensions and connections



Refrigerant charge

External diameters

Water

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

2,8

1,9

11/4"

| Size (230M) | | | 21 | 31 | 4 | 11 | 61 | 71 | 81 |
|--------------------|-----------------------------------|----------------------|-----|--------------|-----|------------|--------|--------------|-----|
| Dimensions | Length(A) x Height (C) x Depth(B) | | | 1.210x945x | 402 | | 1.4 | 04x1.414x405 | |
| Weight | | kg | | 99 | | | | 178 | |
| | | type/GWP | | | | R-32 / 675 | 5 | | |
| Refrigerant charge | | 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) | | 1.4 | 404x1.414x40 | 5 | | 1.129x | 1.558x440 | |
| Weight | | kg | | 172 | | | | 177 | |
| | | type/GWP | | | | R-32 / 675 | i | | |

kg CO₂ tons

inch

5

3,4

11/4"

technical data

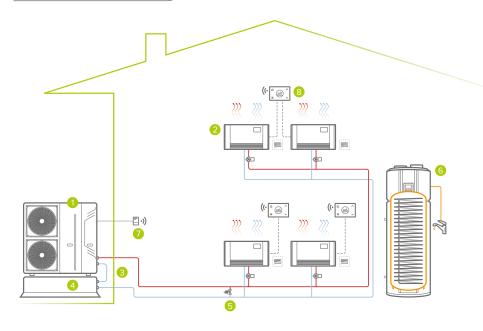
| Size (230M) | | | | | 21 | 31 | 41 | 61 | 71 | 81 |
|----------------------|----------------|------------------------------------|-------------------|----------|-----------|-------------|------------|-------------|-------------|-------------|
| | Capacity | W + 25/2000 O + 1 : 700 | Nominal / Maximum | 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 | Water 35/30°C - Outdoor air 7°C | Nominal | - | 5,00 | 4,94 | 4,60 | 4,81 | 4,60 | 4,45 |
| | Capacity | W. 1. 25/2000 O. 1/ | 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 |
| Heating | COP | Water 35/30°C - Outdoor air -7°C | 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 | - Water 45/40 C - Outdoor dir 7 C | Nominal | - | 3,60 | 3,57 | 3,44 | 3,53 | 3,47 | 3,43 |
| | 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 |
| Caaliaa | EER | — water 18/23 C - Outdoor dir 35 C | Nominal | - | 4,82 | 4,65 | 4,16 | 4,78 | 4,52 | 4,26 |
| Cooling | Capacity | W-4 7/12°C O. 4-1:- 25°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 | — Water 7/12°C - Outdoor air 35°C | 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 |
| | | Energy class | | - | A++ | A ++ | A++ | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 4.203 | 4.203 | 4.770 | 8.164 | 8.724 | 9.216 |
| | 55°C | SCOP | | - | 3,23 | 3,24 | 3,22 | 3,23 | 3,26 | 3,27 |
| Seasonal efficiency | | ηs (seasonal output) | | % | 127% | 127% | 126% | 126% | 128% | 128% |
| Medium climate | | Energy class | | - | A+++ | A+++ | A+++ | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 3.071 | 3.071 | 3.844 | 5.726 | 6.819 | 7.687 |
| | 35°C | 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/Freque | ncy/Phases | | V/Hz/n° | | | 230 | /50/1 | | |
| Water flow-rate | | Water 35/30°C - Outdoor air 7°C | Nominal | I/s | 0,22 | 0,31 | 0,38 | 0,58 | 0,67 | 0,74 |
| Pump available pres | sure | — water 35/30 C - Outdoor air / C | Nominal | kPa | 61 | 50 | 38 | 41 | 30 | 20 |
| Minimum system wa | iter content | | | I | | 20 | | | 40 | |
| Expansion tank capa | acity | | | I | | 2 | | | 5 | |
| Sound power | | | Minimum / Nominal | dB(A) | 59 / 61 | 60 / 64 | 62 / 67 | 63 / 68 | 63 / 71 | 65 / 71 |
| Sound pressure @1r | n | | Minimum / Nominal | dB(A) | 46 / 49 | 49 / 52 | 50 / 55 | 49 / 54 | 47 / 55 | 50 / 56 |
| Operating range | | | | | | | | | | |
| Water supply tempe | rature | Heating | Minimum / Maximum | °C | | | 30 | / 60 | | |
| water supply tellipe | I ULUI C | Cooling | Minimum / Maximum | °C | | | 5 | 25 | | |
| Operating range | | Heating | Minimum / Maximum | °C | | | -25 | / 35 | | |
| (Outdoor air) | | Cooling | Minimum / Maximum | °C | | -5 / 43 | | | -5 / 46 | |
| (Salabol all) | | DHW | Minimum / Maximum | °C | | | -25 | / 43 | | |

| Size (400TN) | | | | | 61 | 71 | 81 | 91 | 101 | 121 | 141 |
|----------------------|------------------|----------------------------------|-------------------|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 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 | Water 33/30 C - Outdoor dir 7 C | Nominal | - | 4,84 | 4,63 | 4,49 | 4,70 | 4,40 | 4,08 | 3,91 |
| Heating | 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 |
| neating | COP | Water 33/30 C - Outdoor all -/ C | 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 | Water 43/40 C - Outdoor an 7 C | Nominal | - | 3,59 | 3,54 | 3,45 | 3,50 | 3,40 | 3,10 | 2,90 |
| | 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 |
| Cooling | EER | Water 16/23 C - Outdoor all 33 C | Nominal | | 4,83 | 4,50 | 4,27 | 4,75 | 4,60 | 4,30 | 4,00 |
| Cooling | 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 | Water 7/12 C - Outdoor air 35 C | 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 |
| | | Energy class | | - | A++ | A++ | A ++ | A++ | A++ | Α+ | A+ |
| | Heating | Annual energy consumption | | kWh/year | 8.164 | 8.724 | 9.216 | 11.375 | 14.390 | 11.489 | 14.165 |
| | 55°C | SCOP | | - | 3,23 | 3,26 | 3,27 | 3,21 | 3,22 | 3,14 | 3,14 |
| Seasonal efficiency | | ηs (seasonal output) | | % | 126% | 128% | 128% | 125% | 126% | 123% | 123% |
| Medium climate | | Energy class | | - | A ++ | A++ | A ++ | A+++ | A+++ | A+++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 5.726 | 6.819 | 7.687 | 8.086 | 10.180 | 11.489 | 14.165 |
| | 35°C | 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/Frequenc | cy/Phases | | V/Hz/n° | | | | 400/50/3+N | ١ | | |
| Water flow-rate | | Water 35/30°C - Outdoor air 7°C | Nominal | I/s | 0,58 | 0,67 | 0,74 | 0,88 | 1,1 | 1,29 | 1,48 |
| Pump available pres | ssure | water 35/30°C - Outdoor air 7°C | Nominal | kPa | 41 | 30 | 20 | 100 | 89 | 74 | 54 |
| Minimum system wa | ater content | | | I | | | | 40 | | | |
| Expansion tank cap | acity | | | Ī | | 5 | | | | 8 | |
| Sound power | • | | Minimum / Nominal | dB(A) | 63 / 68 | 65 / 71 | 66 / 71 | 65 / 70 | 66 / 72 | 68 / 74 | 69/77 |
| Sound pressure @1r | m | | Minimum / Nominal | dB(A) | 49 / 54 | 50 / 56 | 51 / 56 | 50/57 | 51/59 | 53/61 | 54/63 |
| Operating range | • | | | | | | | | | | |
| Water cumply tempe | ratura | Heating | Minimum / Maximum | °C | | | | 30/60 | | | |
| Water supply tempe | erature | Cooling | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| 0 | | Heating | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| Operating range | | Cooling | Minimum / Maximum | °C | | | | -5 / 46 | | | |
| (Outdoor air) | | DHW | Minimum / Maximum | °C | | | | -25 / 43 | | | |

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

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

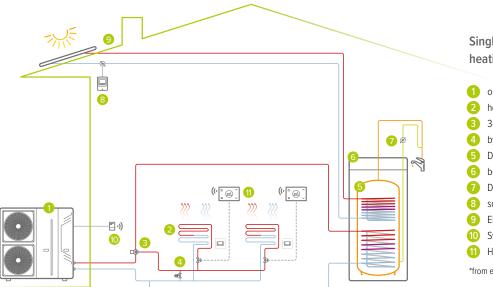
system diagrams



Single area system: heating/cooling/DHW

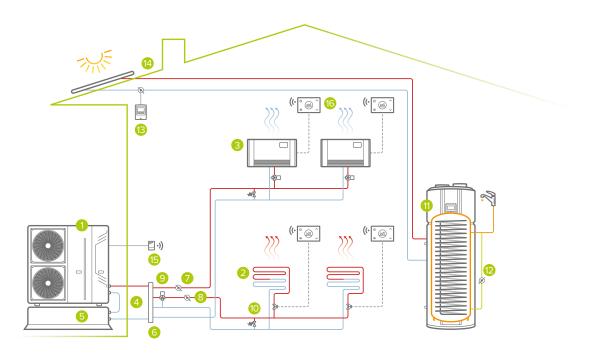
- outdoor unit
- 2 heating/cooling area (fan coils / radiant)
- system inertial storage connection kit (optional)
- system inertial storage (optional)
- 6 bypass*
- 6 DHW heat pump - AQUA
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



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

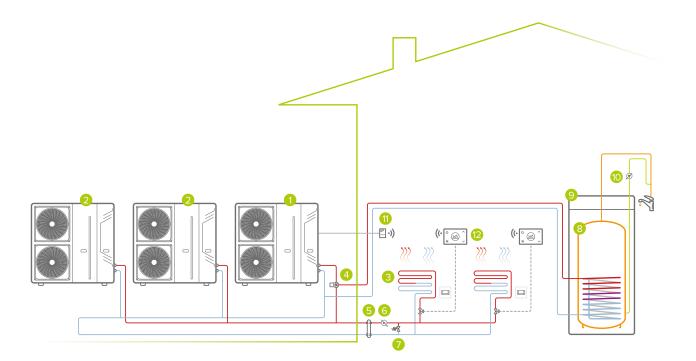
- outdoor unit
- heating/cooling area (fan coils / radiant)
- 3-way switching valve (optional)
- bypass*
- DHW tank with solar predisposition (optional)
- boiler kit connection QERAX (optional)
- 7 DHW recirculation pump*
- solar circulation kit (optional)
- ELFOSun solar thermal (optional)
- SwitchConnect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



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)
- high temperature secondary circuit pump*
- 8 low temeprature secondary circuit pump*
- 9 3-way mechanical mixing valve *

- 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)
- (optional)



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)
- bydraulic 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)

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







RELIABILITY Backup heater





Eurovent

Keymark

HEALTH





























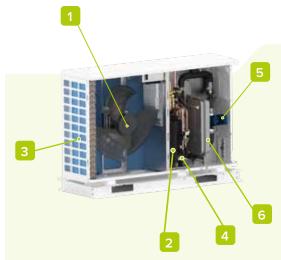


- √ Space saving: installed outdoors, no indoor unit is required.
- ✓ Designed for harsh climates: excellent performance at low temperatures and optional 3 to 9kW auxiliary heaters
- High temperature distribution can be used: water up to 65°C
- Modular: combines up to 6 units in cascade for power up to
- Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl³ 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

| 60 | KTFLX | Hose kit for connection to the chiller/heat pump | Server T2 | TANKX | Buffer tank |
|----------|----------|---|----------------|----------|--|
| | FDMX | Magnetic dirt separator filter | | KTCAMX | Piping kit for the connection to the buffer tank on supply water side |
| | VAGX | System freeze protection kit in the absence of electricity | 14 | KTCARX | Piping kit for the connection to the buffer tank on return water side |
| | ACS200X | 200-litre domestic hot water storage tank | | PCSX | Secondary circuit pump |
| | ACS399X | 300-litre domestic hot water storage tank | | PCS2X | Oversized secondary circuit pump |
| | ACS500X | 500-litre domestic hot water storage tank | dia. | | - |
| | ACS1000X | 1000-litre domestic hot water storage tank | do | PRSX | DHW recirculation pump |
| • | ACS10SX | 1000L domestic hot water storage tank with double coil for solar thermal connection | | IBHMX | single-phase back-up electric heater (2/4/6kW) |
| | SCS08X | 0.8 m² solar exchanger for flange installation (for ACS200X e ACS300X) | | IBHTX | three-phase back-up electric heater (3/6/9kW) |
| 6 | SCS12X | 1.2 m ² solar exchanger for flange installation (for ACS500X) | Name of Street | DTX | Auxiliary condensate collection tray |
| | QERAMX | Electrical panel for single-phase heater connection on DHW storage tank | - | APAVX | Kit of antivibration mounts for floor installation |
| | QERATX | Electrical panel for three-phase heater connection on DHW storage tank | | AMMX | Kit of antivibration anti-seismic mounts for floor installation |
| d'e | 3DHWX | Three-way valve for domestic hot water | | | Kit of antivibration mounts for wall |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | - | ASTFX | bracket installation |
| | KIR2HLX | 2 zones: external kit, high temperature + low temperature (mixed) | I | KSIPX | Kit with wall fixing brackets |
| | KIRHX | 2 zones: external kit, high temperature | 500 | HID-TCBX | White soft touch chronothermostat, with temperature control and management |
| 1 | DIX | 1-litre circuit breaker | | | via App / Voice control |
| (| DI50X | 50-litre circuit breaker (to exhaustion) | | HID-TCNX | Black soft touch chronothermostat, with temperature control and management via App / Voice control |
| | DI22-50X | 50L circuit breaker (2 pairs of supply connectors / 2 pairs of return connectors) | | | |
| | DI100X | 100-litre circuit breaker | 21 | SWCX | Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the |
| | T1BX | Probe for auxiliary heating source T1B | | | 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) | | 1.295x7 | 792x429 | 1.385x9 | 945x526 | 1 | .385x945x52 | <u>'</u> 6 |
| Weight | | kg | 1: | 21 | 1 | 48 | | 170 | |
| | | type/GWP | | | | R-32 / 675 | | | |
| Refrigerant charge | | 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 | .385x945x52 | 16 | | 1.129x1. | 558x440 | |
| Weight | | kg | | 188 | | | 2 | 06 | |
| | | type/GWP | | | | R-32 / 675 | | | |
| Refrigerant charge | | kg | | 1,75 | | | | 5 | |
| | | CO ₂ tons | | 1,18 | | | 3 | ,4 | |
| External diameters | Water | inch | | 11/4" | | | 11 | /4" | |

technical data

| Size (ZSUNI) | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|---|---|--|---|--|--|---|---|---|--|--|---|
| | 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 |
| | | | Nominal | - | 5,10 | 4,95 | 5,15 | 4,95 | | | 4,50 |
| Heating | Capacity | — Water 35/30°C - Outdoor air -7°C | Nominal | kW | 4,70 | 6,00 | 7,00 | 8,00 | | 12,10 4,95 4,60 10,00 12,00 3,00 2,85 12,30 14,10 3,70 3,60 12,00 13,50 3,95 12,40 2,75 2,50 6,50 A++ 6,916 6,916 3,46 135 135 A++ 5,156 5,157 4,81 4,81 189 189 6.1 7.1 0,55 0,59 59,9 40 10.1 12.1 122,00 24,00 2,00 2,00 2,00 2,00 3,40 3,10 23,00 27,00 4,60 4,30 21,00 22,00 22,00 24,60 3,10 23,00 24,00 25,00 25,00 25,00 26,00 3,40 3,10 21,00 26,00 3,40 3,10 22,00 26,00 3,40 3,10 21,00 26,00 3,40 3,10 22,00 26,00 3,40 3,10 23,00 27,00 4,60 4,30 21,00 26,00 3,40 3,10 23,00 27,00 4,60 4,30 21,00 26,00 3,40 3,10 21,00 26,00 3,40 3,10 23,00 27,00 4,60 4,30 21,00 26,00 3,40 3,10 21,00 26,00 3,40 3,10 21,00 21,00 26,00 3,40 3,10 21,00 21,00 21,00 22,00 24,60 4,30 21,00 25,00 25,00 21,50 21,50 21,50 22,00 24,60 25,00 25,00 21,50 2 | 13,10 |
| Heating COF Cap COF Cap COF Cap COF Cap EER Cap EER Cap EER Electrical power for mete Seasonal efficiency Medium climate Hea 35° Indoor unit Power supply Volt Water flow-rate Pump available pressure Minimum system water of Expansion tank capacity Sound power Sound pressure @1m Operating range Outdoor air) Size (400TN) Cap Cof Cap Cof Cap EER ECOF Coling Cap EER ECOF Coling Cap Col Col | | | Nominal | | 3,10 | 3,00 | 3,20 | 3,05 | | | 2,70 |
| | Capacity | Water 45/40°C - Outdoor air 7°C | Nominal | kW | 4,30 | 6,30 | 8,10 | 10,00 | | | 16,00 |
| | | | Nominal | - | 3,80 | 3,70 | 3,85 | 3,75 | | | 3,50 |
| | Capacity | Water 18/23°C - Outdoor air 35°C | Nominal | kW | 4,50 | 6,50 | 8,30 | 9,90 | | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 6,917 3,46 135 A+++ 5,157 4,81 189 7,1 0,59 59,9 40 65 50 12,40 2,50 6,50 A++ 1,116 3,16 123 A++ 11,513 4,50 177 12,1 1,24 78,8 60 | 14,90 |
| Cooling | | | Nominal | | 5,50 | 4,80 | 5,05 | 4,55 | | | 3,40 |
| - | Capacity | ── Water 7/12°C - Outdoor air 35°C | Nominal | kW | 4,70 | 7,00 | 7,45 | 8,20 | - | | 14,00 |
| Electrical control (control | | | Nominal | - | 3,45 | 3,00 | 3,35 | 3,25 | | | 2,50 |
| Electrical power for | meter sizing | F | | kW | 3,50 | 3,50 | 6,50 | 6,50 | - | - | 6,50 |
| | H P | Energy class | | - I-VA/In / | A++ | A++ | A++ | A++ | | | A++ |
| | Heating | Annual energy consumption | | kWh/year | 2.749 | 3.348 | 4.064 | 4.541 | 12,10 14,50 4,95 4,60 10,00 12,00 3,00 2,85 12,30 14,10 3,70 3,60 12,00 13,50 3,95 3,60 11,50 12,40 2,75 2,50 6,50 6,50 A++ A++ 6,916 6,917 3,46 3,46 135 A+++ A+++ A+++ 5,156 5,157 4,81 4,81 189 189 6.1 7.1 0,55 0,59 59,9 59,9 40 4,80 21,00 26,00 4,40 4,82 21,00 26,00 2,50 22,00 26,00 2,50 22,00 26,00 3,40 3,10 23,00 27,00 4,60 4,30 | 7.213 | |
| C | 55 C | SCOP | | | 3,31 | 3,52 | 3,36 | 3,49 | | 12,10 4,95 4,96 10,00 12,00 3,00 2,85 12,30 14,10 3,70 3,60 12,00 13,50 3,95 3,60 11,50 12,40 2,75 2,50 6,50 6,50 6,50 A++ 6,916 3,46 135 135 A+++ 5,156 5,157 4,81 189 189 6,1 7,1 0,55 5,9 59,9 59,9 40 10,1 12,1 22,00 2,60 2,50 22,00 2,60 2,50 22,00 2,60 23,40 3,40 3,10 23,00 21,00 26,00 2,95 27,00 12,50 13,80 A++ A+ 14,363 17,116 3,23 3,16 126 123 A++ 14,363 17,116 3,23 3,16 126 123 A++ 14,363 17,116 3,23 3,16 126 123 A++ 10,167 11,513 4,54 4,50 179 177 10,1 12,1 | 3,46 |
| | | ηs (seasonal output) | | % | 129 | 138 | 131 | 137 | | | 135 |
| Medium ciimate | | Energy class | | - | A+++ | A+++ | A+++ | A+++ | | | A+++ |
| | Heating | Annual energy consumption | | kWh/year | 2.354 | 2.849 | 3.223 | 3.649 | | | 6.011 |
| | 35°C | SCOP | | | 4,85 | 4,95 | 5,21 | 5,19 | | | 4,72 |
| | | ηs (seasonal output) | | | 191 | 195 | 205 | 205 | | | 186 |
| Indoor unit | Voltage/Frequency/Phases | 8.1 | | | | | | | | | |
| Power supply | Voltage/Freque | ency/Phases | | V/Hz/n° | | | | 230/50/1 | | | |
| Water flow-rate | · | Water 35/30°C Outdoor air 7°C | Nominal | I/s | 0,22 | 0,33 | 0,36 | 0,39 | 0,55 | 0,59 | 0,67 |
| Pump available pres | sure | water 35/30 C - Outdoor air / C | Nominal | kPa | 85,2 | 82,2 | 76,4 | 67,9 | 59,9 | 59,9 | 47,6 |
| Minimum system wa | iter content | | | I | | 20 | | | 4 | 0 | |
| Expansion tank capa | acity | | | I | | | | 8 | | | |
| Sound power | - | | Nominal | dB(A) | 55 | 58 | 59 | 60 | 65 | 65 | 68 |
| Sound pressure @1n | n | | Nominal | dB(A) | 41 | 44 | 45 | 45 | 50 | 50 | 53 |
| Operating range | | | | | | | | | | | |
| Operating range | | Heating | Minimum / Mavimum | °C | | | | 20 / 65 | | | |
| Water supply tempe | rature | | | | | | | | | | |
| | | DHW | Minimum / Maximum | - °C | | | | 30 / 60 | | | |
| | | Heating | Minimum / Maximum | - °C | | | | -25/35 | | | |
| Operating range | | | Minimum / Maximum | - °C | | | | | | | |
| (Outdoor air) | | Cooling | | - °C | | | | -5 / 43 | | | |
| | | DHW | Minimum / Maximum | | | | | -25 / 43 | | | |
| | | | | | | | | | | | |
| C: (400TN) | | | | | 6.1 | 74 | 0.4 | 0.1 | 40.4 | 42.4 | 44.4 |
| Size (400TN) | Capacity | | Nominal | I/M | 6.1 | 7.1 | 8.1 | 9.1 | | | 14.1 |
| Size (400TN) | 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 |
| Size (400TN) | СОР | Water 35/30°C - Outdoor air 7°C | Nominal | - | 12,10 4,95 | 14,50 4,60 | 15,90 4,50 | 18,00 4,70 | 22,00 4,40 | 26,00 4,08 | 30,00 3,91 |
| Size (400TN) Heating | COP Capacity | Water 35/30°C - Outdoor air 7°C Water 35/30°C - Outdoor air -7°C | Nominal Nominal | kW - kW | 12,10 4,95 10,00 | 14,50 4,60 12,00 | 15,90 4,50 13,10 | 18,00 4,70 18,00 | 22,00 4,40 21,00 | 26,00 4,08 22,00 | 30,00 3,91 23,00 |
| | COP Capacity COP | | Nominal Nominal Nominal | kW | 12,10 4,95 10,00 3,00 | 14,50 4,60 12,00 2,85 | 15,90 4,50 13,10 2,70 | 18,00 4,70 18,00 2,70 | 22,00 4,40 21,00 2,60 | 26,00 4,08 22,00 2,50 | 30,00 3,91 23,00 2,45 |
| | COP Capacity COP Capacity | | Nominal Nominal Nominal | - | 12,10 4,95 10,00 3,00 12,30 | 14,50 4,60 12,00 2,85 14,10 | 15,90 4,50 13,10 2,70 16,00 | 18,00 4,70 18,00 2,70 18,00 | 22,00 4,40 21,00 2,60 22,00 | 26,00 4,08 22,00 2,50 26,00 | 30,00 3,91 23,00 2,45 30,00 |
| Size (400TN) Heating | COP Capacity COP Capacity COP | Water 35/30°C - Outdoor air -7°C | Nominal Nominal Nominal Nominal | kW - kW | 12,10 4,95 10,00 3,00 12,30 3,70 | 14,50 4,60 12,00 2,85 14,10 3,60 | 15,90 4,50 13,10 2,70 16,00 3,50 | 18,00 4,70 18,00 2,70 18,00 3,50 | 22,00 4,40 21,00 2,60 22,00 3,40 | 26,00 4,08 22,00 2,50 26,00 3,10 | 30,00 3,91 23,00 2,45 30,00 2,90 |
| | COP Capacity COP Capacity COP Capacity | Water 35/30°C - Outdoor air -7°C | Nominal Nominal Nominal Nominal Nominal Nominal | kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 |
| | COP Capacity COP Capacity COP Capacity EER | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C | Nominal Nominal Nominal Nominal Nominal Nominal | - kW - kW - kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 |
| Heating | COP Capacity COP Capacity COP Capacity EER Capacity | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 |
| Heating Cooling | COP Capacity COP Capacity COP Capacity EER Capacity EER | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C | Nominal Nominal Nominal Nominal Nominal Nominal | - kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 |
| Heating Cooling | COP Capacity COP Capacity COP Capacity EER Capacity EER | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | - kW - kW - kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 |
| Heating Cooling | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A ++ | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + |
| Heating Cooling | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | - kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + |
| Heating Cooling Electrical power for | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + 19,552 3,14 |
| Heating Cooling Electrical power for Seasonal efficiency | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A ++ 11.396 3,21 125 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + 19.552 3,14 123 |
| Heating Cooling Electrical power for Seasonal efficiency | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 | A+++ 156 5.157 .81 4,81 89 189 5.1 7.1 55 0,59 59,9 59,9 40 55 65 65 65 65 60 50 121 12.1 .00 26,00 40 40,00 27,00 60 40,00 26,00 95 2,70 .50 13,80 ++ A+ 31,116 23 3,16 26 123 +++ A+++ 167 11.513 54 4,50 79 177 70.1 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + 19,552 3,14 |
| Heating Cooling Electrical power for Seasonal efficiency | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A ++ 11.396 3,21 125 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ | 189 1 7.1 5 0,59 9 59,9 40 6 65 6 50 6 65 6 50 6 65 6 65 6 60 6 65 6 60 74 6 78,8 6 60 74 6 61 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + 19.552 3,14 123 |
| Heating Cooling Electrical power for | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - kW - kW - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A ++ 11.396 3,21 125 A +++ | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17,116 3,16 123 A+++ 11,513 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A + 19.552 3,14 123 A ++ |
| Heating Cooling Electrical power for Seasonal efficiency | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - kW - kW - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19.552 3,14 123 A++ 14.372 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7.214 3,46 135 A+++ 6.012 4,72 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 123 A+++ 11.513 4,50 177 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19,552 3,14 123 A++ 14,372 4,20 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Heating 35°C | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - kWh/year - kWh/year - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7.214 3,46 135 A+++ 6.012 4,72 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 123 A+++ 11.513 4,50 177 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - kW - kW - kW - kW - kW - kWh/year - kWh/year - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Heating 35°C | Water 35/30°C - Outdoor air -7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) | Nominal | kW - kW - kW - kW - kW - kWh/year - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6,012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11,396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19,552 3,14 123 A++ 14,372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Heating 35°C Voltage/Frequessure | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases | Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal | kW - kW - kW - kW - kW - kWh/year - kWh/year - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wa | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Voltage/Frequestre | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases | Nominal | kW - kW - kW - kW - kW - kWh/year - kWh/year - % | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6,012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19,552 3,14 123 A++ 14,372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wa Expansion tank cap | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Voltage/Frequestre | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases | Nominal | - kW - kW - kW - kW - kW - kWh/year - kWh/ye | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7.214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 2,55 14,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wa Expansion tank cap Sound power | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Woltage/Frequ assure ater content acity | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases | Nominal | kW - kW - kW - kW - kWh/year - kWh/year - kWh/year - kPh/year - kWh/year - kW | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 1,00 94,6 6 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system watexpansion tank cap Sound power Sound pressure @1r | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Voltage/Frequ ssure ater content acity | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases | Nominal | - kW - kW - kW - kW - kW - kWh/year - kWh/ye | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7.214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 1,00 94,6 6 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 14,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system watexpansion tank cap Sound power Sound pressure @1r | COP Capacity COP Capacity COP Capacity EER Capacity EER meter sizing Heating 55°C Voltage/Frequ ssure ater content acity | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases Water 35/30°C - Outdoor air 7°C | Nominal | - kW - kW - kW - kW - kW - kW - kWh/year - kWh/year - kWh/year - % l/s kPa I dB(A) dB(A) | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 0,59 33,1 40 65 50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 1,00 94,6 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 1,24 78,8 0 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wate Expansion tank cap Sound power Sound pressure @Ir | COP Capacity COP Capacity COP Capacity EER Capacity EER Meter sizing Heating 55°C Voltage/Frequessure activ The state of | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases Water 35/30°C - Outdoor air 7°C Heating | Nominal | - kW - kW - kW - kW - kW - kW - kWh/year - k | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 1,00 94,6 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 1,24 78,8 0 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wate Expansion tank cap Sound power Sound pressure @Ir | COP Capacity COP Capacity COP Capacity EER Capacity EER Meter sizing Heating 55°C Voltage/Frequessure activ The state of | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases Water 35/30°C - Outdoor air 7°C Heating Cooling | Nominal Mominal Mominal Mominal Mominal Mominal Mominal Nominal Nominal | - kW - kW - kW - kW - kW - kWh/year - kWh/ye | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 0,59 33,1 40 65 50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 1,00 94,6 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 1,24 78,8 0 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wate Expansion tank cap Sound power Sound pressure @Ir | COP Capacity COP Capacity COP Capacity EER Capacity EER Meter sizing Heating 55°C Voltage/Frequessure activ The state of | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases Water 35/30°C - Outdoor air 7°C Heating Cooling DHW | Nominal | kW - kW - kW - kW - kWh/year - kWh/year - g W - kWh/year - g C C C C C C | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 0,59 33,1 40 65 50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 8 70 57 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 1,00 94,6 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 1,24 78,8 0 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wa Expansion tank cap Sound power Sound pressure @1r Operating range Water supply tempe | COP Capacity COP Capacity COP Capacity EER Capacity EER Meter sizing Heating 55°C Voltage/Frequessure activ The state of | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases Water 35/30°C - Outdoor air 7°C Heating Cooling | Nominal Mominal Mominal Mominal Mominal Mominal Mominal Nominal Nominal | kW - kW - kW - kW - kWh/year - kWh/year - % V/Hz/n° I/s kPa I I dB(A) dB(A) °C °C °C | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 0,59 33,1 40 65 50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 1,24 78,8 0 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |
| Heating Cooling Electrical power for Seasonal efficiency Medium climate Outdoor unit Power supply Water flow-rate Pump available pres Minimum system wa Expansion tank cap | COP Capacity COP Capacity COP Capacity EER Capacity EER Meter sizing Heating 55°C Voltage/Frequessure activ The state of | Water 35/30°C - Outdoor air 7°C Water 45/40°C - Outdoor air 7°C Water 18/23°C - Outdoor air 35°C Water 7/12°C - Outdoor air 35°C Energy class Annual energy consumption SCOP ηs (seasonal output) Energy class Annual energy consumption SCOP ηs (seasonal output) ency/Phases Water 35/30°C - Outdoor air 7°C Heating Cooling DHW | Nominal Mominal Minimum / Maximum Minimum / Maximum Minimum / Maximum | kW - kW - kW - kW - kWh/year - kWh/year - g W - kWh/year - g C C C C C C | 12,10 4,95 10,00 3,00 12,30 3,70 12,00 3,95 11,50 2,75 6,50 A++ 7,214 3,46 135 A+++ 6.012 4,72 186 6.1 | 14,50 4,60 12,00 2,85 14,10 3,60 13,50 3,60 12,40 2,50 6,50 A++ 7.894 3,41 133 A+++ 6.803 4,62 182 7.1 0,59 33,1 40 65 50 | 15,90 4,50 13,10 2,70 16,00 3,50 14,90 3,40 14,00 2,50 6,50 A++ 7.895 3,41 133 A+++ 6.805 4,62 182 8.1 0,67 33,1 | 18,00 4,70 18,00 2,70 18,00 3,50 18,50 4,75 17,00 3,05 10,60 A++ 11.396 3,21 125 A+++ 8.077 4,61 181 9.1 400/50/3+N 0,81 101,9 8 70 57 | 22,00 4,40 21,00 2,60 22,00 3,40 23,00 4,60 21,00 2,95 12,50 A++ 14.363 3,23 126 A+++ 10.167 4,54 179 10.1 | 26,00 4,08 22,00 2,50 26,00 3,10 27,00 4,30 26,00 2,70 13,80 A+ 17.116 3,16 123 A+++ 11.513 4,50 177 12.1 1,24 78,8 0 | 30,00 3,91 23,00 2,45 30,00 2,90 31,00 4,00 29,50 14,50 A+ 19.552 3,14 123 A++ 14.372 4,20 165 14.1 |

PRELIMINARY DATA

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

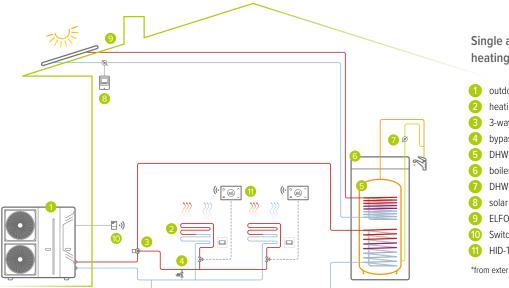
 $The \ Product \ complies \ with \ the \ European \ ErP \ Directive \ (EU \ Regulations \ 811/2013 - 813/2013 - 2016/2281).$

system diagrams 2 6 6 ((• <u>****</u> -[]·)) 7

Single area system: heating/cooling/DHW

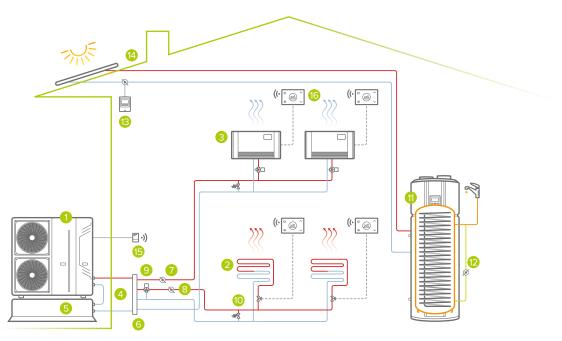
- outdoor unit
- heating/cooling area (fan coils / radiant)
- system inertial storage connection kit (optional)
- system inertial storage (optional)
- bypass*
- DHW heat pump AQUA
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



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

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

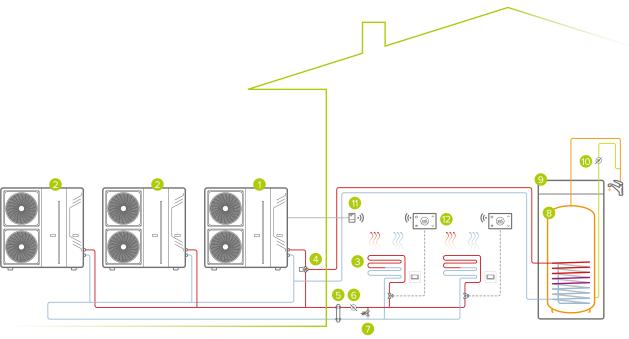


Two-area system with solar thermal: heating/cooling/DHW

- outdoor unit
- 2 heating area (radiant)
- cooling area (fan coils) 3
- 4 system inertial storage connection kit (optional)
- system inertial storage (optional)
- 6 circuit breaker (optional)
- high temperature secondary circuit pump*
- 8 low temeprature secondary circuit pump*
- 3-way mechanical mixing valve*

- bypass*
- 11 DHW heat pump with solar predisposition AQUA
- 12 DHW recirculation pump*
- 13 solar circulation kit (optional)
- 14 ELFOSun solar thermal (optional)
- SwitchConnect Wi-Fi receiver (optional)
- 16 HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

- outdoor unit (Master)
- 2 outdoor unit (Slave)
- 3 heating/cooling area (fan coils / radiant)
- 3-way switching valve (optional)
- hydraulic separator (optional)
- secondary circuit pump*
- bypass*

- 8 DHW tank (optional)
- 9 boiler kit connection QERAX (optional)
- 10 DHW recirculation pump*
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)



HYBRID HEAT PUMPS: SPLIT



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

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











RELIABILITY

Eurovent













- ✓ 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 m³ 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)
- 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 | | | |
| Dilliensions | Outdoor unit | Length(A) x Height(C) x Depth(B) | mm | 1.008x7 | 12x426 | 1.118x8 | 65x523 | | 1.118x864x523 | 3 |
| Weight | Indoor unit | | kg | | 7 | 0 | | | 81 | |
| weight | Outdoor unit | | kg | 5 | 8 | 3 77 | | | 112 | |
| Max / min equivalent length | | | | | | 30 / 2 | | | | |
| Max difference in level ODU / IDU | | Н | m | | 2 | 25 | | | 20 | |
| | | | type/GWP | | | | R-32 / 675 | | | |
| Refrigerant precharge ¹ | | | kg/m | 1,50 / 15 1,65 / 15 | | 1.84 / 15 | | | | |
| | | | CO ₂ tons | 1,0 |)5 | • | 1,1 | | 1,24 | |
| Additional refrigerant charge | | | g/m | 2 | 0 | | | 38 | | |
| | Defrigerent pine | Liquid | inch | 1/- | 4" | | | 3/8" | | |
| | Refrigerant pipe | Gas | inch | | | | 5/8" | | | |
| | Indoor unit | Water (system) | inch | | | | 1" | | | |
| External diameters | iliuooi ullit | Water (DHW) | inch | | | | 1/2" | | | |
| | | Gas | inch | | | | 3/4" | | | |
| | Boiler | Intake air | mm | | | | 100 | | | |
| | | Exhaust gas | mm | | | | 60 | | | |

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

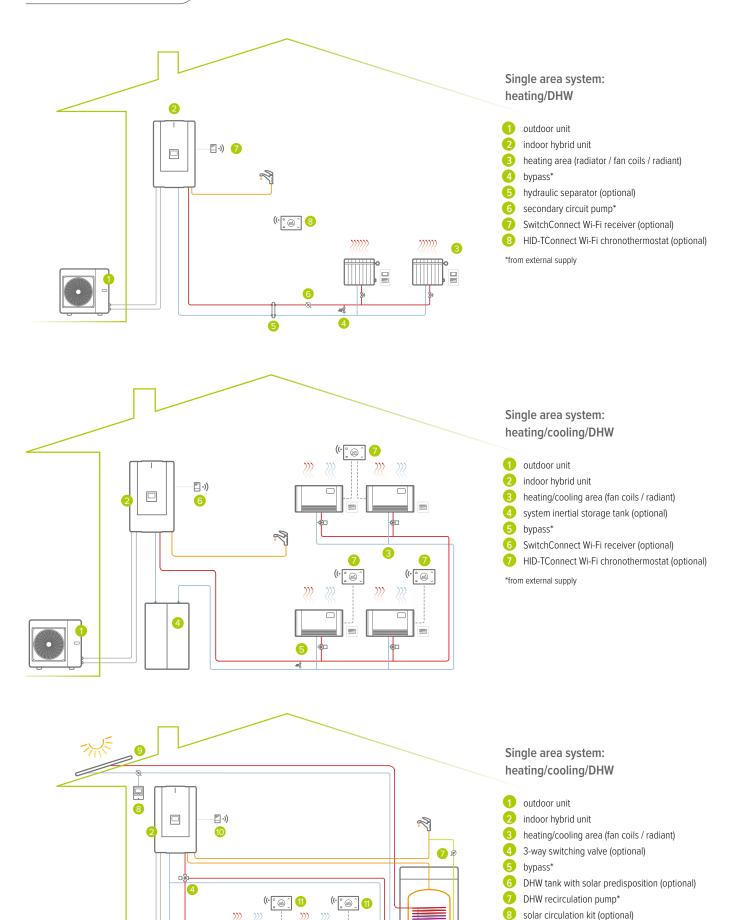
| Size (220M) | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|----------------------|--------------------------------|---------------------------------|--|----------|--------------|--------------|--------------|---------------------|---------------|---|--------------|
| | Capacity | Water 35/30°C - 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 | 16,01/16,8 |
| | СОР | Water 33/30 C - Outdoor dir 7 C | Nominal | - | 5,42 | 5,21 | 5,31 | 5,01 | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | 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 / 14,3 |
| (Heat pump) | СОР | air -7°C | 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 | 16,01/16,6 |
| | СОР | Water 43/40 C - Outdoor dir 7 C | Nominal | - | 3,93 | 3,83 | 3,95 | 3,86 | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 22,94 | 22,94 | 22,94 | 22,94 | 33,35 | 33,35 | 33,35 |
| (Boiler) | Performance | Water 80/00 C | Nominal | % | 97,60 | 97,60 | 97,60 | 97,60 | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | 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, |
| Cooling | EER | 35°C | Nominal | - | 6,08 | 5,24 | 5,12 | 4,77 | 4,02 | 3,70 | 3,65 |
| Cooling | 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 / 14,2 |
| | EER | water 7/12 C - Outdoor air 35 C | 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 / 34,0 |
| DHW | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | 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 |
| | | Energy class | | - | A ++ | A ++ | A ++ | A ++ | A++ | A++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | 55°C | 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 |
| Seasonal efficiency | | Energy class | | - | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | 35°C | 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 | | - | Α | Α | Α | Α | Α | 1,80 11,72/12,86 2,55 1,00 4,10/34,00 16 5,70 A++ 3 7,380 3,52 138 + A+++ 3 7,380 0 4,91 193 A XL C | Α |
| | (Boiler) | DHW profile | | - | XL | XL | XL | XL | XL | XL | XL |
| Indoor unit | | | | | Α | Α | Α | Α | В | С | D |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | | | 230/50/1 | | | |
| Water flow-rate | | | Nominal | I/s | 0,21 | 0,30 | 0,41 | 0,49 | 0,57 | 0,67 | 0,75 |
| Pump available pres | sure | | Nominal | kPa | 31,2 | 36,5 | 33,1 | 31,0 | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | acity | | | I | | | | 8 | | | |
| Minimum system wa | ter content | | | I | | 4 | 10 | | | 60 | |
| Sound power | | | | dB(A) | | | | 41 | | | |
| Sound pressure @1m | 1 | | | dB(A) | | | | 26 | | | |
| Boiler | | | | | | | | | | | |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | | | 230/50/1 | | | |
| Power input | <u> </u> | | | W | | 3 | 38 | | | 78 | |
| Sound power | | | | dB(A) | | | | 52 | | | |
| Outdoor unit | | | | ub(/// | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | 00 | | V/Hz/n° | 2.1 | J.1 | 7.1 | 230/50/1 | 0.1 | 7.1 | 0.1 |
| Sound power | voitage/i requericy/i ilas | c 3 | | dB(A) | 55 | 57 | 58 | 60 | 63 | 64 | 66 |
| Sound pressure @1m | • | | | | 42 | 44 | 45 | 47 | 50 | 51 | 53 |
| | | | | dB(A) | 42 | 44 | 45 | 4/ | 50 | | 53 |
| Operating range | | Hoat numn | Minimum / Maximum | °C | | | | 25 / 65 | | | |
| Water supply | Heating | Heat pump | | | | | | 25 / 65 | | | |
| temperature | Cooling | Boiler | Minimum / Maximum | °C | | | | 25 / 80 | | | |
| | Cooling | - Lloat numn | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| | Heating | Heat pump | Minimum / Maximum | °C | | | | -25 / 43 | | | |
| Operating range | | Boiler | Minimum / Maximum | °C | | | | -25 / 35 -5 / 43 | | | |
| Operating range | | | | | | | | | | | |
| (outdoor air) | Cooling | - Heat pump | Minimum / Maximum Minimum / Maximum | °C | | | | -5 / 43 | | | |

| Size (400TN) | | | | | 6.1 | 7.1 | 8.1 |
|----------------------------------|--------------------------------|---------------------------------|-------------------|----------|---------------|---------------------|---------------|
| | 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 | Trater coros o catacor an 7 c | Nominal | - | 5,00 | 4,70 | 4,55 |
| leating | Capacity | Water 35/30°C - Outdoor | Nominal / Maximum | kW | 10,49 / 13,85 | 12,23 / 14,09 | 13,43 / 14,33 |
| Heat pump) | COP | air -7°C | 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 | Water 45/40 C Outdoor all 7 C | Nominal | | 3,80 | 3,65 | 3,60 |
| leating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 33,35 | 33,35 | 33,35 |
| Boiler) | Performance | Water 60/00 C | Nominal | % | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | Nominal / Maximum | kW | 12,06 / 15,02 | 13,79 / 15,30 | 14,84 / 16,38 |
| Cooling | EER | 35℃ | Nominal | - | 4,02 | 3,70 | 3,65 |
| Journa | 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 | Water 7/12 C - Outdoor all 35 C | Nominal | - | 2,75 | 2,55 | 2,45 |
| DHW | Power | - | Minimum / Maximum | kW | 4,10 / 34,00 | 4,10 / 34,00 | 4,10 / 34,00 |
| / TIVV | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | l/min | 16 | 16 | 16 |
| lectrical power for | meter sizing | | | kW | 5,40 | 5,70 | 6,10 |
| | | Energy class | | - | A ++ | A ++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 55°C | SCOP | | - | 3,56 | 3,52 | 3,48 |
| | | ηs (seasonal output) | | % | 139 | 138 | 136 |
| easonal efficiency | | Energy class | | - | A+++ | A+++ | A +++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 35°C | SCOP | | - | 5,00 | 4,91 | 4,89 |
| | | ηs (seasonal output) | | % | 196 | 193 | 193 |
| | DHW | Energy class | | _ | Α | A | A |
| | (Boiler) | DHW profile | | _ | XL | XL | XL |
| ndoor unit | | | | | В | С | D |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | 230/50/1 | |
| Vater flow-rate | | | Nominal | I/s | 0,57 | 0,67 | 0,75 |
| ump available pres | ssure | | Nominal | kPa | 25,7 | 31,7 | 22,6 |
| xpansion tank capa | acity | | | | | 8 | |
| Minimum system wa | nter content | | | ī | | 60 | |
| Sound power | | | | dB(A) | | 41 | |
| Sound pressure @1n | n | | | dB(A) | | 26 | |
| Boiler | | | | | | | |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | 230/50/1 | |
| Power input | · · · | | | W | | 78 | |
| ound power | | | | dB(A) | | 52 | |
| Outdoor unit | | | | | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | 400/50/3+N | |
| Sound power | , , | | | dB(A) | 63 | 64 | 66 |
| Sound pressure @1m | n | | | dB(A) | 50 | 51 | 53 |
| Operating range | | | | - v · y | | | |
| | | Heat pump | Minimum / Maximum | °C | | 25 / 65 | |
| | Heating | Boiler | Minimum / Maximum | °C | | 25 / 80 | |
| emperature | Cooling | - | Minimum / Maximum | °C | | 5 / 25 | |
| | Heating | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |
| | neaufid | Boiler | Minimum / Maximum | °C | | -25 / 35 | |
| N P | | bullet | | | | | |
| , , | Cooling | - | Minimum / Maximum | °C | | -5 / 43 | |
| Operating range (outdoor air) | | - Heat pump | | °C °C | | -5 / 43 -25 / 43 | |

PRELIMINARY DATA

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

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



6

§ ELFOSun solar thermal (optional)
 10 SwitchConnect Wi-Fi receiver (optional)
 11 HID-TConnect Wi-Fi chronothermostat (optional)

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









Cooling



















MANAGEMENT AND CONNECTIVITY



(optional)













Clivet Eye monitoring

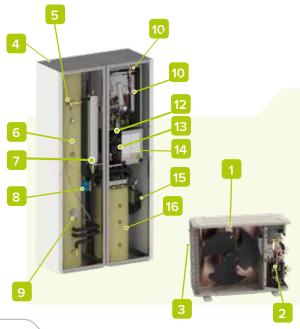




- √ Optimised to maximise energy savings without sacrificing comfort
- √ Compatible with a radiator system: water temperature up to 80°C
- ✓ Customisable with numerous kits for a complete, yet discreet, central heating plant
- Connectivity and the APP to keep the system under control
- Domestic hot water 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
- 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. | 100x2.100x5 | 00 | | |
| Dilliensions | Outdoor unit | Length(A) x Height(C) x Depth(B) | mm | 1.008x7 | 712x426 | 1.118x8 | 65x523 | | 1.118x864x52 | 3 |
| Woight | Indoor unit | | kg | | | | 325 | | | |
| Weight | Outdoor unit | | kg | 5 | 8 | 7 | 77 | | 112 | |
| Max / min equivalent length | | L | m | | | | 30/2 | | | |
| Max difference in level ODU / IDU | | Н | m | 2 | 5 | | 51 | | 2 | 20 |
| | | | type/GWP | | | | R-32 / 675 | | | |
| Refrigerant precharge ¹ | | | kg/m | 1,50 |)/15 | 1,65 | 5 / 15 | | 1,84/15 | |
| | | | CO ₂ tons | 1,0 |)5 | 1 | ,11 | | 1,24 | |
| Additional refrigerant charge | | | g/m | | | | 38 | | | |
| | Defrigerent pine | Liquid | inch | 1/ | 4" | | | 3/8" | | |
| | Refrigerant pipe | Gas | inch | | | | 5/8" | | | |
| | la da a uait | Water (system) | inch | | | | 1" | | | |
| External diameters | Indoor unit | Water (DHW) | inch | 3/4" | | | | | | |
| | | Gas | inch | | | | 3/4" | | | |
| | Boiler | Intake air | mm | | | | 100 | | | |
| | | Exhaust gas | mm | | | | 60 | | | |

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

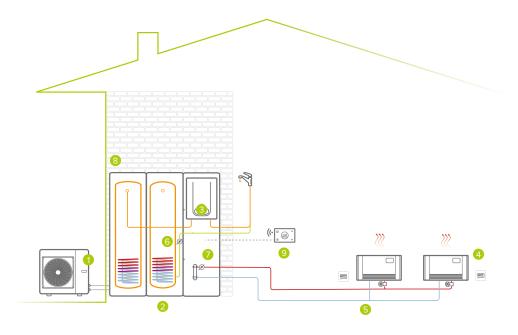
| Size (220M) | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|---------------------------------|--------------------------------|---------------------------------|--|-------------------|-------------|-------------|--------------|------------------|---------------|---------------|---------------|
| | Capacity | W . 25/2000 O | 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 / 16,8 |
| | COP | Water 35/30°C - Outdoor air 7°C | Nominal | - | 5,42 | 5,21 | 5,31 | 5,01 | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | 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 / 14,3 |
| (Heat pump) | COP | air -7°C | 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 | water 45/40 C - Outdoor dir 7 C | Nominal | | 3,93 | 3,83 | 3,95 | 3,86 | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 22,94 | 22,94 | 22,94 | 22,94 | 33,35 | 33,35 | 33,35 |
| (Boiler) | Performance | | Nominal | % | 97,60 | 97,60 | 97,60 | 97,60 | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | Nominal / Maximum | kW | 4,55 / 6,88 | 6,44 / 7,65 | | | 12,06 / 15,02 | | |
| Cooling | EER | 35℃ | Nominal | - | 6,08 | 5,24 | 5,12 | 4,77 | 4,02 | 3,70 | 3,65 |
| Cooming | Capacity | Water 7/12°C - Outdoor air 35°C | Nominal / Maximum | kW | 4,26 / 6,14 | | 7,46 / 7,94 | | 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 | | | | , , . |
| | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | 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 |
| | | Energy class | | - | Δ++ | A++ | A++ | A++ | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | 55°C | 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 |
| Seasonal efficiency | Harder. | Energy class | | - LW/h/ | A+++ | A+++ | A+++ | 4.749 | A+++ | A+++ | 7.915 |
| Medium climate | Heating 35°C | Annual energy consumption SCOP | | kWh/year | 2.542 | 3.283 | 3.824 | | 6.793 | 7.380 | |
| | 35 C | | | - % | 5,13 202 | 5,15 203 | 5,32 210 | 5,27 208 | 5,00 196 | 4,91 193 | 4,89 193 |
| | DHW | ηs (seasonal output) | | | A | A | A | A | A | A | A |
| | (Boiler) | Energy class DHW profile | | - | XL | XL | XL | XL | XL | XL | XL |
| Indoor unit | (Doller) | DHW profile | - | - | A | | A | | B | C | D |
| | V-11/F/DI | | | | A | A | A | | | | |
| Power supply Water flow-rate | Voltage/Frequency/Phas | es | Nominal | V/Hz/n° I/s | 0,21 | 0.30 | 0.41 | 230/50/1 0,49 | 0.57 | 0.67 | 0.75 |
| Pump available pres | Curo | | Nominal | kPa | 31,2 | 36,5 | 33,1 | 31,0 | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | | | NOIIIIIdi | KFa I | 31,2 | 30,3 | 33,1 | 8 | 23,7 | 31,7 | 22,0 |
| Minimum system wa | • | | | <u> </u> | | | 10 | 0 | | 60 | |
| Sound power | iter content | | | dB(A) | | | ru . | 41 | | 00 | |
| Sound pressure @1n | n | | | dB(A) | | | | 26 | | | |
| Boiler | | | | ub(ii) | | | | | | | |
| Power supply | Voltage/Frequency/Phas | | | V/Hz/n° | | | | 230/50/1 | | | |
| Power input | voitage/Frequency/Frias | ies | | W | | | 88 | 230/30/1 | | 78 | |
| Sound power | | | | dB(A) | | | ,,, | 52 | | 70 | |
| Outdoor unit | | | | UD(A) | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | 100 | | V/Hz/n° | 2.1 | 3.1 | 7.1 | 230/50/1 | 0.1 | 7.1 | 0.1 |
| Sound power | voitage/Frequency/Frias | 955 | | dB(A) | 55 | 57 | 58 | 60 | 63 | 64 | 66 |
| Sound pressure @1n | n | | | dB(A) | 42 | 44 | 45 | 47 | 50 | 51 | 53 |
| · | | | | ub(A) | | | | | | | |
| Operating range | | Heat numn | Minimum / Mavimum | °C | | | | 25 / 65 | | | |
| Water supply | Heating | Heat pump Boiler | Minimum / Maximum Minimum / Maximum | °C | | | | 25 / 80 | | | |
| temperature | Cooling | DOUGI | Minimum / Maximum | °C | | | | 5/25 | | | |
| | Cooming | - | | °C | | | | -25 / 43 | | | |
| | | Hoat numn | | | | | | | | | |
| | Heating | Heat pump | Minimum / Maximum | | | | | | | | |
| Operating range | | Heat pump Boiler | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| Operating range (outdoor air) | Heating Cooling DHW | | | | | | | | | | |

| Size (400TN) | | | | | 6.1 | 7.1 | 8.1 |
|----------------------|--------------------------------|--|-------------------|----------|---------------|---------------|---------------|
| | 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 | water 55/50 C - Outdoor all 7 C | Nominal | - | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | Nominal / Maximum | kW | 10,49 / 13,85 | 12,23 / 14,09 | 13,43 / 14,33 |
| Heat pump) | СОР | air -7°C | 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 | Water 43/40 C - Outdoor all 7 C | Nominal | - | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 33,35 | 33,35 | 33,35 |
| Boiler) | Performance | water 80/00 C | Nominal | % | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | Nominal / Maximum | kW | 12,06 / 15,02 | 13,79 / 15,30 | 14,84 / 16,38 |
| Cooling | EER | 35℃ | Nominal | - | 4,02 | 3,70 | 3,65 |
| Cooling | 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 | water 7/12 C - Outdoor all 35 C | Nominal | - | 2,75 | 2,55 | 2,45 |
| OHW | Power | - | Minimum / Maximum | kW | 4,10 / 34,00 | 4,10 / 34,00 | 4,10 / 34,00 |
| ZITIVV | Specific flow rate | Water with $\Delta T=30^{\circ}C$ in 10 mi | nutes | l/min | 16 | 16 | 16 |
| Electrical power for | meter sizing | | | kW | 5,40 | 5,70 | 6,10 |
| | | Energy class | | - | Α++ | Δ++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 55°C | SCOP | | | 3,56 | 3,52 | 3,48 |
| | | ηs (seasonal output) | | % | 139 | 138 | 136 |
| Seasonal efficiency | | Energy class | | - | A+++ | Α+++ | A+++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 35°C | SCOP | | - | 5,00 | 4,91 | 4,89 |
| | | ηs (seasonal output) | | % | 196 | 193 | 193 |
| | DHW | Energy class | | - | Α | A | Α |
| | (Boiler) | DHW profile | | - | XL | XL | XL |
| ndoor unit | | | | | В | С | D |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | 230/50/1 | |
| Water flow-rate | | | Nominal | I/s | 0,57 | 0,67 | 0,75 |
| Pump available pres | sure | | Nominal | kPa | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | acity | | | I | | 8 | |
| Minimum system wa | ter content | | | I | | 60 | |
| Sound power | | | | dB(A) | | 41 | |
| Sound pressure @1m | 1 | | | dB(A) | | 26 | |
| Boiler | | | | | | | |
| Power supply | Voltage/Frequency/Phas | es | | 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/Phas | es | | V/Hz/n° | | 400/50/3 + N | |
| Sound power | J | | | dB(A) | 63 | 64 | 66 |
| Sound pressure @1m | 1 | | | dB(A) | 50 | 51 | 53 |
| Operating range | | | | | | | |
| | | Heat pump | Minimum / Maximum | °C | | 25 / 65 | |
| Nater supply | Heating | Boiler | Minimum / Maximum | °C | | 25 / 80 | |
| emperature | Cooling | - | Minimum / Maximum | °C | | 5 / 25 | |
| | | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |
| | Heating | Boiler | Minimum / Maximum | °C | | -25 / 35 | |
| Operating range | Cooling | | Minimum / Maximum | °C | | -5 / 43 | |
| , , | Coolling | | | | | | |
| (outdoor air) | DHW | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |

PRELIMINARY DATA

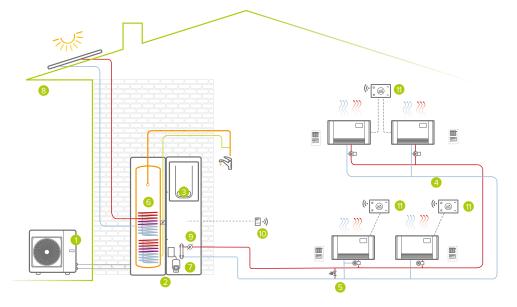
Data according to EN 14511:2018 and EN 14825:2016

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



Single area system: heating/DHW

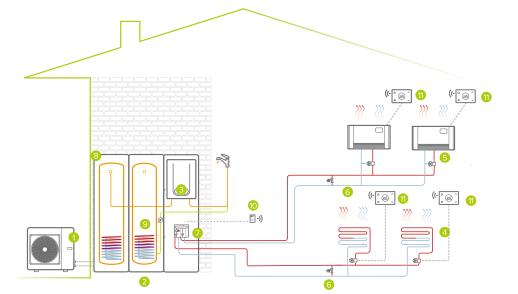
- 1 outdoor unit
- 2 indoor unit
- 3 hybrid module (heat pump / boiler)
- 4 heating area (radiator / fan coils / radiant)
- bypass*
- 6 secondary circuit kit (optional)
- DHW recirculation pump
- 8 additional DHW tank
- 9 HID-TConnect Wi-Fi chronothermostat (optional)



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

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

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













CONVENIENCE























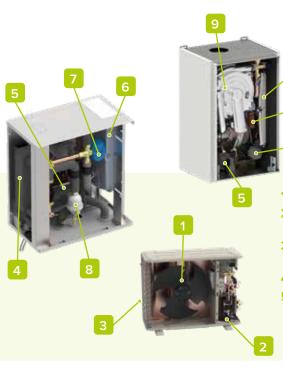


- ✓ Ideal for replacing old systems while keeping existing radiators
- √ Simultaneous production of DHW and cooling/heating
- ✓ It does not need to be coupled to a tank if DHW is produced by the boiler
- ✓ It uses renewable solar thermal energy by coupling to ELFOSun (can be connected to the boiler)
- 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.





- Inverter DC fan
- 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 Power supply 400/3/50+N 400TN

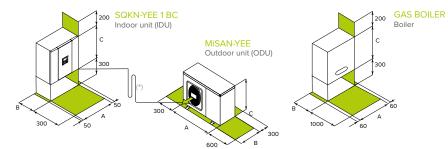
4-PIPE BOILER

HYSO24 24kW boiler HYSO34 34kW boiler

accessories

| | ACS200X | 200-litre domestic hot water storage tank | San | KITAK50X | Coaxial system for adjustable smoke discharge and intake (ø | | |
|----------|----------|--|---|----------|---|--|--|
| | ACS300X | 300-litre domestic hot water storage tank | | | 80/125) | | |
| | ACS500X | 500-litre domestic hot water storage tank | © © © | KAS80X | Smoke intake and discharge fittings, 80 mm diameter | | |
| | SCS08X | 0.8 m² solar exchanger for flange installation (for ACS200X e ACS300X) | | KTCGPLX | Kit to convert boiler from methane to LPG | | |
| 6 | SCS12X | 1.2 m ² solar exchanger for flange installation (for ACS500X) | | | Auxiliary condensate collection | | |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | II als | DTX | tray | | |
| (Stan) | KIRE2HLX | 2 zones: external kit, high temperature + low temperature | 9 | APAVX | Kit of antivibration mounts for floor installation | | |
| | KIRE2HX | 2 zones: external kit, high temperature | | ASTFX | Kit of antivibration mounts for wall bracket installation | | |
| 1 | DIX | 1-litre circuit breaker | 11 | KSIPX | Kit with wall fixing brackets | | |
| 46. | DI50X | 50-litre circuit breaker | | | | | |
| 1 | ACI40X | 40L system inertial storage tank (s. 2.1÷5.1) | | KISX | Simplified installation kit with fittings for Sphera EVO 2.0 Box Hybrid | | |
| | ACI60X | 60-litre system inertial storage tank | | | Black soft touch chronothermostat, with | | |
| | SFCSTX | Additional probe for cascade function | (20) | HID-TCBX | temperature control and management via App / Voice control | | |
| KSDFX | KSDFX | Splitter for boiler smoke discharge | | HID-TCNX | White soft touch chronothermostat, with temperature control and | | |
| STD O | KCSAFX | Coaxial fitting for smoke discharge and intake (ø60/100) | 1 200 | | management via App / Voice control | | |
| S. S. S. | KITKX | Coaxial system for adjustable smoke discharge and intake (ø 60/100 | | 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

| Size (230M) | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|----------------------|--------------------------------|---------------------------------|-------------------|----------|--------------|--------------|--------------|---------------|---------------|---------------|-------------|
| • • | Capacity | | 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. |
| | COP | Water 35/30°C - Outdoor air 7°C | Nominal | - | 5,42 | 5,21 | 5,31 | 5,01 | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | Nominal / Maximum | kW | 4,17 / 6,25 | 6,05 / 6,97 | - | 8,20/9,30 | 10,49 / 13,85 | 12,23 / 14,09 | 13,43 / 14, |
| (Heat pump) | COP | air -7°C | Nominal | - | 3,16 | 3,00 | 3,23 | 3,07 | 3,13 | 2,82 | 2,74 |
| | Capacity | | Nominal / Maximum | kW | 4,16 / 5,96 | 6,03 / 7,13 | | 10,01/10,30 | 12,30 / 14,50 | 14,00 / 15,70 | 16,01/16, |
| | COP | Water 45/40°C - Outdoor air 7°C | Nominal | - | 3,93 | 3,83 | 3,95 | 3,86 | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | | Nominal | kW | 22,94 | 22,94 | 22,94 | 22,94 | 33,35 | 33,35 | 33,35 |
| (Boiler) | Performance | Water 80/60°C | Nominal | % | 97,60 | 97,60 | 97,60 | 97,60 | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | 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, |
| 0 - 1 | EER | 35℃ | Nominal | - | 6,08 | 5,24 | 5,12 | 4,77 | 4,02 | 3,70 | 3,65 |
| Cooling | Capacity | | 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, |
| | EER | Water 7/12°C - Outdoor air 35°C | Nominal | - | 3,50 | 3,09 | 3,33 | 3,09 | 2,75 | 2,55 | 2,45 |
| 51111 | 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, |
| DHW | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | 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 |
| | <u>-</u> | Energy class | | - | A ++ | A ++ | A ++ | A ++ | A ++ | A ++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | 55°C | 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 |
| Seasonal efficiency | | Energy class | | - | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| medium emiliate | 35°C | 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 | | - | Α | Α | Α | Α | Α | Α | Α |
| | (Boiler) | DHW profile | | - | XL | XL | XL | XL | XL | XL | XL |
| Indoor unit | | | | | Α | Α | Α | Α | В | В. | В |
| Power supply | Voltage/Frequency/Phas | 243 | | V/Hz/n° | | | | 230/50/1 | | | |
| Water flow-rate | voltage/i requestej/i nas | | Nominal | I/s | 0,21 | 0,30 | 0,41 | 0,49 | 0,57 | 0,67 | 0,75 |
| Pump available pres | ssure | | Nominal | kPa | 31,2 | 36.5 | 33,1 | 31,0 | 25.7 | 31.7 | 22.6 |
| Expansion tank capa | | | | 1 | ,- | ,- | ,- | 8 | ,- | ,- | |
| Minimum system wa | | | | i i | | 4 | 10 | | | 60 | |
| Sound power | itor contone | | | dB(A) | | | | 41 | | | |
| Sound pressure @1n | n | | | dB(A) | | | | 26 | | | |
| Boiler | | | | (-/ | | | | | | | |
| Power supply | Voltage/Frequency/Phas | 200 | | V/Hz/n° | | | | 230/50/1 | | | |
| Power input | voitage/i requericy/i rias | 000 | | W | | - | 38 | 230/30/1 | | 78 | |
| Sound power | | | | dB(A) | | | 00 | 52 | | 70 | |
| Outdoor unit | | | | ub(A) | - 1 | 24 | | | - C 4 | 74 | 8.1 |
| | V 1: (5 (D) | | | 1441 / 0 | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | | F0 | 230/50/1 | C 2 | C 4 | |
| Sound power | | | | dB(A) | 55 | 57 | 58 | 60 | 63 | 64 | 66 |
| Sound pressure @1n | | | | dB(A) | 42 | 44 | 45 | 47 | 50 | 51 | 53 |
| Operating range | | | | | | | | | | | |
| Water supply | Heating | Heat pump | Minimum / Maximum | °C | | | | 25 / 65 | | | |
| temperature | | Boiler | Minimum / Maximum | °C | | | | 25/80 | | | |
| F | Cooling | - | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| | Heating | Heat pump | Minimum / Maximum | °C | | | | -25 / 43 | | | |
| Operating range | | Boiler | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| (outdoor air) | 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 |
|------------------------------------|------------------|----------------------------------|----------------------|------------|--------|---------|---------|------|--------------|-----|
| | Indoor unit | Length(A) x Height(C) x Depth(B) | mm | | 547x6 | 04x386 | | | 547x604x386 | |
| Dimensions | Outdoor unit | Length(A) x Height(C) x Depth(B) | mm | 986x7 | 12x426 | 1.004x8 | 366x523 | | 1.004x866x52 | 3 |
| | Boiler | Length(A) x Height(C) x Depth(B) | mm | | 410x6 | 42x307 | | | 410x642x330 | |
| | Indoor unit | | kg | | 5 | 0 | | | 68 | |
| Weight | Outdoor unit | | kg | 5 | 8 | | 77 | | 112 | |
| | Boiler | | kg | | 3 | 5 | | | 44 | |
| Max / min equivalent length | | L | m | | | | 30/2 | | | |
| Max difference in level ODU / IDU | | Н | m | | 2 | 5 | | | 20 | |
| | | | type/GWP | R-32 / 675 | | | | | | |
| Refrigerant precharge ¹ | | | kg/m | 1,50 |) / 15 | 1,65 | 5 / 15 | | 1.84 / 15 | |
| | | | CO ₂ tons | 1, | 05 | 1 | I,1 | | 1,24 | |
| Additional refrigerant charge | | | g/m | 2 | 0 | | | 38 | | |
| | Dofrigorout nino | Liquid | inch | 1/ | 4" | | | 3/8" | | |
| | Refrigerant pipe | Gas | inch | | | | 5/8" | | | |
| | Indoor unit | Water (system) | inch | | | | 1" | | | |
| External diameters | illuooi ullit | Water (DHW) | inch | 1/2" | | | | | | |
| | | Gas | inch | | | | 3/4" | | | |
| | Boiler | 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 |
|----------------------|--------------------------------|---------------------------------|-------------------|--------------|---------------|---------------|---------------|
| | 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 | water 35/30 C - Outdoor air / C | Nominal | - | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | Nominal / Maximum | kW | 10,49 / 13,85 | 12,23 / 14,09 | 13,43 / 14,33 |
| (Heat pump) | СОР | air -7°C | 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 |
| | СОР | water 45/40 C - Outdoor air / C | Nominal | - | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 33,35 | 33,35 | 33,35 |
| (Boiler) | Performance | Water 80/60 C | Nominal | % | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | Nominal / Maximum | kW | 12,06 / 15,02 | 13,79 / 15,30 | 14,84 / 16,38 |
| Caaliaa | EER | 35°C | Nominal | - | 4,02 | 3,70 | 3,65 |
| Cooling | Capacity | W-+7/220 O-+ | Nominal / Maximum | kW | 11,16 / 11,80 | 11,72 / 12,86 | 12,88 / 14,20 |
| | EER | Water 7/12°C - Outdoor air 35°C | Nominal | _ | 2,75 | 2,55 | 2,45 |
| 51111 | Power | - | Minimum / Maximum | kW | 4,10 / 34,00 | 4,10 / 34,00 | 4,10 / 34,00 |
| DHW | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | l/min | 16 | 16 | 16 |
| Electrical power for | • | | | kW | 5,40 | 5,70 | 6,10 |
| · | - | Energy class | | - | A++ | A ++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 55°C | SCOP | | | 3,56 | 3,52 | 3,48 |
| | | ns (seasonal output) | | % | 139 | 138 | 136 |
| Seasonal efficiency | | Energy class | | - | A+++ | Δ+++ | A+++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 35°C | SCOP | | | 5,00 | 4,91 | 4,89 |
| | | ηs (seasonal output) | | % | 196 | 193 | 193 |
| | DHW | Energy class | | _ | Α | Α | A |
| | (Boiler) | DHW profile | | - | XL | XL | XL |
| Indoor unit | | | | | В | В | В |
| Power supply | Voltage/Frequency/Phas | ies | | V/Hz/n° | | 230/50/1 | |
| Water flow-rate | | | Nominal | I/s | 0.57 | 0,67 | 0,75 |
| Pump available pres | sure | | Nominal | kPa | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | | | | i — — | | 8 | |
| Minimum system wa | | | | i — — | | 60 | |
| Sound power | ter content | | | dB(A) | | 41 | |
| Sound pressure @1m | 1 | | | dB(A) | | 26 | |
| Boiler | · | | | -50.7 | | | |
| | Valtage/Eroguene:/Db | | | V/Hz/n° | | 230/50/1 | |
| Power supply | Voltage/Frequency/Phas | 962 | | W W | | 78 | |
| Power input | | | | | | | |
| Sound power | | | | dB(A) | | 52 | |
| Outdoor unit | | | | | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | es | | V/Hz/n° | | 230/50/1 | |
| Sound power | | | | dB(A) | 63 | 64 | 66 |
| Sound pressure @1m | 1 | | | <u>dB(A)</u> | 50 | 51 | 53 |
| Operating range | | | | | | | |
| Water cupali | Heating | Heat pump | Minimum / Maximum | °C | | 25 / 65 | |
| Water supply | ricaully | Boiler | Minimum / Maximum | °C | | 25 / 80 | |
| temperature | Cooling | - | Minimum / Maximum | °C | | 5 / 25 | |
| | Heating | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |
| O | Heating | Boiler | Minimum / Maximum | °C | | -25 / 35 | |
| Operating range | Cooling | - | Minimum / Maximum | °C | | -5 / 43 | |
| (outdoor air) | | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |
| | DHW | 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 ELFOControl 3 EVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl 3 EVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl 3 EVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl 3 EVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2013

system diagrams Single area system: heating/DHW outdoor unit -[]·)) indoor unit 0 boiler heating area (radiator / fan coils / radiant) bypass* hydraulic separator (optional) secondary circuit pump* SwitchConnect Wi-Fi receiver (optional) וווווו HID-TConnect Wi-Fi chronothermostat (optional) *from external supply Single area system: heating/cooling/DHW outdoor unit indoor unit -<u>-</u>□·)) boiler heating/cooling area (fan coils / radiant) system inertial storage tank (optional) bypass* SwitchConnect Wi-Fi receiver (optional) HID-TConnect Wi-Fi chronothermostat (optional) *from external supply Single area system: heating/cooling/DHW . outdoor unit 8 indoor unit -E ·)) boiler 0 heating/cooling area (fan coils / radiant) 6 bypass* 6 DHW tank with solar predisposition (optional) DHW recirculation pump* (· [(a)) ((· 🖺 🚳 Ĵ 8 solar circulation kit (optional) ELFOSun solar thermal (optional) SwitchConnect Wi-Fi receiver (optional) HID-TConnect Wi-Fi chronothermostat (optional) *from external supply



Weekly schedule

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

















MANAGEMENT AND CONNECTIVITY

Instant DHW













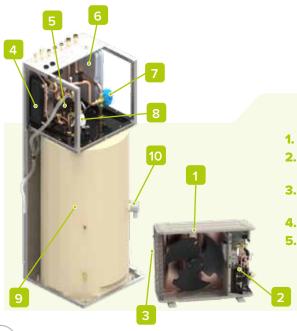




- √ Ideal combination of heat pump and boiler
- √ Hot water guaranteed with the utmost efficiency
- ✓ Designed not to disturb, operating very quietly.
- ✓ Simultaneous operation and domestic hot water supply
- Wide series of accessories for a complete system

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.



- 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

Power supply 400/3/50+N 400TN

PUMP:

Standard pump

Single pump with larger available head 1PUM

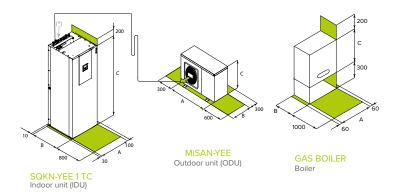
4-PIPE BOILER

24kW boiler HYSO24 34kW boiler HYSO34

accessories

| | ACSA250X | 250L additional domestic hot water storage tank | STD O | KCSAFX | Coaxial fitting for smoke discharge and intake (ø60/100) |
|-------|----------|---|------------------|----------|---|
| 4 | SOLX | Drain-back solar integration for domestic hot water | See St. | KITKX | Coaxial system for adjustable smoke discharge and intake (ø |
| | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | War and a second | KITAK50X | 60/100) Coaxial system for adjustable smoke discharge and intake (ø |
| | KIRE2HLX | 2 zones: external kit, high temperature + low temperature (mixed) | MARKK O O O O O | KAS80X | 80/125) Smoke intake and discharge fittings, 80 mm diameter |
| | KIRE2HX | 2 zones: external kit, high temperature | # | KTCGPLX | Kit to convert boiler from methane to LPG |
| 1 | DIX | 1-litre circuit breaker | Mark . | DTX | Auxiliary condensate collection tra |
| (8) | DI50X | 50-litre circuit breaker | | APAVX | Kit of antivibration mounts for floor installation |
| | ACI40X | 40L system inertial storage tank (s. 2.1÷5.1) | | ASTFX | Kit of antivibration mounts for wall bracket installation |
| | ACI60X | 60-litre system inertial storage tank | I | KSIPX | Kit with wall fixing brackets |
| 1 | COFX | Casing sheets for the inertial storage cover | | HID-TCBX | Black soft touch chronothermostat with temperature control and management via App / Voice |
| J/ | SFCSTX | Additional probe for cascade | | | control |
| HSDFX | KSDFX | Splitter for boiler smoke discharge | | HID-TCNX | White soft touch chronothermostat with temperature control and management via App / Voice control |
| | | | 2.1 | 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.

(*) Water and gas connections

technical data

| Size (220M) | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|----------------------|--------------------------------|---------------------------------|-------------------|--------------|-------------|-------------|--------------|--------------|---------------|---------------|--------------|
| | 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 |
| | СОР | Water 33/30 C - Outdoor dir 7 C | Nominal | - | 5,42 | 5,21 | 5,31 | 5,01 | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | Nominal / Maximum | kW | 4,17 / 6,25 | 6,05 / 6,97 | | 8,20/9,30 | | 12,23 / 14,09 | |
| (Heat pump) | СОР | air -7°C | 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 | | 8,22 / 8,98 | | | 14,00 / 15,70 | |
| | СОР | | Nominal | - | 3,93 | 3,83 | 3,95 | 3,86 | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 22,94 | 22,94 | 22,94 | 22,94 | 33,35 | 33,35 | 33,35 |
| (Boiler) | Performance | | Nominal | % | 97,60 | 97,60 | 97,60 | 97,60 | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | Nominal / Maximum | kW | 4,55 / 6,88 | 6,44 / 7,65 | 8,10 / 11,13 | | | 13,79 / 15,30 | |
| Cooling | EER | 35℃ | 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 | | 7,46 / 7,94 | | 11,16 / 11,80 | 11,72 / 12,86 | 12,88 / 14,2 |
| | 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 | | | | 4,10 / 34,0 |
| | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | 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 |
| | | Energy class | | - | A++ | A++ | A++ | A++ | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | 55°C | 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 |
| Seasonal efficiency | | Energy class | | | Α+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 | 6.793 | 7.380 | 7.915 |
| | 35°C | 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 | Α | Α | A | Α |
| | (Boiler) | DHW profile | | | XL | XL | XL | XL | XL | XL | XL |
| Indoor unit | | | | | Α | Α | Α | Α | В | В | В |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | | | 230/50/1 | | | |
| Water flow-rate | | | Nominal | I/s | 0,21 | 0,30 | 0,41 | 0,49 | 0,57 | 0,67 | 0,75 |
| Pump available pres | | | Nominal | kPa | 31,2 | 36,5 | 33,1 | 31,0 | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | | | | <u> </u> | | | | 8 | | | |
| Minimum system wa | ter content | | | <u> </u> | | 4 | .0 | | | 60 | |
| Sound power | | | | dB(A) | | | | 41 | | | |
| Sound pressure @1n | 1 | | | dB(A) | | | | 26 | | | |
| Boiler | V-11/F/Db | | | V/II- / -0 | | | | 220/50/4 | | | |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° W | | | | 230/50/1 | | 70 | |
| Power input | | | | | | | 8 | | | 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/Phas | ses | | V/Hz/n° | | | | 230/50/1 | | | |
| Sound power | | | | dB(A) | 55 | 57 | 58 | 60 | 63 | 64 | 66 |
| Sound pressure @1n | 1 | | | dB(A) | 42 | 44 | 45 | 47 | 50 | 51 | 53 |
| Operating range | | | | | | | | | | | |
| Water supply | Heating | Heat pump | Minimum / Maximum | °C | | | | 25 / 65 | | | |
| temperature | | Boiler | Minimum / Maximum | °C | | | | 25/80 | | | |
| | Cooling | - | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| | Heating | Heat pump | Minimum / Maximum | °C | | | | -25 / 43 | | | |
| Operating range | | Boiler | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| (outdoor air) | 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 |
|------------------------------------|------------------|----------------------------------|----------------------|-------|--------|--------|------------|------|--------------|-----|
| | Indoor unit | Length(A) x Height(C) x Depth(B) | mm | | 547x6 | 04x386 | | | 547x604x386 | j |
| Dimensions | Outdoor unit | Length(A) x Height(C) x Depth(B) | mm | 986x7 | 12x426 | 1.004x | 366x523 | 1 | I.004x866x52 | 3 |
| | Boiler | Length(A) x Height(C) x Depth(B) | mm | | 410x6 | 42x307 | | | 410x642x330 | i |
| | Indoor unit | | kg | | 5 | 0 | | | 68 | |
| Weight | Outdoor unit | | kg | 5 | 58 | | 77 | | 112 | |
| | Boiler | | kg | | 3 | 5 | | | 44 | |
| Max / min equivalent length | | L | m | | | | 30 / 2 | | | |
| Max difference in level ODU / IDU | | Н | m | | 2 | !5 | | | 20 | |
| | | | type/GWP | | | | R-32 / 675 | | | |
| Refrigerant precharge ¹ | | | kg/m | 1,50 | 0 / 15 | 1,6 | 5 / 15 | | 1.84 / 15 | |
| | | | CO ₂ tons | 1, | 05 | • | 1,1 | | 1,24 | |
| Additional refrigerant charge | | | g/m | 2 | 20 | | | 38 | | |
| | Defrigerent nine | Liquid | inch | 1/ | /4" | | | 3/8" | | |
| | Refrigerant pipe | Gas | inch | | | | 5/8" | | | |
| | Indoor unit | Water (system) | inch | | | | 1" | | | |
| External diameters | illuoor ullit | Water (DHW) | inch | | | | 1/2" | | | |
| | | Gas | inch | | | | 3/4" | | | |
| | Boiler | 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 |
|----------------------|--------------------------------|---------------------------------|-------------------|--------------|---------------|------------------|---------------|
| | 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 | water 35/30 C - Outdoor air / C | Nominal | - | 5,00 | 4,70 | 4,55 |
| Heating | Capacity | Water 35/30°C - Outdoor | Nominal / Maximum | kW | 10,49 / 13,85 | 12,23 / 14,09 | 13,43 / 14,33 |
| (Heat pump) | COP | air -7°C | 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 |
| | СОР | water 45/40 C - Outdoor air 7 C | Nominal | - | 3,80 | 3,65 | 3,60 |
| Heating | Nominal heating capacity (LHV) | Water 80/60°C | Nominal | kW | 33,35 | 33,35 | 33,35 |
| (Boiler) | Performance | water 80/60 C | Nominal | % | 98,08 | 98,08 | 98,08 |
| | Capacity | Water 18/23°C - Outdoor air | Nominal / Maximum | kW | 12,06 / 15,02 | 13,79 / 15,30 | 14,84 / 16,38 |
| CI: | EER | 35°C | Nominal | - | 4,02 | 3,70 | 3,65 |
| Cooling | 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 | water //12 C - Outdoor air 35 C | Nominal | - | 2,75 | 2,55 | 2,45 |
| DIIW | Power | - | Minimum / Maximum | kW | 4,10 / 34,00 | 4,10 / 34,00 | 4,10 / 34,00 |
| DHW | Specific flow rate | Water with ΔT=30°C in 10 mi | nutes | I/min | 16 | 16 | 16 |
| Electrical power for | meter sizing | | | kW | 5,40 | 5,70 | 6,10 |
| | | Energy class | | - | A ++ | A ++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 55°C | SCOP | | - | 3,56 | 3,52 | 3,48 |
| | | ηs (seasonal output) | | % | 139 | 138 | 136 |
| Seasonal efficiency | | Energy class | | - | A +++ | A+++ | A +++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 6.793 | 7.380 | 7.915 |
| | 35°C | SCOP | | - | 5,00 | 4,91 | 4,89 |
| | | ηs (seasonal output) | | % | 196 | 193 | 193 |
| | DHW | Energy class | | - | A | Α | A |
| | (Boiler) | DHW profile | | - | XL | XL | XL |
| Indoor unit | | - | - | | В | В | В |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | 230/50/1 | |
| Water flow-rate | | | Nominal | I/s | 0,57 | 0,67 | 0,75 |
| Pump available pres | sure | | Nominal | kPa | 25,7 | 31,7 | 22,6 |
| Expansion tank capa | | | | | ., | 8 | ,- |
| Minimum system wa | | | | <u> </u> | | 60 | |
| Sound power | | | | dB(A) | | 41 | |
| Sound pressure @1n | 1 | | | dB(A) | | 26 | |
| Boiler | | | | | | | |
| Power supply | Voltage/Frequency/Phas | Ses . | | V/Hz/n° | | 230/50/1 | |
| Power input | . z. sago, oquency, i nas | | | W | | 78 | |
| Sound power | | | | dB(A) | | 52 | |
| Outdoor unit | | | | 35(r) | 6.1 | 7.1 | 8.1 |
| | Voltago/Eroguesgy/DL | 200 | | V/Hz/n° | 0.1 | 400/50/3+N | 0.1 |
| Power supply | Voltage/Frequency/Phas | 962 | | | 63 | 400/50/3+N 64 | 66 |
| Sound power | • | | | dB(A) | | | |
| Sound pressure @1n | | | | <u>dB(A)</u> | 50 | 51 | 53 |
| Operating range | | Hartman | Mar | | | 25 / 25 | |
| Water supply | Heating | Heat pump | Minimum / Maximum | °C | | 25 / 65 | |
| emperature | | Boiler | Minimum / Maximum | °C | | 25 / 80 | |
| | Cooling | - | Minimum / Maximum | °C | | 5 / 25 | |
| | Heating | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |
| Operating range | | Boiler | Minimum / Maximum | °C | | -25 / 35 | |
| (outdoor air) | 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 ELFOControl 3 EVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/2010 - 813/

system diagrams Single area system: heating/DHW 3 outdoor unit 2 indoor unit ° 3 boiler heating area (radiator / fan coils / radiant) bypass* hydraulic separator (optional) · 🖺 •)) 7 secondary circuit pump* 9 8 DHW recirculation pump* וווווו SwitchConnect Wi-Fi receiver (optional) HID-TConnect Wi-Fi chronothermostat (optional) *from external supply Single area system: heating/cooling/DHW outdoor unit indoor unit 3 7 boiler heating/cooling area (fan coils / radiant) 6 system inertial storage (optional) · [] ·)) 6 bypass* DHW recirculation pump* (optional) SwitchConnect Wi-Fi receiver (optional) 9 HID-TConnect Wi-Fi chronothermostat (optional) *from external supply 6 Single area system with solar thermal: heating/cooling/DHW outdoor unit 2 indoor unit boiler heating/cooling area (fan coils / radiant) bypass* DHW recirculation pump* (optional) solar connection kit (optional) (-(10) ELFOSun solar thermal (optional) solar circulation kit (optional) SwitchConnect Wi-Fi receiver (optional) 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





(optional)















RELIABILITY







Weekly schedule



MANAGEMENT AND CONNECTIVITY

















User interface/





- √ Space-saving: completely outdoor installation with uncased wallmounted 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 ELFOControl³ EVO included as standard

Using the space well

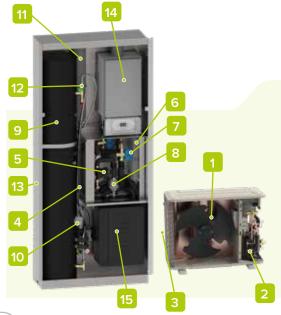
SPHERA EVO 2.0 Invisible Hybrid is the ideal choice for all homes that do not have a technical room and which need to make the unit invisible by embedding it in the wall.

The cabinet has an adjustable telescopic frame and can be painted to make the unit disappear completely.





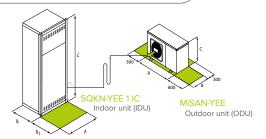




- Inverter DC fan
- 2. Inverter DC twin-rotary compressor
- 3. Air-gas finned exchanger (blue fin treatment)
- 4. Gas/water plate exchanger
- 5. Inverter DC high efficiency pump
- 6. 8L system expansion tank
- 7. 3-way valve
- 8. Magnetic dirt separator filter

- 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 |
|-----------------------------------|------------------|----------------------------------|----------------------|---------|----------|------------|--------|
| | Indoor unit | Length(A) x Height(C) x Depth(B) | mm | | 950x2.2 | 250x360 | |
| Dimensions | Outdoor unit | Length(A) x Height(C) x Depth(B) | mm | 1.008x7 | 12x426 | 1.118x8 | 65x523 |
| | Boiler | Length(A) x Height(C) x Depth(B) | mm | | 410x642x | 307 (23.2) | |
| | Indoor unit | | kg | | 3 | 25 | |
| Weight | Outdoor unit | | kg | 58 | 3 | 6 | 7 |
| | Boiler | | kg | | 35 (| 23.2) | |
| Max / min equivalent length | | L | m | | 30 | /2 | |
| Max difference in level ODU / IDU | | Н | m | | 2 | !5 | |
| | | | type/GWP | | R-32 | / 675 | |
| Refrigerant precharge¹ | | | kg/m | 1,50 | / 15 | 1,65 | / 15 |
| | | | CO ₂ tons | 1,0 | 5 | 1, | 11 |
| Additional refrigerant charge | | | g/m | 20 |) | 3 | 8 |
| | Defrigerent pine | Liquid | inch | 1/4 | " | 3/ | 8" |
| Refrigerant pipe | | Gas | inch | 5/8" | | | |
| External diameters | Indoor unit | Water (system) | inch | | • | " | |
| | muoor unit | 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 | | ADI50X | Recessed storage unit for external inertial accumulation |
|-----|----------|--|-------------|----------|--|
| Ø. | ACS150X | 150-litre domestic hot water storage tank | - W | CCGIX | Integration condensing boiler |
| | ADIAX | Recessed storage unit for additional DHW accumulation | KSDFX | KSDFX | Splitter for boiler smoke discharge |
| | ACSA150X | Additional 150-litre domestic hot water storage | MARKEN O | | Smoke intake and discharge |
| | ACSA50X | Additional 50-litre domestic hot water storage | 00 | KAS80X | fittings, 80 mm diameter |
| | SHWT | 150L domestic hot water storage tank with solar coil | | KTCGPLX | Kit to convert boiler from methane to LPG |
| 7 | KCVEX | Circulation kit: circulation group, control unit, expansion tank | THE R. | DTX | Auxiliary condensate collection tray |
| | KPRSX | DHW recirculation pump kit | 9 | APAVX | Kit of antivibration mounts for floor installation |
| 1 2 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | 9 | ASTFX | Kit of antivibration mounts for wall bracket installation |
| - | KIRE2HLX | 2 zones: high temperature + low | I | KSIPX | Kit with wall fixing brackets |
| | KIRE2HX | temperature (mixed) 2 zones: both at high temperature | 500 | HID-TCBX | Black soft touch chronothermostat, with temperature control and management via App / Voice control |
| | AC50X | 50-litre inertial storage tank for indoor installation | | HID-TCNX | White soft touch chronothermostat, with temperature control and management via App/Voice control |
| | ACE50X | 50-litre inertial storage tank for outdoor installation | \$ 1 m-m | 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 |
|----------------------------------|-------------------------------|---------------------------------------|---|----------|-------------|-------------|----------------------|---------------|
| | 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 | water 35/30 C - Outdoor dir 7 C | Nominal | - | 5,42 | 5,21 | 5,31 | 5,01 |
| Lloating | 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 |
| Heating | СОР | water 55/50 C - Outdoor dir -7 C | 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 |
| | СОР | Water 45/40 C - Outdoor dir 7 C | Nominal | _ | 3,93 | 3,83 | 3,95 | 3,86 |
| | 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 |
| Caaliaa | EER | water 18/23 C - Outdoor air 35 C | Nominal | - | 6,08 | 5,24 | 5,12 | 4,77 |
| Cooling | 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 | Water 7/12 C - Outdoor air 55 C | Nominal | - | 3,50 | 3,09 | 3,33 | 3,09 |
| Boiler 23.2 | Nominal heatig capacity (LHV) | Water 80/60°C | Nominal | kW | | 22 | ,94 | |
| bollet 23.2 | Performance | Water 60/60 C | Nominal | % | | 9 | 7.6 | |
| Electrical power for | meter sizing | | | kW | 2,20 | 2,60 | 3,30 | 3,60 |
| | | Energy class | | - | A ++ | A ++ | A ++ | A ++ |
| | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 |
| | 55°C | SCOP | | - | 3,32 | 3,54 | 3,72 | 3,73 |
| | | ηs (seasonal output) | | % | 130 | 138 | 146 | 146 |
| Seasonal efficiency | | Energy class | | - | A+++ | A+++ | A+++ | A+++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 2.542 | 3.283 | 3.824 | 4.749 |
| | 35°C | SCOP | | | 5,13 | 5,15 | 5,32 | 5,27 |
| | | ηs (seasonal output) | | % | 202 | 203 | 210 | 208 |
| | | Energy class | | | A+ | Α+ | Α+ | A + |
| | DHW | DHW profile | | _ | L | L | L | L |
| Indoor unit | | · · · · · · · · · · · · · · · · · · · | | | Α | Α | Α | Α |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | 230 | /50/1 | |
| Water flow-rate | , , | | Nominal | I/s | 0,21 | 0,30 | 0,41 | 0,49 |
| Pump available pres | ssure | | Nominal | kPa | 31,2 | 36,5 | 33,1 | 31,0 |
| Expansion tank capa | acity | | | Ī | | | 8 | |
| Minimum system wa | | | | | | 4 | 0 | |
| Sound power | | | | dB(A) | | | 11 | |
| Sound pressure @1m | 1 | | | dB(A) | | | 26 | |
| Boiler | | | | | | | | |
| Power supply | Voltage/Frequency/Phas | Ses . | | V/Hz/n° | | 230 | /50/1 | |
| Power input | , , | | | W | | 3 | 18 | |
| Sound power | | | | dB(A) | | | 52 | |
| Outdoor unit | | | | | 2.1 | 3.1 | 4.1 | 5.1 |
| Power supply | Voltage/Frequency/Phas | Ses | | V/Hz/n° | · | | /50/1 | |
| Sound power | | | | dB(A) | 55 | 58 | 58 | 60 |
| Sound pressure @1m | 1 | | | dB(A) | 42 | 44 | 45 | 47 |
| Operating range | | | | ·- v · · | | | | |
| | | Heat pump | Minimum / Maximum | °C | | 25 | / 65 | |
| Water supply | Heating | Boiler | Minimum / Maximum | °C | | | /70 | |
| temperature | Cooling | - | Minimum / Maximum | °C | | | 25 | |
| | | Heat pump | Minimum / Maximum | °C - | | | / 43 | |
| | | | | | | | | |
| | Heating | | Minimum / Maximum | °C | | -25 | / 35 | |
| | | Boiler | Minimum / Maximum Minimum / Maximum | °C | | | / 35 | |
| Operating range (Outdoor air) | Heating Cooling DHW | | Minimum / Maximum Minimum / Maximum Minimum / Maximum | °C °C | | -5 | / 35 / 43 / 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 SEVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl SEVO system control and the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl SEVO system control and the European ErP Directive (EU Regulations 811/2013 - 813

system diagrams Single area system: heating/DHW outdoor unit 2 indoor unit 3 boiler heating area (radiator / fan coils / radiant) bypass* hydraulic separator (optional) secondary circuit pump* DHW recirculation pump* additional DHW tank (optional) HID-TConnect Wi-Fi chronothermostat (optional) *from external supply Single area system with solar thermal: heating/cooling/DHW outdoor unit indoor unit boiler heating/cooling area (fan coils / radiant) bypass* DHW recirculation pump* (optional) solar connection kit (optional) **□**•)) 8 ELFOSun solar thermal (optional) SwitchConnect Wi-Fi receiver (optional) 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 outdoor unit 2 indoor unit 3 boiler low temperature heating/cooling area (radiant) 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* 1 SwitchConnect Wi-Fi receiver (optional) HID-TConnect Wi-Fi chronothermostat (optional) flue to be fitted on the side or back

*from external supply



HYBRID HEAT PUMPS: MONOBLOCK



Hybrid



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



Solar integration (optional - DHW tank)

CONVENIENCE



















Keymark



MANAGEMENT AND CONNECTIVITY

























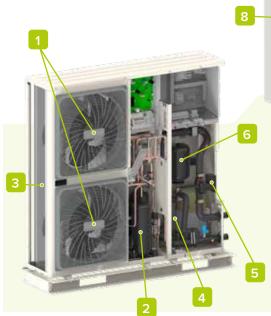


- ✓ Ideal for replacing old systems while keeping existing radiators
- √ Simultaneous production of DHW and cooling/heating
- It does not need to be coupled to a tank if DHW is produced by the boiler
- √ It uses renewable solar thermal energy by coupling to ELFOSun. (can be connected to the boiler)
- √ Advanced connectivity: management via the dedicated. MSmartLife App or via the Modbus port with ELFOControl³ 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.







- 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

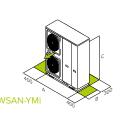
accessories

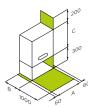
| 60 | KTFLX | Hose kit for connection to the chiller/heat pump | | TANKX | Buffer tank |
|-------------------|---------|--|---------------|----------|---|
| | ACS200X | 200-litre domestic hot water storage tank | | KTCAMX | Piping kit for the connection to the buffer tank on supply water side |
| | ACS300X | 300-litre domestic hot water storage tank | 1.00 | KTCARX | Piping kit for the connection to the buffer tank on return water side |
| | ACS500X | 500-litre domestic hot water storage tank | € KSDFX | KSDFX | Splitter for boiler smoke discharge |
| | SCS08X | 0.8 m ² solar exchanger for flange installation (for ACS200X e ACS300X) | STD CO | | - |
| 6 | SCS12X | 1.2 m ² solar exchanger for flange installation (for ACS500X) | | KCSAFX | Coaxial fitting for smoke discharge and intake (ø60/100) |
| | QERAX | Connection electrical panel of the DHW storage heater | Ser Str | KITKX | Coaxial system for adjustable smoke discharge and intake (ø 60/100) |
| Se. | 3DHWX | Three-way valve for domestic hot water | Second Second | KITAK50X | Coaxial system for adjustable smoke discharge and intake (ø 80/125) |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | © 0 2 & | KAS80X | Smoke intake and discharge fittings, 80 mm diameter |
| | KIR2HLX | 2 zones: external kit, high temperature + low temperature (mixed) | (#) | KTCGPLX | Kit to convert boiler from methane to LPG |
| | KIR2HX | 2 zones: external kit, high temperature | <u>.</u> | HID-TCBX | White soft touch chronothermostat, with temperature control and |
| | DIX | 1-litre circuit breaker | Supress | | management via App / Voice control Black soft touch chronothermostat, |
| -200 | DI50X | 50-litre circuit breaker | | HID-TCNX | with temperature control and management via App / Voice control |
| | KSAX | 100-litre circuit breaker | 0:1 | SWCX | Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the |
| s@8 =── ∃I | T1BX | Probe for auxiliary heating source T1B | | | terminal units/radiant systems ON/ OFF |
| | | | | | |

| Size (230M) | | | | | 2.1 | 3.1 | 4.1 | 6.1 | 7.1 | 8.1 |
|----------------------------------|-------------------------------|----------------------------------|--|----------|--------------|--------------|--------------|-------------|-------------|-------------|
| | 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 | water 55/50 C - Outdoor all 7 C | Nominal | - | 5,00 | 4,94 | 4,60 | 4,81 | 4,60 | 4,45 |
| Heating | 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 |
| (Heat pump) | COP | water 55/50 C - Outdoor dir -7 C | 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 | water 45/40 C - Outdoor air / C | Nominal | - | 3,60 | 3,57 | 3,44 | 3,53 | 3,47 | 3,43 |
| | Nominal heatig capacity (LHV) | | Nominal | kW | | 22,70 | | | | |
| D :: 00.4 | Performance | Water 80/60°C | Nominal | % | | 96,60 | | | - | |
| Boiler 23.4 | DWH power | | Minimum / Maximum | kW | | 2,90 / 23,50 | | | - | |
| | DWH specific flow rate | Water with ∆T=30°C in 10 minutes | - | l/min | | 11,50 | | | - | |
| | Nominal heatig capacity (LHV) | | Nominal | kW | | | 33 | 3,35 | | |
| | Performance | Water 80/60°C | Nominal | % | | | | 3.08 | | |
| Boiler 34.4 | DWH power | | Minimum / Maximum | kW | | | | 34,00 | | |
| | DWH specific flow rate | Water with ΔT=30°C in 10 minutes | | I/min | | | | 16 | | |
| | Capacity | | 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 | Water 18/23°C - Outdoor air 35°C | Nominal | - | 4,82 | 4,65 | 4,16 | 4,78 | 4,52 | 4,26 |
| Cooling | Capacity | | 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 | Water 7/12°C - Outdoor air 35°C | Nominal Nominal | KVV | 2,98 | 2,77 | 2,53 | 2,92 | 2,78 | 2,65 |
| Fla -4-: | | | NOIIIIIai | kW | | | | | | 6,50 |
| Electrical power for | meter sizing | F | | KW | 3,50 | 3,50 | 3,50 | 6,50 | 6,50 | |
| | | Energy class | | - | A++ | A++ | A++ | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 4.203 | 4.203 | 4.770 | 8.164 | 8.724 | 9.216 |
| | 55°C | SCOP | | | 3,23 | 3,24 | 3,22 | 3,23 | 3,26 | 3,27 |
| | | ηs (seasonal output) | | % | 127% | 127% | 126% | 126% | 128% | 128% |
| | | Energy class | | | A +++ | A+++ | A +++ | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 3.071 | 3.071 | 3.844 | 5.726 | 6.819 | 7.687 |
| | 35°C | SCOP | | - | 4,48 | 4,49 | 4,51 | 4,30 | 4,35 | 4,30 |
| | | ηs (seasonal output) | | % | 176% | 176% | 177% | 169% | 168% | 169% |
| | DHW | Energy class | | - | Α | Α | Α | A | A | Α |
| | (Boiler) | DHW profile | | | XL | XL | XL | XL | XL | XL |
| Boiler | | | | | | | | | | |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | | 230 | /50/1 | | |
| Power input | | | | W | | | | 78 | | |
| Sound power | | | | dB(A) | | | Į. | 52 | | _ |
| Outdoor unit | | | | | 2.1 | 3.1 | 4.1 | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | | 230 | /50/1 | | |
| Water flow-rate | | | Nominal | I/s | 0,22 | 0,31 | 0,38 | 0,58 | 0,67 | 0,74 |
| Available pressure p | oump | | Nominal | kPa | 61 | 50 | 38 | 41 | 30 | 20 |
| Minimum system wa | ater content | | | 1 | | 20 | | | 40 | |
| Expansion tank capa | acity | | | 1 | | 2 | | | 5 | |
| Sound power | | | | dB(A) | 59 / 61 | 60 / 64 | 62 / 67 | 63 / 68 | 63 / 71 | 65 / 71 |
| Sound pressure @1r | n | | | dB(A) | 46 / 49 | 49 / 52 | 50 / 55 | 49 / 54 | 47 / 55 | 50 / 56 |
| Operating range | • | | | | | | | | | |
| | | Heat pump | Minimum / Maximum | °C | | | 30 | /60 | | |
| Water supply | Heating | Boiler | Minimum / Maximum | °C | | | 12 | / 60 | | |
| temperature | Cooling | - | Minimum / Maximum | °C | | | 5 | / 25 | | |
| | | Heat pump | Minimum / Maximum | °C | | | | 5/35 | | |
| | Heating | Boiler | Minimum / Maximum | °C | | | | 6/35 | | |
| | | | | | | | | | | |
| | Coolina | - | Minimum / Maximum | °C | | -5 / 43 | | | -5 / 46 | |
| Operating range (Outdoor air) | Cooling DHW | - Heat pump | Minimum / Maximum Minimum / Maximum | °C | | -5 / 43 | -25 | 6 / 43 | -5 / 46 | |

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





GAS BOILER Boiler

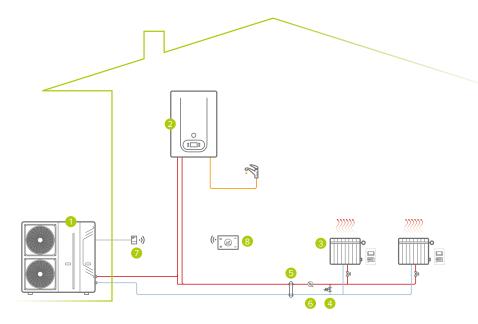
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

| 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 | ! | | 1.404x1.414x40 | 5 |
| Dillielizioliz | Boiler | Length(A) x Height(C) x Depth(B) | mm | | 410x6 | 642x307 (24.4) | / 410x642x330 | (34.4) | |
| Weight | Heat pump | | kg | | 99 | | | 178 | |
| weight | Boiler | | kg | | | 35 (24.4) | / 44 (34.4) | | |
| | | | type/GWP | | | R-32 | / 675 | | |
| Refrigerant charge | | | kg | | 2 | | | 2,8 | |
| | | | CO ₂ tons | | 1,4 | | | 1,9 | |
| | Heat pump | Water | inch | | 1" | | | 11/4" | |
| | | Water (DHW) | inch | | | 1/ | 2" | | |
| External diameters | Boiler | Gas | inch | | | 3. | /4" | | |
| | noner | Intake air | mm | | | 1 | 00 | | |
| | | Exhaust gas | mm | | | 6 | 60 | | |

| Size (400TN) | _ | | | | 6.1 | 7.1 | 8.1 |
|----------------------|-------------------------------|----------------------------------|-------------------|--------------|-------------|--------------|-------------|
| | Capacity | Water 35/30°C - Outdoor air 7°C | Nominal / Maximum | kW | 12,3 / 14,3 | 14,1 / 16,5 | 16,3 / 18,1 |
| | СОР | Water 33/30 C - Outdoor dir 7 C | Nominal | | 4,84 | 4,63 | 4,49 |
| Heating | Capacity | Water 35/30°C - Outdoor air -7°C | Nominal / Maximum | kW | 8,9 / 10,4 | 10,2 / 12,3 | 11,8 / 13,6 |
| (Heat pump) | COP | Water 55/50 C Outdoor all 7 C | 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 | Water 43/40 C - Outdoor dir 7 C | Nominal | - | 3,59 | 3,54 | 3,45 |
| | Nominal heatig capacity (LHV) | Water 80/60°C | Nominal | kW | | - | |
| Boiler 23.4 | Performance | water 60/00 C | Nominal | % | | - | |
| DUIIEI 23.4 | DWH power | | Minimum / Maximum | kW | | - | |
| | DWH specific flow rate | Water with ∆T=30°C in 10 minutes | - | l/min | | - | |
| | Nominal heatig capacity (LHV) | Water 80/60°C | Nominal | kW | | 33,35 | |
| D. 11 2.4.4 | Performance | water 80/60 C | Nominal | % | | 98,08 | |
| Boiler 34.4 | DWH power | | Minimum / Maximum | kW | | 4,10 / 34,00 | |
| | DWH specific flow rate | Water with ∆T=30°C in 10 minutes | - | I/min | | 16 | |
| | Capacity | W-t40/22°C C : : 2502 | Nominal / Maximum | kW | 12,2 / 14,5 | 14,0 / 16,1 | 15,5 / 17,6 |
| 0 11 | EER | Water 18/23°C - Outdoor air 35°C | Nominal | - | 4,83 | 4,50 | 4,27 |
| Cooling | Capacity | | Nominal / Maximum | kW | 10,9 / 13,2 | 12,9 / 14,8 | 13,8 / 15,5 |
| | EER | Water 7/12°C - Outdoor air 35°C | Nominal | | 2,93 | 2,80 | 2,66 |
| Electrical power for | | | - | kW | 6,50 | 6,50 | 6,50 |
| | | Energy class | | | A++ | A++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 8.164 | 8.724 | 9.216 |
| | 55°C | SCOP | | - | 3,23 | 3,26 | 3,27 |
| | | ns (seasonal output) | | % | 126% | 128% | 128% |
| Seasonal efficiency | | Energy class | | - | A++ | A++ | A++ |
| Medium climate | Heating | Annual energy consumption | | kWh/year | 5.726 | 6.819 | 7.687 |
| Mediam emilate | 35°C | SCOP SCOP | | KWII/yedi | 4,30 | 4,35 | 4,30 |
| | 33 C | ηs (seasonal output) | | % | 169% | 168% | 169% |
| | DHW | Energy class | | | A | A | A |
| | (Boiler) | DHW profile | | <u> </u> | XL | XL | XL |
| Boiler | (Bolici) | DITW profile | | | AL . | | |
| Power supply | Voltage/Frequency/Phas | 243 | | V/Hz/n° | | 230/50/1 | |
| Power input | voltage/i requency/i nas | | | W | | 78 | |
| Sound power | | | | dB(A) | | 52 | |
| • | | | | UB(A) | <u> </u> | | |
| Outdoor unit | | | | | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | 0.50 | 400/50/3+N | 0.7: |
| Water flow-rate | | | Nominal | l/s | 0,58 | 0,67 | 0,74 |
| Available pressure p | · · | | Nominal | kPa | 41 | 30 | 20 |
| Minimum system wa | | | | L | | 40 | |
| Expansion tank capa | acity | | | l | | 5 | |
| Sound power | | | | dB(A) | 63 / 68 | 65 / 71 | 66 / 71 |
| Sound pressure @1n | 1 | | | <u>dB(A)</u> | 49 / 54 | 50 / 56 | 51/56 |
| Operating range | | | | | | | |
| Water supply | Heating | Heat pump | Minimum / Maximum | °C | | 30 / 60 | |
| temperature | aung | Boiler | Minimum / Maximum | °C | | 12 / 60 | |
| perature | Cooling | | Minimum / Maximum | °C | | 5 / 25 | |
| | Heating | Heat pump | Minimum / Maximum | °C | | -25 / 35 | |
| Onoroting | Heating | Boiler | Minimum / Maximum | °C | | -25 / 35 | |
| Operating range | Cooling | - | Minimum / Maximum | °C | | -5 / 46 | |
| (Outdoor air) | DUW | Heat pump | Minimum / Maximum | °C | | -25 / 43 | |
| | DHW | Boiler | Minimum / Maximum | °C | | -25 / 43 | |

 $A limentazione \ standard: G20 \ (gas \ Metano \ 100\%). \ A limentazione \ con \ kit \ opzionale: G30 \ / \ G31 \ (gas \ GPL)$

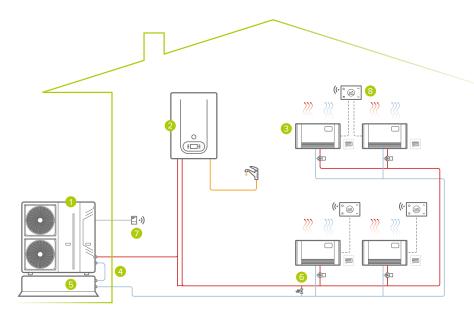
| Size (400TN) | | | | 6.1 | 7.1 | 8.1 |
|--------------------|-----------|----------------------------------|----------------------|-----|-----------------|-----|
| Dimensions | Heat pump | Length(A) x Height(C) x Depth(B) | mm | | 1.404x1.414x405 | |
| Diffictions | Boiler | Length(A) x Height(C) x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



Single area system: heating/DHW

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

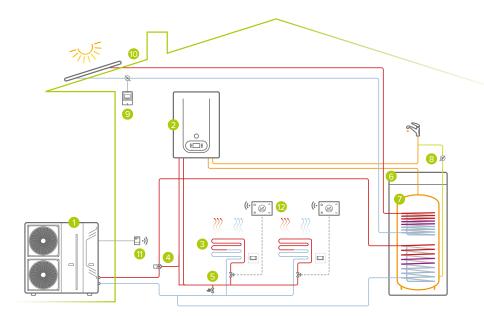
*from external supply



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*
- SwitchConnect Wi-Fi receiver (optional)
- 8 HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

- 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























Solar integration (optional - DHW tank) CONVENIENCE















MANAGEMENT AND CONNECTIVITY











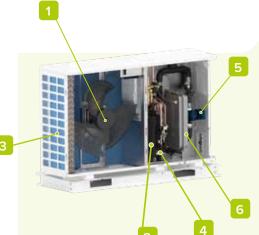


- ✓ €/Switch function: the unit simulates the operating conditions of the two generators and uses either a heat pump or a boiler depending on savings
- √ Simultaneous production of DHW and cooling/heating
- It does not need to be coupled to a tank if DHW is produced by the boiler
- It uses renewable 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 ELFOControl³ 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.







- 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

KTCAMX

KTCARX

Piping kit for the connection to the

Piping kit for the connection to the

buffer tank on return water side

buffer tank on supply water side

4-PIPE BOILER:

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

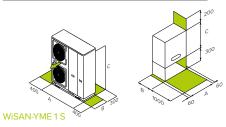
accessories

| Co | KTFLX | Hose kit for connection to the chiller/heat pump | .Ala | PCSX | Secondary circuit pump |
|-----------|----------|---|-------------|----------|--|
| \$ | FDMX | Magnetic dirt separator filter | | PCS2X | Oversized secondary circuit pump |
| | VAGX | System freeze protection kit in the absence of electricity | P | PRSX | DHW recirculation pump |
| | ACS200X | 200-litre domestic hot water storage tank | 3 . | KSDFX | Splitter for boiler smoke discharge |
| | ACS399X | 300-litre domestic hot water storage tank | STD (S) | KCSAFX | Coaxial fitting for smoke discharge and intake (ø60/100) |
| • | ACS500X | 500-litre domestic hot water storage tank | grand to | KITKX | Coaxial system for adjustable smoke discharge and intake (ø 60/100) |
| | ACS1000X | 1000-litre domestic hot water storage tank | - TO | KITAK50X | Coaxial system for adjustable smoke discharge and intake (ø |
| | ACS10SX | 1000L domestic hot water storage tank with double coil for solar thermal connection | 3 | KAS80X | 80/125) Smoke intake and discharge fittings, 80 mm diameter |
| | SCS08X | 0.8 m² solar exchanger for flange installation (for ACS200X e ACS300X) | Vi Constant | KTCGPLX | Kit to convert boiler from methane to LPG |
| 6 | SCS12X | 1.2 m ² solar exchanger for flange installation (for ACS500X) | TIME! | DTX | Thermostat-based drain pan |
| | QERAMX | Electrical panel for single-phase heater connection on DHW storage tank | 4 | APAVX | Kit of antivibration mounts for floo installation |
| | QERATX | Electrical panel for three-phase heater connection on DHW storage tank | 1 | AMMX | Kit of antivibration anti-seismic |
| d'e | 3DHWX | Three-way valve for domestic hot water | | | mounts for floor installation Kit of antivibration mounts for wall |
| 10 | KCSX | Secondary circuit kit (1-litre circuit breaker + pump) | -30 | ASTFX | bracket installation |
| | KIR2HLX | 2 zones: external kit, high temperature | 1 | KSIPX | Kit with wall fixing brackets |
| | KIRHX | + low temperature (mixed) 2 zones: external kit, high | · 🕮 · | HID-TCBX | White soft touch chronothermostat, with temperature control and management via App / Voice control |
| 1 | DIX | temperature 1-litre circuit breaker | | HID-TCNX | Black soft touch chronothermostat, with temperature control and management |
| | DI50X | 50-litre circuit breaker (to exhaustion) | | | via App / Voice control Switch IoT to be combined with |
| 4 | DI22-50X | 50L circuit breaker (2 pairs of supply connectors / 2 pairs of return connectors) | | SWCX | HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON. |
| 2 | DI100X | 100-litre circuit breaker | | | OFF |
| | T1BX | Probe for auxiliary heating source T1B | | | |
| | TANKX | Buffer tank | | | |

technical data

| Size (230M) | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
|---------------------------------------|-------------------------------------|----------------------------------|-------------------|----------|----------------------|-------|-------|-------------|-------|-------------|-------|
| | 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 |
| | СОР | | Nominal | | 5,10 | 4,95 | 5,15 | 4,95 | 4,95 | 4,60 | 4,50 |
| Heating | 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 |
| (Heat pump) | СОР | | 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 | Water 45/40 C Outdoor all 7 C | 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 | 33,3! |
| Doller | Performance | Water 60/00 C | Nominal | % | 96,70 | 96,70 | 96,70 | 96,70 | 98,02 | 98,02 | 98,02 |
| | 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 |
| Cooling | EER Water 10/25 C State of all 55 C | | Nominal | - | 5,50 | 4,80 | 5,05 | 4,55 | 3,95 | 3,60 | 3,40 |
| Cooling | 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 | water //12 C - Outdoor dir 35 C | 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 |
| | | Energy class | | - | A++ | A++ | A++ | A++ | A++ | A ++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 2.749 | 3.348 | 4.064 | 4.541 | 6.916 | 6.917 | 7.213 |
| | 55°C | SCOP | | - | 3,31 | 3,52 | 3.36 | 3,49 | 3,46 | 3,46 | 3,46 |
| Seasonal efficiency | ηs (seasonal output) | | % | 129 | 138 | 131 | 137 | 135 | 135 | 135 | |
| Medium climate | | 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 | 6.01 | |
| | | SCOP | | - | 4,85 | 4,95 | 5,21 | 5,19 | 4,81 | 4,81 | 4,72 |
| | | ns (seasonal output) | | % | 191 | 195 | 205 | 205 | 189 | 189 | 186 |
| Boiler | | ija (acaaonai output) | | 70 | | | | 4.4 | | 5.2 | 115. |
| | DWH power | | Maximum | kW | | | | 110,6 | | | |
| DHW (Boiler) | DWH power DWH specific flow rate | Water with ∆T=30°C in 10 minutes | | I/min | 22,70 33,35 | | | ,os 1.79 | 52,8 | | |
| ` ' | Voltage/Frequency/Phas | | - | V/Hz/n° | 10,84 15,93 230/50/1 | | 34 | 1,79 | 52,0 | | |
| Power supply Power input | voitage/Frequency/Frias | 562 | | W | | 7 | '8 | 230/30/1 | | 216 | |
| · · · · · · · · · · · · · · · · · · · | | | | | | / | 0 | 52 | | 210 | |
| Sound power | DIIW | Factorial | | dB(A) | | | | | | | |
| Seasonal efficiency | | Energy class | | | | Α | | A | | | |
| Medium climate | (Boiler) | DHW profile | _ | - | | (L | | KL | | | |
| Outdoor unit | | | | | 2.1 | 3.1 | 4.1 | 5.1 | 6.1 | 7.1 | 8.1 |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | | | 230/50/1 | | | |
| Water flow-rate | | | Nominal | I/s | 0,20 | 0,30 | 0,40 | 0,48 | 0,58 | 0,69 | 0,76 |
| Available pressure p | ump | | Nominal | kPa | 85,2 | 82,2 | 76,4 | 67,9 | 59,9 | 59,9 | 47,6 |
| Minimum system wa | iter content | | | <u> </u> | | 20 | | | | 10 | |
| Expansion tank capa | acity | | | <u> </u> | | | | 8 | | | |
| Sound power | | | | dB(A) | 55 | 58 | 59 | 60 | 65 | 65 | 68 |
| Sound pressure @1n | n | | | dB(A) | 41 | 44 | 45 | 45 | 50 | 50 | 53 |
| Operating range | | | | | | | | | | | |
| | | Heat pump | Minimum / Maximum | °C | | | | 30 / 65 | | | |
| Water supply | Heating | Boiler | Minimum / Maximum | °C | | | | 30 / 75 | | | |
| temperature | Cooling | - | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| | g | Heat pump | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| | Heating | Boiler | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| Operating range | Cooling | - | Minimum / Maximum | °C | | | | -5 / 43 | | | |
| (Outdoor air) | cooming | - Heat pump | Minimum / Maximum | °C | | | | -25 / 43 | | | |
| | DHW | Boiler | | °C | | | | | | | |
| | | Dullei | Minimum / Maximum | L | | | | -25 / 43 | | | |

dimensions and connections



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 | 1.295x7 | 92x429 | | 1 | .385x945x52 | 6 | |
| Weight | Heat pump | | kg | 12 | 1 | 14 | 48 | | 170 | |
| | | | type/GWP | | | | R-32 / 675 | | | |
| Refrigerant charge | | | kg | | 1,4 | 10 | | | 1,75 | |
| | | | CO ₂ tons | | 0,9 | 95 | | | 1,18 | |
| External diameters | Heat pump | Water | inch | 1' | , | | | 1 1/4" | | |

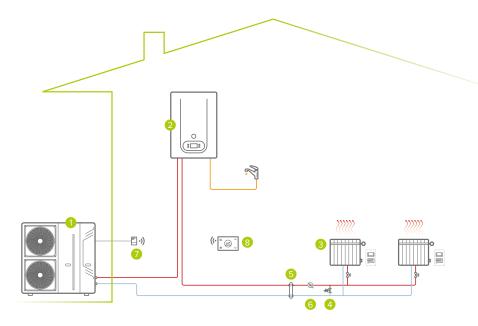
| Size (400TN) | | | | | 6.1 | 7.1 | 8.1 | 9.1 | 10.1 | 12.1 | 14.1 |
|---------------------------------------|-------------------------------|---|-------------------|-----------|-------|----------------------------|-------|------------|------------|------------|------------|
| | Capacity | Water 35/30°C - Outdoor air 7°C | Nominal | kW | 12,1 | 14.5 | 15,9 | 18,0 | 22,0 | 26,0 | 30,0 |
| | COP | Water 33/30 C - Outdoor dir / C | Nominal | - | 4,95 | 4,60 | 4,50 | 4,70 | 4,40 | 4,08 | 3,91 |
| Heating | 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 |
| (Heat pump) | COP | water 33/30 C - Outdoor dir -7 C | 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 | Water 45/40 C - Outdoor dir 7 C | 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 |
| Bollet | Performance | water 80/60 C | Nominal | % | 98,02 | 98,02 | 98,02 | 97,30 | 97,30 | 97,30 | 97,30 |
| | 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 |
| C 1" | EER | water 18/23 C - Outdoor air 35 C | Nominal | - | 3,95 | 3,60 | 3,40 | 4,75 | 4,60 | 4,30 | 4,00 |
| Cooling | Capacity | | Nominal | kW | 11,5 | 12,4 | 14,0 | 17,0 | 21,0 | 26,0 | 29,5 |
| | EER | Water 7/12°C - Outdoor air 35°C | 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 |
| ' | • | Energy class | | - | A++ | A++ | A++ | A++ | A++ | A + | A + |
| | Heating | Annual energy consumption | | kWh/year | 7.214 | 7.894 | 7.895 | 11.396 | 14.363 | 17.116 | 19.552 |
| | 55°C | SCOP | | | 3,46 | 3,41 | 3,41 | 3,21 | 3,23 | 3,16 | 3,14 |
| Seasonal efficiency | | ns (seasonal output) | | % | 135 | 133 | 133 | 125 | 126 | 123 | 123 |
| Medium climate | | Energy class | | - | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A++ |
| | Heating | Annual energy consumption | | kWh/year | 6.012 | 6.803 | 6.805 | 8.077 | 10.167 | 11.513 | 14.372 |
| | 35°C | 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 | | ijs (seasonai output) | | /0 | | 4.4 | | 4.4 | | 5.2 | 115.2 |
| DHW | DWH power | | Maximum | kW | | | | | | ,83 | 110,69 |
| (Boiler) | DWH specific flow rate | Water with ∆T=30°C in 10 minutes | | I/min | | 22,70 33,35 10,84 15,93 | | | ,63 ,79 | 52,88 | |
| Power supply | Voltage/Frequency/Phas | | | V/Hz/n° | 10 | ,04 | 15 | 230/50/1 | 34 | ,13 | 32,00 |
| Power input | voitage/Frequency/Frias | 962 | | W | | | '8 | 230/30/1 | | 216 | |
| Sound power | | | | dB(A) | | | 0 | 52 | | 210 | |
| | DIIW | Energy class | | ub(A) | | A | | A 32 | | - | _ |
| Seasonal efficiency Medium climate | | • | | - | | | | | | - | |
| | (Boiler) | DHW profile | | - | | KL | | XL | 40.4 | - | |
| Outdoor unit | V-11/F/DI | | | M/II / -0 | 6.1 | 7.1 | 8.1 | 9.1 | 10.1 | 12.1 | 14.1 |
| Power supply | Voltage/Frequency/Phas | ses | | V/Hz/n° | | 0.00 | 0.70 | 400/50/3+N | | 4.04 | 4.40 |
| Water flow-rate | | | Nominal | I/s | 0,58 | 0,69 | 0,76 | 0,86 | 1.05 | 1,24 | 1,43 |
| Available pressure p | · · | | Nominal | kPa | 47,6 | 33,1 | 33,1 | 101,9 | 94,6 | 78,8 | 59,4 |
| Minimum system wa | | | | · | | 40 | | | (| 50 | |
| Expansion tank capa | acity | | | I | | CF | 60 | 8 | 70 | 74 | 77 |
| Sound power | | | | dB(A) | 65 | 65 | 68 | 70 | 72 | 74 | 77 |
| Sound pressure @1n | | | | dB(A) | 50 | 50 | 53 | 57 | 59 | 61 | 63 |
| Operating range | | | | | | | | | | | |
| Water supply | Heating | Heat pump | Minimum / Maximum | °C | | 30 / 65 | | | 30 | / 60 | |
| temperature | | Boiler | Minimum / Maximum | °C | | | | 30 / 75 | | | |
| Co. | Cooling | - | Minimum / Maximum | °C | | | | 5 / 25 | | | |
| Heating | Heating | Heat pump | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| Operating range | Heating Boiler | Boiler | Minimum / Maximum | °C | | | | -25 / 35 | | | |
| Operating range (Outdoor air) | | | Minimum / Maximum | °C | | -5 / 43 | | | -5 | / 46 | |
| (Gataooi aii) | 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

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

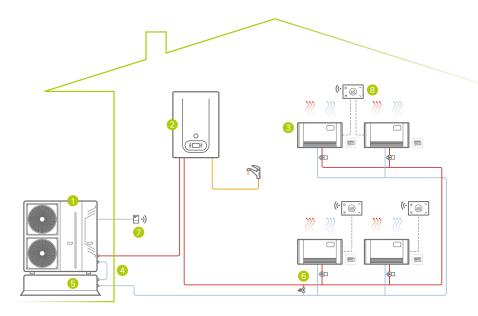
| Size (400TN) | | | | 6.1 | 7.1 | 8.1 | 9.1 | 10.1 | 12.1 | 14.1 |
|--------------------|-----------|----------------------------------|----------------------|----------|-------------|-----------|------------|-------------|--------|------|
| Dimensions | Heat pump | Length(A) x Height(C) x Depth(B) | mm | 1.3 | 385x945x526 | 6 | | 1.129x5 | 58x440 | |
| Weight | Heat pump | | kg | | 188 | | | 2 | 06 | |
| | | | type/GWP | | | | R-32 / 675 | i | | |
| Refrigerant charge | | | kg | 1,75 | | | 5 | | | |
| | | | CO ₂ tons | 1,18 | | 3,4 | | | | |
| External diameters | Heat pump | Water | inch | 11/4" | | | | | | |
| Boiler | | | | 24.4 | ı | 34.4 | | 75.2 | 1 | 15.2 |
| Dimensions | | Length(A) x Height(C) x Depth(B) | mm | 410x642x | κ307 | 410x642x3 | 30 | 670x642x485 | | |
| Weight | | | kg | 35 | | 44 | | 67 | | 79 |
| | | Water | inch | | 3/4" | | | 11/2" | | |
| | | Water (DHW) | inch | | 1/2" | | | - | | - |
| External diameters | | Gas | inch | 3/4" | | | 1" | | | |
| | | Intake air | mm | | | | 80 | | | |
| | | Exhaust gas | mm | | | | 80 | | | |



Single area system: heating/DHW

- outdoor unit
- boiler
- heating area (radiator / fan coils / radiant)
- bypass*
- hydraulic separator (optional)
- 6 secondary circuit pump*
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)

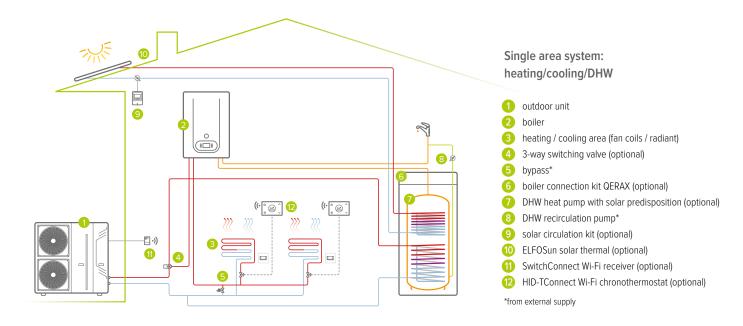
*from external supply

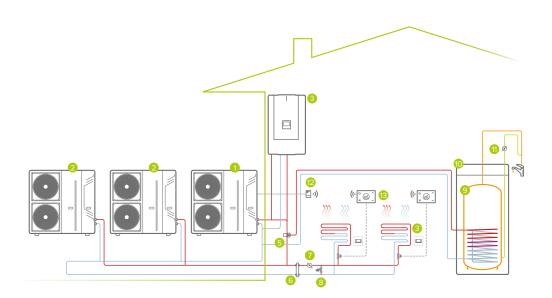


Single area system: heating/cooling/DHW

- outdoor unit
- boiler
- heating/cooling area (fan coils / radiant)
- system inertial storage connection kit (optional)
- 5 system inertial storage (optional)
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply





Single area system: heating/cooling/DHW

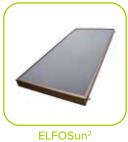
- outdoor unit (Master)
- 2 indoor unit (Slave)
- 3 condensing boiler
- 4 heating/cooling area (fan coils / radiant)
- 5 3-way switching valve (optional)
- hydraulic separator (optional)
- secondary circuit pump*

- 8 bypass*
- 9 DHW tank AQUA
- 10 QERAX boiler connection kit (optional)
- 11 DHW recirculation pump*
- SwitchConnect Wi-Fi receiver (optional)
- (13) HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



ACCESSORY PRODUCTS TO HEAT PUMPS





Tanks

ELFOSun² BLUhx+

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





HEALTH



- ✓ 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
- 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 | Set | | - | 1 |
| collectors | Maximum (in a series) | | - | 5 |
| Installation | | | - | Horizontal / Sloping |
| Roof slope | | Minimum / Maximum | 0 | 15 / 45 |
| | gross | | m ² | 2,523 |
| Surface | opening | | m ² | 2,401 |
| | absorber | | m ² | 2,400 |
| | η _{COL} - collector efficiency | | - | 66% |
| η ₀ - zero loss collector efficiency | | | - | 0,797 |
| Periormances | a ₁ - thermal dispersion coefficient | | W/m ² K | 3,18 |
| | a2 - temperature report / thermal dispersion coefficien | t | W/m^2K^2 | 0,008 |
| Stagnant tempera | ature | Maximum | °C | 204 |
| Operating pressu | re | Maximum | bar | 6 |
| Water content | | | 1 | 1,7 |
| Panel water flow | | Nominal | l/min | 2,17 |
| Absorptance | | | % | 95 |
| Emittance | | | % | 5 |
| Circulation gro | oup¹ | | | KCVE |
| Power supply | Voltage/Frequency/Phases | | V/Hz/n° | 230/50/1 |
| rower suppry | | | - | Independent |
| Dumn | Panel water flow | Minimum / Maximum | l/min | 1/13 |
| Pump | Maximum power absorption | | W | 45 |

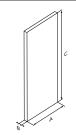
The Product complies with the European ErP Directive (UE Regulations 811/2013 - 813/2013)

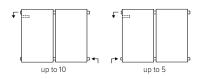
(1) Control unit for indoor installation

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 |
| 11111 | 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 |
| 11111 | 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 |
| 11111 | 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



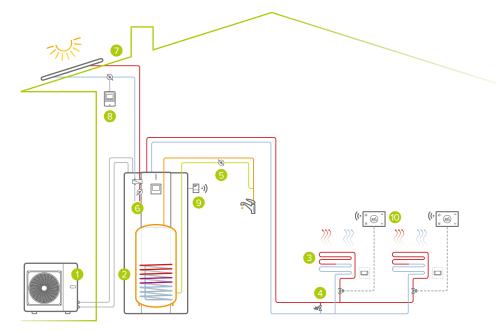


Collector connections

Fast copper connection

21 mm female ogive for copper (with hydraulic kit)

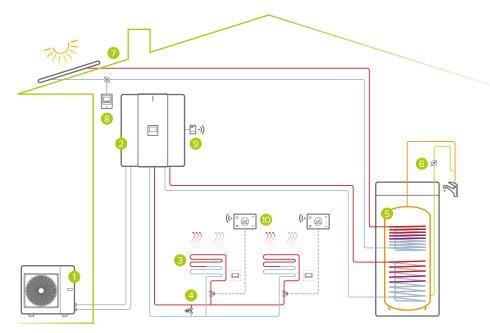
| Size | | | | BLUhx+ |
|--------------------|-------------------|-----------------------------------|------|-----------------|
| Dimensions | Solar collector | Length(A) x Height (C) x Depth(B) | mm | 1.987x1.270x100 |
| Jillelisions | Controller | Length(A) x Height (C) x Depth(B) | mm | 115x86x45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



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)
- ELFOSun solar thermal (optional)
- 8 solar circulation kit (optional)
- SwitchConnect Wi-Fi receiver (optional)
- HID-TConnect Wi-Fi chronothermostat (optional)

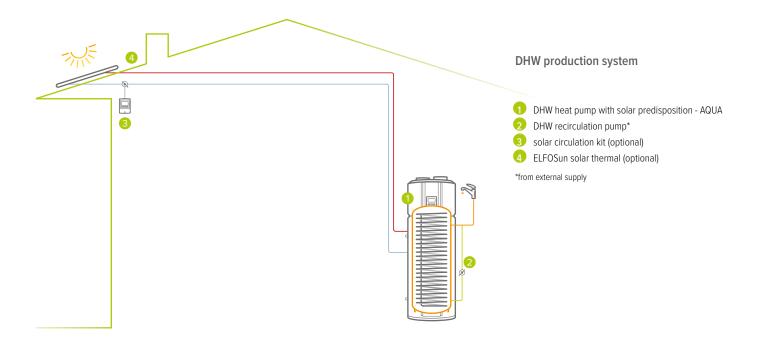
*from external supply



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*
- ELFOSun solar thermal (optional)
- 8 solar circulation kit (optional)
- SwitchConnect Wi-Fi receiver (optional)
- 10 HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



ENERGY SAVING

(optional)





RELIABILITY

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

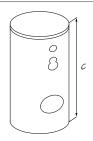
| Size | | | ACS200X | ACS300X | ACS500X | ACS1000X |
|--------------------|--|--------|---------|---------|---------|----------|
| | Net water volume | I | 196 | 273 | 475 | 930 |
| | Energy efficiency class | - | В | В | В | С |
| Daufa | Maximum water temperature | °C | | | | |
| Performance | Insulation: Material / Medium thickness ¹ | mm | | PU / 70 | | PU / 100 |
| | Thermal dispersions W/K | | 1,13 | 1,40 | 1,78 | 4,05 |
| | Electric heater kW | | | | 3 | |
| Quantity of exchar | ngers | - | | 1 | | |
| • | Superficie | m² | 1,5 | 1,8 | 2,2 | 3,5 |
| | Internal volume | I | 8,6 | 10,4 | 12,7 | 12,7 |
| Bottom pipe coil | 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 operatir | • | 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 |
| | DHW supply | inch | | 1" | | 1" 1/4 |
| | DHW return | inch | | 1" | | 1" 1/4 |
| External diameters | Return pipe coil | inch | | 1/2" | | 1" |
| External diameters | Supply Upper pipe coil | inch | | 1" | | 1" 1/4 |
| | Return bottom pipe coil / drain | inch | | 1" | | 1" 1/4 |
| | Recirculating | inch | | 1/2" | | 1" |

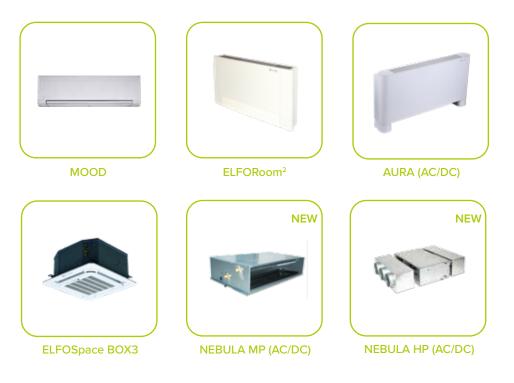




TERMINAL UNITS



Terminal units for the distribution of heating and cooling at home



MOOD

CFW-2 1÷5

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

COMFORT

















Potential-free

contact

MANAGEMENT AND CONNECTIVITY



control





(optional)









RELIABILITY





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**



Management with ELFOControl

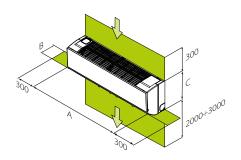
Mood can be connected to ELFOControl³ EVO, the touch-screen centraliser that coordinates the entire system intelligently and efficiently to always ensure the utmost comfort at the lowest possible

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 De | 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" | | | |
| External diameter | Condensate drain | mm | | | 20 | | | |

accessories



technical data

| Size | | | | | 1 | 2 | 3 | 4 | 5 |
|----------------------|-----------------------|--|-----------------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Total yeld | | _ | kW | 2,70 | 2,91 | 3,81 | 4,47 | 4,87 |
| Caalina | Sensible yeld | Water 7/12°C | | kW | 2,15 | 2,33 | 3,18 | 3,67 | 4,11 |
| Cooling | Water flow-rate | — Ambient air 27°C/19°Cwb — Maximum ventilation speed | | l/h | 480 | 510 | 670 | 770 | 850 |
| | Water pressur drop | maximum ventilation speed | | kPa | 31,6 | 37,2 | 56,8 | 41,2 | 50,7 |
| | Yeld | Water 45/40°C | | kW | 2,12 | 3,23 | 4,3 | 4,84 | 5,26 |
| | Water flow-rate | Ambient air 20°C | | l/h | 480 | 510 | 670 | 770 | 850 |
| H C | Water pressur drop | Maximum ventilation speed | | kPa | 37,5 | 40,6 | 61,9 | 43,7 | 51,7 |
| Heating | Yeld | Water 50°C/cooling water flow-rate | | kW | 3,29 | 3,76 | 5,08 | 5,68 | 6,31 |
| | Water flow-rate | Ambient air 20°C | | l/h | 480 | 510 | 670 | 770 | 850 |
| | Water pressur drop | Maximum ventilation speed | | 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 pres | sure | | 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 | e @1m | | Minimum / Maximum | dB(A) | 27/32 | 23/32 | 35/45 | 30/38 | 35/44 |
| Power supply | Voltage/Frequency/Pha | ases | | 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 $\,$

ELFORoom²

ELFORoom² 003.0÷017.0

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

COMFORT

















contact



MANAGEMENT AND CONNECTIVITY



(optional)



port



management



0-10 V

RELIABILITY



法

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**

Ready for anything

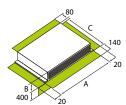
ELFORoom² is highly flexible, thanks to the availability of many accessories that enhance its potential.

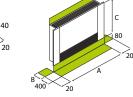
The unit can be managed with the on-board control, with LCD display and very discreet, with external thermostat, ON/OFF input via potential-free contact or input with 0-10V signal.

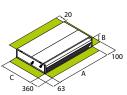
Multiple ELFORoom² units can also be grouped together in mini-networks of up to 9 units with master/slave management by thermostat or by ELFOControl³ EVO centraliser or BMS with Modbus protocol.

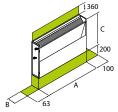
The rest of the optional equipment is designed to facilitate installation: feet for fixing to the ground, recessed fan coil / grid kit to make uncased installations invisible, telescopic or 90° plenum for ducting.

dimensions and connections









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

ELFORoom² OUTVOT

Cased unit

ELFORoom² OUTVL-OUTVOT Cased unit

ELFORoom² INVOT Uncased unit

ELFORoom² INVOT Uncased unit

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

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-

Vertical cased with continuous modulation DC **OUTRAD**

motor, RS485 interface with built-in thermostat and

ventilated radiant plate

Vertical - Horizontal uncased with continuous **INVOT**

modulation DC motor, RS485 interface without built-

in thermostat

TYPE OF INSTALLATION:

2-pipe **B4T** 4-pipe

ELECTRONIC:

From selected configuration

Simplified electronic control with 4 speeds DC motor, **CSEMP**

built-in thermostat without RS485 interface (with

option: OUTVL - OUTRAD)

DC motor modulation electronic board for matching SC3V

to 3 speeds thermostats

DC motor modulation electronic board for matching **SC010**

to 0-10V thermostats

AIR PURIFICATION:

Standard

UV germicidal lamp kit with support UV

accessories

| KASPX | Return plenum kit | | FXPPX | Floor fixing brackets kit |
|--------|---|--------|--------|---|
| | | | KV3VBX | 3-way valve kit with electrothermal head and balancing |
| GRA1X | Air outflow grille | | KV3B4X | 3-way valve kit with electrothermal head and balancing for 4-pipe system (Available only with B4T) |
| PR90MX | 90° air outlet plenum | | KCMDX | Motor connection cables for unit with couplings on the right |
| PMSTX | Telescopic upper supply plenum kit | TIME | HIDE1X | Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - 3 speeds) |
| GMX | Outlet grille | 3300 | HIDE2X | Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - Cool/ Heat - 3 speeds) |
| PCIX | Rear painted panel for cased units Uncased closure panel | TIL | HIDE3X | Electro-mechanical thermostat for wall installation with built-in temperature probe () |
| | Oncased closure panel | | | Electronic thermostat for wall |
| CSFIX | Formwork for uncased installation | 000000 | HIDT3X | installation with display and built- in humidity / temperature probes |
| KPDX | Plinth kit | 23 | HIDT6X | Electronic thermostat for wall installation with built-in temperature probe |

technical data

| Size | | | | | 003.0 | 005.0 | 011.0 | 015.0 | 017.0 |
|----------------------|-----------------------|--|-----------------------------|---------|---------------|-----------------|-----------------|-----------------|-----------------|
| | Total yield | | | kW | 0,91 | 2,12 | 2,81 | 3,3 | 3,71 |
| Caaliaa | Sensible yield | Water 7/12°C — Ambient air 27°C/19°Cwb | | kW | 0,73 | 1,72 | 2,11 | 2,71 | 2,90 |
| Cooling | Water flow-rate | Maximum ventilation speed | | l/h | 160 | 360 | 480 | 570 | 640 |
| | Water pressure drop | | | kPa | 12 | 8 | 17 | 18 | 21 |
| | Yield | Water 45/40°C | | kW | 1,02 | 2,21 | 3,01 | 3,81 | 4,32 |
| | Water flow-rate | Ambient air 20°C | | l/h | 180 | 380 | 530 | 660 | 750 |
| Heating | Water pressure drop | Maximum ventilation speed | | kPa | 9 | 9 | 19 | 21 | 23 |
| Heating | Yield | Water 50°C/cooling water flow-rate | | kW | 1,2 | 2,59 | 3,6 | 4,53 | 5,1 |
| | Water flow-rate | Ambient air 20°C | | l/h | 156 | 364 | 482 | 566 | 637 |
| | Water pressure drop | Maximum ventilation speed | | 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/Pha | ses | | 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 $\,$



AURA

CFFC / CFFU / CFFAC / CFFAU 1÷12

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

COMFORT



























management on the control for the AC version



0-10 V



Cooling 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.



TYPE OF INSTALLATION:

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

TYPE OF INSTALLATION: CC2 2-pipe 4-pipe CC4

AIR RETURN:

R3 Downward Front RF

HYDRAULIC CONNECTIONS NEW:

Pipes connection on the right DX 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

KJRP-75 control mounted on board (only for versions **HMIDM**

 $\mathsf{DC}\;\mathsf{CFFC})^{\mathsf{NEW}}$

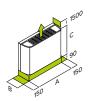
KJRP-86 control mounted on board (only for versions **HMIAM**

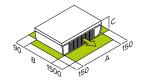
AC CFFAC)^{NEW}

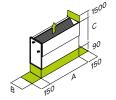
accessories

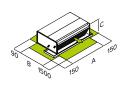
| 3 | BRVHX | Auxiliary condensate collection tray for vertical/horizontal installation | | KJR90X | KJR-90D electronic room control for wall installation (only DC version) |
|-------------|---------|--|--------|-----------------|--|
| | KDPX | Plinth kit | | KJR150X | Indoor units group controller (only DC version) |
| | 3V2DX | 3-way ON/OFF valves kit for 2-pipe system (3V2DX for right side fittings | 0 | CCM30BX | Centralized controller with case (only DC version) |
| 100 | 3V2SX | / 3V2SX for left side fittings) | | ССМ09 | Wired centraliser with weekly scheduler (to exhaustion) |
| ×. | 3V4DX | 3-way ON/OFF valves kit for 4-pipe system (3V4DX for right side fittings | | CCM-180A/ WS | Wired centralizer with 6.2" touchscreen display with weekly scheduler NEW |
| | 3V4SX | / 3V4SX for left side fittings) | 0 | CCM-270A/ WS | Wired centralizer with 10.1" touchscreen display with weekly scheduler NEW |
| | HMIFACX | KJRP-86A wired controller for on- board or wall installation (only AC version) | P-0.23 | CCM18UX | Modbus protocol for up to 16 fancoil units (gateway) |
| CONT. | вохх | Wall installation with concealed box KJRP-86A | | CCM18X | Modbus protocol for up to 64 fancoil units (gateway) |
| 10 - | HMIFDCX | KJRP-75A wired controller for on- board or wall installation (only DC version) | | CCM08X | BACnet Gateway (to exhaustion) |
| J | EXTENX | KJRP-75 Wired Control Connection Cable Extension (2m) | | IMMP-BAC(A) | BACnet Gateway and IMMPRO gateway |
| \$ com | | Electro-mechanical thermostat for | To com | LONGW64 | LonWorks Gateway for up to 16 fancoil units (to exhaustion) |
| 820 1820 | нірт9х | semi-uncased wall installation with display and built-in temperature probe (for AC version, 2-ON/OFF | | GW-LON(A) | LonWorks Gateway for up to 32 fancoil units |
| | | valves management, 3-point valve management, Modbus port) | | KNXX | KNX Gateway, for single indoor unit (to exhaustion) |

dimensions and connections









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

CFF / CFFA CAS Cased unit

CFF / CFFA CAS Cased unit

CFF / CFFA UNC Uncased unit

CFF / CFFA UNC Uncased unit

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

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

technical data

| Size - CFFC / C | FFU (unit with DC inve | rter motor) | | | 1 | 2 | 3 | 4 | 5 | 6 | |
|--|-------------------------------------|--|--|-------------------------|------------------------------------|------------------------------------|---|--|-------------------------------------|--|--|
| | Total capacity | | | kW | 1,50 | 1,95 | 2,35 | 2,85 | 3,50 | 3,90 | |
| Cooling | Sensible capacity | Water 7/12°C — Ambient air 27°C/19°Cwb | | kW | 1,14 | 1,42 | 1,79 | 2,06 | 2,65 | 2,9 | |
| Cooling | Water flow-rate | Maximum ventilation speed | | l/h | 260 | 330 | 400 | 490 | 600 | 670 | |
| | Water pressure drop | | | kPa | 13,9 | 27,2 | 13,3 | 26 | 34,1 | 37,4 | |
| | Capacity | Water 45/40°C | | kW | 1,57 | 2,05 | 2,60 | 2,95 | 3,80 | 4,00 | |
| | Water flow-rate | Ambient air 20°C | | l/h | 270 | 350 | 450 | 510 | 650 | 700 | |
| II. atia a | Water pressure drop | Maximum ventilation speed | | kPa | 15,1 | 25,3 | 14,3 | 24,4 | 35,1 | 36,5 | |
| Heating | Capacity | Water 50°C/cooling water flow | | kW | 1,91 | 2,21 | 3,13 | 3,51 | 4,33 | 4,71 | |
| | Water flow-rate | Ambient air 20°C | | l/h | 260 | 330 | 400 | 490 | 600 | 670 | |
| | Water pressure drop | Maximum ventilation speed | | 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 pressu | re | | Maximum | bar | | | 1 | 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/Pha | ses | | V/Hz/n° | | | 230/50/1 | | | | |
| | | | | | | | | | | | |
| Size - CFFC / C | FFU (unit with DC inve | rter motor) | | | 7 | 8 | 9 | 10 | 11 | 12 | |
| | Total capacity | | | kW | 4,30 | 4,85 | 5,60 | 6,35 | 7,35 | 8,25 | |
| Cooling | Sensible capacity | Water 7/12°C Ambient air 27°C/19°Cwb | | kW | 3,25 | 3,63 | 4,62 | 4,98 | 5,87 | 6,12 | |
| Cooling | Water flow-rate | Maximum ventilation speed | | 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 | |
| | Capacity | Water 45/40°C | | kW | 4,70 | 5,25 | 6,00 | 7,05 | 8,05 | 8,70 | |
| | Water flow-rate | Ambient air 20°C | | l/h | 810 | 910 | 1.040 | 1.220 | 1.390 | 1.510 | |
| Haatiaa | Water pressure drop | Maximum ventilation speed | | kPa | 54,3 | 53,4 | 55,5 | 37,6 | 46,9 | 62,6 | |
| Heating | Capacity | Water 50°C/cooling water flow | | kW | 5,18 | 5,55 | 7,33 | 8,37 | 9,61 | 02,0 | |
| | Maria di | | | | | | | | | 10,63 | |
| | Water flow-rate | Ambient air 20°C | | I/h | 740 | 830 | 960 | 1.090 | 1.270 | | |
| | Water flow-rate Water pressure drop | | | I/h kPa | 740 54,2 | 830 54,3 | 960 50,7 | 1.090 32,8 | 1.270 44,1 | 10,63 | |
| Power input | | Ambient air 20°C | Minimum / Maximum | | | | | | | 10,63 1.430 | |
| <u> </u> | Water pressure drop | Ambient air 20°C | Minimum / Maximum | kPa | 54,2 | 54,3 | 50,7 17 / 96 | 32,8 | 44,1 | 10,63 1.430 71,4 | |
| Operating pressu | Water pressure drop | Ambient air 20°C | | kPa W bar | 54,2 | 54,3 | 50,7 17 / 96 | 32,8 19 / 92 16 | 44,1 | 10,63 1.430 71,4 22 / 102 | |
| Operating pressu Airflow¹ | Water pressure drop | Ambient air 20°C | Maximum | kPa W bar | 54,2 14 / 50 | 54,3 15 / 52 | 50,7 17 / 96 | 32,8 19 / 92 16 | 44,1 22 / 113 | 10,63 1.430 71,4 22 / 102 | |
| Power input Operating pressu Airflow ¹ Sound power Sound pressure @ | Water pressure drop | Ambient air 20°C | Maximum Minimum / Nominal / Maximum | kPa W bar m³/h | 54,2 14 / 50 410 / 580 / 790 | 54,3 15 / 52 420 / 600 / 800 | 50,7 17 / 96 1 505 / 855 / 1.190 | 32,8 19 / 92 16 530/875/1.190 | 44,1 22 / 113 685/1.015/1.360 | 10,63 1.430 71,4 22 / 102 680 / 980 / 1.30 | |

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 / C | FFAU (AC motor unit v | vith three speeds) | | | 1 | 2 | 3 | 4 | 5 | 6 |
|--|--|--|---|--|--|--|--|---|---|---|
| | Total capacity | | | kW | 1,65 | 2,25 | 2,65 | 3,05 | 3,85 | 4,20 |
| Caaliaa | Sensible capacity | Water 7/12°C Ambient air 27°C/19°Cwb | | kW | 1,25 | 1,65 | 2,05 | 2,23 | 2,91 | 3,05 |
| Cooling | Water flow-rate | Maximum ventilation speed | | l/h | 280 | 390 | 450 | 520 | 660 | 720 |
| | Water pressure drop | maximam ventination speed | | kPa | 15,8 | 33,2 | 18,0 | 26,7 | 38,2 | 41,2 |
| | Capacity | Water 45/40°C | | kW | 1,85 | 2,35 | 3,05 | 3,15 | 4,10 | 4,30 |
| | Water flow-rate | Ambient air 20°C | | l/h | 320 | 400 | 520 | 540 | 710 | 740 |
| Unating | Water pressure drop | Maximum ventilation speed | | kPa | 15,1 | 33,2 | 17,6 | 23,3 | 35,5 | 37,2 |
| Heating | Capacity | Water 50°C/cooling water flow. | | kW | 1,94 | 2,56 | 3,33 | 4,13 | 4,67 | 4,93 |
| | Water flow-rate | Ambient air 20°C | | l/h | 283 | 386 | 454 | 523 | 660 | 720 |
| | Water pressure drop | Maximum ventilation speed | | 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 pressur | re e | | Maximum | bar | | | 1 | 6 | | |
| 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 |
| • • | 1m | | Minimum / Maximum | dB(A) | 21/35 | 27 / 42 | 18 / 34 | 19 / 34 | 23/39 | 31 / 40 |
| Sound pressure @1m | | | | | | | | | | |
| Power supply | Voltage/Frequency/Pha | ses | | V/Hz/n° | | | 230 | /50/1 | | |
| · · | | ses | | - ' ' | | | | | | |
| Power supply | | | | - ' ' | 7 | 8 | 230. 9 | /50/1 10 | 11 | 12 |
| Power supply | Voltage/Frequency/Pha | vith three speeds) | | - ' ' | 7 4,65 | 8 5,35 | | | 11 7,35 | 12 8,25 |
| Power supply Size CFFAC / C | Voltage/Frequency/Pha | vith three speeds) Water 7/12°C | | V/Hz/n° | - <u> </u> | | 9 | 10 | | |
| Power supply | Voltage/Frequency/Pha FFAU (AC motor unit v Total capacity | vith three speeds) | | V/Hz/n° | 4,65 | 5,35 | 9 6,00 | 10 6,75 | 7,35 | 8,25 |
| Power supply Size CFFAC / C | Voltage/Frequency/Pha FFAU (AC motor unit v Total capacity Sensible capacity | vith three speeds) Water 7/12°C Ambient air 27°C/19°Cwb | | V/Hz/n° kW kW | 4,65 3,58 | 5,35 3,96 | 9 6,00 4,83 | 10 6,75 5,09 | 7,35 5,63 | 8,25 6,08 |
| Power supply Size CFFAC / C | Voltage/Frequency/Pha FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate | vith three speeds) Water 7/12°C Ambient air 27°C/19°Cwb | | V/Hz/n° kW kW l/h | 4,65 3,58 800 | 5,35 3,96 920 | 9 6,00 4,83 1.030 | 10 6,75 5,09 1.160 | 7,35 5,63 1.260 | 8,25 6,08 1.410 |
| Power supply Size CFFAC / C | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C | | kW kW l/h kPa | 4,65 3,58 800 56,9 | 5,35 3,96 920 61,5 | 9 6,00 4,83 1.030 53,8 | 10 6,75 5,09 1.160 40,3 | 7,35 5,63 1.260 45,4 | 8,25 6,08 1.410 64,7 |
| Power supply Size CFFAC / C Cooling | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C | | kW kW l/h kPa kW | 4,65 3,58 800 56,9 5,20 | 5,35 3,96 920 61,5 5,70 | 9 6,00 4,83 1.030 53,8 6,15 | 10 6,75 5,09 1.160 40,3 7,15 | 7,35 5,63 1.260 45,4 8,20 | 8,25 6,08 1.410 64,7 8,50 |
| Power supply Size CFFAC / C | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C | | kW kW l/h kPa kW l/h | 4,65 3,58 800 56,9 5,20 890 | 5,35 3,96 920 61,5 5,70 980 | 9 6,00 4,83 1.030 53,8 6,15 1050 | 10 6,75 5,09 1.160 40,3 7,15 1230 | 7,35 5,63 1.260 45,4 8,20 1410 | 8,25 6,08 1.410 64,7 8,50 1460 |
| Power supply Size CFFAC / C Cooling | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C Maximum ventilation speed Water 50°C/cooling water flow. Ambient air 20°C | | kW kW l/h kPa kW l/h kPa | 4,65 3,58 800 56,9 5,20 890 56,7 | 5,35 3,96 920 61,5 5,70 980 60,9 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 | 7,35 5,63 1.260 45,4 8,20 1410 44,6 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 |
| Power supply Size CFFAC / C Cooling | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Capacity | with three speeds) Water 7/12°C Ambient dir 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient dir 20°C Maximum ventilation speed Water 50°C/cooling water flow. | | kW kW I/h kPa kW kW | 4,65 3,58 800 56,9 5,20 890 56,7 5,89 | 5,35 3,96 920 61,5 5,70 980 60,9 6,35 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 7,59 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 7,91 | 7,35 5,63 1.260 45,4 8,20 1410 44,6 8,77 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 9,27 |
| Power supply Size CFFAC / C Cooling | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water flow-rate | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C Maximum ventilation speed Water 50°C/cooling water flow. Ambient air 20°C | Minimum / Maximum | V/Hz/n° kW kW I/h kPa kW I/h kPa kW | 4,65 3,58 800 56,9 5,20 890 56,7 5,89 797 | 5,35 3,96 920 61,5 5,70 980 60,9 6,35 917 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 7,59 1020 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 7,91 1150 | 7,35 5,63 1.260 45,4 8,20 1410 44,6 8,77 1260 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 9,27 1410 |
| Power supply Size CFFAC / C Cooling Heating | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water flow-rate Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Water flow-rate Water pressure drop | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C Maximum ventilation speed Water 50°C/cooling water flow. Ambient air 20°C | | V/Hz/n° kW kW I/h kPa kW I/h kPa kW I/h kPa | 4,65 3,58 800 56,9 5,20 890 56,7 5,89 797 56,9 | 5,35 3,96 920 61,5 5,70 980 60,9 6,35 917 61,5 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 7,59 1020 53,8 68 / 123 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 7,91 1150 40,3 | 7,35 5,63 1.260 45,4 8,20 1410 44,6 8,77 1260 45,4 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 9,27 1410 64,7 |
| Power supply Size CFFAC / C Cooling Heating Power input | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water flow-rate Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Water flow-rate Water pressure drop | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C Maximum ventilation speed Water 50°C/cooling water flow. Ambient air 20°C | Minimum / Maximum | V/Hz/n° kW kW I/h kPa kW I/h kPa kW I/h kPa kW I/h kPa | 4,65 3,58 800 56,9 5,20 890 56,7 5,89 797 56,9 | 5,35 3,96 920 61,5 5,70 980 60,9 6,35 917 61,5 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 7,59 1020 53,8 68 / 123 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 7,91 1150 40,3 64 / 110 | 7,35 5,63 1.260 45,4 8,20 1410 44,6 8,77 1260 45,4 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 9,27 1410 64,7 82 / 118 |
| Power supply Size CFFAC / C Cooling Heating Power input Operating pressur | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water flow-rate Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Water flow-rate Water pressure drop | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C Maximum ventilation speed Water 50°C/cooling water flow. Ambient air 20°C | Minimum / Maximum Maximum | V/Hz/n° kW kW I/h kPa kW I/h kPa kW I/h kPa kW I/h kPa | 4,65 3,58 800 56,9 5,20 890 56,7 5,89 797 56,9 34/91 | 5,35 3,96 920 61,5 5,70 980 60,9 6,35 917 61,5 35 / 91 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 7,59 1020 53,8 68/123 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 7,91 1150 40,3 64/110 | 7,35 5,63 1,260 45,4 8,20 1410 44,6 8,77 1260 45,4 83 / 123 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 9,27 1410 64,7 82 / 118 |
| Power supply Size CFFAC / C Cooling Heating Power input Operating pressur Airflow ¹ | FFAU (AC motor unit v Total capacity Sensible capacity Water flow-rate Water pressure drop Capacity Water flow-rate Water pressure drop Capacity Water pressure drop Capacity Water pressure drop Capacity Water flow-rate Water pressure drop | with three speeds) Water 7/12°C Ambient air 27°C/19°Cwb Maximum ventilation speed Water 45/40°C Ambient air 20°C Maximum ventilation speed Water 50°C/cooling water flow. Ambient air 20°C | Minimum / Maximum Maximum Minimum / Nominal / Maximum | V/Hz/n° kW kW I/h kPa kW I/h kPa kW I/h kPa kW I/h kPa m³/h | 4,65 3,58 800 56,9 5,20 890 56,7 5,89 797 56,9 34/91 | 5,35 3,96 920 61,5 5,70 980 60,9 6,35 917 61,5 35/91 | 9 6,00 4,83 1.030 53,8 6,15 1050 57,9 7,59 1020 53,8 68/123 | 10 6,75 5,09 1.160 40,3 7,15 1230 42,2 7,91 1150 40,3 64 / 110 6 591/885/1.150 | 7,35 5,63 1.260 45,4 8,20 1410 44,6 8,77 1260 45,4 83 / 123 | 8,25 6,08 1.410 64,7 8,50 1460 62,0 9,27 1410 64,7 82 / 118 |

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

Sound levels tested in an anechoic chamber according to ISO 3744 $\,$

ELFOSpace BOX3

CFK 007.0÷041.0

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

COMFORT













Anti cold air







Remote contro



(optional)



Centralised control (optional)



Modbus



RELIABILITY





CONVENIENCE

√ New functions: management with potential-free contact input or

- ✓ Quiet and efficient, thanks to the fan's brushless DC motor
- Standard supplied infrared remote control

0-10V input, alarm output

- Standard supplied condensate drain pump on board
- Management via Modbus port with connection to BMS system or **ELFOControl**

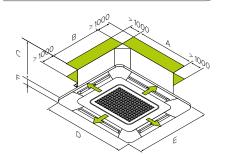


Efficient and quiet

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 $2 \ensuremath{\div} 5$ 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 |
| Dillielisiolis | Panel | Length(D) x Height(F) x Depth(E) | mm | 647x50x647 | 647x50x647 | 647x50x647 | 950x45x950 | 950x45x950 | 950x45x950 |
| M/-*- I-1 | Unit + Panel (2-pipe) | | kg | 16,5+2,5 | 16,5+2,5 | 16,5+2,5 | 23+6 | 27+6 | 27+6 |
| Weight | Unit + Panel (4-pipe) | | kg | 16,7+2,5 | 16,7+2,5 | 16,7+2,5 | 27,5+6 | 30+6 | 30+6 |
| Futament diameter | | Water | inch | | | 3, | /4" | | |
| External diameter | | Condensate drain | mm | | 25 | | | 32 | |

TYPE OF SYSTEM:

CC2 2-pipe CC4 4-pipe

accessories

| # 1 T + 5 | KJR90X | KJR90 electronic room control for wall installation | | CCM08X | BACnet Gateway (to exhaustion) |
|----------------|-----------------|---|------|-----------|---|
| | KJR150X | Indoor units' group controller | *** | GW-LON(A) | BACnet Gateway e IMMPRO |
| District In | CCM30BX | Touch-key indoor units' | | | gateway |
| 0 | CCMSOBX | centralized controller | | LONGW64 | LonWorks Gateway for up to 64 fancoil units (to exhaustion) |
| | CCM09 | Wired centraliser with weekly | 5.45 | | Taricon urits (to exhaustion) |
| | | scheduler (to exhaustion) | 1000 | GW-LON(A) | LonWorks Gateway for up to 32 fancoil units |
| 0 | CCM-180A/ WS | Wired centralizer with 6.2" touchscreen display with weekly scheduler NEW | | KNXX | KNX Gateway, for single indoor unit (to exhaustion) |
| | | | | | |
| 0 | CCM-270A/ WS | Wired centralizer with 10.1" touchscreen display with weekly scheduler ^{NEW} | | | |
| Name of Street | CCM18UX | Modbus protocol for up to 16 fancoil | | | |

technical data

| Size | | | | | 007.0 | 011.0 | 015.0 | 021.0 | 031.0 | 041.0 |
|----------------------|-------------------------|---|-----------------------------|---------|-----------------|-----------------|-----------------|---------------|-------------------|-------------------|
| | Total capacity | | | kW | 2,98 | 3,96 | 4,20 | 5,93 | 7,87 | 11,19 |
| Caaliaa | Sensible capacity | Water 7/12°C — Ambient air 27°C/19°C wb | | kW | 2,49 | 3,20 | 3,45 | 5,00 | 6,68 | 9,04 |
| Cooling | Water flow-rate | Maximum ventilation speed | | l/h | 530 | 700 | 750 | 1050 | 1440 | 1960 |
| | Water pressure drop | maximum remandion speed | | kPa | 10,0 | 11,5 | 12,3 | 23,8 | 22,3 | 36,6 |
| | Capacity | Water 45/40°C | | kW | 2,61 | 4,08 | 4,95 | 6,06 | 9,16 | 8,98 |
| | Water flow-rate | Ambient air 20°C | | l/h | 640 | 830 | 870 | 1.300 | 1.730 | 2.350 |
| H. alba | Water pressure drop | Maximum ventilation speed | | kPa | 12,1 | 9,2 | 9,4 | 25,9 | 28,8 | 49,2 |
| Heating | Capacity | Water 50°C/cooling water flow | | kW | 4,01 | 4,78 | 5,76 | 8,42 | 10,92 | 14,92 |
| | Water flow-rate | Ambient air 20°C | | l/h | 530 | 700 | 750 | 1050 | 1440 | 1960 |
| | Water pressure drop | Maximum ventilation speed | | 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 | <u>,</u> | | Maximum | bar | | | 1 | 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 @1 | m | | Minimum / Maximum | dB(A) | 27 / 39 | 30 / 42 | 32 / 43 | 33 / 43 | 41 / 48 | 39 / 49 |
| Power supply | Voltage/Frequency/Phase | ses | | 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

CCM18X

units (gateway)

Modbus protocol for up to 64

fancoil units (gateway)

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



Cooling







·



HEALTH

High density



contact



input





Modbus port (in the thermostat)

Modbus port 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 ELFOControl³ 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.

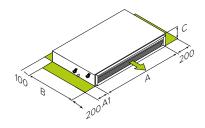
Selection Software

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.

| _ | DUA- | MP | 13 | 14 | 23 | 24 | 33 | 34 | 43 | 44 |
|------|------------|--|-----------------------------------|---|--|---|---|---|---|--|
| Unit | Lenght (A) | mm | 700 | 700 | 920 | 920 | 920 | 920 | 1.140 | 1.140 |
| | 3 () | mm | 225 | 225 | 225 | 225 | 225 | 225 | 255 | 255 |
| | Depth (B) | mm | 550 | 550 | 550 | 550 | 550 | 550 | 580 | 580 |
| 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 |
| | CC2 | Unit Lenght (A) Height (C) Depth (B) CC2 | Height (C) mm Depth (B) mm CC2 kg | Unit Lenght (A) mm 700 Height (C) mm 225 Depth (B) mm 550 CC2 kg 14,7 | Unit Lenght (A) Height (C) Pepth (B) mm Pepth (B) 700 Pepth (B) 700 Pepth (B) 225 Pepth (B) 225 Pepth (B) 550 Pepth (B) CC2 kg 14,7 15,5 | Unit Lenght (A) mm 700 700 920 Height (C) mm 225 225 225 Depth (B) mm 550 550 550 CC2 kg 14,7 15,5 19,2 | Unit Height (C) Lenght (B) mm 700 700 920 920 Depth (B) mm 225 225 225 225 CC2 kg 14,7 15,5 19,2 20,1 | Unit Height (A) Lenght (A) mm 700 700 920 920 920 Height (C) mm 225 225 225 225 225 225 225 25 550 550 550 550 550 550 200 19,8 14,7 15,5 19,2 20,1 19,8 19,8 19,8 19,2 10,0 | Unit Height (A) Lenght (A) mm 700 700 920 920 920 920 Depth (B) mm 225 225 225 225 225 225 CC2 kg 14,7 15,5 19,2 20,1 19,8 20,7 | Unit Height (C) Lenght (B) mm 700 700 920 920 920 920 920 920 1.140 Depth (B) mm 225 225 225 225 225 225 225 255 550 550 550 550 550 550 550 580 CC2 kg 14,7 15,5 19,2 20,1 19,8 20,7 27,7 |

| 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 |
| Woight | CC2 | | kg | 18,7 | 19,6 | 22,4 | 24,2 | 29,5 | 30,6 | 31,2 | 33,2 |
| Weight | CC4 | | kg | 19,8 | 20,7 | 23,7 | 25,5 | 31,4 | 32,5 | 33,1 | 35,1 |

TYPE OF SYSTEM:

CC2 2-pipe CC4 4-pipe

AIR RETURN:

RB 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

2-way ON/OFF valves for 2-pipe version
3-way ON/OFF valves for 2-pipe version
2-way ON/OFF valves for 4-pipe version
3-way ON/OFF valves for 4-pipe version

CONDENSATE DRAIN PUMP:
not required

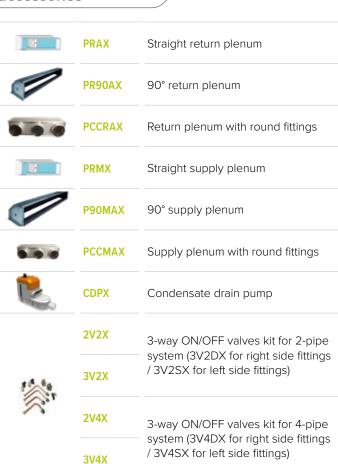
CDP built-in pump

AUXILIARY TRAY:

not required

BRO built-in tray (for horizontal installation)

accessories



Horizontal auxiliary tray

BROX



HIDE2X

HIDE3X

for wall installation with built-in temperature probe (ON/OFF - Cool/ Heat - 3 speeds)

Electro-mechanical thermostat

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)

technical data

| Size | | | | | 13 | 14 | 23 | 24 | 33 | 34 | 43 | 44 |
|----------------------|-----------------------|---|-------------------|---------|-------|-------|-------|-------|--------|--------|--------|--------|
| | Total capacity | | | kW | 2,62 | 2,98 | 3,61 | 4,05 | 5,53 | 6,28 | 6,69 | 7,80 |
| Cooling | Sensible capacity | Water 7/12°C — Ambient air 27°C/19°C wb | | kW | 1,94 | 2,14 | 2,67 | 2,87 | 4,07 | 4,47 | 5,03 | 5,66 |
| Cooling | Water flow-rate | Maximum ventilation speed | | 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 |
| | Cpacity | Water 45/40°C | | kW | 2,90 | 3,14 | 3,78 | 3,58 | 5,95 | 6,42 | 7,33 | 8,22 |
| Heating | Water flow-rate | Ambient air 20°C | | l/h | 504 | 546 | 658 | 720 | 1.037 | 1.119 | 1.277 | 1.432 |
| | Water pressure drop | Maximum ventilation speed | | 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 @1r | n | | Minimum / Maximum | dB(A) | 43/58 | 43/57 | 44/57 | 43/56 | 48/61 | 48/61 | 50/62 | 50/62 |
| Power supply | Voltage/Frequency/Pha | ses | | 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 |
|----------------------|-------------------------|--|-------------------|---------|-------|-------|--------|--------|--------|--------|---------|---------|
| | Total capacity | | | kW | 1,57 | 1,14 | 2,35 | 2,68 | 3,18 | 3,75 | 5,53 | 7,25 |
| Caaliaa | Sensible capacity | Water 7/12°C | | kW | 1,11 | 1,06 | 1,67 | 1,85 | 2,32 | 2,63 | 4,58 | 5,22 |
| Cooling | Water flow-rate | Ambient air 27°C/19°C wb Maximum ventilation speed | | l/h | 283 | 310 | 473 | 541 | 565 | 663 | 1.095 | 1.284 |
| | Water pressure drop | maximum ventilation speed | | kPa | 15,9 | 4,1 | 35,0 | 10,2 | 13,3 | 15,0 | 32,8 | 24,6 |
| | Cpacity | Water 45/40°C | | kW | 1,39 | 1,18 | 1,84 | 2,76 | 3,45 | 3,45 | 5,78 | 7,28 |
| Heating | Water flow-rate | Ambient air 20°C | | I/h | 243 | 326 | 414 | 481 | 601 | 658 | 1.211 | 1.268 |
| | Water pressure drop | Maximum ventilation speed | | 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 | 3 | | | |
| Airflow ¹ | | | Nominal | m³/h | 170 | 130 | 230 | 230 | 510 | 510 | 807 | 1.030 |
| Headroom available | e 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 @1r | m | | Minimum / Maximum | dB(A) | 46/56 | 46/56 | 47/58 | 47/58 | 50/56 | 50/56 | 51/60 | 51/60 |
| Power supply | Voltage/Frequency/Phase | S | | 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



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



Cooling



















Modbus port ELFOContro (in the thermostat) managemen



- 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 ELFOControl³ 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.

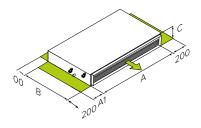
Selection Software

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-I | HP | 13 | 14 | 23 | 24 | 33 | 34 | 43 | 44 | 53 | 54 | 63 | 64 |
|------------|------|------------|----|------|------|------|------|------|------|------|----|------|------|------|------|
| Dimensions | Unit | Lenght (A) | mm | 5 | 90 | 70 | 00 | 92 | 20 | 1.0 | 30 | 1.3 | 90 | 1.5 | 50 |
| | | Height (C) | mm | | | 58 | 30 | | | 65 | 50 | 6 | 80 | 7 | 60 |
| | | Depth (B) | mm | | | 29 | 99 | | | 36 | 69 | 3 | 99 | 4 | 49 |
| W-: | CC2 | | kg | 23 | 24,1 | 27,6 | 28,7 | 39,3 | 40,4 | 47,4 | 49 | 60 | 63 | 84,7 | 88,2 |
| Weight | CC4 | | kg | 24,2 | 25,3 | 28,9 | 30 | 40,8 | 41,9 | 49,4 | 51 | 63,5 | 66,5 | 89,1 | 92,6 |

| | DU-HF | | 13 | 14 | 23 | 24 | 33 | 34 | 43 | 44 | 53 | 54 | 63 | 64 |
|------|------------|--|-----------------------------------|--|--|--|--|---|---|--|--|--|---|--|
| Unit | Lenght (A) | mm | 59 | 90 | 70 | 00 | 92 | 20 | 1.0 | 30 | 1.3 | 90 | 1.5 | 550 |
| | Height (C) | mm | | | 5 | 80 | | | 6 | 50 | 68 | 80 | 70 | 60 |
| | Depth (B) | mm | | | 2 | 99 | | | 3 | 69 | 3 | 99 | 4 | 49 |
| 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 |
| | CC2 | Unit Lenght (A) Height (C) Depth (B) CC2 | Height (C) mm Depth (B) mm CC2 kg | Unit Lenght (A) mm 5: Height (C) mm Depth (B) mm CC2 kg 23 | Unit Lenght (A) mm 590 Height (C) mm Depth (B) mm CC2 kg 23 24,1 | Unit Lenght (A) mm 590 70 Height (C) mm 550 Depth (B) mm 220 CC2 kg 23 24,1 29,1 | Unit Lenght (A) mm 590 700 Height (C) mm 580 Depth (B) mm 299 CC2 kg 23 24,1 29,1 30,2 | Unit Lenght (A) mm 590 700 9. Height (C) mm 580 Depth (B) mm 299 CC2 kg 23 24,1 29,1 30,2 40,8 | Unit Lenght (A) mm 590 700 920 Height (C) mm 580 Depth (B) mm 299 CC2 kg 23 24,1 29,1 30,2 40,8 41,9 | Unit Height (A) mm F590 700 920 1.0 Depth (B) mm Pm 580 66 Depth (B) mm 299 33 CC2 kg 23 24,1 29,1 30,2 40,8 41,9 52,9 | Unit Height (C) mm mm mm 590 mm 700 mm 920 mm 1.030 mm Depth (B) mm 299 mm 369 mm CC2 kg 23 24,1 29,1 30,2 40,8 41,9 52,9 54,5 | Unit Height (A) mm 590 700 920 1.030 1.3 Depth (B) mm 580 650 66 Depth (B) mm 299 369 33 CC2 kg 23 24,1 29,1 30,2 40,8 41,9 52,9 54,5 64 | Unit Height (A) mm 590 700 920 1.030 1.390 Depth (B) mm 580 650 680 Depth (B) mm 299 369 399 CC2 kg 23 24,1 29,1 30,2 40,8 41,9 52,9 54,5 64 67 | Unit Height (A) mm mm 590 700 920 1.030 1.390 1.5 Height (C) mm 580 650 680 7 Depth (B) mm 299 369 399 4 CC2 kg 23 24,1 29,1 30,2 40,8 41,9 52,9 54,5 64 67 75,2 |

TYPE OF SYSTEM:

CC2 2-pipe CC4 4-pipe

AIR RETURN:

R3 Air return from below RBAir return from behind HYDRAULIC CONNECTIONS $^{\mbox{\scriptsize NEW}}$:

DX Right side fittings SX Left side fittings

BUILT-IN VALVES NEW:

not required

2-way ON/OFF valves for 2-pipe version **2V2** 3-way ON/OFF valves for 2-pipe version **3V2** 2-way ON/OFF valves for 4-pipe version **2V4** 3-way ON/OFF valves for 4-pipe version **3V4**

CONDENSATE DRAIN PUMP: not required CDP built-in pump

AUXILIARY TRAY:

not required

built-in tray (for horizontal installation) **BRO**

accessories

| (6) | PRAX | Straight return plenum | 3300 | HIDE2X | Electro-mechanical thermostat for wall installation with built-in temperature probe (ON/OFF - Cool/ Heat - 3 speeds) |
|------|--------|--|---------|-----------|---|
| | PR90AX | 90° return plenum | 116 | HIDE3X | Electro-mechanical thermostat for wall installation with built-in |
| 990 | PCCRAX | Return plenum with round fittings | | - IIIDESX | temperature probe (Auto mode - auto speed) |
| 180 | PRMX | Straight supply plenum | 0 0 0 Y | | Electro-mechanical thermostat for semi-uncased wall installation with |
| | P90MAX | 90° supply plenum | 1820 | HIDT9X | display and built-in temperature probe (for AC version, 2-ON/OFF valves management, 3-point valve |
| 600 | PCCMAX | Supply plenum with round fittings | | | management, Modbus port) |
| | CDPX | Condensate drain pump | Fuel: | | Electro-mechanical thermostat for wall installation with display and |
| | 2V2X | 3-way ON/OFF valves kit for 2-pipe system (3V2DX for right side fittings | 110 :0 | HIDT8X | built-in temperature probe (DC fan control, Auto/ECO/Cool/Heat mode - Auto/3 speeds) |
| 1000 | 3V2X | / 3V2SX for left side fittings) | | | |
| N. | 2V4X | 3-way ON/OFF valves kit for 4-pipe system (3V4DX for right side fittings | 245 | HIDT10X | Electro-mechanical thermostat for semi-uncased wall installation with display and built-in temperature |
| | 3V4X | / 3V4SX for left side fittings) | | | probe (DC fan control, 2-ON/OFF valves management, 3-point valve management, Modbus port) |
| 1 | BROX | Horizontal auxiliary tray | | | |

technical data

| Size | | | | | 13 | 14 | 23 |
|----------------------|-----------------------|---|-------------------|---------|-------|--------------|--------|
| | Total capacity | | | kW | 3,08 | 3,45 | 4,70 |
| Cooling | Sensible capacity | Water 7/12°C — Ambient air 27°C/19°C wb | | kW | 2,48 | 2,69 | 4,06 |
| Cooling | Water flow-rate | Maximum ventilation speed | | l/h | 538 | 591 | 832 |
| | Water pressure drop | | | kPa | 44,3 | 22,7 | 35,1 |
| | Cpacity | Water 45/40°C | | kW | 3,31 | 3,59 | 4,92 |
| Heating | Water flow-rate | Ambient air 20°C | | l/h | 529 | 626 | 857 |
| | Water pressure drop | Maximum ventilation speed | | 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 @1n | n | | Minimum / Maximum | dB(A) | 41/54 | 41/54 | 51/61 |
| Power supply | Voltage/Frequency/Pha | ses | | 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 |
|----------------------|-----------------------|---|-------------------|---------|--------|----------|---------|
| | Total capacity | | | kW | 2,99 | 3,49 | 4,68 |
| Caaliaa | Sensible capacity | Water 7/12°C — Ambient air 27°C/19°C wb | | kW | 2,39 | 2,67 | 4,04 |
| Cooling | Water flow-rate | Maximum ventilation speed | | I/h | 532 | 600 | 842 |
| | Water pressure drop | | | kPa | 43,3 | 23,0 | 35,8 |
| | Cpacity | Water 45/40°C | | kW | 3,27 | 3,65 | 5,53 |
| Heating | Water flow-rate | Ambient air 20°C | | l/h | 570 | 635 | 963 |
| | Water pressure drop | Maximum ventilation speed | | 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 @1r | n | | Minimum / Maximum | dB(A) | 44/56 | 44/56 | 50/63 |
| Power supply | Voltage/Frequency/Pha | ses | | V/Hz/n° | | 230/50/1 | |

PRELIMINARY DATA

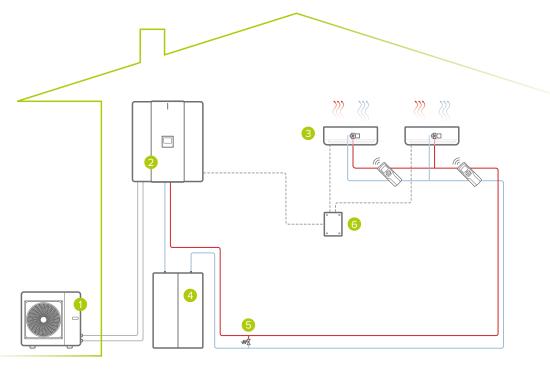
The Product is compliant with the Erp (regulation 2016/2281)

Sound levels tested in an anechoic chamber according to ISO 3744 $\,$

| 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 | | | | |

| 33 | 34 | 43 | 44 | 53 | 54 | 63 | 64 |
|---------|---|--|---|--|---|--|---|
| 7 | 8,63 | 10,3 | 12,84 | 15,82 | 18,49 | 21,94 | 26,82 |
| 6,22 | 7,07 | 9,5 | 10,94 | 14,10 | 15,37 | 20,08 | 22,59 |
| 1.248 | 1.480 | 1.855 | 2.203 | 2.715 | 3.172 | 3.764 | 4.602 |
| 39,5 | 38,5 | 34,0 | 27,7 | 32,9 | 20,8 | 33,0 | 34,0 |
| 8,33 | 9,51 | 12,8 | 14,79 | 18,16 | 20,96 | 25,71 | 30,35 |
| 1.451 | 1.657 | 2.231 | 2.577 | 3.165 | 3.651 | 4.481 | 5.287 |
| 42,4 | 38,7 | 38,7 | 30,1 | 35,5 | 22,0 | 37,0 | 35,7 |
| 144/274 | 144/274 | 284/515 | 284/515 | 499/878 | 499/878 | 1.410/1.760 | 1.410/1.760 |
| | | | 8 | | | | |
| 1.270 | 1.255 | 2.450 | 2.390 | 3.200 | 3.160 | 4.900 | 4.860 |
| 82 | 82 | 73 | 73 | 80 | 80 | 60 | 60 |
| 52/70 | 52/70 | 64/76 | 64/76 | 69/79 | 69/79 | 78/83 | 78/83 |
| 44/62 | 44/62 | 56/68 | 56/68 | 61/71 | 69/71 | 70/75 | 70/75 |
| | 7 6,22 1.248 39,5 8,33 1.451 42,4 144/274 1.270 82 52/70 | 7 8,63 6,22 7,07 1.248 1.480 39,5 38,5 8,33 9,51 1.451 1.657 42,4 38,7 144/274 144/274 1.270 1.255 82 82 52/70 52/70 | 7 8,63 10,3 6,22 7,07 9,5 1.248 1.480 1.855 39,5 38,5 34,0 8,33 9,51 12,8 1.451 1.657 2.231 42,4 38,7 38,7 144/274 144/274 284/515 1.270 1.255 2.450 82 82 73 52/70 52/70 64/76 | 7 8,63 10,3 12,84 6,22 7,07 9,5 10,94 1.248 1.480 1.855 2.203 39,5 38,5 34,0 27,7 8,33 9,51 12,8 14,79 1.451 1.657 2.231 2.577 42,4 38,7 38,7 30,1 144/274 144/274 284/515 284/515 8 1.270 1.255 2.450 2.390 82 82 73 73 52/70 52/70 64/76 64/76 | 7 8,63 10,3 12,84 15,82 6,22 7,07 9,5 10,94 14,10 1.248 1.480 1.855 2.203 2.715 39,5 38,5 34,0 27,7 32,9 8,33 9,51 12,8 14,79 18,16 1.451 1.657 2.231 2.577 3.165 42,4 38,7 38,7 30,1 35,5 144/274 144/274 284/515 284/515 499/878 8 1.270 1.255 2.450 2.390 3.200 82 82 73 73 80 52/70 52/70 64/76 64/76 64/76 69/79 | 7 8,63 10,3 12,84 15,82 18,49 6,22 7,07 9,5 10,94 14,10 15,37 1.248 1.480 1.855 2.203 2.715 3.172 39,5 38,5 34,0 27,7 32,9 20,8 8,33 9,51 12,8 14,79 18,16 20,96 1.451 1.657 2.231 2.577 3.165 3.651 42,4 38,7 38,7 30,1 35,5 22,0 144/274 144/274 284/515 284/515 499/878 499/878 1.270 1.255 2.450 2.390 3.200 3.160 82 82 73 73 80 80 52/70 52/70 64/76 64/76 69/79 69/79 | 7 8,63 10,3 12,84 15,82 18,49 21,94 6,22 7,07 9,5 10,94 14,10 15,37 20,08 1.248 1,480 1,855 2,203 2,715 3,172 3,764 39,5 38,5 34,0 27,7 32,9 20,8 33,0 8,33 9,51 12,8 14,79 18,16 20,96 25,71 1,451 1,657 2,231 2,577 3,165 3,651 4,481 42,4 38,7 38,7 30,1 35,5 22,0 37,0 144/274 144/274 284/515 284/515 499/878 499/878 1,410/1,760 8 1,270 1,255 2,450 2,390 3,200 3,160 4,900 82 82 73 73 80 80 60 52/70 52/70 64/76 64/76 69/79 69/79 78/83 |

SYSTEM DIAGRAMS

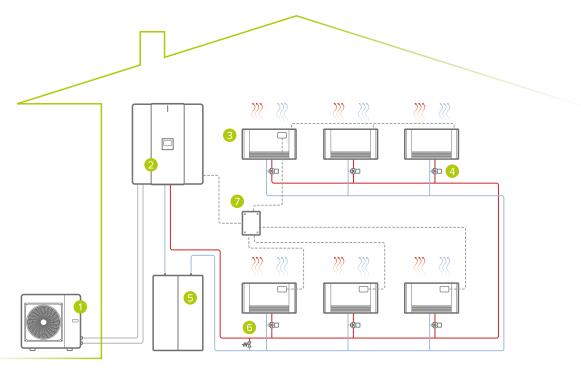


Single area system: heating/cooling

- 1 outdoor unit
- 2 indoor unit
- 3 heating / cooling area (fan coils)

- 4 system inertial storage (optional)
- 6 bypass*
- 6 box for signal to generator *

*from external supply

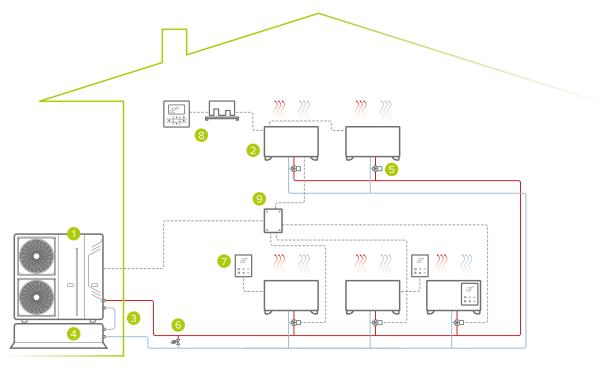


Single area system: heating/cooling

- 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*
- box for signal to generator*

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



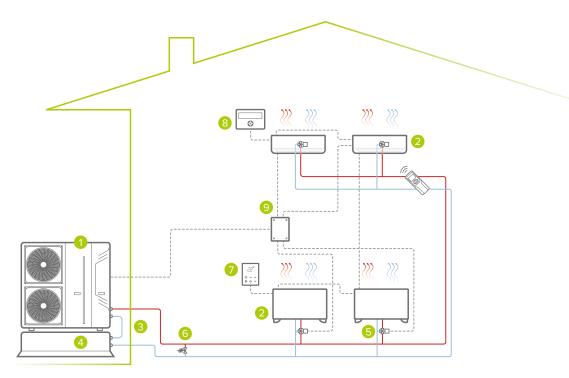
Single area system: heating/cooling

- outdoor unit
- heating / cooling area (fan coils)
- system inertial storage tank connection kit (optional)
- system inertial storage (optional)

- 3-way valve kit (optional)
- bypass*
- wired control (optional)
- 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

- outdoor unit
- heating / cooling area (fan coils)
- system inertial storage tank connection kit (optional)
- 4 system inertial storage (optional)

- 3-way valve kit (optional)
- bypass*
- 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

SWAN-2 190÷300

Packaged monoblock heat pump for domestic hot water production

ENERGY SAVING



(optional)









heater





energy













port

MANAGEMENT AND CONNECTIVITY









- √ Advanced connectivity: management via the App or via the Modbus port with ELFOControl³ 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

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 |
| | | type/GWP | | R134a | / 1.430 | |
| Refrigerant charge | | kg | 1,1 | 1,5 | 1,1 | 1,5 |
| | | CO ₂ tons | 1,57 | 2,15 | 1,57 | 2,15 |
| | Air | mm | 160 | 190 | 160 | 190 |
| Futamed diameter | Water | inch | | 3/ | /4" | |
| External diameter | Condensate drain | mm | | 1 | 0 | |
| | Solar | inch | - | - | 3/4" | 3/4" |

technical data

| Size | | | | | 190 | 300 | 190S | 300S |
|---------------------------------------|---------------------|-------------------------------|---|-------------|------------|-------|-------|-------|
| | CUD | | | kW | 1,59 | 2,16 | 1,59 | 2,16 |
| | | | Water 10/53°C Outdoor air 14°C DB/87% UR | - | 3,69 | 3,97 | 3,69 | 3,97 |
| | Heating time | Heating time | | h:min | 05:41 | 06:31 | 05:41 | 06:31 |
| DHW | Heating capacity | Heating capacity | | kW | 1,38 | 1,84 | 1,38 | 1,84 |
| | COP Heating time | | Water 10/53°C Outdoor air 7°C DB/87% UR | - | 3,29 | 3,46 | 3,29 | 3,46 |
| | | | - Outdoor dir 7 C DB/67/6 OK | h:min | 06:40 | 07:40 | 06:40 | 07:40 |
| | Nominal tank volur | ne | | I | 176 | 284 | 168 | 272 |
| Electrical power | for meter sizing | | | kW | 2,1 | 2,25 | 2,1 | 2,25 |
| Power heater | | | | kW | | 1,5 | | |
| 6 | | Energy class | | - | A+ | A+ | A+ | A+ |
| Seasonal | DUM | Annual energy consumption | | kWh/year | 890 | 1.356 | 890 | 1.356 |
| efficiency Medium climate | DHW | DHW profile | | - | L | XL | L | XL |
| | | ηs (seasonal output) | | % | 115 | 123 | 115 | 123 |
| Unit | | | | | 190 | 300 | 1905 | 3005 |
| 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 p | ressure | | | bar | | 1 | 0 | |
| Power supply Voltage/Frequency/Phases | | | V/Hz/n° | 230/50/1 | | | | |
| Operating ran | ige | | | | | | | |
| 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) $^{\text{NEW}}$



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

CONVENIENCE

ENERGY SAVING



Free Cooling / Heating





Dehumidification



RELIABILITY



drain pump





Fresh air



Air purification



refrigerant



schedule

MANAGEMENT AND CONNECTIVITY













ELFOControl



Clivet Eye monitoring

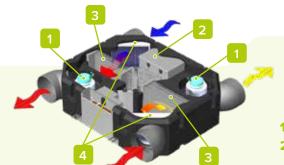


- Innovative heat recovery system that alone fulfils over 85% of the building's demands
- ✓ Intake air humidity control: perfect for coupling with radiant panel cooling systems
- ✓ Purifies the air with the high efficiency electrostatic filter (optional)
- Inverter DC compressor and constant flow DC fan for the best modulation operation
- Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl³ 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!



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

INSTALLATION TYPE:

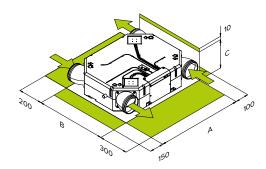
- Standard El Cased



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.

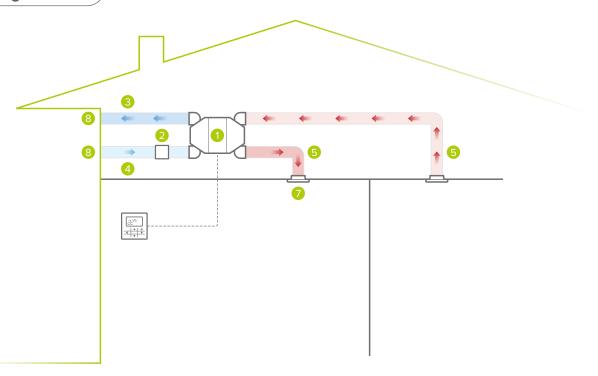
| Size | | | Size 2 | |
|--------------------|-----------------------------|----------------------|---------------|--|
| Dimensions | Length(A) x Height(C) x Dep | th(B) mm | 1.107x290x900 | |
| Weight | | kg | 44 | |
| | | type / GWP | R-32 / 675 | |
| Refrigerant charge | | kg | 0,3 | |
| | | CO ₂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

technical data

| Size | | | | | Size 2 |
|-----------------------------------|--------------------|--------------------------|-----------------------------|---------|--------------------|
| | Airflow | | Minimum / Nominal / Maximum | m³/h | 125 / 270 / 320 |
| | Available pressure | | Nominal / Maximum | Pa | 50 / 120 |
| Ventilation | Renewal air | | - | - | 100% |
| | Filter type | | - | - | Pleated filter |
| | Filtration class | | - | - | PM10 50% |
| | Heating capacity | Ambient air 20°C/50% UR | Minimum / Nominal / Maximum | kW | 1,42 / 2,05 / 2,49 |
| Winterregovery | СОР | Outdoor air 7°C/6°C WB | Minimum / Nominal / Maximum | - | 3,09 / 4,93 / 4,61 |
| Winter recovery | Heating capacity | Ambient air 20°C/50% UR | Minimum / Nominal / Maximum | kW | 1,97 / 2,37 / 2,45 |
| | СОР | Outdoor air -5°C/80% UR | Minimum / Nominal / Maximum | - | 4,93 / 6,50 / 7,66 |
| Summer recovery | Cooling capacity | Ambient air 26°C/50% UR | Minimum / Nominal / Maximum | kW | 1,57 / 1,92 / 2,23 |
| | EER | Outdoor air 35°C/50% UR | 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 | Heating | | Minimum / Maximum | °C | 15 / 30 |
| (Indoor air) | Cooling | | Minimum / Maximum | °C | 16 / 30 |
| Operating range | Heating | | Minimum / Maximum | °C | -15 / 28 |
| (outdoor air) | Cooling | | Minimum / Maximum | °C | 16 / 45 |

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

system diagrams



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)
- intake air duct (optional)

- 6 Extracted air duct (optional)
- Supply grille (optional)
- 8 Exhaust grille (optional)

Note: for the distribution system in detail see the ELFOAir section $\label{eq:continuous} % \begin{center} \b$





ELFOFresh²

CPAN-U 500

Mechanical ventilation unit with thermodynamic heat recovery

ENERGY SAVING



Free Cooling / Heating







Dehumidification



Condensate drain pump (optional)



(optional)





Fresh air



Air purification





schedule

MANAGEMENT AND CONNECTIVITY







MOD

ELFOControl

Clivet Eye monitoring

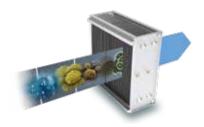


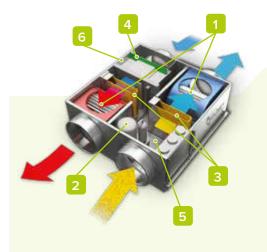
- Innovative heat recovery system that alone fulfils up to 80% of the building's demands
- ✓ Much more efficient than a traditional passive recuperator, especially in spring and autumn
- √ Humidity control: perfect for coupling with radiant panel cooling. systems
- Purifies the air with the high efficiency 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.





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



FUNCTIONALITY:

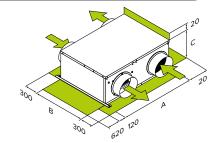
- Reversible heat pump OHO Heating-only operation

accessories

| FESX | Electronic filter kit | | AL12X | Power supply unit for HID-Ti5 thermostats and HID-UR sensor | |
|-----------------------------------|--------------------------------|---|---|--|--|
| FAEX | Kit of exhaust air filter | • | HSE3MX | Immersed electrode steam humidifier for Elfofresh DN250 | |
| CDPX | Condensed drain pump | | HIDTI52BX | Temperature and humidity thermostat with touch screen display, for for uncased (box 503) or wall installation. | |
| СММВХ | Serial communication module to | | | Colour white | |
| | | | | Temperature and humidity | |
| EHPCX Preheating elements in duct | | 200 | HIDTI52NX | thermostat with touch screen display, for for uncased (box 503) or wall installation. Colour black | |
| | FAEX CDPX CMMBX | FAEX Kit of exhaust air filter CDPX Condensed drain pump CMMBX Serial communication module to supervisor (Modbus) | FAEX Kit of exhaust air filter CDPX Condensed drain pump CMMBX Serial communication module to supervisor (Modbus) | FAEX Kit of exhaust air filter HSE3MX CDPX Condensed drain pump CMMBX Serial communication module to supervisor (Modbus) | |

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.

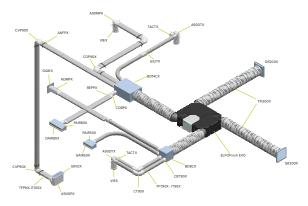
| Size | | | 500 |
|--------------------|-----------------------------------|----------------------|---------------|
| Dimensions | Length(A) x Height (C) x Depth(B) | mm | 1.158x407x752 |
| Weight | | kg | 92,5 |
| | | type / GWP | R-410A / 2088 |
| Refrigerant charge | | kg | 1,45 |
| | | CO ₂ tons | 1,62 |
| External diameter | Air | mm | 250 |
| External diameter | Condensate drain | mm | 26 |

technical data

| Size | | | | | 500 |
|-----------------------------------|----------------------|---|-------------------|---------|---------------|
| | Airflow | | Nominal | m³/h | 500 |
| | Available pressure | | Nominal / Maximum | Pa | 40 / 120 |
| Ventilation | Renewal air | | - | - | 100% |
| | Filters type | | - | - | Folded filter |
| | Filtration class | | - | - | Coarse 50% |
| | Heating capacity | Ambient air 20°C/50% RH | Nominal | kW | 3,58 |
| W: | СОР | Outdoor unit 7°C/6°C WB | Nominal | - | 4,27 |
| Winter recovery | Heating capacity | Ambient air 20°C/50% RH Outdoor unit -5°C/80% RH | Nominal | kW | 3,74 |
| | СОР | | Nominal | - | 5,57 |
| Cummar racavaru | Cooling cpacity | Ambient air 26°C/50% RH | Nominal | kW | 3,13 |
| Summer recovery | EER | Outdoor unit 35°C/50% RH | Nominal | - | 2,86 |
| Electrical power for meter sizing | | | kW | 1,51 | |
| Power supply Voltage/Freque | | 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 | Heating | | Minimum / Maximum | °C | 16 / 28 |
| (Indoor air) | Cooling | | Minimum / Maximum | °C | 18 / 30 |
| Operating range | Heating ¹ | | Minimum / Maximum | °C | -15 / 25 |
| (outdoor air) | 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

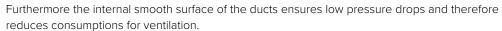




- Flexible in installation thanks to the use of flexible and usable ducts
- ✓ Simple in selecting the components and in the installation
- ✓ Air quality assured by the use of antistatic and antibacterial ducts
 - Homogenous air diffusion thanks to the special diffusers AIRJET

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.





accessories DAIR50X AIRJET 50/I supply diffuser - white frame and black inside DAIR80X AIRJET 80/I supply diffuser - white frame and black inside Intake grille + extractable filter AIRJET 50/A - white frame and black inside GAIR50X 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 Internal suction and supply grilles **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 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 Round tube **GIUTX** Connecting joint for DN90 round tube distribution (from the distribution box **CT90X** Printed curve of 90-degree angle for DN90 round tube to outlet) 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.)

| | | TFPNX | Flat flexible tube 132x52mm in a 20mt. coil without insulation |
|---|----------|----------|--|
| | 9 | IT100X | Insulation in a 20mt. coil for flat flexible tube 132x52 |
| | | COBPX | Connector to distribution box for flat tube |
| | 0 | GIUPX | Seal and connecting joint for flat tube (10pz.) |
| | | CVP90X | Vertical 90-degree curve for flat tube |
| | 6 | COP90X | Horizontal 90-degree curve for flat tube |
| Flat tube | 0 | CTP180X | Joint for 180-degree flat tube rotation |
| distribution (from the distribution box | | A90MPX | 90-degree adaptor, single tube for DN125 valve |
| to outlet) | Ĩ | 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.) |
| | 9 | ANFPX | Fixing ring for flat tube (10pz.) |
| | (11191) | REPPX | Flow controller for flat tube |
| | 0 | RTPTX | Round/flat tube connecting joint |
| | | BD8CX | Distribution box of DN150-200 joint with 8 connections |
| | O 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 |
| External distribution (Ducts from the | | GR200X | Exhaust / return square wall grig with circular coupling DN200 |
| outside to the unit and from | | GR250X | Exhaust / return square wall grig with circular coupling DN250 |
| the unit to the distribution boxes) | | GF150X | F/F DN150 Joint |
| Solesy | | GF200X | F/F DN200 Joint |
| | | GF250X | F/F DN250 Joint |
| | | R2015X | DN200-DN150 Reducer |
| | | R2520X | DN250-DN200 Reducer |
| | | DY200X | DN200-DN200 Y-branch |
| | | DY250X | DN250-DN200-DN200 Y-branch |
| | | GPRX | Grill for recirculation air return plenum 325 x 175 mm white |
| Air recirculation (ELFOPack only) | | PRX | Soundproofed plenum for air recirculation |
| | • | CPRX | Manifold for air recirculation plenum DN150-200 |
| | 0 | PRX | Soundproofed plenum for air recirculation |



SOLUTIONS



System control and all-in-one system solutions



HID-TConnect



ELFOControl



Clivet Solutions



- √ 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

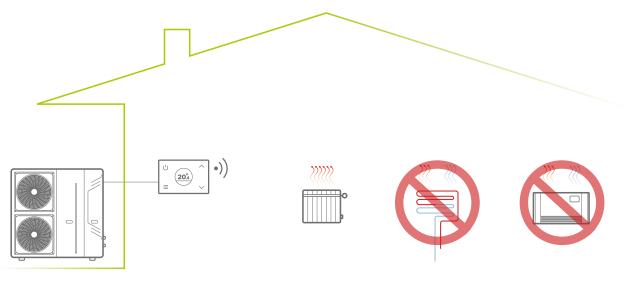
Management via the App

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.

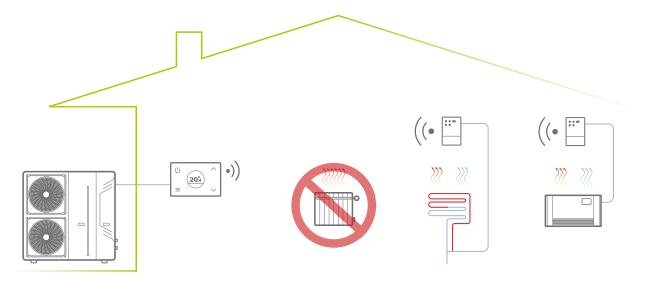


Note: mode change and distribution system management not available

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.



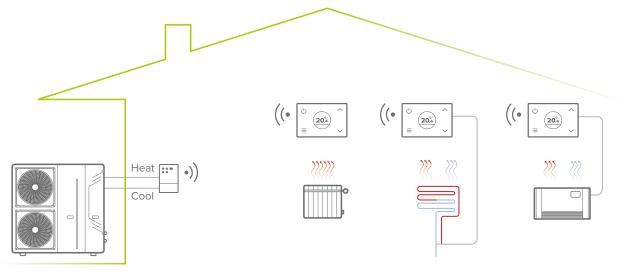
Note: the mode change must be managed in the heat pump (from the user interface or the MSmartLife App).

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.



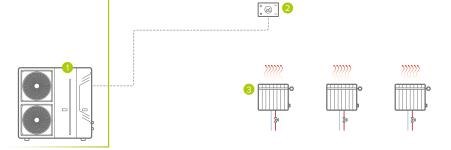
system diagrams

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

1 outdoor unit

2 HID-TConnect

radiator



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

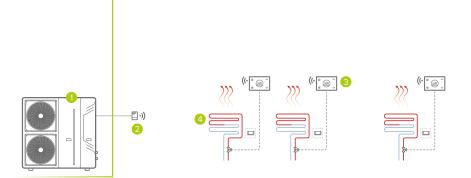
1 outdoor unit

2 SwitchConnect

HID-TConnect

radiant floor

Note: can support up to 6 thermostats.



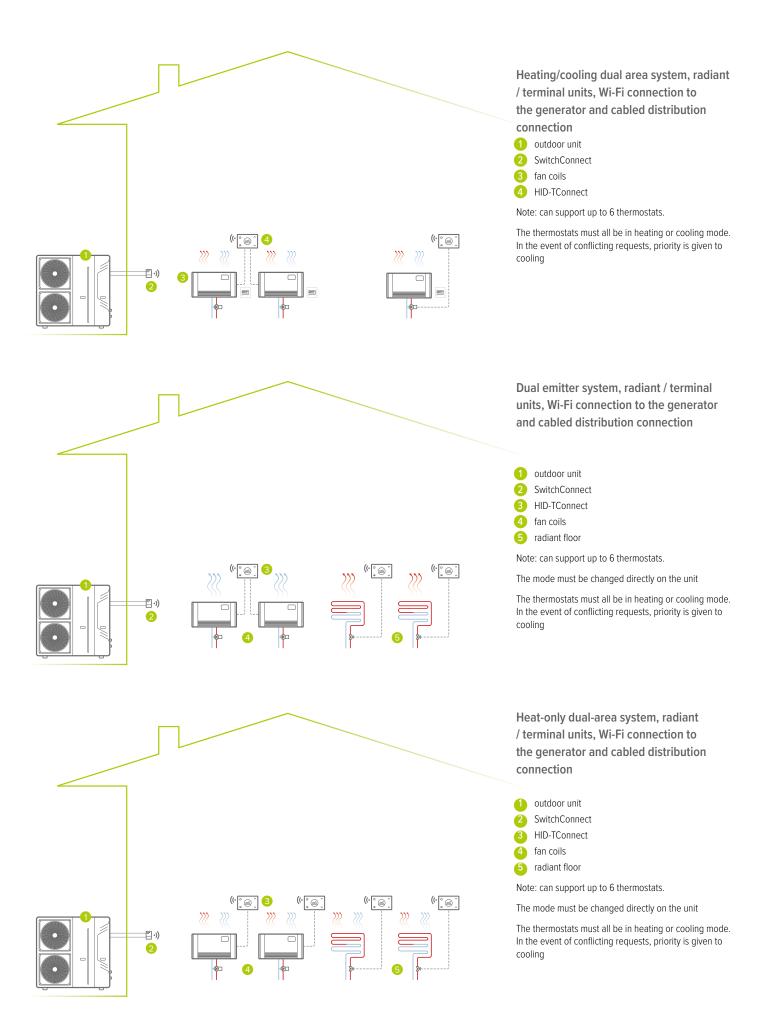
Heat-only single-area system, radiant / terminal units, cabled connection to the generator and Wi-Fi distribution connection

outdoor unit 2 HID-TConnect

SwitchConnect

radiant floor

Note: can support up to 2 SwitchConnect



SOLUTIONS

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.



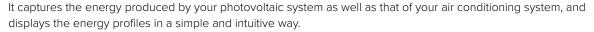
Energy management

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.





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 |
| | 23 | HID-T6 | Temperature only thermostat – wall installation | 108 X 78 X 16mm |
| Communication with the room thermostat | 904 | 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 |
| humidity control | | 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 |
| Eloor radiant panol | | 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 |
| Floor radiant panel management (heating and cooling), radiators, | | AL12X | Power supply unit for HIDTi52 thermostats and HID-UR sensor | 85 x 90 x 65 mm 4 DIN modules |
| towel rail | | 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 |
| Flements for the | petic | CIECX | Allows recessed installation of ELFOControl ³ EVO | 154 x 92 x 70 mm |
| complete installation. | JUL 18 | CBSX | Shielded cable for the connection to all devices | Spool da 50 m |
| Dual temperature system | 0 | KGPRX | Management module of a mixing group | 210 x 155 x 80 mm |
| Zone valve, circulating pump and remote consent management | Jecoc | 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

- 3 heating/cooling area (fan coils / radiant floor)
- 4 heating area (radiator)
- 5 bypass*
- 6 system inertial storage (optional)
- 7 2-zone kit (optional)

- 10 zone module (optional ELFOControl³ EVO)
- 11 HIDT3X Thermostat (optional ELFOControl³ EVO)
- 12 ELFOControl³ 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:

- \checkmark a heat pump for heating, cooling and the production of domestic hot water
- \checkmark unit for air renewal and purification
- √ unit for heating and cooling distribution in the various rooms
- \checkmark 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.





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

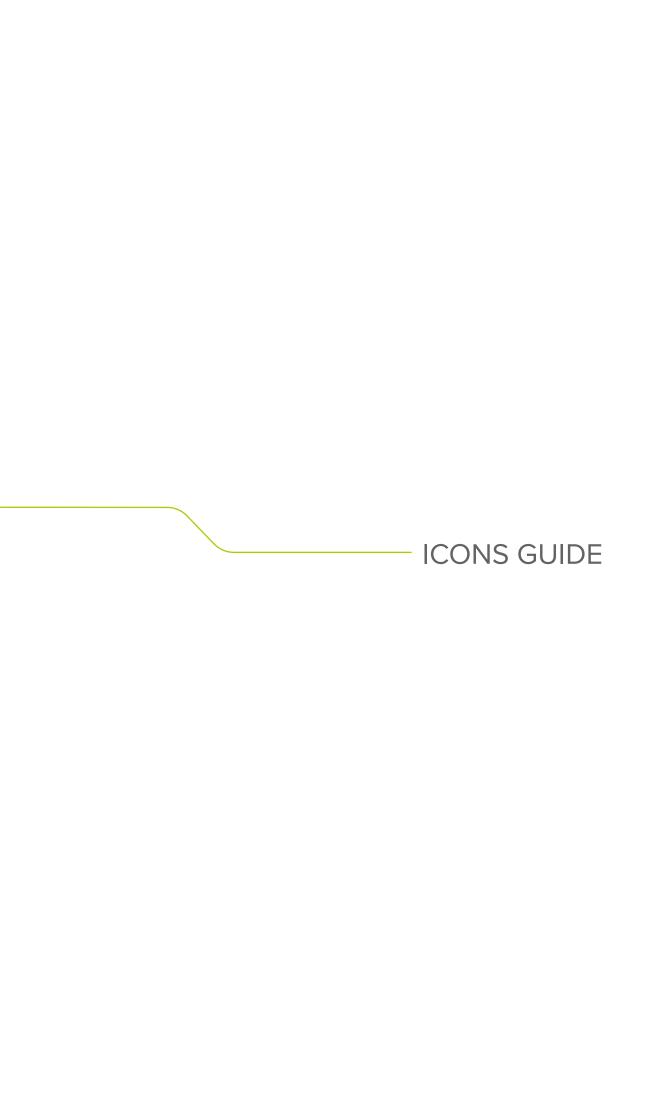
INDEX

| SERIES | SIZE FROM | ТО | MODEL NAME | GROUP | PAGE |
|--|-----------|--------|---------------------------------|--------------------|------|
| BLUhx+ | - | - | ELFOSun ² | Heat pumps | 98 |
| DHW Tanks | ACS200X | ACS5SX | DHW Tanks | Heat pumps | 102 |
| CFFC / CFFU / CFFAC / CFFAU | 1 | 12 | AURA | Terminal unit | 112 |
| CFK | 007.0 | 041.0 | ELFOSpace BOX3 | Terminal unit | 116 |
| CFW-2 | 1 | 5 | MOOD | Terminal unit | 106 |
| Clivet Solutions | - | - | Clivet Solutions | Solutions | 152 |
| CPAN-U | 500 | - | ELFOFresh ² | VMC with recovery | 138 |
| CPAN-YIN | SIZE2 | - | ELFOFresh EVO | VMC with recovery | 134 |
| DU-HP / DUA-HP | 13 | 64 | NEBULA HP | Terminal unit | 122 |
| DU-MP / DUA-MP | 13 | 64 | NEBULA MP | Terminal unit | 118 |
| ELFOAir | - | - | ELFOAir | VMC with recovery | 140 |
| ELFOControl ³ EVO | - | - | ELFOControl ³ EVO | Solutions | 148 |
| ELFORoom ² | 003.0 | 017.0 | ELFORoom ² | Terminal unit | 108 |
| HID-Tconnect | - | - | HID-TConnect | Solutions | 144 |
| SQKN-YEE 1 BC + MiSAN-YEE 1 S | 2.1 | 8.1 | SPHERA EVO 2.0 Box | Heat pumps | 30 |
| SQKN-YEE 1 BC + MISAN-YEE 1 S + GAS BOILER | 2.1 | 8.1 | SPHERA EVO 2.0 Box Hybrid | Heat pumps | 66 |
| SQKN-YEE 1 BH + MISAN-YEE 1 S | 2.1 | 8.1 | SPHERA EVO 2.0 EASYHybrid Box | Heat pumps | 58 |
| SQKN-YEE 1 IC + MiSAN-YEE 1 S | 2.1 | 5.1 | SPHERA EVO 2.0 Invisible | Heat pumps | 36 |
| SQKN-YEE 1 IC + MiSAN-YEE 1 S + CCGIX | 2.1 | 5.1 | SPHERA EVO 2.0 Invisible Hybrid | Heat pumps | 78 |
| SQKN-YEE 1 TC + MiSAN-YEE 1 S | 2.1 | 8.1 | SPHERA EVO 2.0 | Heat pumps | 24 |
| SQKN-YEE 1 TC + MiSAN-YEE 1 S + GAS BOILER | 2.1 | 8.1 | SPHERA EVO 2.0. Hybrid | Heat pumps | 72 |
| SQKN-YEE 1 BH + MISAN-YEE 1 S | 2.1 | 8.1 | SPHERA EVO 2.0. EASYHybrid T | Heat pumps | 62 |
| SWAN-2 | 190 | 300 | AQUA Plus | Heat pumps for DHW | 130 |
| WiSAN-YME 1 S | 2.1 | 14.1 | Edge EVO 2.0 - EXC | Heat pumps | 50 |
| WSAN-YMi | 21 | 141 | ELFOEnergy Edge EVO | Heat pumps | 44 |
| WiSAN-YME 1S | 2.1 | 14.1 | Edge EVO 2.0 - EXC Hybrid | Heat pumps | 90 |
| WSAN-YMi + GAS BOILER | 21 | 81 | ELFOEnergy Edge EVO Hybrid | Heat pumps | 84 |

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).

Data contained in this catalogue are not binding and may be changed by the Manufacturer without notice. No part of this publication may be reproduced. Updated data available on www.clivet.com





ICONS GUIDE

ENERGY SAVING



Solar integration

Ideal for use with solar thermal



Smart Grid ready

Ideal for integration with Smart Grid technology



Free Cooling / Heating

Produces Cooling / Heating for free (under certain conditions)



n7FR

Designed for buildings with almost no energy consumption



Cascade

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



€-Switch

DHW

Regulates the generator for cost-effective operation



Dehumidification

Removes humidity in the room



Follow Me

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



High temperature

Produces heating at high



**

Silent

COMFORT

For more silent operation

Produces both Heating and

Heating/Cooling



Anti cold air

Prevents air from entering until the room is sufficiently warm

Produces Domestic Hot Water



Temperature compensation

Considers the stratification of air to create a fairer temperature



temperature

RELIABILITY



Condensate drain pump

Disposes of condensate with a specific pump



Backup heater

Disposes of condensate with a specific pump



FUROVENT

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 CO₂ emissions





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



Instant DHW

Quickly produces Domestic Hot



Integrated DHW tank

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



Hot Water at the same time



Water on demand

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



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







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