CLIVET Home

GUIDE **2020**

PRODUCTS AND SYSTEMS

HOME

Inspiring Solutions since 1989

Clivet Live is born

Life

Environmental safeguard for our children's future

Innovation

Passion and curiosity to guide innovation

Vision

Technology and systems to assure comfort and efficiency

Energy

Protagonistof the new energy era

In order to satisfy residential comfort needs, Clivet has set up the application Clivet HOME inspired by the principles embodied by the acronym **LIVE**

ALWAYS READY FOR THE FUTURE

INSPIRING SOLUTIONS

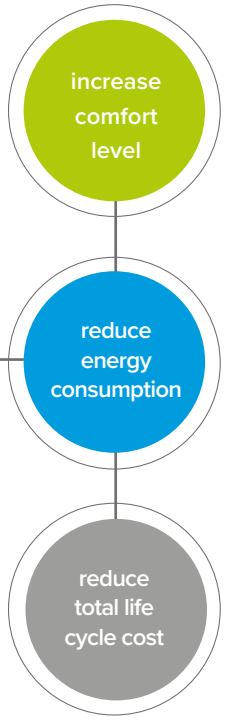
In over 30 years of working on the design, manufacturing and distribution of air conditioning and handling systems, combining high efficiency with minimal environmental impact, Clivet has developed solutions to ensure sustainable comfort and the well-being of people and the environment.
Designing and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

COMFORT FOR THE PLANET & PEOPLE

OUR VALUES

IN THE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SECTORS

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



OUR NUMBERS

35
AGENCIES
IN ITALY

50.000 m²
OF PLANTS IN FELTRE,
BELLUNO - ITALY

80
COUNTRIES WE
EXPORT TO

610
EMPLOYEES IN ITALY
AND ABROAD

7 BRANCHES:
GREAT BRITAIN,
GERMANY, INDIA,
RUSSIA, UNITED ARAB
EMIRATES,
CHINA, BALKANS

140
SERVICE CENTRES

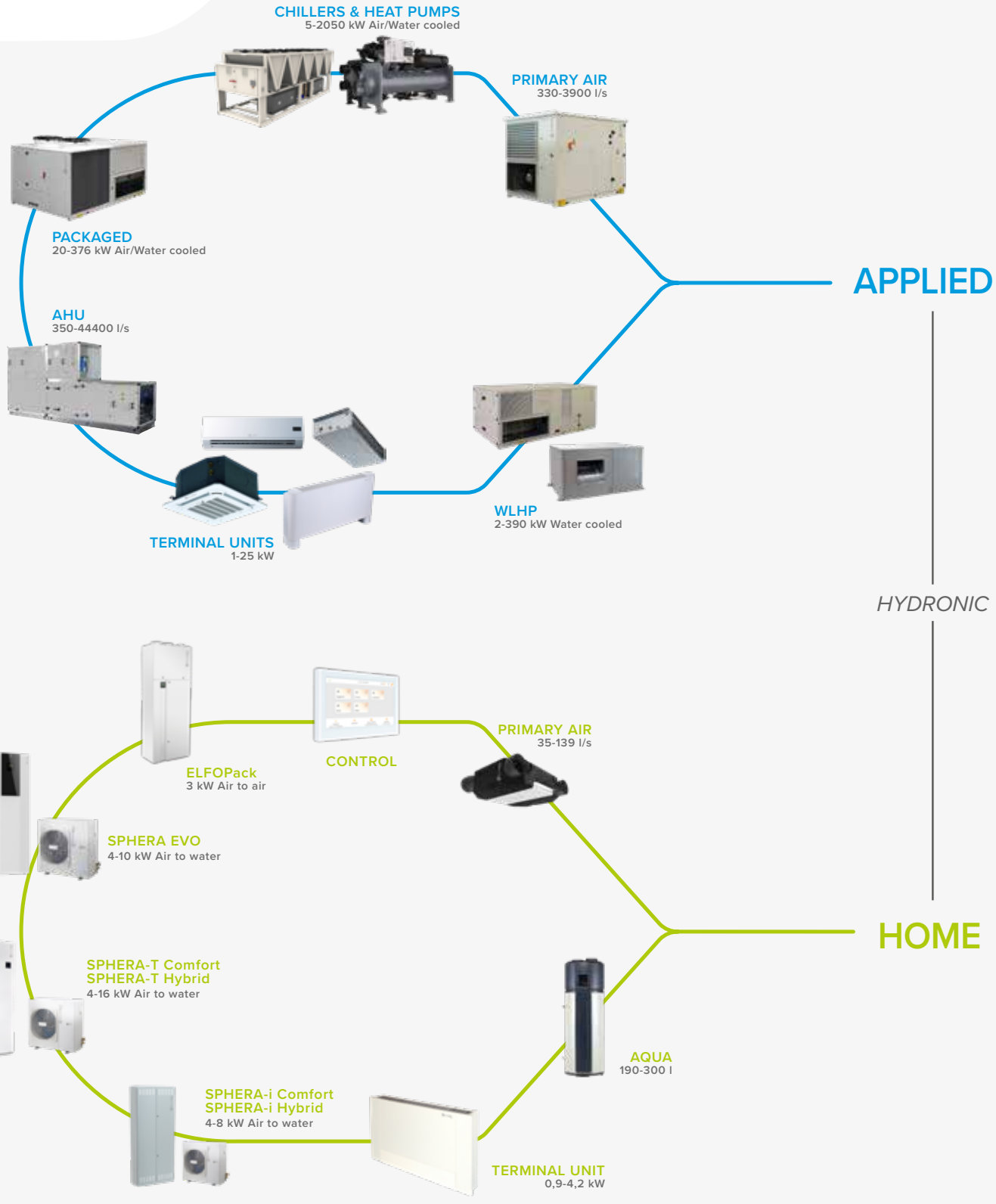
2015
CLIVET LIVE IS BORN

2016
A GROUP
COMPANY OF
Midea

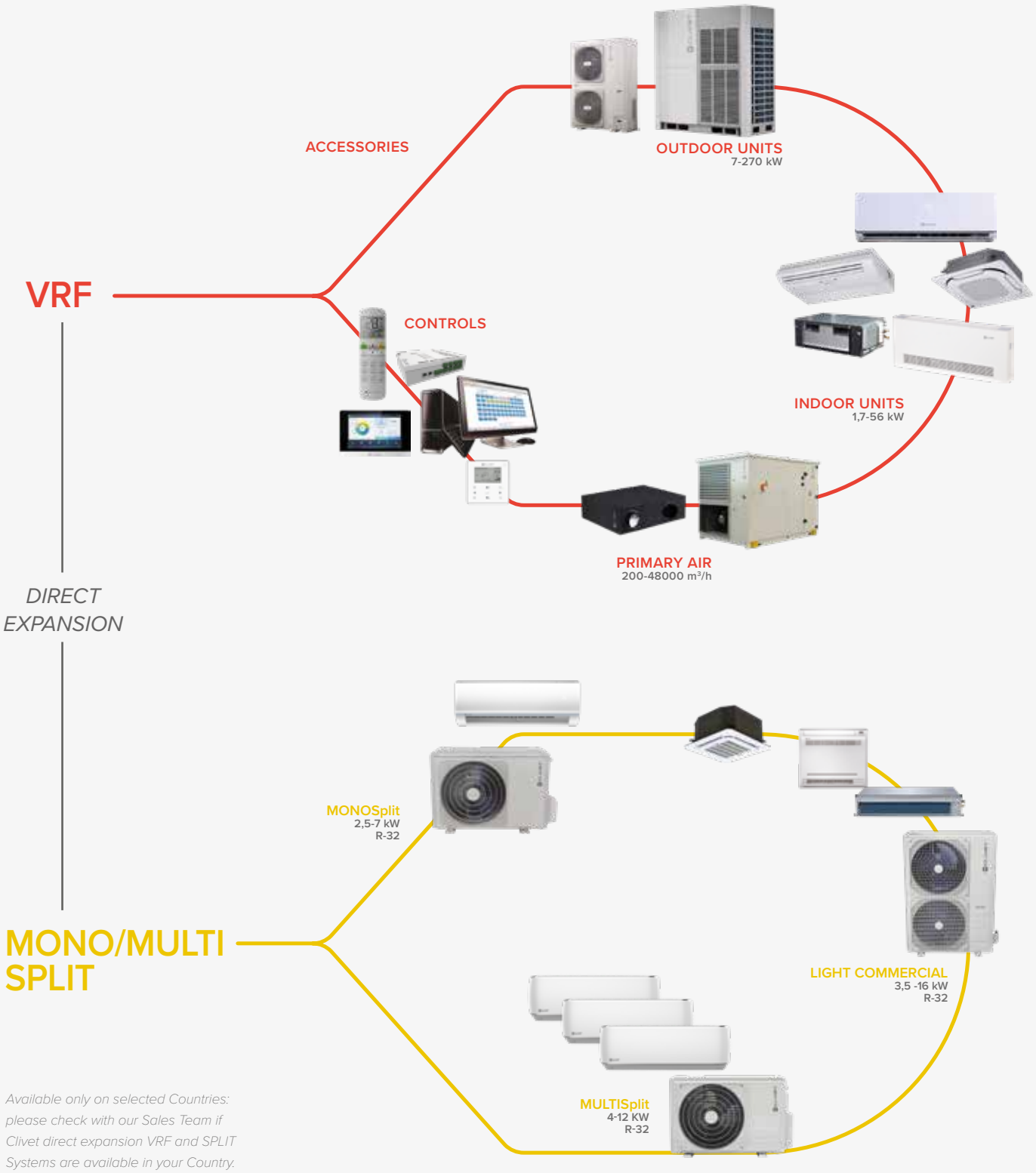
2019
MIDEA
GROUP #312 FORTUNE GLOBAL 500
39.581 $M
MIDEA TURNOVER

ALL TECHNOLOGIES

FOR A COMPLETE PROPOSAL



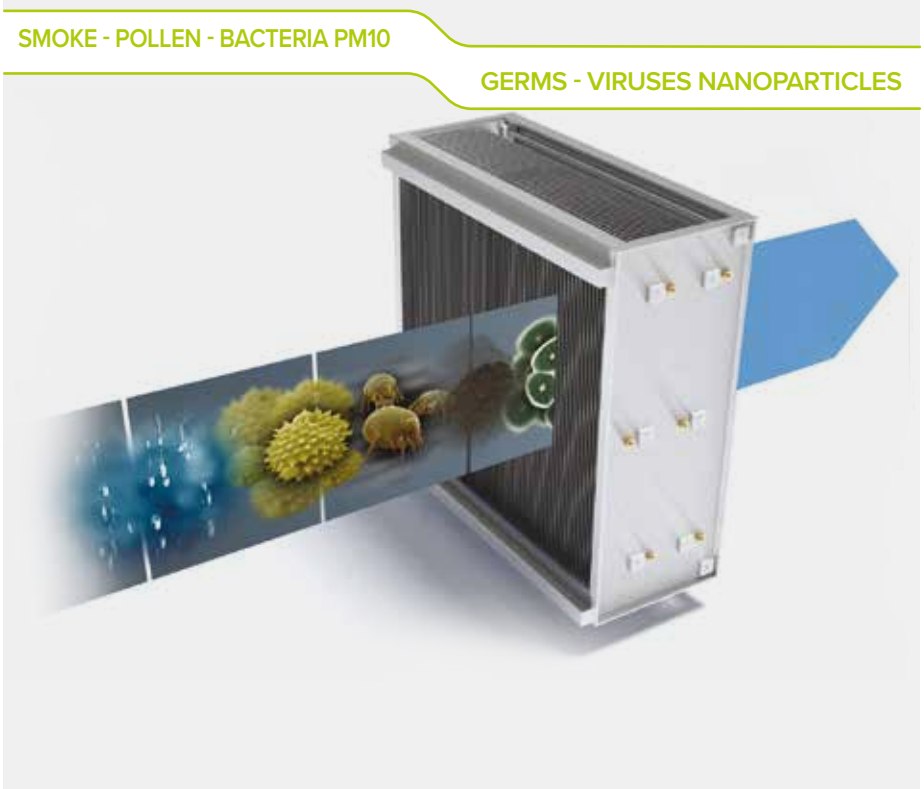
Heating, cooling, air renewal and domestic hot water production



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

HOME

Air quality:
Fresh air is a fundamental need



BUILDING INSULATION

Thanks to new construction methods and improvements in building insulation, buildings are extremely air tight. Contaminants stagnate in the environments and systems for air renewal and purification become necessary.

INDOOR AND OUTDOOR POLLUTION

Human health is severely damaged by the many indoor pollutants such as mold, smoke, dust, CO_2 emissions, and by external pollutants like pollen, PM10, viruses and bacteria.

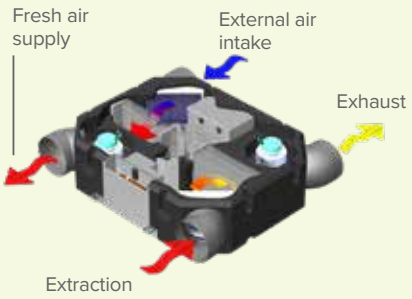
MECHANICAL CONTROLLED VENTILATION

The controlled mechanical ventilation system ensures a dilution of indoor pollutants. The inlet fresh air is treated by recovering the heat from the extracted air. It is important the energy recovery happens both in winter and in summer to reduce energy consumption.

ELECTRONIC FILTRATION

Harmful elements and odors in the outdoor air are removed thanks to the efficient electronic filtration system, also active on fine particles and nanoparticles, the most dangerous to human health as they reach the pulmonary alveoli and from there enter the blood. The electrostatic filter, easily removable, is fully regenerable by washing.

ELFOFresh



- FRESH AIR
- THERMODYNAMIC HEAT RECOVERY
- MAIN ENERGY SOURCE
- SUMMER DEHUMIDIFICATION
- ELECTRONIC FILTRATION

CLIVET HEAT PUMPS

- HEATING
- COOLING
- DOMESTIC HOT WATER PRODUCTION
- CONTROLLED MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY
- DEHUMIDIFICATION
- ELECTRONIC FILTRATION

CONTROLLED MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY

The controlled mechanical ventilation with thermodynamic heat recovery is the original solution developed by Clivet that provides many benefits

ENERGY ADVANTAGES

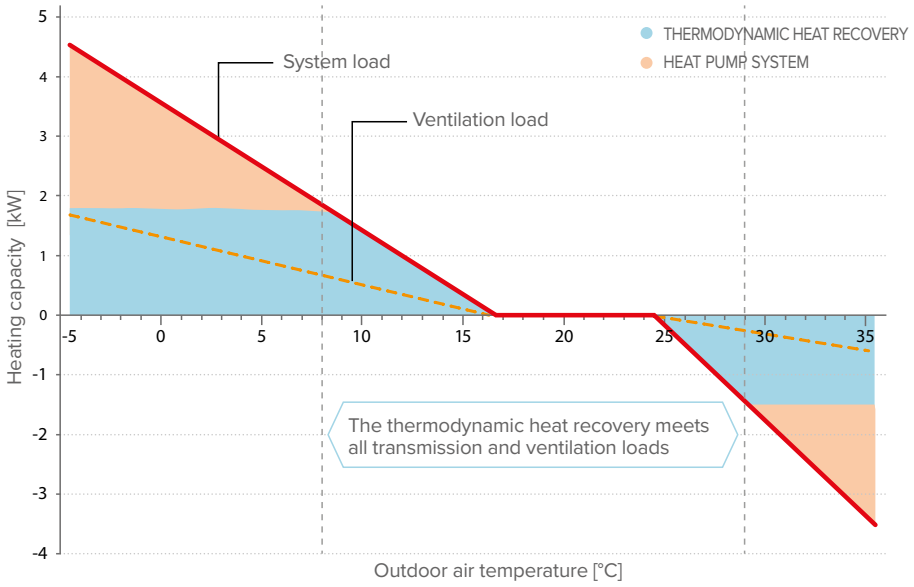
- ✓ Ventilation energy reduction thanks to the lower pressure drops than traditional recovery.
- ✓ High efficiency energy recovery from the exhaust air both in winter and summer.
- ✓ It multiplies the energy recovered and fulfills the building thermal load.
- ✓ It increases the seasonal efficiency of the whole system, thanks to the thermal source (exhaust air, always at favorable temperature conditions) of the heat pump, used as a thermodynamic heat recovery system.

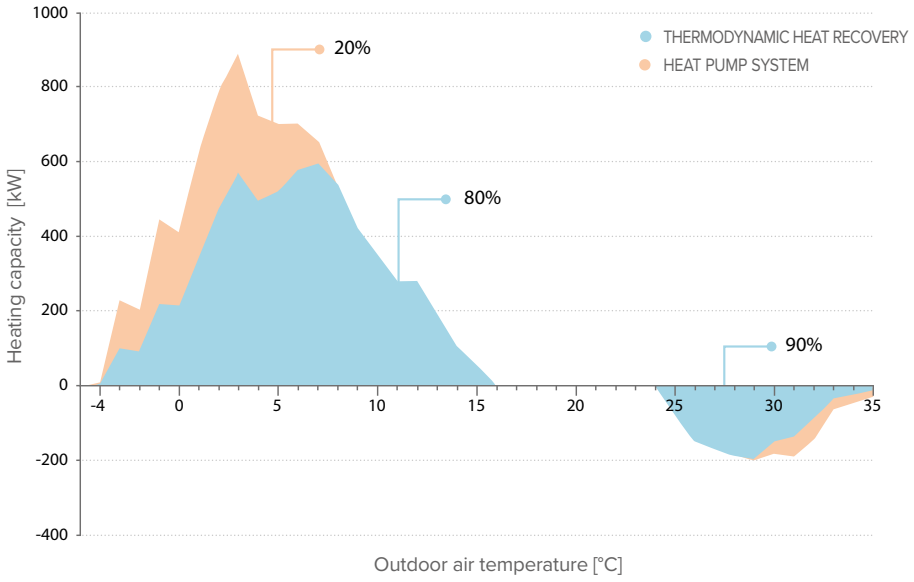
SYSTEM ADVANTAGES

- ✓ It generates a first step of power and in the middle seasons completely satisfies the power required.
- ✓ It reduces the load of the air-conditioning system.
- ✓ It eliminates the dehumidifier necessary in radiant systems in cooling operation, because it controls the summer humidity.

COMFORT IMPROVEMENT

- ✓ The external renewal air is supplied at the ideal temperature for comfort
- ✓ It compensates for the discomfort generated from the thermal inertia of the radiant system in spring and autumn.
- ✓ Clivet thermodynamic heat recovery increases the energy class of the building, simplifies the system and improves the comfort





The distinctive elements of Clivet systems

MULTIFUNCTION UNIT

Issues related to the selection, installation and electric connection of a traditional system components are eliminated thanks to solutions that are integrated in all the system elements already tested by Clivet.

TRADITIONAL SYSTEM

Solar panels

Boiler

Storage tank

Air conditioner

Cross flow static passive recovery devicei

Dehumidifier

SPHERA + ELFOFresh EVO

Solar panels

SPHERA EVO

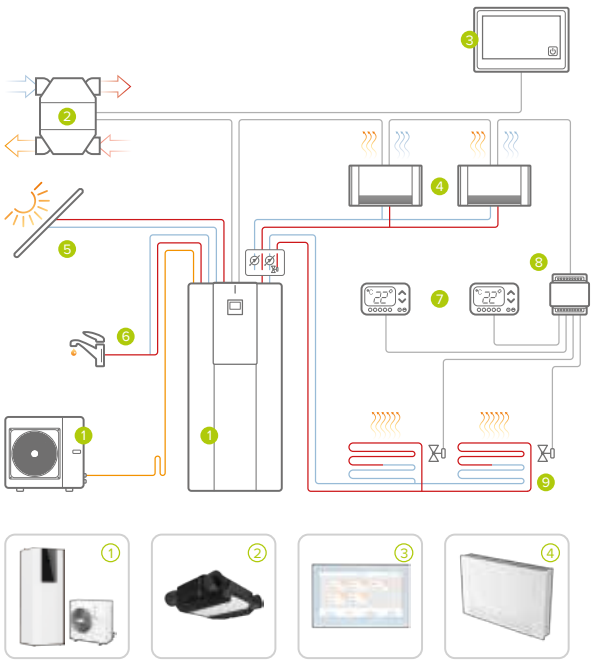
ELFOFresh EVO

ELFOPack

1 unit

THE COMPLETE CONTROL OF THE SYSTEM

The interface is simple and intuitive, limited only to comfort settings required depending on the occupation and the operation system display.
The advanced control logic is at the heart of Clivet systems.
It allows effective co-ordination of the dwelling system.



1. SPHERA EVO
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. ELFORoom²
5. Thermal solar
6. Domestic hot water
7. Thermostats
8. Radiant module
9. Radiant panels for underfloor heating

The specialized Clivet heat pump system advantages

COMFORT IN EVERY SEASON

Systems developed according to the specific features of dwellings and to the energy requirements needed at different seasons, ensuring perfect comfort conditions

ENERGY SAVINGS

- Devices, developed to intelligently manage the energy and their coordination according to the environmental conditions, allow:
- reduced operating costs
- maximum use of renewable energy
- environmental impact reduction
- increased value of the property

SIMPLICITY

Complete solutions, pre-assembled and integrated control of the entire system are prerequisites to guarantee easy:
DESIGN: optimized solutions simplify the system
INSTALLATION: time reduction and quality installations
MANAGEMENT: one simple interface to set the desired comfort
MAINTENANCE: the integrated control connectivity allows a maintenance service and remote assistance for a more efficient system

COMPLETE SERVICES

SCHEDULED MAINTENANCE
To keep the plant effcient
QUALIFIED SERVICE
Widespread throughout the territory

PROFESSIONAL INSTALLATION

Clivet assigns the offer of its products for residential buildings to retailers and wholesalers.
These professionals are trained at Clivet University and have in their showrooms corners dedicated to Clivet systems, guaranteeing the customer a prompt availability of all the offerings.

Independent heat pump home systems

ELFOPack - Air System

APPLICATION

Houses

NEARLY ZERO CONSUMPTION SINGLE-FAMILY HOUSES

AIR CONDITIONING

Heating

Cooling

ELFOPack

ErP TOP SYSTEM EFFICIENCY XL A

DC INVERTER

PATENTED

ACS

Domestic hot water

AIR QUALITY

Mechanical ventilation with thermodynamic recovery

Electronic filtration

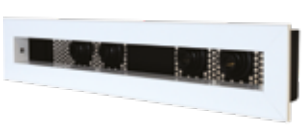
Summer dehumidification

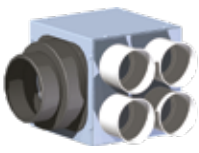
MAX Total airflow: 400 m³/h
MAX Renewable Airflow: 100 m³/h
CAPACITY: 3 kW
DHW storage tank: 180 L

DISTRIBUTION

Air distribution and diffusion

ELFOAir





CONTROL

System control

integrated into ELFOPack

ELFOSystem - Hydronic System

MEDIUM-LOW CONSUMPTION SINGLE-FAMILY HOUSES

SPHERA EVO

AIR

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

DC INVERTER

CAPACITY: 4÷10 kW
DHW storage tank: 190 o 250 L

MEDIUM-LOW CONSUMPTION SINGLE-FAMILY HOUSES

SPHERA-T Comfort

AIR

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

DC INVERTER

CAPACITY: 12÷16 kW
DHW storage tank: 280 L (+ 280 L aux)

HIGH CONSUMPTION SINGLE-FAMILY HOUSES

SPHERA-T Hybrid

AIR

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

DC INVERTER

CAPACITY: 4÷16 kW (+ gen. aux 24 kW)
DHW storage tank: 280 L (+ 280 L aux)

ELFOFresh EVO

Airflow: 125÷320 m³/h

ELFOFresh²

Airflow: 500 m³/h

ELFOAir

ELFORoom²

connectable to radiant panels

ELFOSun

ELFOControl³ EVO

AIR Aerothermal

Integration to solar system

Integrated condensation boiler

Independent heat pump home systems

ELFOPack - Air System

APPLICATION

Houses

NEARLY ZERO CONSUMPTION APARTMENT BUILDING

AIR CONDITIONING

Heating

Cooling

ELFOPack

ErP TOP SYSTEM EFFICIENCY XL A

DC INVERTER

PATENTED

DHW

Domestic hot water

AIR QUALITY

Mechanical ventilation with thermodynamic recovery

Electronic filtration

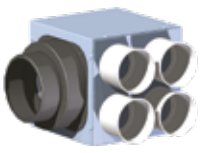
Summer dehumidification

MAX Total airflow: 400 m³/h
MAX Renewable Airflow: 100 m³/h
CAPACITY: 3 kW
DHW storage tank: 180 L

DISTRIBUTION

Air distribution and diffusion

ELFOAir



CONTROL

System control

integrated into ELFOPack

ELFOSystem - Hydronic System

MEDIUM-LOW CONSUMPTION APARTMENT BUILDING

SPHERA-i Comfort

AIR · R-32* · TOP SYSTEM EFFICIENCY ErP 55°C A++ L A · DC INVERTER

CAPACITY: 4÷8 kW
DHW storage tank: 150 L (+ 150 L aux)

ELFOFresh EVO

AIRFLOW: 125÷320 m³/h

ELFOAir

ELFORoom²

connectable to radiant panels

ELFOSun

ELFOControl³ EVO

HIGH CONSUMPTION APARTMENT BUILDING

SPHERA-i Hybrid

AIR · R-32* · TOP SYSTEM EFFICIENCY ErP 55°C A++ L A · DC INVERTER

CAPACITY: 4÷8 kW (+ gen. aux 24 kW)
DHW storage tank: 150 L (+ 150 L aux)

ELFOFresh²

AIRFLOW: 500 m³/h

AIR Aerothermal · integration to solar system · Integrated condensation boiler · R-32* R-32 units available during 2020

CLIVET

ELFOSystem - Hydronic System

APPLICATION

Houses
Light Commercial

RESIDENTIAL AND LIGHT COMMERCIAL APPLICATIONS

AIR CONDITIONING

Heating

Cooling

SPHERA-B Comfort

ErP TOP SYSTEM EFFICIENCY XL A

AIR R-32 DC INVERTER

CAPACITY: 4÷16 kW

ELFOEnergy Edge EVO

ErP TOP SYSTEM EFFICIENCY XL A

AIR DC INVERTER

CAPACITY: 5÷29 kW

ELFOEnergy Extended Inverter

ErP TOP SYSTEM EFFICIENCY XL A

AIR DC INVERTER

CAPACITY: 16÷50 kW

DHW

Domestic hot water

Storage tank

AIR QUALITY

Mechanical ventilation with thermodynamic recovery

Electronic filtration

Summer dehumidification

ELFOFresh EVO

AIRFLOW: 125÷320 m³/h

ELFOFresh²

AIRFLOW: 500 m³/h

DISTRIBUTION

Air distribution and diffusion

ELFOAir

ELFORoom²

connectable to radiant panels

ELFOSun

CONTROL

System control

ELFOControl³ EVO

AQUA - Heat pumps for domestic hot water

APPLICATION

Houses

ACS

H2O
Domestic Hot Water

RESIDENTIAL APPLICATIONS

AQUA

AIR

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

AQUA 190

CAPACITY 190 liters
SUITABLE FOR 3-4 people

VERSION CONNECTABLE TO TO SOLAR THERMAL

AQUA 300

CAPACITY 300 liters
SUITABLE FOR 4-5 people

VERSION CONNECTABLE TO TO SOLAR THERMAL

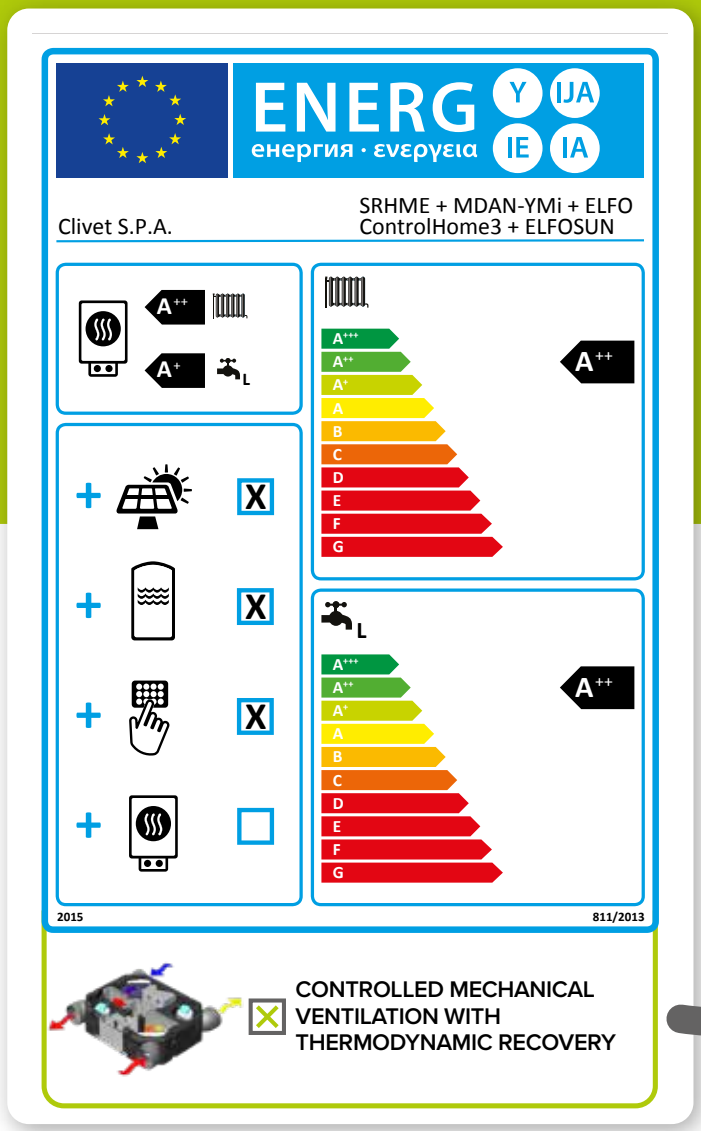
AIR Aerothermal

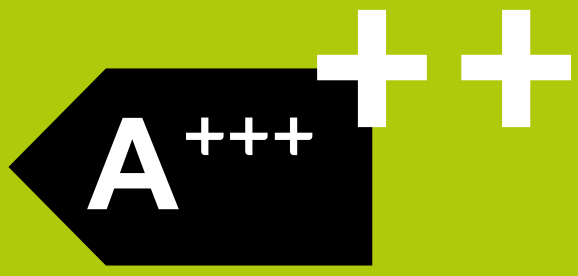
Integration to solar system

R-32 R-32 units available during 2020

Energy related Products

The wide range of Clivet products and complete systems comply with the requirements of the implementing measures for Directives 2009/125/EC (ErP-Energy related Products) 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.





With ELFOFresh EVO and ELFOControl[3] EVO you can reach higher labelling levels than the the directives ones

BECOME A SPECIALIST

in renewable energy systems based on heat pump technology with Clivet's training programmes

The new era of sustainable comfort is challenging the traditional design and installation approaches of building-plant systems. Constantly updated standards require new buildings to have low or almost zero consumption levels, which encourages the use of renewable energies.
Systems are changing at a fast pace and must meet the new requirements deriving from the evolution of an increasingly efficient envelope.
New technologies require an initial investment in terms of knowledge and training in order to build the skills to use innovative systems focused on energy savings.
Through its CLIVET UNIVERSITY, Clivet intends to create a team of trained professionals able to offer, design, install and conduct maintenance on our solutions in order to ensure complete customer satisfaction.

For more information please visit our website www.clivet.com

CLIVET UNIVERSITY

Clivet provides training classes to professionals willing to stand out in the field of innovative technologies using renewable energies. The training programme, structured in different levels providing detailed information, discusses annual-cycle systems based on heat pump technology

THE COURSES

Clivet offers a complete training catalogue for architects, mechanical engineers, installers, sales and technical staff:

- Seminars for Designers and Architects on all year round comfort in the residential sector
- Courses for installers to introduce the system's components and installation features
- Courses for maintainers to introduce the basics of the innovative Clivet solutions.

TEST ROOMS

Clivet pays great attention to the practical training of professionals who will offer, install and ensure the maintenance of its products. That is why it has a series of test rooms for the simulation of the operation of the plant in different climate and plant conditions that the installer could meet.

WHY CLIVET?

The advantages of an independent clivet heat pump system

A system for every need

Apartment buildings

Medium-low consumption houses

High consumption single-family houses

A wide range of services

Training

CLIVET UNIVERSITY

2 maintenance programs

PLATINUM
SILVER

Assistance

Customer Care
+39 0439 313 800 ITALY
+39 0439 313 888 WORLD
aftersales@clivet.it

Tax credit

Due to their high efficiency, Clivet products may be eligible for heat pump subsidies in Your Country

TAX CREDIT

Certifications

Eurovent

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Units listed on www.eurovent-certification.com

CasaClima

Partner KlimaHaus CasaClima®

Green Building Council

GREEN BUILDING COUNCIL ITALIA MEMBER

HP KEYMARK

Units listed on www.heatpumpkeymark.com

CLIVET HOME:

a world of advantages, services and systems

Clivet Home represents a new comprehensive solution for the residential sector.

Clivet Home autonomous heat pump systems:

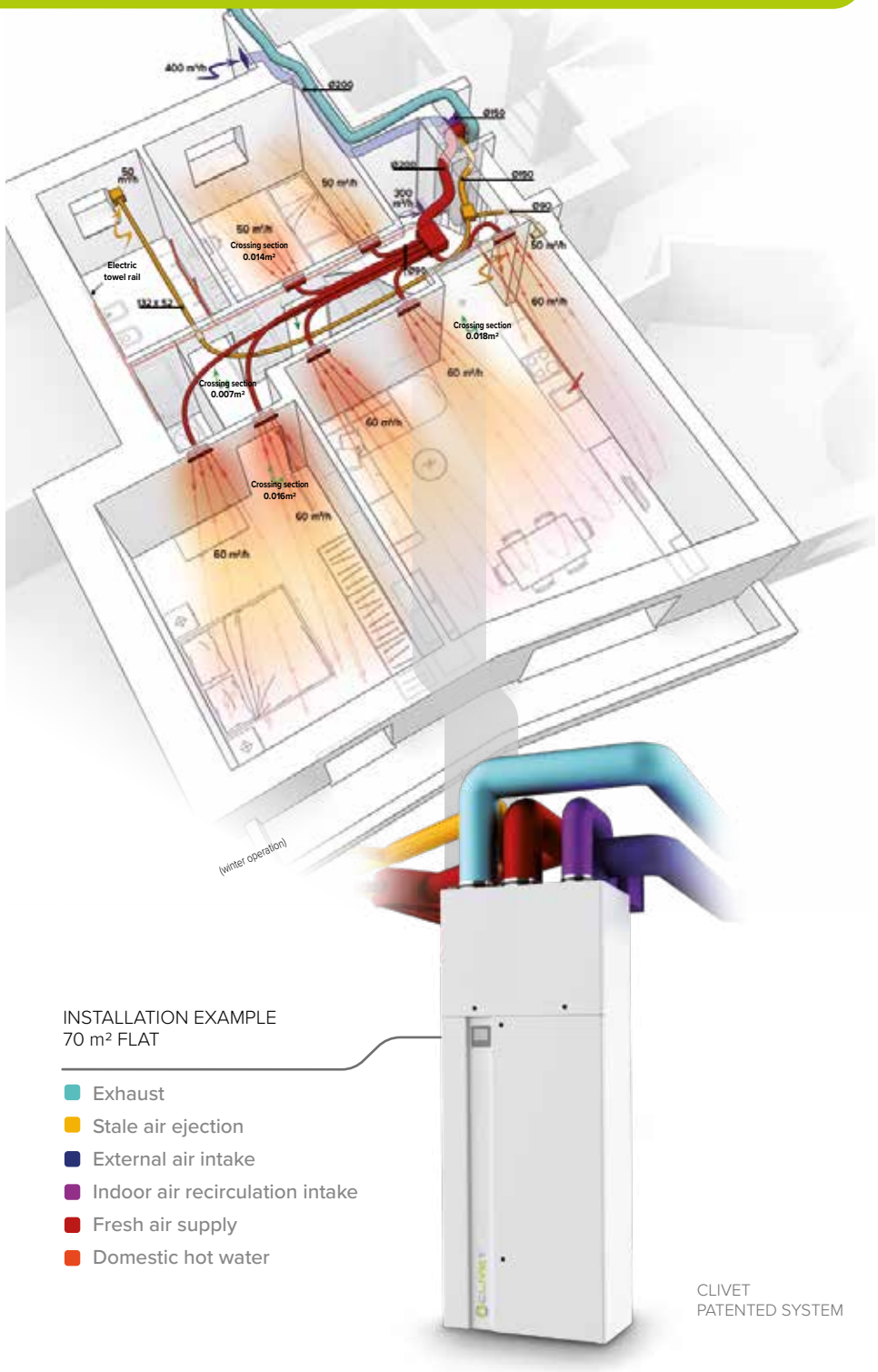
- ✓ are tax deductible according to the countries
- ✓ guarantee an extensive range of services during the pre-sale phase, installation and throughout the life-cycle of the plant, thanks to a network of specialized partners
- ✓ provide comprehensive solutions that simplify the design, installation and maintenance, guaranteeing year-round comfort::
  - heating
  - cooling
  - domestic hot water
  - air renewal and purification
  - humidity control

SYSTEMS

ELFOPack

Nearly Zero consumption single-family houses and multi-family houses with stand-alone system

SYSTEM'S COMPONENTS
ELFOPack
ELFOAir



INSTALLATION EXAMPLE
70 m² FLAT

- Exhaust
- Stale air ejection
- External air intake
- Indoor air recirculation intake
- Fresh air supply
- Domestic hot water

CLIVET
PATENTED SYSTEM

6 FUNCTIONS IN A SINGLE PACKAGED UNIT

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ CONTROLLED MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY
- ✓ AIR PURIFICATION WITH ELECTRONIC FILTRATION

ELFOPack
main features

Uses air renewal ducts for heating, cooling and summer dehumidification

Max air renewal 100 m³/h for houses up to 120 m²

AERAULIC DISTRIBUTION

Wide selection of accessories for air distribution

Thanks to special induction air diffusers, supplied air mixes with the whole mass of air already present in the room and creates a uniform temperature and air quality in the entire room

1 HIGH EFFICIENCY ELECTRONIC FILTRATION

Standard electronic filters with filtration efficiency higher than 99,9%. The electronic filter **pressure drops are 90% lower** than a traditional filter, allowing a considerable reduction in electrical energy used for ventilation.

2 REDUCTION OF 30% ON THE VENTILATION ELECTRICAL ENERGY

High efficiency plug fans with DC motor, which guarantee a saving on electrical energy of up to 30% compared with the traditional AC fans. **The DC motor** allows the fan speed to be set to the real system pressure drops, thus minimising electrical consumption.

3 CAPACITY MODULATION MAXIMIZED SEASONAL EFFICIENCIES

The inverter DC compressor adjusts the capacity according to system requirements optimizing the seasonal efficiency.

4 50% OF FREE DOMESTIC HOT WATER

Integrated 180-litre storage tank. **The patented circuit** allows the domestic hot water to be produced at high efficiency in winter and free in summer. The innovative **twin-wall exchanger improves** the heat exchange efficiency and avoids water contamination.

5 THERMODYNAMIC HEAT RECOVERY

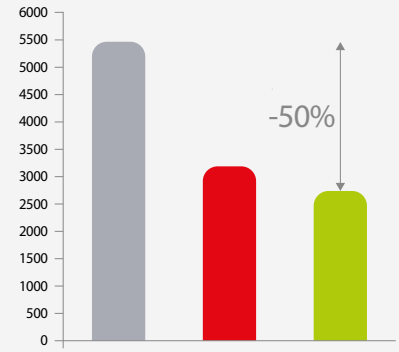
Heat recovery from the exhaust air both in **winter** and in **summer** by a thermodynamic circuit. The thermal source of the heat pump is fully maximised for efficiency. Thanks to the mixture between the extracted stale air and the outdoor air. The air introduced in the room is a mixture between the fresh air and the recirculation air.

THE RESULTS: comparison with a traditional system

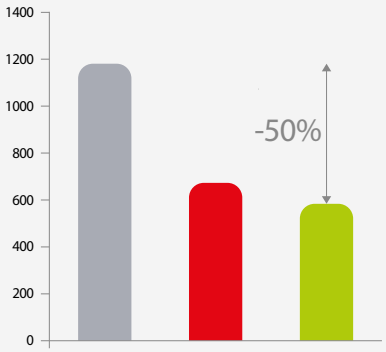
New multi-family building with 30 apartments of 75m² in Class A.

Location	Milan
Climatic zone:	E - 2404 degree days
Insulation:	opaque surfaces (0.34 W/m²k) and transparent surfaces (2.2 W/m²k)
Dispersant surfaces:	vertical opaque envelope and transparent on two views, some internal closures to unheated rooms
Air renewal rate:	0,3 vol/h

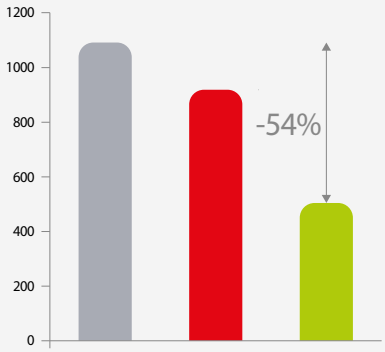
PRIMARY ENERGY [kWh/year]



CO_2 EMISSIONS [kg CO_2/year]



RUNNING COSTS [€/year]



Traditional system (heating + cooling) | Heat pump system (centralized) | ELFOPack (decentralized)

Traditional centralized system

Centralized condensing boiler, centralized thermal solar system, centralized cooling with air/water chiller, decentralized CMV (passive recovery unit) for each flat, radiant system, dehumidifier.

Centralized heat pump

Centralized air/water heat pump for heating, cooling and DHW production. Decentralized CMV (ELFOFresh EVO active recovery unit) for each flat, radiant system

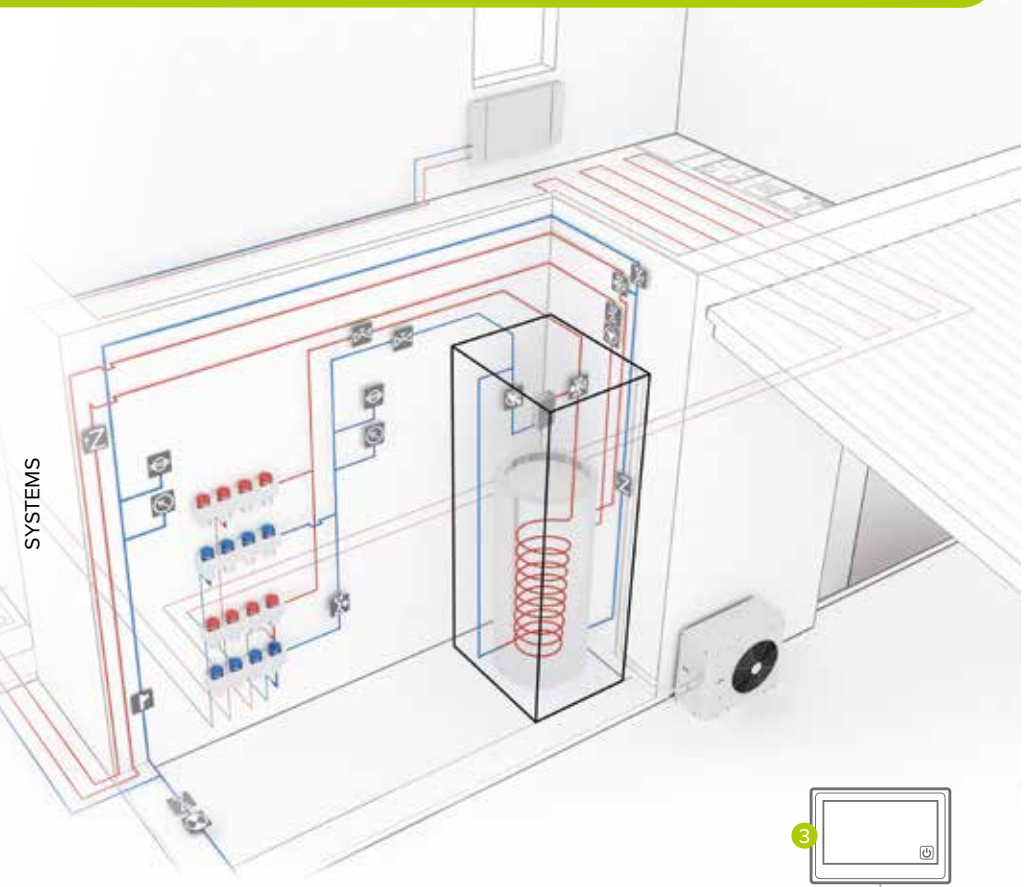
Data are referred to a single flat.
The running costs of systems also include the metering costs when compared with centralized systems.

ELFOSystem SPHERA EVO

Medium-low consumption single-family houses

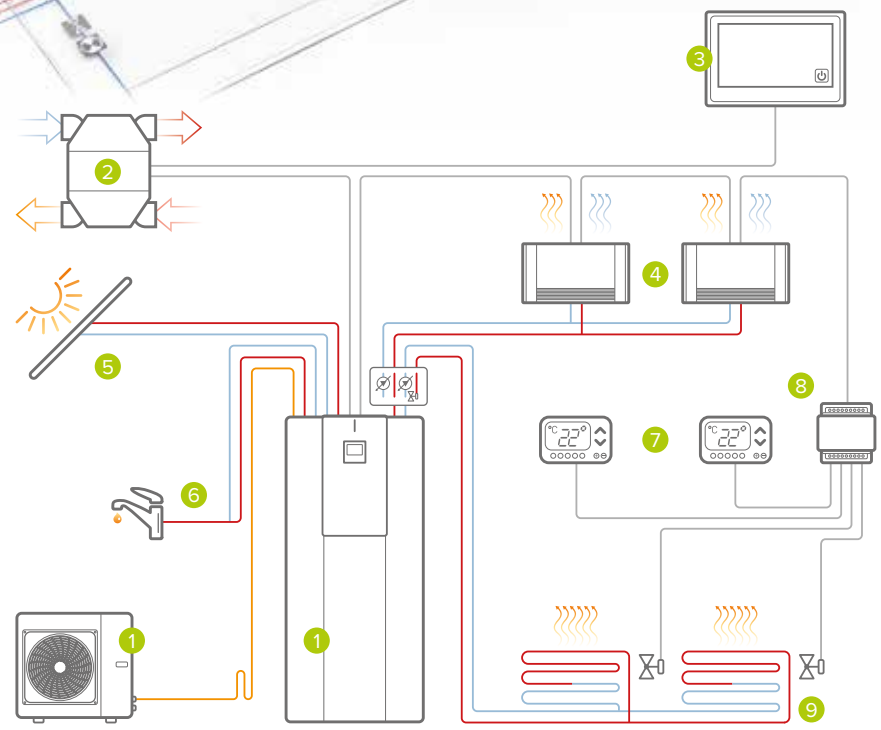
SYSTEM'S COMPONENTS

SPHERA EVO
ELFOFresh EVO
ELFOAir
ELFORoom²
ELFOControl³ EVO



6 FUNCTIONS

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ AIR RENEWAL AND PURIFICATION WITH ELECTRONIC FILTRATION
- ✓ MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY



ELFOSystem SPHERA EVO main features

Primary pump included

External condensing unit

1. SPHERA EVO
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. ELFORoom²
5. Thermal solar
6. Domestic hot water
7. Thermostats
8. Radiant module
9. Radiant panels for underfloor heating

HIGH ENERGY EFFICIENCY

1 HEAT PUMP WITH DC INVERTER COMPRESSOR

2 HIGH EFFICIENCY DC INVERTER CIRCULATOR

3 DOMESTIC HOT WATER STORAGE 190 OR 250L

4 READY FOR CONNECTION WITH THERMAL SOLAR COLLECTORS

5 CONNECTION FOR DOMESTIC WATER RECIRCULATION

6 EXTERNAL UNIT: EFFICIENT AND QUIET

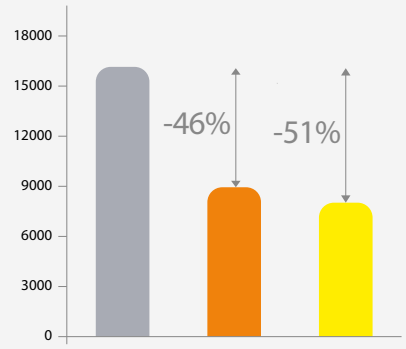
Compact design
Silence
DC Inverter compressor
Ice Protection System

THE RESULTS: comparison with a traditional system

150 m² new single house, radiant panels, energy requirements equivalent to 65kWh/m² year in heating mode, 23kWh/m² year in cooling mode, 4 occupants with 50l/person a day domestic hot water consumption

Location: Milan
Climate zone: E - 2404 degree days
Number of vans: 8
Surface: 150 m²

PRIMARY ENERGY [kWh/year]

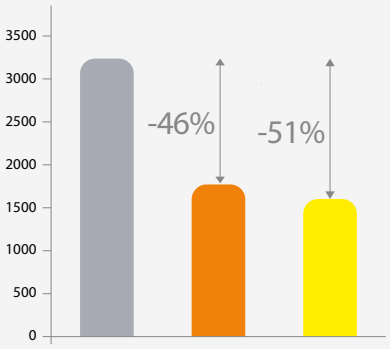


Traditional system

Traditional system

Condensing boiler, radiant panels for heating, cross flow recovery device, cooling split system.

CO_2 EMISSIONS [kg CO_2/year]

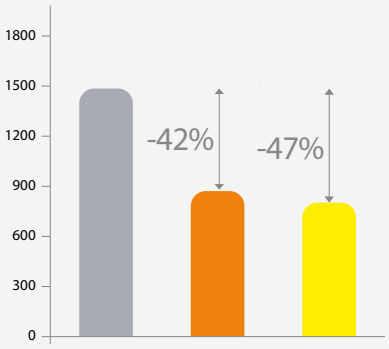


ELFOSystem SPHERA EVO

ELFOSystem SPHERA EVO

SPHERA EVO 3.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 200m³/h), ELFOControl³ EVO.

RUNNING COSTS [€/year]



ELFOSystem Sphera EVO with ELFOSun

ELFOSystem ELFOSystem SPHERA EVO with ELFOSun

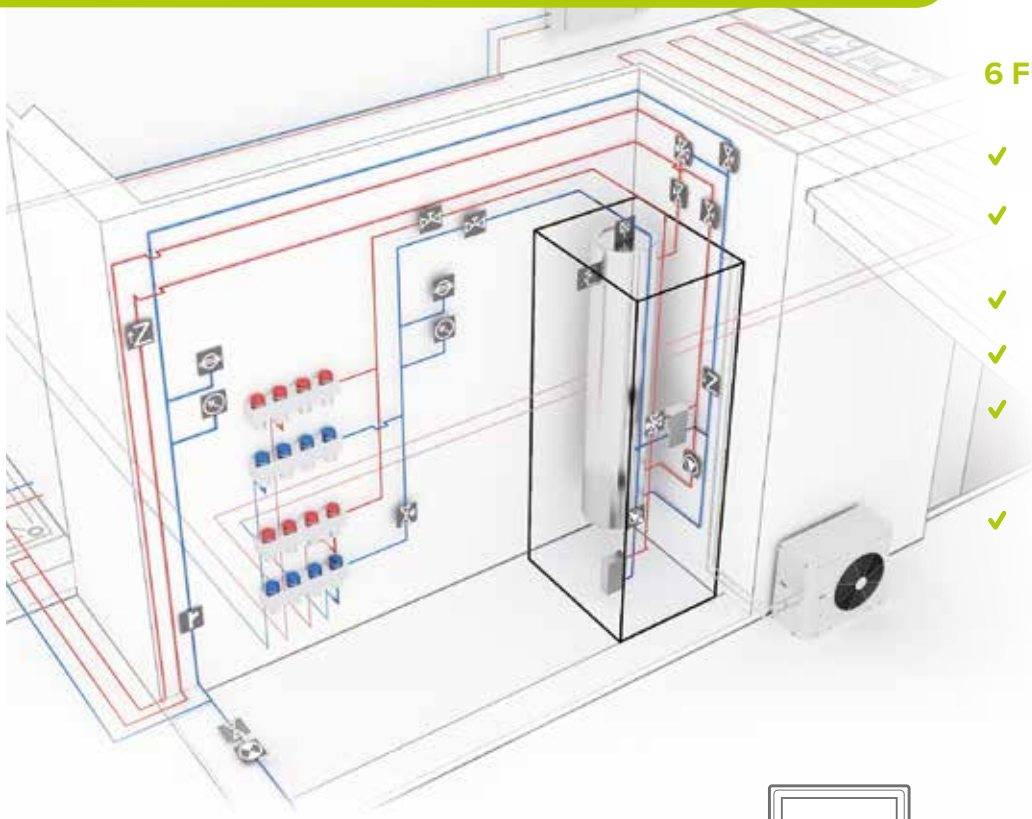
SPHERA EVO 3.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 200m³/h), ELFOControl³ EVO, ELFOSun.

ELFOSystem SPHERA-T Comfort

Medium-low consumption single-family houses

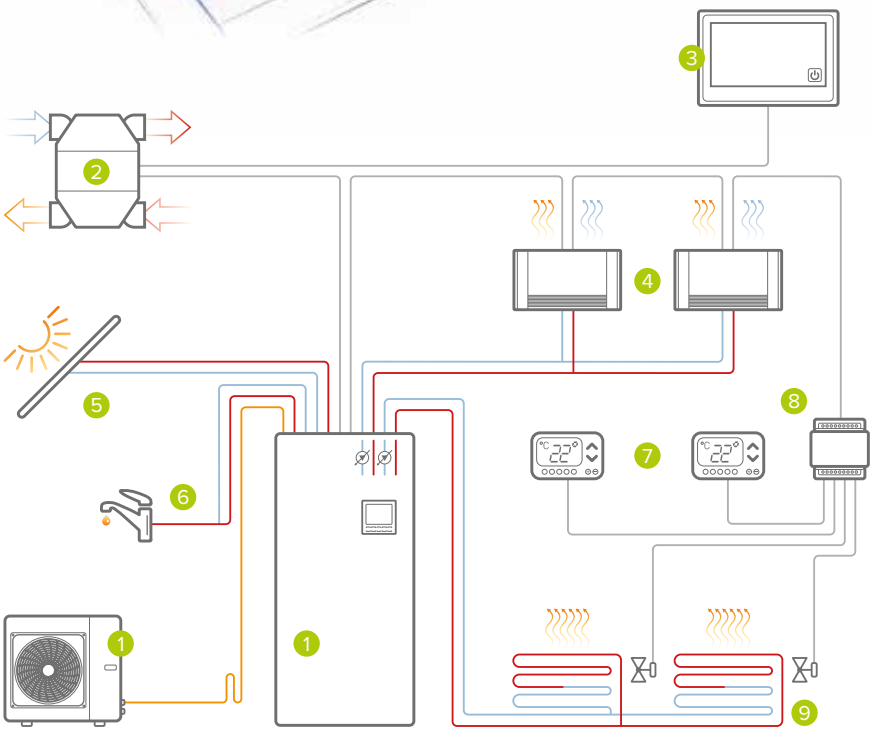
SYSTEM'S COMPONENTS

SPHERA-T Comfort
ELFOFresh EVO
ELFOAir
ELFORoom²
ELFOControl³ EVO



6 FUNCTIONS

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ AIR RENEWAL AND PURIFICATION WITH ELECTRONIC FILTRATION
- ✓ MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY



ELFOSystem SPHERA-T Comfort main features

Primary pump included

External condensing unit

1. SPHERA-T Comfort
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. ELFORoom²
5. Thermal solar
6. Domestic hot water
7. Thermostats
8. Radiant module
9. Radiant panels for underfloor heating

HIGH ENERGY EFFICIENCY

1 **HEAT PUMP WITH DC INVERTER COMPRESSOR**

2 **VERSION WITH ELFOSun THERMAL SOLAR COLLECTORS**

3 **PUMP FOR DOMESTIC WATER RECIRCULATION**

4 **HIGH EFFICIENCY DC INVERTER CIRCULATOR**

5 **DOMESTIC HOT WATER STORAGE 280L**

Plate exchanger - electronic anode

6 **DOUBLE BOOSTER HIGH AND LOW TEMPERATURE**

(Optional)

7 **EXTERNAL UNIT: EFFICIENT AND QUIET**

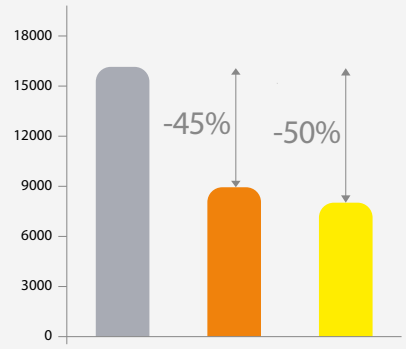
Compact design
Silence
DC Inverter compressor
Ice Protection System

THE RESULTS: comparison with a traditional system

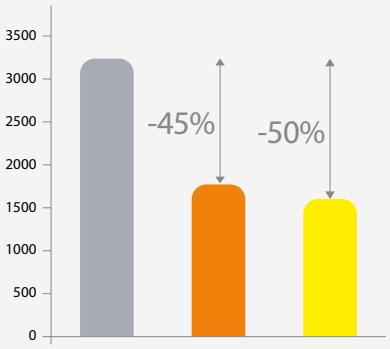
190 m² new single house, radiant panels, energy requirements equivalent to 50kWh/m² year in heating mode, 19kWh/m² year in cooling mode, 4 occupants with 50l/person a day domestic hot water consumption

Location:	Padua
Climate zone:	E - 2404 degree days
Number of vans:	10
Surface:	190 m²

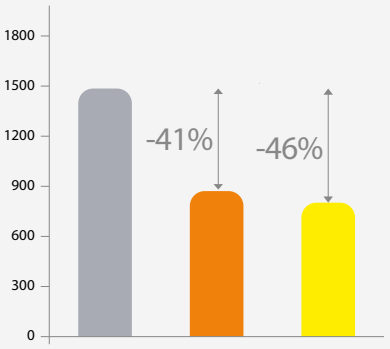
PRIMARY ENERGY [kWh/year]



CO_2 EMISSIONS [kg CO_2/year]



RUNNING COSTS [€/year]



Traditional system

Traditional system

Condensing boiler, radiant panels for heating, cross flow recovery device, cooling split system.

ELFOSystem SPHERA-T Comfort

ELFOSystem SPHERA-T Comfort

SPHERA-T Comfort 6.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 270m³/h), ELFOControl³ EVO.

ELFOSystem Sphera-T Comfort with ELFOSun

ELFOSystem ELFOSystem Sphera-T Comfort with ELFOSun

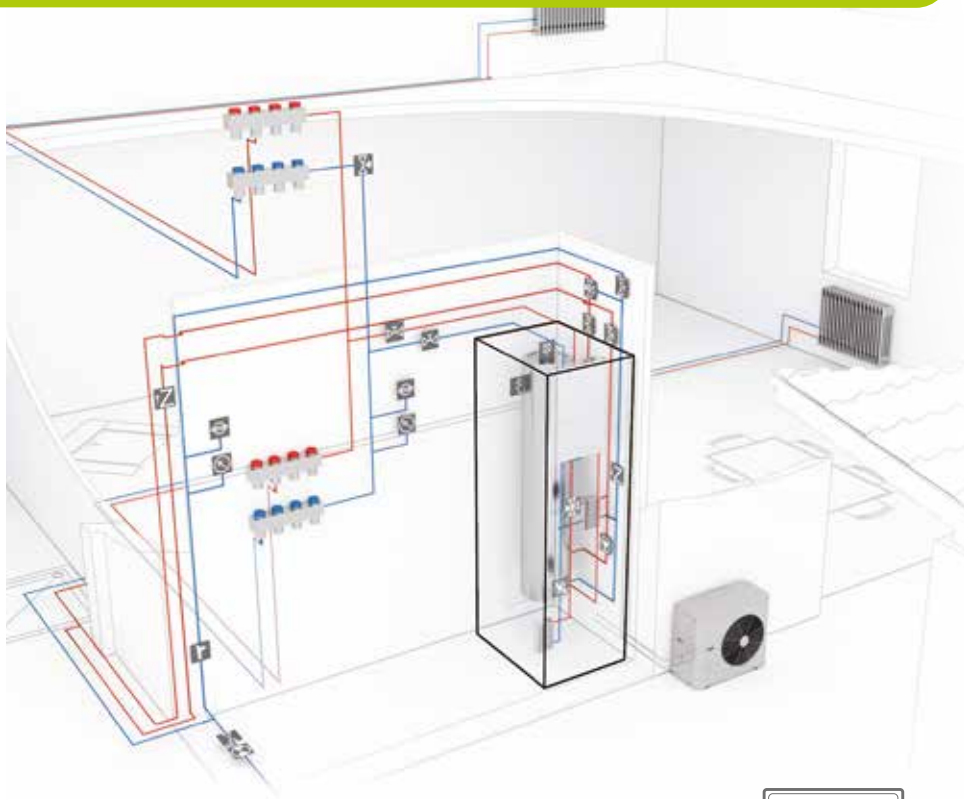
SPHERA-T Comfort 6.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 270m³/h), ELFOControl³ EVO, ELFOSun.

ELFOSystem SPHERA-T Hybrid

High consumption single-family houses

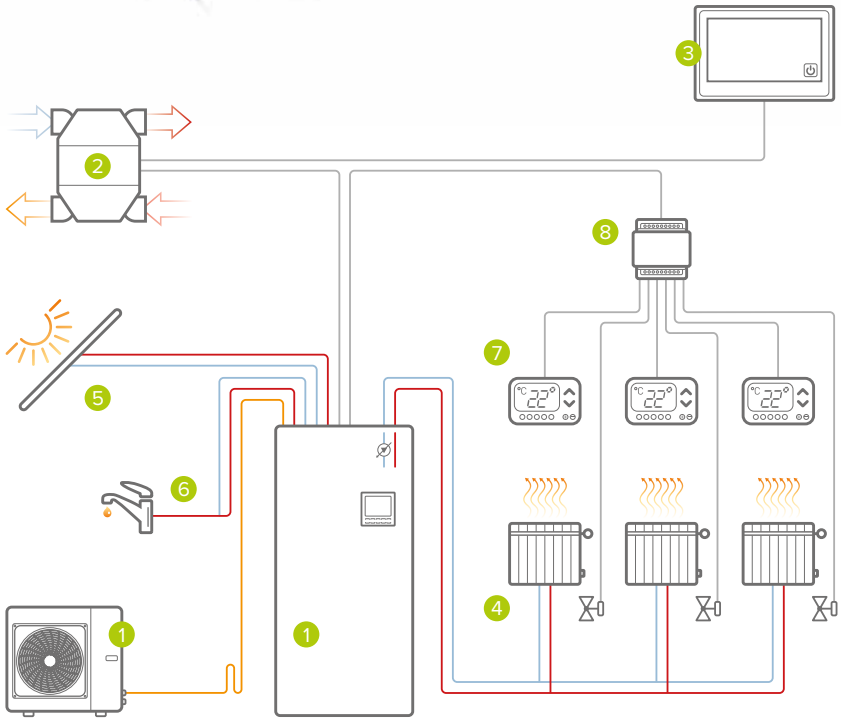
SYSTEM'S COMPONENTS

SPHERA-T Hybrid
ELFOFresh EVO
ELFOAir
ELFORoom²
ELFOControl³ EVO



6 FUNCTIONS

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ AIR RENEWAL AND PURIFICATION WITH ELECTRONIC FILTRATION
- ✓ MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY



ELFOSystem SPHERA-T Hybrid main features

Primary pump included

Integrated condensing boiler

It satisfies high domestic hot water consumption

1. SPHERA-T Hybrid
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. Radiators
5. Thermal solar
6. Domestic hot water
7. Thermostats
8. Radiant module

1 HEAT PUMP WITH DC INVERTER COMPRESSOR

2 VERSION WITH ELFOSun THERMAL SOLAR COLLECTORS

3 PUMP FOR DOMESTIC WATER RECIRCULATION

4 HIGH EFFICIENCY DC INVERTER CIRCULATOR

5 DOMESTIC HOT WATER STORAGE 280L

Plate exchanger - electronic anode

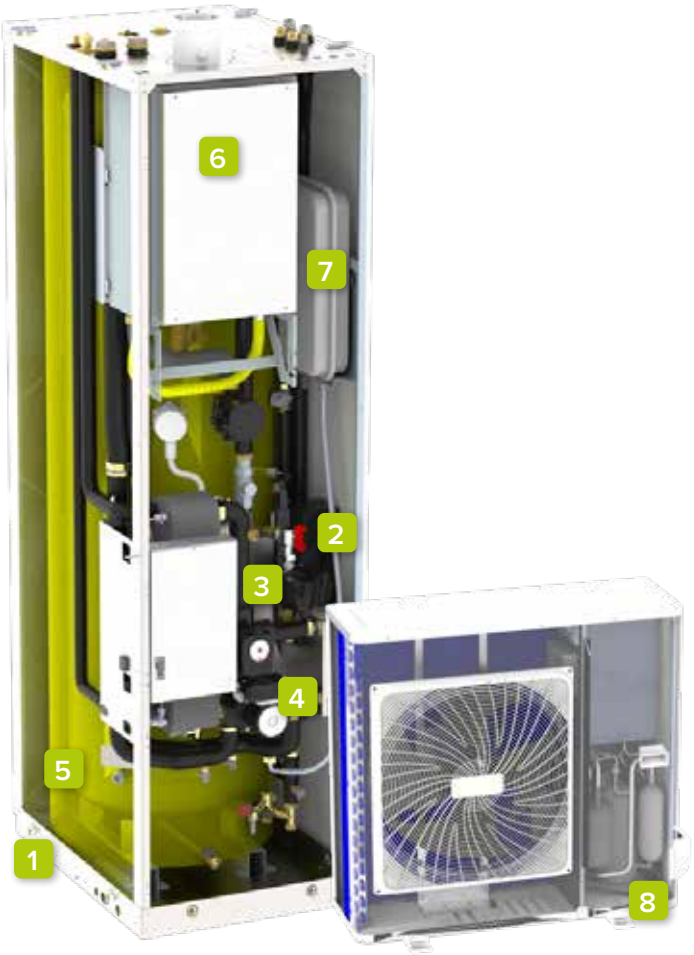
6 INTEGRATED CONDENSING BOILER

7 EXPANSION TANK

(Optional)

8 EXTERNAL UNIT: EFFICIENT AND QUIET

Compact design
Quiet
DC Inverter compressor
Ice Protection System

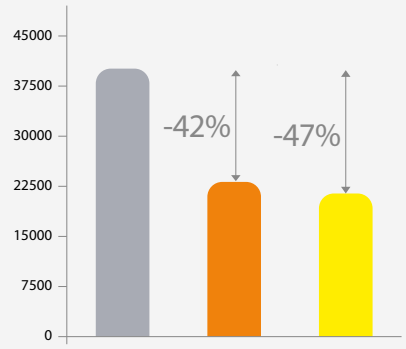


THE RESULTS: comparison with a traditional system

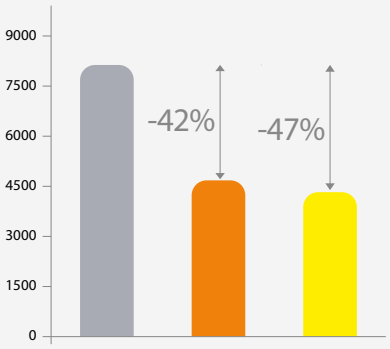
250 m² existing single house, radiant panels with radiators in integration and fancoil for cooling, energy requirements equivalent to 98kWh/m² year in heating mode, 32kWh/m² year in cooling mode, 6 occupants with 50l/person day domestic hot water consumption

Location:	Milan
Climate zone:	E - 2404 degree days
Number of rooms:	12
Surface:	250 m²

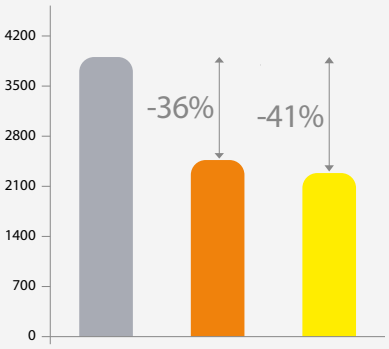
PRIMARY ENERGY [kWh/year]



CO_2 EMISSIONS [$kgCO_2$/year]



RUNNING COST [€/year]



Traditional plant | ELFOSystem SPHERA-T Hybrid | ELFOSystem Sphera-T Hybrid with ELFOSun

Traditional system
Existing Boiler, radiators for heating, cooling split system.

ELFOSystem SPHERA-T Hybrid
SPHERA-T Hybrid 5.1, radiators and fan coil, ELFOFresh EVO Size 2 (air flow 320m³/h), ELFOControl³ EVO.

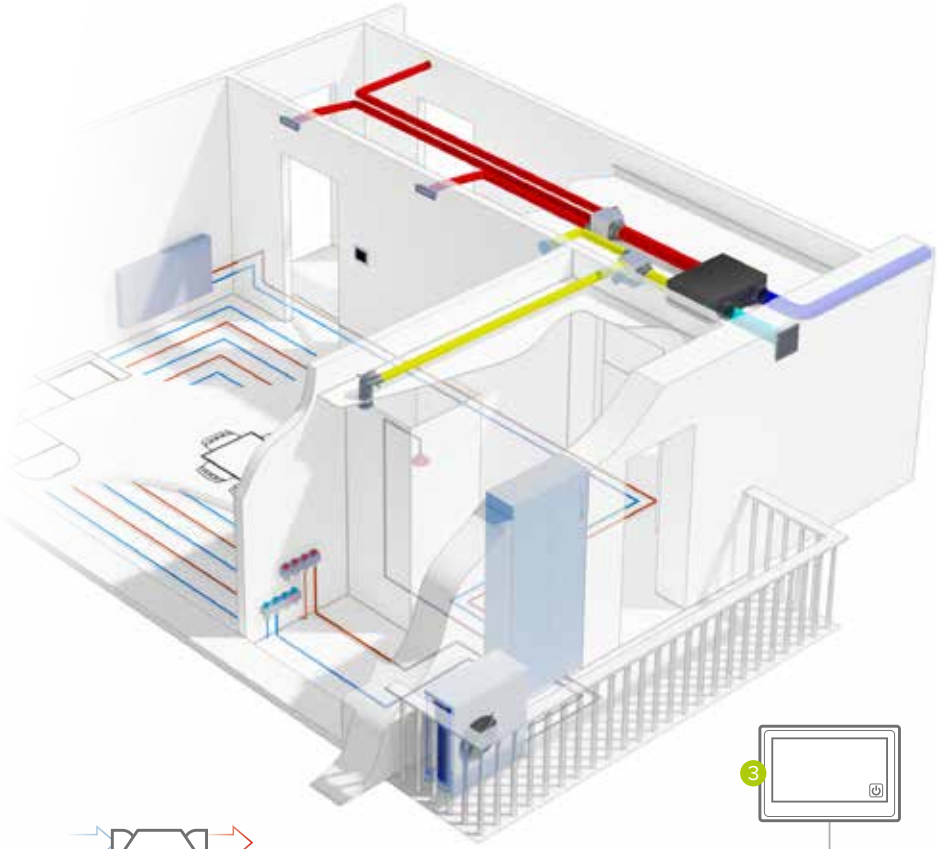
ELFOSystem Sphera-T Hybrid with ELFOSun
SPHERA-T Hybrid 5.1, radiators and fan coil, ELFOFresh EVO Size 2 (air flow 320m³/h), ELFOControl³ EVO, ELFOSun.

ELFOSystem SPHERA-i Comfort

Medium-low consumption apartment building

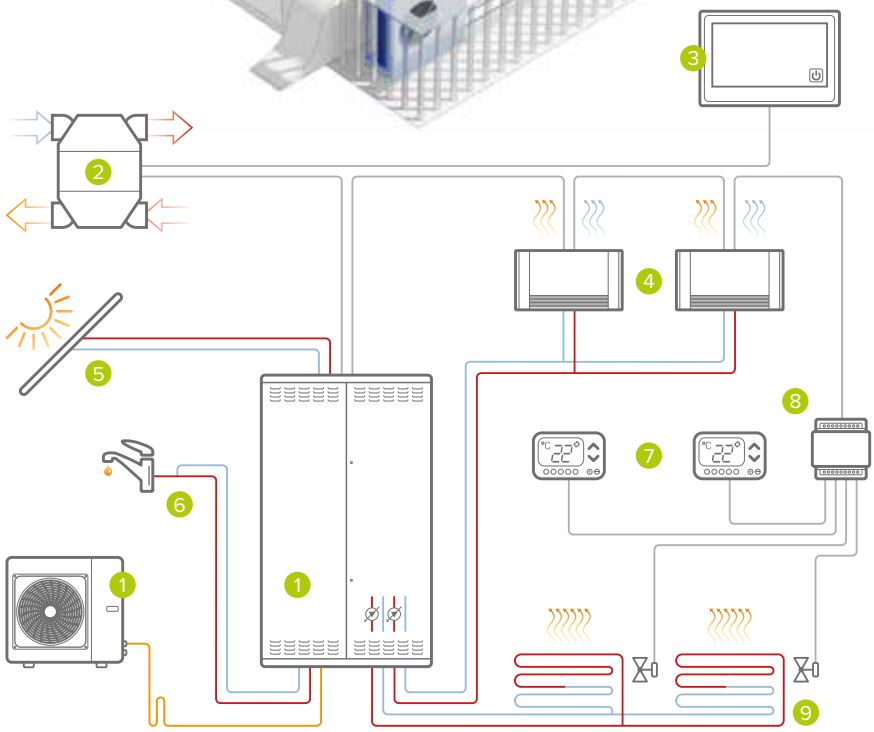
SYSTEM'S COMPONENTS

SPHERA-i Comfort
ELFOFresh EVO
ELFOAir
ELFORoom²
ELFOControl³ EVO



6 FUNCTIONS

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ AIR RENEWAL AND PURIFICATION WITH ELECTRONIC FILTRATION
- ✓ MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY



ELFOSystem SPHERA-i Comfort main features

Systems up to 2 hydraulic circuit mixed and not

Uncased unit in only 35 cm

1. SPHERA-i Comfort
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. ELFORoom²
5. Thermal solar
6. Domestic hot water
7. Thermostats
8. Radiant module
9. Radiant panels for underfloor heating

1 DC INVERTER COMPRESSOR HEAT PUMP

2 VERSION WITH ELFOSun THERMAL SOLAR COLLECTORS

3 PUMP FOR DOMESTIC WATER RECIRCULATION

4 HIGH EFFICIENCY CIRCULATOR

5 DOUBLE BOOSTER HIGH AND LOW TEMPERATURE

Modules can also be placed at different times to meet system needs (Optional)

6 150-L DHW STORAGE TANK

7 EXTERNAL UNIT: EFFICIENT AND QUIET

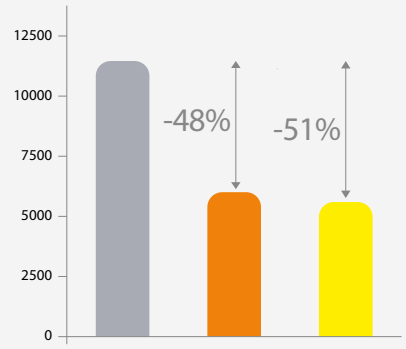
Compact design
Quiet
DC Inverter compressor
Ice Protection System

THE RESULTS: comparison with a traditional system

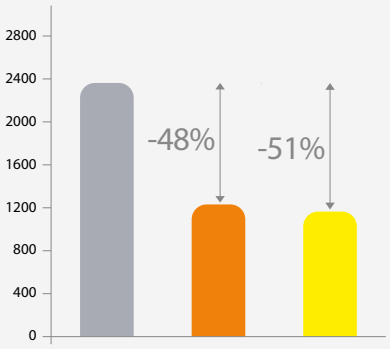
100 m² new flat, radiant panel system, energy requirements equivalent to 54kWh/m² year in heating mode, 25kWh/m² year in cooling mode, 4 occupants with 50l/person a day domestic hot water consumption

Location:	Milan
Climate zone:	E - 2404 degree days
Number of rooms:	6
Surface:	100 m²

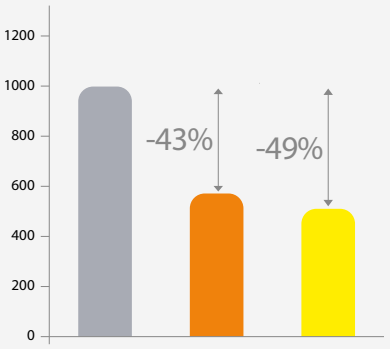
PRIMARY ENERGY [kWh/year]



CO_2 EMISSIONS [$kgCO_2$/year]



RUNNING COST [€/year]



Traditional system | ELFOSystem SPHERA-i Comfort | ELFOSystem Sphera-i Comfort with ELFOSun

Traditional system

Existing Boiler, thermal solar, radiant panels for heating, cross flow recovery device, cooling split system.

ELFOSystem SPHERA-i Comfort

SPHERA-i Comfort 2.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 150m³/h), ELFOControl³ EVO.

ELFOSystem Sphera-i Comfort with ELFOSun

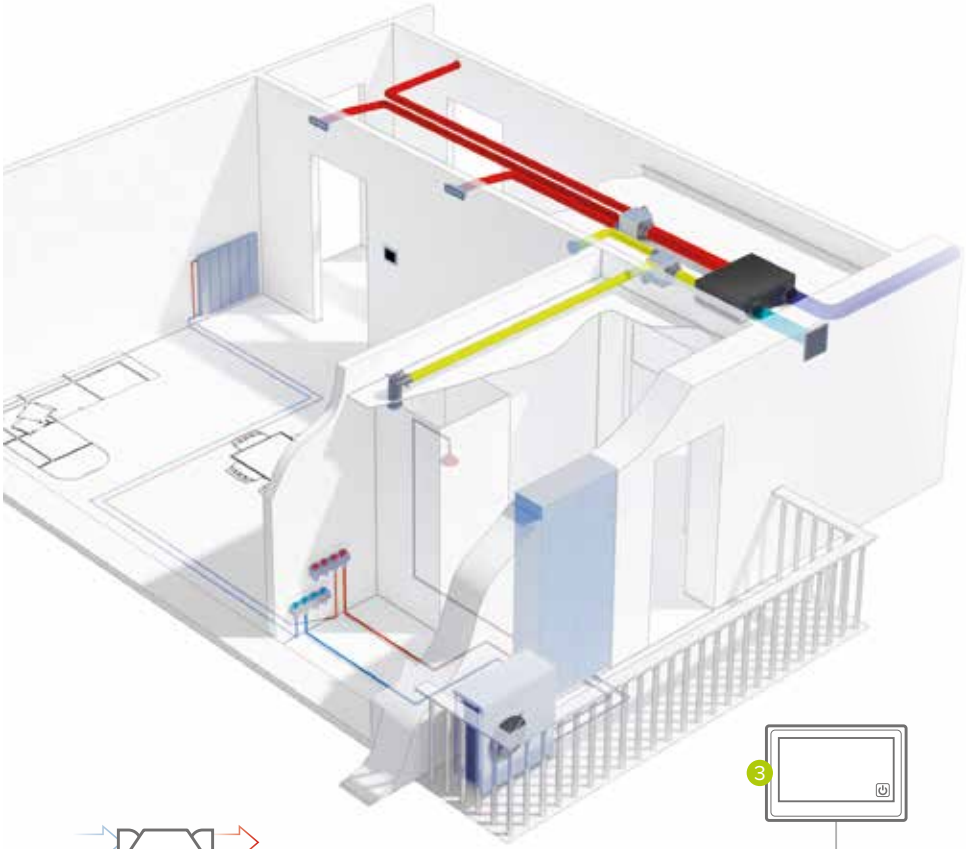
SPHERA-i Comfort 2.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 150m³/h), ELFOControl³ EVO, ELFOSun.

ELFOSystem SPHERA-i Hybrid

High consumption apartment building

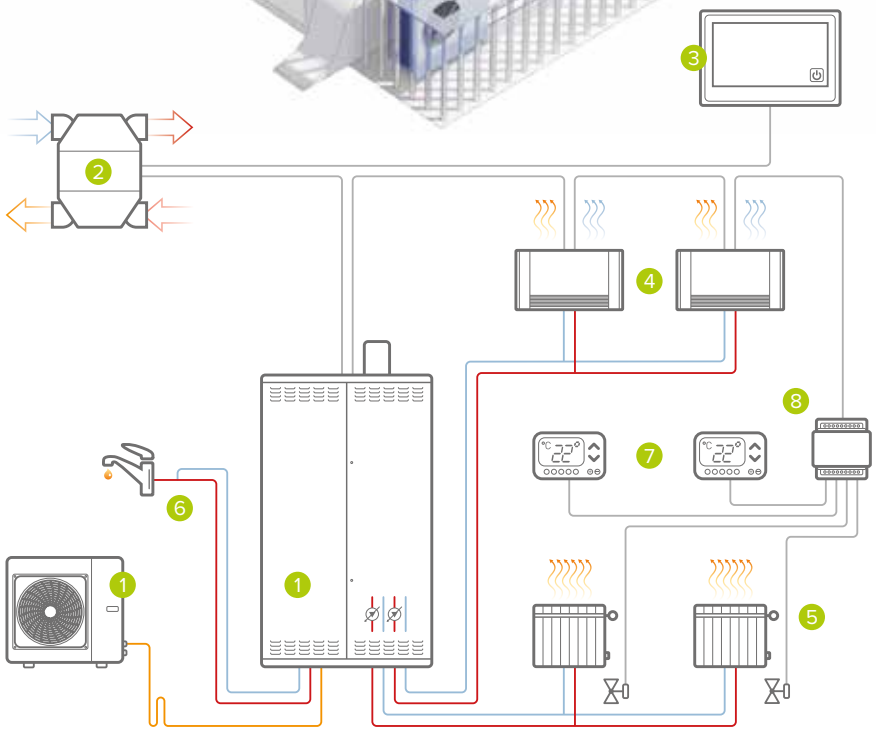
SYSTEM'S COMPONENTS

SPHERA-i Hybrid
ELFOFresh EVO
ELFOAir
ELFORoom²
ELFOControl³ EVO



6 FUNCTIONS

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ AIR RENEWAL AND PURIFICATION WITH ELECTRONIC FILTRATION
- ✓ MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY



ELFOSystem SPHERA-i Hybrid main features

Systems up to 2 hydraulic circuit mixed and not

Integrated condensing boiler

Uncased unit in only 35 cm

1. SPHERA-i Hybrid
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. ELFORoom²
5. Radiators
6. Domestic hot water
7. Thermostats
8. Radiant module

1 DC INVERTER COMPRESSOR HEAT PUMP

2 INTEGRATION WITH CONDENSING BOILER

3 PUMP FOR DOMESTIC WATER RECIRCULATION

4 HIGH EFFICIENCY CIRCULATOR

5 DOUBLE BOOSTER HIGH AND LOW TEMPERATURE

Modules can also be placed at different times to meet system needs (Optional)

6 150-L DHW STORAGE TANK

7 EXTERNAL UNIT: EFFICIENT AND QUIET

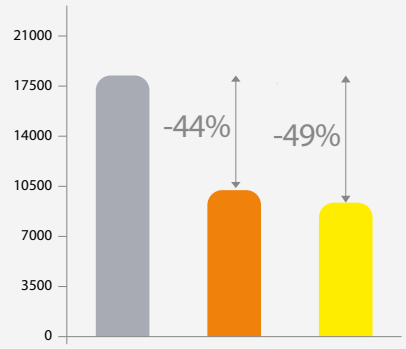
Compact design
Quiet
DC Inverter compressor
Ice Protection System

THE RESULTS: comparison with a traditional system

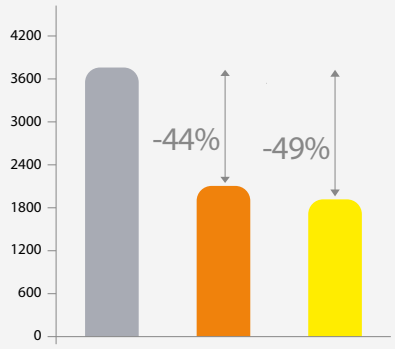
120 m² old flat, heating plant with radiators integrated with fan coil for cooling, energy requirements equivalent to 89kWh/m² year in heating mode, 29kWh/m² year in cooling mode, 4 occupants with 50l/person a day domestic hot water consumption

Location: Milan
Climate zone: E - 2404 degree days
Number of rooms: 7
Surface: 120 m²

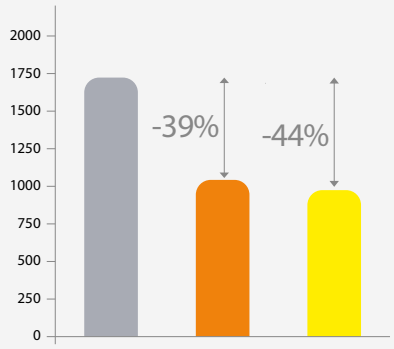
PRIMARY ENERGY [kWh/year]



CO_2 EMISSIONS [kg CO_2/year]



RUNNING COST [€/year]



Traditional system | ELFOSystem SPHERA-i Hybrid | ELFOSystem Sphera-i Hybrid with ELFOSun

Traditional system
Existing Boiler, radiators for heating, split system for cooling.

ELFOSystem SPHERA-i Hybrid
SPHERA-i Hybrid 3.1, radiators and fan coil, ELFOFresh EVO Size 2 (air flow 200m³/h), ELFOControl³ EVO.

ELFOSystem Sphera-i Hybrid with ELFOSun
SPHERA-i Hybrid 3.1, radiators and fan coil, ELFOFresh EVO Size 2 (air flow 200m³/h), ELFOControl³ EVO, ELFOSun.

ELFOSystem SPHERA-B Comfort

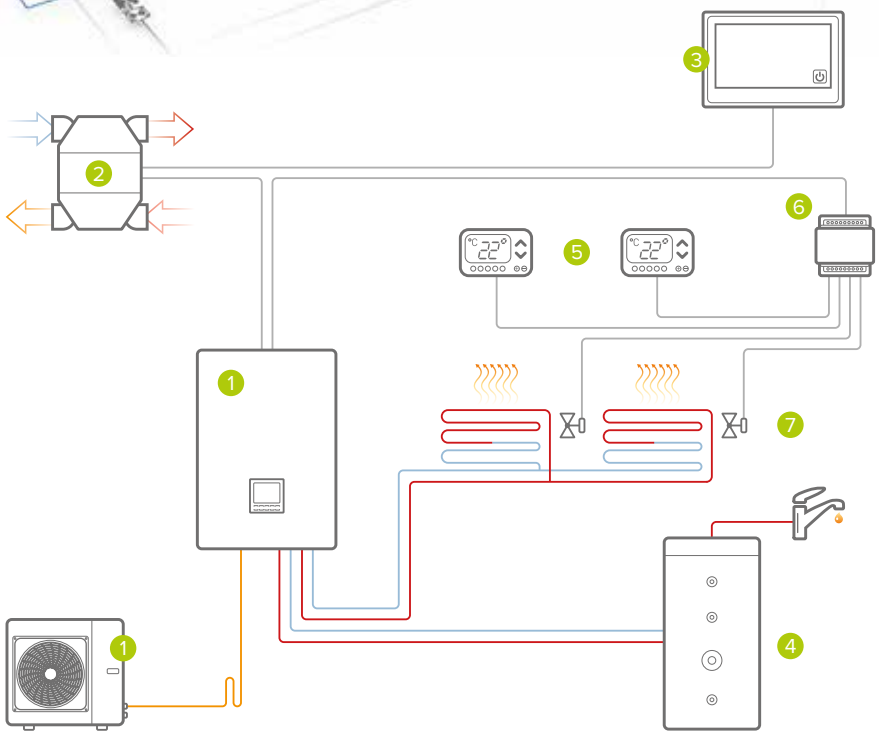
Residential and Light Commercial applications

SYSTEM'S COMPONENTS

SPHERA-B Comfort
ELFOFresh EVO
ELFOAir
ELFORoom²
ELFOControl³ EVO

6 FUNCTIONS

- ✓ HEATING
- ✓ DOMESTIC HOT WATER PRODUCTION
- ✓ COOLING
- ✓ SUMMER DEHUMIDIFICATION
- ✓ AIR RENEWAL AND PURIFICATION WITH ELECTRONIC FILTRATION
- ✓ MECHANICAL VENTILATION WITH THERMODYNAMIC HEAT RECOVERY



ELFOSystem SPHERA-B Comfort main features

Primary pump includedt

Integrated DHW production valve

It satisfies high domestic hot water consumption

1. SPHERA-B Comfort
2. ELFOFresh EVO
3. ELFOControl³ EVO
4. Storage tank
5. Thermostats
6. Radiant module
7. Radiant panels for underfloor heating

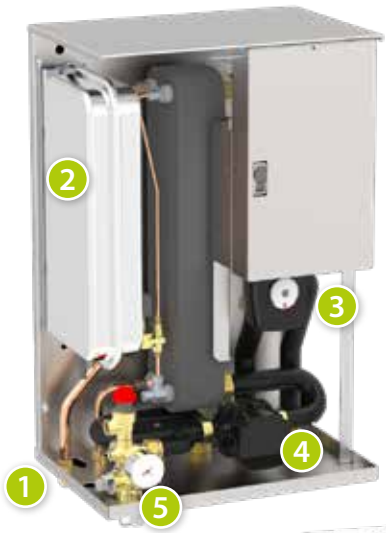
1 DC INVERTER COMPRESSOR HEAT PUMP

2 SYSTEM-SIDE EXPANSION TANK

3 VALVE FOR DOMESTIC HOT WATER PRODUCTION

4 HIGH EFFICIENCY DC INVERTER CIRCULATOR

5 FILLING VALVE WITH PRESSURE GAUGE



6 EXTERNAL UNIT: EFFICIENT AND QUIET

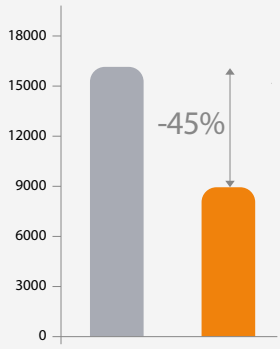
Compact design
Quiet
DC Inverter compressor
Ice Protection System

THE RESULTS: comparison with a traditional system

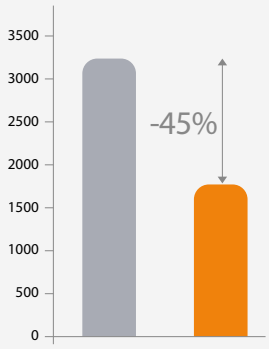
150 m² new single house, radiant panels, energy requirements equivalent to 65kWh/m² year in heating mode, 23kWh/m² year in cooling mode, 4 occupants with 50l/person a day domestic hot water consumption

Location:	Milan
Climate zone:	E - 2404 degree days
Number of vans:	8
Surface:	150 m²

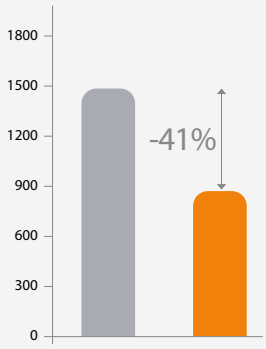
PRIMARY ENERGY [kWh/year]



CO_2 EMISSIONS [kg CO_2/year]



RUNNING COSTS [€/year]



Traditional system

ELFOSystem SPHERA-B Comfort

Traditional system

Condensing boiler, radiant panels for heating, cross flow recovery device, cooling split system.

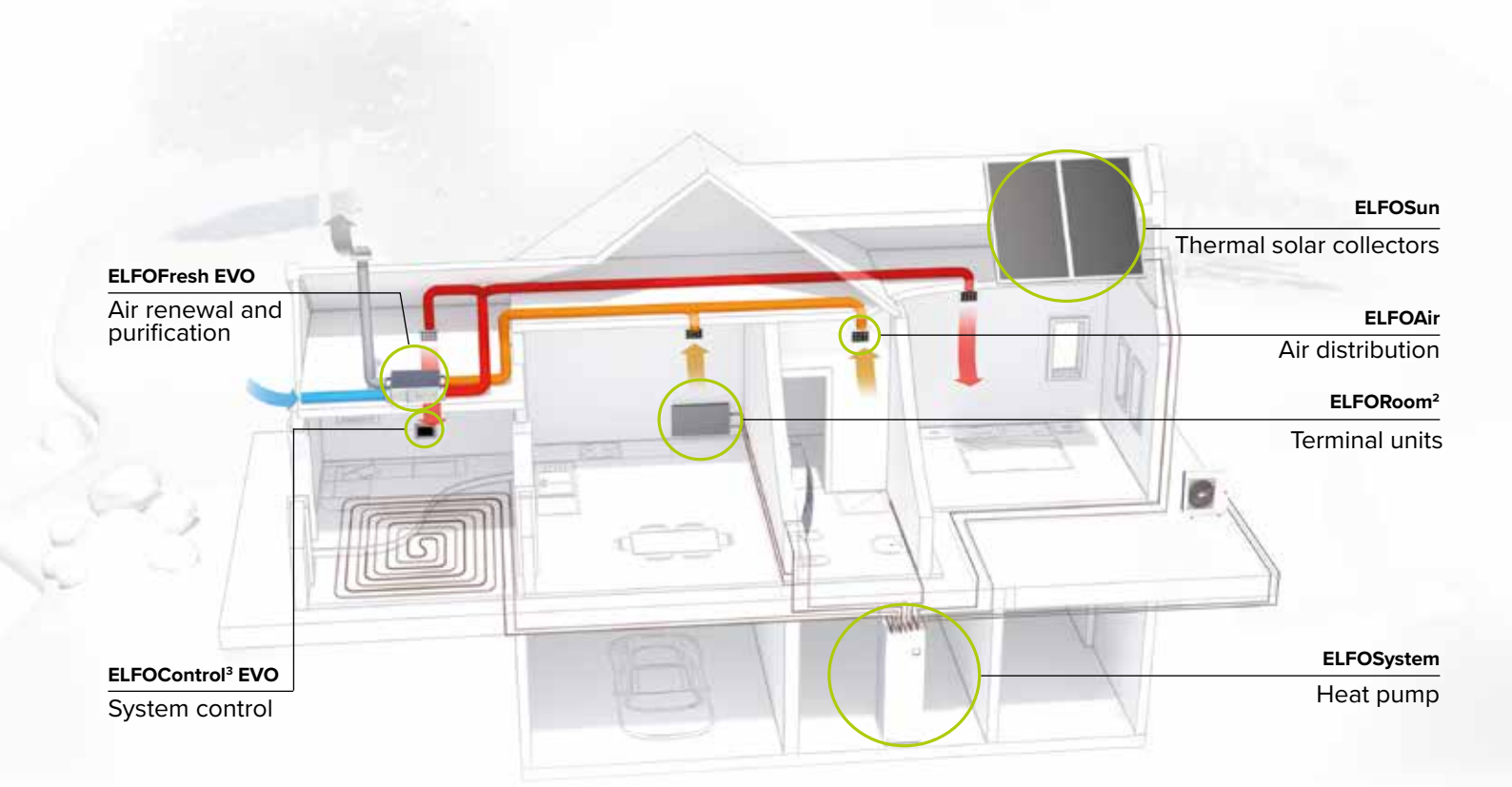
ELFOSystem SPHERA-B Comfort

SPHERA-B Comfort 3.1, radiant panels for heating and cooling, ELFOFresh EVO Size 2 (air flow 200m³/h), ELFOControl³ EVO.

PRODUCTS

Clivet HOME

Heat pumps and transversal products



Clivet residential systems generate comfort using heat pump technology for the different applications.

ELFOPack is composed by a single unit that satisfies all comfort needs.

ELFOSystem systems consist of a heat pump specific for each system for heating, cooling and domestic hot water production and five transversal elements:

1. **ELFOControl³ EVO**
   Control system
2. **ELFOFresh EVO**
   Air renewal and purification unit
3. **ELFOAir**
   Air distribution
4. **ELFORoom²**
   Terminal unit for the distribution
5. **ELFOSun**
   Thermal solar collectors

SYSTEM	HEAT PUMP	TRANSVERSAL COMPONENTS				
		ELFOControl[3] EVO	ELFOFresh EVO	ELFOAir	ELFORoom[2]	ELFOSun
ELFOPack	ELFOPack	—	—	✓	—	—
ELFOSystem SPHERA EVO	SPHERA EVO	✓	✓	✓	✓	✓
ELFOSystem SPHERA-T Comfort	SPHERA-T Comfort	✓	✓	✓	✓	✓
ELFOSystem SPHERA-T Hybrid	SPHERA-T Hybrid	✓	✓	✓	✓	✓
ELFOSystem SPHERA-i Comfort	SPHERA-i Comfort	✓	✓	✓	✓	✓
ELFOSystem SPHERA-i Hybrid	SPHERA-i Hybrid	✓	✓	✓	✓	—
ELFOSystem SPHERA-B Comfort	SPHERA-B Comfort	✓	✓	✓	✓	✓

ELFOPack

The air to air heat pump system with active thermodynamic heat recovery

It covers 75% of energy needs using free and unlimited renewable energy contained in the air.

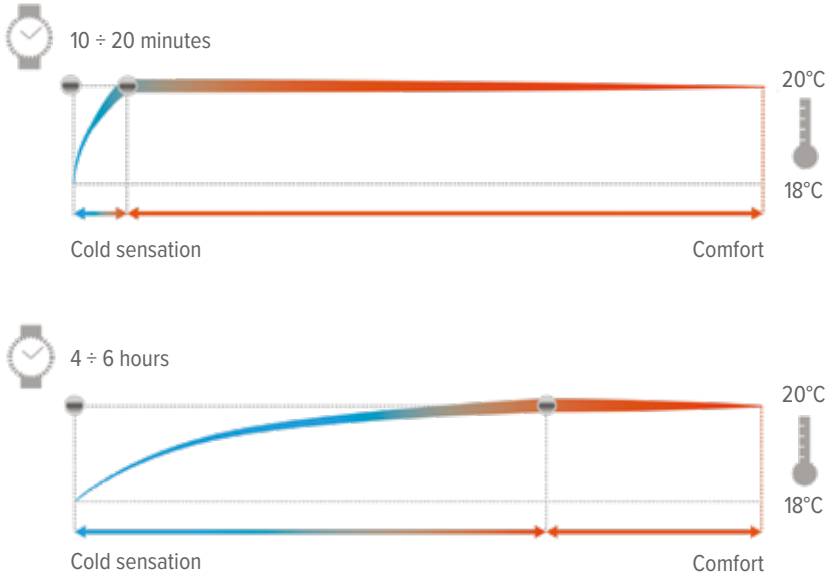
It recovers the energy from the exhaust air thanks to the active thermodynamic heat recovery.

- ✓ THE MECHANICAL CONTROLLED VENTILATION SYSTEM IS ESSENTIAL NOT ONLY FOR ENERGY SAVING, BUT ALSO FOR A HEALTHY ENVIRONMENT
- ✓ THE HARMFUL ELEMENTS AND ODORS IN THE AIR ARE ELIMINATED BY THE EFFICIENT ELECTRONIC FILTRATION SYSTEM
- ✓ THE LOW ENERGY REQUIREMENT OF ELFOPACK MEANS THAT IN SOME CASES, WHERE PHOTOVOLTAIC SYSTEMS ARE INSTALLED, THE ENERGY GENERATED IS SUFFICIENT TO OPERATE THE ELFOPACK SYSTEM, HELPING THE BUILDING TO BECOME SELF SUFFICIENT

COMFORT THROUGH THE AIR

Continuous and rapid adaptation to the desired comfort conditions

Thanks to the lower thermal inertia, the air to air air-conditioning system allows you to reach the desired comfort conditions in a much shorter time than traditional air to water air-conditioning systems. This feature is particularly appreciated in areas with frequent temperature variations typical of Mediterranean climates.



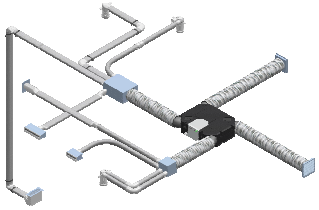
DESIGN FLEXIBILITY

On the balcony

In the stairwell

In the closet

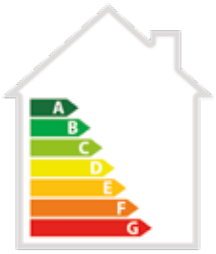
DISTRIBUTION



It can be connected to Clivet ELFOAir distribution system

PRODUCTS

ADD VALUE TO YOUR PROPERTY



Thanks to the benefits detailed above and the use of heat pump technology, ELFOPack demonstrates **reduced running costs and energy consumption, which will contribute to adding value to your property**.

A ELFOPack

C Traditional system
(boiler - radiators - thermal solar)

Standalone system, with one packaged unit. This means that there is no requirement for a boiler, the associated pipework and the control system.

Complete system, that removes the need for heat emitters, fancoil units, radiators or radiant panels. The ELFOPack provides complete comfort distributed through a simple ducted air system, offering complete design freedom.

Simple installation, due to its "plug and play" design, no specialist trades are required for the installation of the unit. As there is no gas requirement, this can also contribute to a reduction in the overall build cost.

User friendly controller, offers simple operation of the unit, managing all aspects of the system from a single point.

Total safety, if combined with an induction hob cooker, the requirement for gas can be removed from the installation, taking away the need to install a gas main, and saving cost on the project, as well as creating a gas free, safe environment.

WINTER

The compressor adjusts its capacity, which is distributed to purify the air and constantly produce Domestic Hot Water. The constant and simultaneous production of Domestic Hot Water increases the **system's efficiency**. During extreme conditions, the post-handling coil is activated as an additional coil.

SUMMER

Intake air is dehumidified as well as being treated and brought to the right temperature as a function of the load. The compressor adjusts its capacity in relation to indoor conditions.
All the heat taken from cooling the intake air is recovered and transferred to produce **free Domestic Hot Water**.

MID-SEASON

Under optimal conditions, outdoor air is mixed with recirculated air to obtain the correct temperature, negating the need to activate the compressor (**free-cooling**).
Domestic Hot Water is produced by turning off the supply air handling exchanger.

ELFOPack

CPAR-XIN 5

PATENTED

technical data

Size – CPAR-XIN			5
▶ Heating capacity	(1)	kW	3,18
Thermodynamic SCOP	(2)	-	3,83
▶ Cooling capacity	(3)	kW	2,14
Thermodynamic SEER	(2)	-	2,95
Maximum air flow rate in the room		m^3/h	400
Maximum air flow taken from the bathrooms and the kitchen		m^3/h	100
Maximum air flow of internal ambient recirculation		m^3/h	300
Maximum air flow air intake from outside		m^3/h	400 of which 100 fresh air
Maximum air flow of outside expelled air		m^3/h	400 of which 100 extraction air
Available head		Pa	120
Compressor type	(4)	-	ROT DC-Inverter
DHW tank		l	180
DHW tank temperature		°C	40/60
Safety electric heater		kW	1,2
Standard power supply		V/f/Hz	230/1/50

(1) Overall heating capacity for transmissions + ventilation + domestic hot water production (4 people - 50 litres/day per person). Conditions: outdoor air 7°C DB, 6.1°C WB, renewal and recirculation stale air 20°C DB.

(2) SCOP / SEER average thermodynamic seasonal efficiency of a home in Milan with an overall demand for transmissions, ventilation and domestic hot water (4 people - 50 litres/day per person) equal to the overall heating capacity provided by ELFOPack as per project specifications (-5°C). The average thermodynamic seasonal efficiency does not take into account the energy absorbed by the fans, as it depends on the pressure drops of the aeraulic distribution of each specific installation.

(3) Total cooling capacity for transmissions + ventilation. Production of domestic hot water (4 people - 50 litres/day per person) with total recovery. Conditions: outdoor air 35°C DB, renewal and recirculation stale air 26°C DB.

(4) ROT DC Inverter = DC Inverter rotary compressor

Refrig. R-410A

Active therm. recovery

Full Inverter DC

Air-air reversible heat pump with active thermodynamic heat recovery

ErP

Size – CPAR-XIN		5
ErP Space Heating Energy Class	(1)	A
ErP Domestic Hot Water Energy Class	(2)	A
ErP Domestic Hot Water Profile	(3)	XL

The Product is compliant with the ErP (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 812/2013, the Commission delegated Regulation (EU) No 206/2012 and the Commission delegated Regulation (EU) No 814/2013

(1) Seasonal Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 626/2011.

(2) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 812/2013.

(3) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 812/2013

accessories

Size – CPAR-XIN	5
Basic configuration (230/1/50)	std

HIDTI5²BX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. White

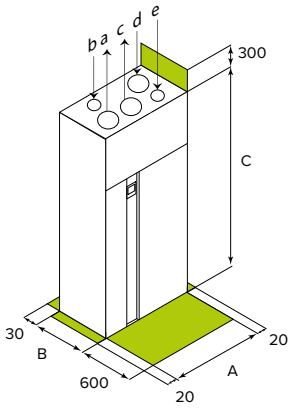
HIDTI5²NX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Black

AL12X Power supply unit for HIDTi52 thermostats and HID-UR sensor

Accessories whose code ends with "X" are separately supplied.

ELFOAir accessories are available in the dedicated page.

dimensions



(a) Exhaust outdoors

(b) Stale air extraction (bathrooms and kitchen)

(c) Supply into the room

(d) Fresh air intake

(e) Indoor air recirculation intake

ATTENTION!

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

Size - CPAR-XIN		5
A - Length	mm	812
B - Width	mm	460
C - Height	mm	2180
Operating weight	kg	400

SPHERA EVO

Heat pump
with integrated hot domestic water storage

NEW PRODUCT

It is the latest generation heat pump that combines the use of low environmental impact gas, R-32, with the availability of two storage versions, 190 and 250 litres, for a solution that is ever more ecological and dynamic in satisfying comfort requirements.

IDEAL FOR LOW-TEMPERATURE SYSTEM

- IDEAL COMFORT IN ALL CONDITIONS
- VERY HIGH SEASONAL EFFICIENCY THANKS TO THE EVOLUTION OF OPERATIONAL LOGICS
- EFFICIENT AND QUIET EXTERNAL UNIT WITH INVERTER DC COMPRESSOR
- DEDICATED APP HEAT PUMP MANAGEMENT

CONNECTIVITY

SPHERA EVO is equipped with WiFi connection to link to the dedicated APP, which makes it possible to manage all of the main functions of the heat pump, such as set point management and scheduling the various operational modes. The standard equipment also includes modbus connection, to link to the ELFOControl and with other supervision systems using this type of protocol.

ALTO DESIGN, A NEW PRODUCT IDENTITY

The Alto Design naming and the clean and taut lines characterising SPHERA EVO are precise references to the company geographical position and the High Plateau of the Dolomites where the headquarter is located, while the faint white chromatic range calls to mind concepts of freshness and purity, intrinsic of the Clivet brand.

DOMESTIC HOT WATER PRODUCTION

The domestic hot water production can be carried out according to the configuration chosen through the heat pump or the thermal solar system in combination with the heat pump.

The domestic hot water production always has priority for the system (standard parameterization), this way it can guarantee greater domestic hot water comfort since it always has the resources available for possible integration with the storage tank.

There is a 2kW immersion heater in the storage tank for the “FAST DHW” function and to complete the anti-legionella cycle, which enables it to reach 65°C for complete sanitisation of the tank.

NEW PRODUCT

SPHERA EVO

SRHME + MDAN-YMi 2.1÷5.1

technical data

Size – SRHME + MDAN-YMi			2.1	3.1	4.1	5.1
Unit for radiant panels						
A7/W35						
▶ Heating capacity		kW	4,49	6,32	8,37	10,26
Total power input		kW	0,90	1,32	1,72	2,19
COP (EN 14511:2018)		-	5,01	4,79	4,87	4,68
A2/W35						
▶ Heating capacity		kW	4,68	6,02	6,70	9,46
Total power input		kW	1,14	1,57	1,69	2,46
COP (EN 14511:2018)		-	4,11	3,83	3,96	3,85
A-7/W35						
▶ Heating capacity		kW	4,59	5,55	6,46	8,02
Total power input		kW	1,50	1,91	2,13	2,69
COP (EN 14511:2018)		-	3,07	2,90	3,04	2,98
A35/W18						
▶ Cooling capacity		kW	4,63	6,79	8,53	9,73
Total power input		kW	0,89	1,32	1,71	2,00
EER (EN 14511:2018)		-	5,21	5,14	5,00	4,87
Terminal units						
A7/W45						
▶ Heating capacity		kW	4,14	6,09	8,02	10,30
Total power input		kW	1,12	1,66	2,10	2,81
COP (EN 14511:2018)		-	3,70	3,66	3,82	3,67
A2/W45						
▶ Heating capacity		kW	4,33	6,48	6,43	10,20
Total power input		kW	1,41	2,22	2,04	3,20
COP (EN 14511:2018)		-	3,07	2,92	3,15	3,18
A-7/W45						
▶ Heating capacity		kW	4,29	5,27	6,19	7,82
Total power input		kW	1,82	2,31	2,50	3,23
COP (EN 14511:2018)		-	2,36	2,28	2,48	2,42
A35/W7						
▶ Cooling capacity		kW	4,56	6,17	7,39	9,06
Total power input		kW	1,31	1,92	2,37	3,01
EER (EN 14511:2018)		-	3,49	3,21	3,12	3,01
SEER		-	5,71	5,36	5,25	5,38
Radiators						
A7/W55						
▶ Heating capacity		kW	4,09	5,76	7,60	9,43
Total power input		kW	1,44	1,94	2,44	3,15
COP (EN 14511:2018)		-	2,84	2,97	3,11	2,99
A2/W55						
▶ Heating capacity		kW	4,38	5,51	6,12	8,74
Total power input		kW	1,82	2,27	2,35	3,46
COP (EN 14511:2018)		-	2,41	2,43	2,60	2,53
A-7/W55						
▶ Heating capacity		kW	4,38	5,20	5,93	7,28
Total power input		kW	2,33	2,70	2,83	3,64
COP (EN 14511:2018)		-	1,88	1,93	2,10	2,00
Water flow-rate (User Side)	(1)	l/s	0,22	0,31	0,41	0,48
Useful pump discharge head (190 L)	(1)	kPa	39	48	37	28
Useful pump discharge head (250 L)	(1)	kPa	41	50	40	50
Domestic hot water storage		l	190 / 250	190 / 250	190 / 250	190 / 250
Solar heat exchanger capacity		W/K	2703	2703	2703	2703
Power supply		V	220-240/1/50			
Sound pressure level (1m) outdoor unit		dB(A)	47	48	48	50
Min inlet air temperature (W.B.)		°C	-25	-25	-25	-25
Max. leaving water temperature		°C	60	60	60	60

(1) A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

Performances according to EN 14511:2018

A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W35 internal exchanger water 30/35°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W45 internal exchanger water 40/45°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W55 internal exchanger water 50/55°C; external air temperature -7°C D.B./ -8°C W.B.
A35/W18 internal exchanger water 23/18°C; external air temperature 35°C
A35/W7 internal exchanger water 12/7°C; external air temperature 35°C

Refrig. R-32

ELFOControl[3] EVO

Full Inverter DC

Two-section air-water reversible heat pump

ErP

Size – SRHME + MDAN-YMi		2.1	3.1	4.1	5.1
ErP System Energy Class - AVERAGE Climate - W55	(1)	A++	A++	A++	A++
ErP Space Heating Energy Class - AVERAGE Climate - W55	(2)	A++	A++	A++	A++
ErP Domestic Hot Water Energy Class (190 L)	(3)	A+	A+	A+	A+
ErP Domestic Hot Water Profile (190 L)	(4)	L	L	L	L
ErP Domestic Hot Water Energy Class (250 L)	(3)	A	A	A	A
ErP Domestic Hot Water Profile (250 L)	(4)	XL	XL	XL	XL

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

(1) Seasonal Space Heating Energy Efficiency Class of the package according to Commission delegated Regulation (EU) No 811/2013

(2) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

(3) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013

(4) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 811/2013. Class of the package with ELFOControl[3] EVO

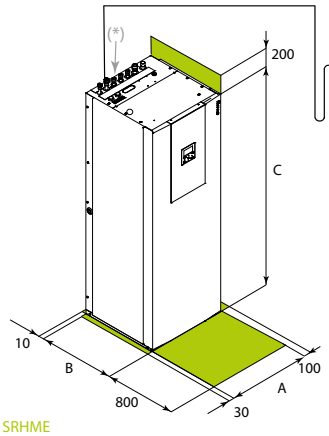
accessories

Size – SRHME + MDAN-YMi	2.1	3.1	4.1	5.1
Basic configuration (230/1/50)	std	std	std	std

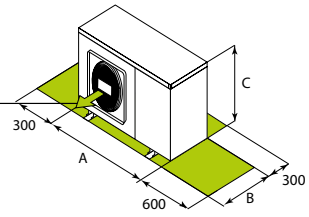
SOLX	Drain-back solar integration for domestic hot water
AMRX	Rubber antivibration mounts
KIRE2HX	2 zones: both at high temperature
KIRE2HLX	2 zones: high temperature + low temperature (mixed)
DTX	Auxiliary condensate collection tray
ACIMPX	System inertial storage

Accessories whose code ends with "X" are separately supplied.

dimensions



SRHME



MDAN-YMi

ATTENTION!

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

(*) Unit hydraulic and gas connections

Size – SRHME		A - 190 L	A - 250 L
A - Length	mm	600	600
B - Width	mm	610	610
C - Height	mm	1750	2050
Operating weight	kg	357	417

Size – MDAN-YMi		2.1	3.1	4.1	5.1
A - Length	mm	960	960	1075	1075
B - Width	mm	380	380	395	395
C - Height	mm	860	860	965	965
D - Max length of cooling lines	m	30	30	30	30
D - Max difference of cooling lines	m	15	15	15	15
Operating weight	kg	57	57	67	67

SPHERA-T

Heat pump
with integrated hot domestic water storage

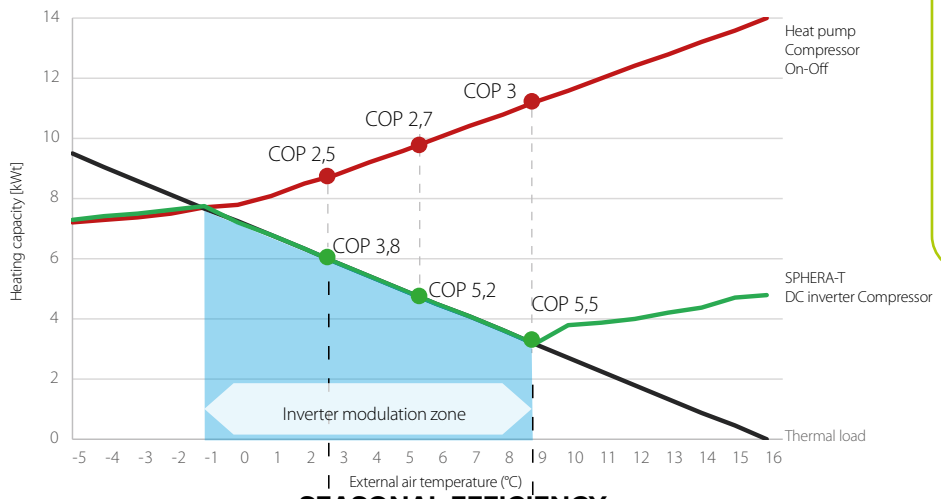
It is the high efficiency heat pump with 280l storage tank, which offers high seasonal efficiency thanks to the possibility of modulating the capacity according to the actual energy needs.

- IT SATISFIES 100% NEEDS WITH THE HEAT PUMP
- QUIET AND EFFICIENT EXTERNAL UNIT WITH DC INVERTER COMPRESSOR
- MAXIMUM SEASONAL EFFICIENCY THANKS TO THE REGULATION, WHICH MANAGES ALL THE HEAT PUMP FUNCTIONS
- USER FRIENDLY MENU FOR A SIMPLE PLANT REGULATION
- THE CONDENSING BOILER SATISFIES HIGH ENERGY DEMANDS

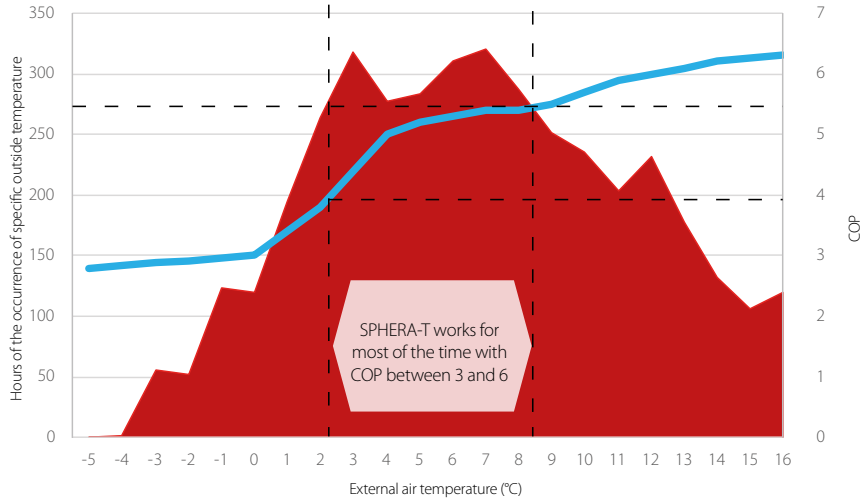
SPHERA-T Comfort

Heat pump with integrated hot domestic water storage

CAPACITY MODULATION



SEASONAL EFFICIENCY



IDEAL FOR LOW-TEMPERATURE SYSTEM

COMFORT AND SEASONAL EFFICIENCY

Since the maximum power generated by the system is required only for short periods of time, it is fundamental to dispose of the maximum efficiency in the conditions of part-load. This is the only way to actually reduce overall yearly consumptions.

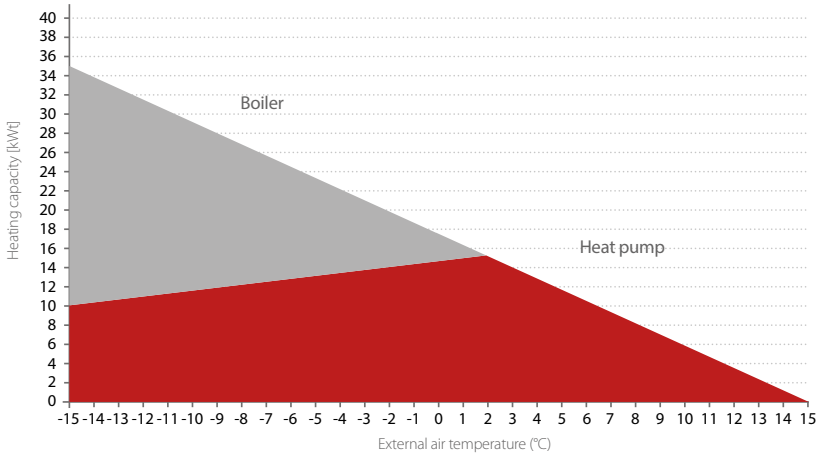
Thanks to automatic capacity modulation, the direct current inverter compressor supplies only the thermal energy that is needed, thereby avoiding wasting energy and increasing the energy efficiency so that the exchange surfaces are larger in relation to the output capacity.

SPHERA-T Hybrid

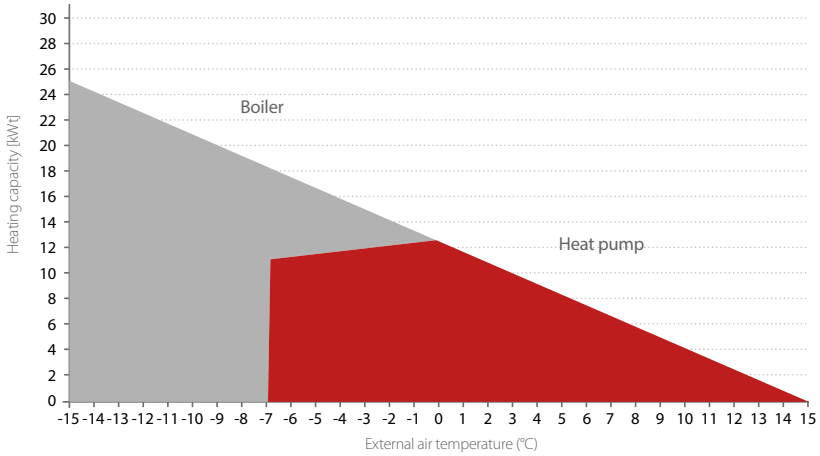
Heat pump and condensing boiler with integrated hot domestic water storage

It is the hybrid heat pump ideal for houses with high energy requirements. The indoor unit is equipped with a modulating condensing boiler for integration both with the plant and with the domestic hot water. It is possible to supply radiators even with -20 °C external air temperature.

INTEGRATION BOILER



SUBSTITUTION BOILER



IDEAL FOR HIGH AND LOW TEMPERATURE SYSTEMS

HEAT PUMP AND BOILER

The system control favours the use of the heat pump, exploiting the maximum quantity of renewable energy.
If the required load is higher than the power generated by the heat pump, it activates the condensing boiler.
The system can also be programmed so that the boiler takes the place of the heat pump taking into account the two energy costs.

€-SWITCH

The €-Switch function, which can be selected directly from the unit's panel, implements an optimisation algorithm that allows for calculating - in any operating condition - the resource capable of satisfying the heating demand in the most cost-convenient way.
To use the €-Switch function, simply enter the electricity cost for each kWh and the methane gas cost for each m³, as indicated in the energy provider's bill, and specify the prevailing type of terminals present in the building (radiant panel, fan coil unit, radiator).

SPHERA-T COMFORT

SRHM-TC + MDAN-XMi 6.1÷8.1

technical data

Size – SRHM-TC + MDAN-XMi		6.1	7.1	8.1
Unit for radiant panels				
A7/W35				
▶ Heating capacity	kW	12,2	14,2	15,8
Total power input	kW	2,54	2,91	3,28
COP (EN 14511:2018)	-	4,79	4,87	4,81
A2/W35				
▶ Heating capacity	kW	9,13	10,8	11,6
Total power input	kW	2,60	3,34	3,55
COP (EN 14511:2018)	-	3,52	3,23	3,26
A-7/W35				
▶ Heating capacity	kW	9,76	11,3	12,1
Total power input	kW	3,32	3,90	4,14
COP (EN 14511:2018)	-	2,94	2,90	2,91
A35/W18				
▶ Cooling capacity	kW	11,4	14,3	15,4
Total power input	kW	2,59	3,10	3,56
EER (EN 14511:2018)	-	4,40	4,63	4,33
Terminal units				
A7/W45				
▶ Heating capacity	kW	12,2	14,6	16,4
Total power input	kW	3,35	3,86	4,42
COP (EN 14511:2018)	-	3,65	3,79	3,72
A2/W45				
▶ Heating capacity	kW	9,16	11,3	11,7
Total power input	kW	3,32	3,99	4,30
COP (EN 14511:2018)	-	2,76	2,83	2,71
A-7/W45				
▶ Heating capacity	kW	9,31	11,1	11,3
Total power input	kW	4,25	4,94	5,24
COP (EN 14511:2018)	-	2,19	2,24	2,16
A35/W7				
▶ Cooling capacity	kW	11,3	14,2	15,5
Total power input	kW	4,25	5,14	5,71
EER (EN 14511:2018)	-	2,67	2,75	2,72
ESEER	-	4,32	4,07	4,02
Radiators				
A7/W55				
▶ Heating capacity	kW	10,3	13,1	14,8
Total power input	kW	3,86	4,40	5,37
COP (EN 14511:2018)	-	2,66	2,98	2,75
A2/W55				
▶ Heating capacity	kW	7,83	10,8	10,9
Total power input	kW	3,50	4,54	4,65
COP (EN 14511:2018)	-	2,24	2,38	2,35
A-7/W55				
▶ Heating capacity	kW	7,96	9,96	10,3
Total power input	kW	4,56	5,81	5,70
COP (EN 14511:2018)	-	1,74	1,71	1,81
Water flow-rate (User Side) (1)	l/s	0,56	0,66	0,74
Useful pump discharge head	kPa	54	49	42
Domestic hot water storage	l	280	280	280
Solar heat exchanger capacity	W/K	3186	3186	3186
Power supply	V		380-400/3/50	
Sound pressure level (1m) outdoor unit	dB(A)	54	55	55
Min inlet air temperature (W.B.)	°C	-20	-20	-20
Max. leaving water temperature	°C	60	60	60

(1) A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

Performances according to EN 14511:2018

A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W35 internal exchanger water 30/35°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W45 internal exchanger water 40/45°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W55 internal exchanger water 50/55°C; external air temperature -7°C D.B./ -8°C W.B.
A35/W18 internal exchanger water 23/18°C; external air temperature 35°C
A35/W7 internal exchanger water 12/7°C; external air temperature 35°C

Refrig. R-410A

ELFOControl³ EVO

Full Inverter DC

Two-section air-water reversible heat pump

ErP

Size – SRHM-TC + MDAN-XMi		6.1	7.1	8.1
ErP System Energy Class - AVERAGE Climate - W55	(1)	A++	A++	A++
ErP Space Heating Energy Class - AVERAGE Climate - W55	(2)	A++	A++	A++
ErP Domestic Hot Water Energy Class	(3)	A	A	A
ErP Domestic Hot Water Profile	(4)	XL	XL	XL

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

(1) Seasonal Space Heating Energy Efficiency Class of the package according to Commission delegated Regulation (EU) No 811/2013

(2) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

(3) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013

(4) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 811/2013. Class of the package with ELFOControl³ EVO

accessories

Size – SRHM-TC + MDAN-XMi	6.1	7.1	8.1
Basic configuration (230/1/50)	std	std	std
Basic configuration (400/3/50)	optional	optional	optional

EH246X 2-4 and 6 kW integration electric heater

SOLX Drain-back solar integration for domestic hot water

ACS280X Auxiliary domestic hot water storage

KCCEX External boiler connection kit

HIDTI5²BX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. White

HIDTI5²NX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Black

AMRX Rubber antivibration mounts

AL12X Power supply unit for HIDTi52 thermostats and HID-UR sensor

KIR2HX 2 zones: both at high temperature

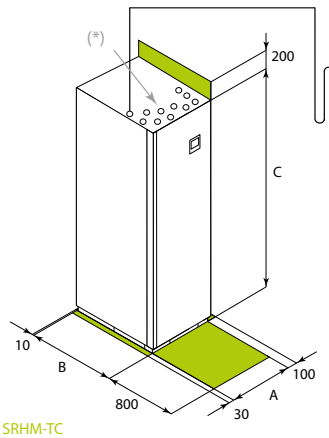
KIR2HLX 2 zones: high temperature + low temperature (mixed)

DTX Auxiliary condensate collection tray

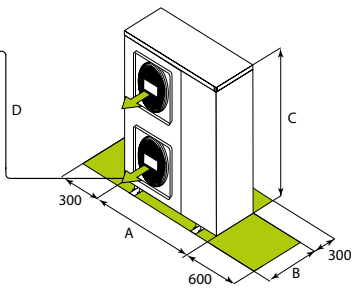
KVE8X 8 litres expansion tank kit

Accessories whose code ends with "X" are separately supplied.

dimensions



SRHM-TC



MDAN-XMi

ATTENTION!

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

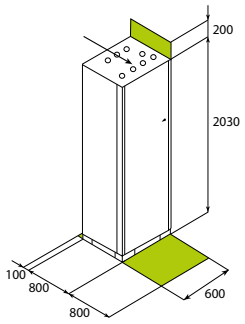
(*) Unit hydraulic and gas connections

Size – SRHM-TC		B
A - Length	mm	600
B - Width	mm	800
C - Height	mm	2020
Operating weight	kg	470

Size – MDAN-XMi		6.1	7.1	8.1
A - Length	mm	900	900	900
B - Width	mm	400	400	400
C - Height	mm	1327	1327	1327
D - Max length of cooling lines	m	50	50	50
D - Max difference of cooling lines	m	25	25	25
Operating weight	kg	109	109	109

OPTIONAL ACCESSORY

Default water connections with SPHERA



AUXILIARY DOMESTIC HOT WATER STORAGE

Optional accessory for installations with domestic hot water consumption

Capacity: 280-litres

SPHERA-T HYBRID

SRHM-TH + MDAN-XMi 2.1÷8.1

technical data

Size – SRHM-TH + MDAN-XMi		2.1	3.1	4.1	5.1	6.1	7.1	8.1
Unit for radiant panels								
A7/W35								
▶ Heating capacity	kW	4,23	6,33	8,09	9,69	12,2	14,2	15,8
Total power input	kW	0,81	1,31	1,77	2,11	2,54	2,91	3,28
COP (EN 14511:2018)	-	5,21	4,83	4,57	4,59	4,79	4,87	4,81
A2/W35								
▶ Heating capacity	kW	4,02	5,44	6,35	7,66	9,13	10,8	11,6
Total power input	kW	1,16	1,45	1,74	2,08	2,6	3,34	3,55
COP (EN 14511:2018)	-	3,46	3,75	3,65	3,68	3,52	3,23	3,26
A-7/W35								
▶ Heating capacity	kW	4,78	5,68	6,09	7,69	9,76	11,3	12,1
Total power input	kW	1,56	1,95	2,18	2,8	3,32	3,9	4,14
COP (EN 14511:2018)	-	3,06	2,91	2,79	2,75	2,94	2,9	2,91
A35/W18								
▶ Cooling capacity	kW	4,47	6,19	8,01	10,2	11,4	14,3	15,4
Total power input	kW	0,8	1,29	1,81	2,03	2,59	3,1	3,56
EER (EN 14511:2018)	-	5,58	4,8	4,43	5	4,4	4,63	4,33
Terminal units								
A7/W45								
▶ Heating capacity	kW	4,06	6	7,29	9,77	12,2	14,6	16,4
Total power input	kW	1,1	1,65	2,15	2,7	3,35	3,86	4,42
COP (EN 14511:2018)	-	3,69	3,64	3,39	3,62	3,65	3,79	3,72
A2/W45								
▶ Heating capacity	kW	4,04	5,52	6,74	7,3	9,16	11,3	11,7
Total power input	kW	1,32	1,83	2,39	2,57	3,32	3,99	4,3
COP (EN 14511:2018)	-	3,07	3,02	2,82	2,83	2,76	2,83	2,71
A-7/W45								
▶ Heating capacity	kW	3,98	4,96	5,54	8,69	9,31	11,1	11,3
Total power input	kW	1,69	2,08	2,51	3,84	4,25	4,94	5,24
COP (EN 14511:2018)	-	2,36	2,38	2,2	2,26	2,19	2,24	2,16
A35/W7								
▶ Cooling capacity	kW	4,34	6,24	7,57	9,52	11,3	14,2	15,5
Total power input	kW	1,27	2,05	2,73	3,2	4,25	5,14	5,71
EER (EN 14511:2018)	-	3,42	3,05	2,77	2,97	2,67	2,75	2,72
ESEER	-	4,82	4,58	3,85	3,57	4,32	4,07	4,02
Radiators								
A7/W55								
▶ Heating capacity	kW	3,96	5,43	6,66	8,87	10,3	13,1	14,8
Total power input	kW	1,34	1,82	2,45	3,27	3,86	4,4	5,37
COP (EN 14511:2018)	-	2,94	2,99	2,72	2,72	2,66	2,98	2,75
A2/W55								
▶ Heating capacity	kW	3,52	4,97	6,4	7,84	7,83	10,8	10,9
Total power input	kW	1,43	1,99	2,72	3,49	3,5	4,54	4,65
COP (EN 14511:2018)	-	2,46	2,5	2,35	2,25	2,24	2,38	2,35
A-7/W55								
▶ Heating capacity	kW	3,15	4,49	5,09	7,85	7,96	9,96	10,3
Total power input	kW	1,8	2,39	2,85	4,58	4,56	5,81	5,7
COP (EN 14511:2018)	-	1,75	1,88	1,79	1,71	1,74	1,71	1,81
Type of gas (1)					G20-G30-G31			
Nominal heat flow-rate	kW	24	24	24	24	24	24	24
Minimal heat flow-rate	kW	2,9						
Water flow-rate (User Side) (2)	l/s	0,2	0,3	0,39	0,47	0,56	0,66	0,74
Useful pump discharge head	kPa	50	50	47	42	54	49	42
Domestic hot water storage	l	280	280	280	280	280	280	280
Solar heat exchanger capacity	W/K	2703	2703	2703	3186	3186	3186	3186
Power supply	V	230/1/50	230/1/50	230/1/50	230/1/50	380-400/3/50	380-400/3/50	380-400/3/50
Sound pressure level (1m) outdoor unit	dB(A)	46	48	50	52	54	55	55
Min inlet air temperature (W.B.)	°C	-20	-20	-20	-20	-20	-20	-20
Max. leaving water temperature	°C	60	60	60	60	60	60	60

(1) G20: Methane gas 100%, standard; G30 / G31: LPG gas, a separate accessory is supplied for converting the boiler to LPG

(2) A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

Performances according to EN 14511:2018

A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W35 internal exchanger water 30/35°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W45 internal exchanger water 40/45°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W55 internal exchanger water 50/55°C; external air temperature -7°C D.B./ -8°C W.B.
A35/W18 internal exchanger water 23/18°C; external air temperature 35°C
A35/W7 internal exchanger water 12/7°C; external air temperature 35°CC

Refrig. R-410A

ELFOControl³ EVO

Full Inverter DC

Two-section air-water reversible heat pump with integration boiler

ErP

Size – SRHM-TH + MDAN-XMi		2.1	3.1	4.1	5.1	6.1	7.1	8.1
ErP Classe energetica di Sistema - Clima MEDIO - W55	(1)	A++	A++	A++	A++	A++	A++	A++
ErP Space Heating Energy Class - AVERAGE Climate - W55	(2)	A++	A++	A++	A++	A++	A++	A++
ErP Domestic Hot Water Energy Class	(3)	A	A	A	A	A	A	A
ErP Domestic Hot Water Profile	(4)	XL	XL	XL	XL	XL	XL	XL

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

(1) Seasonal Space Heating Energy Efficiency Class of the package according to Commission delegated Regulation (EU) No 811/2013

(2) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

(3) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013

(4) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 811/2013. Class of the package with ELFOControl³ EVO

accessories

Size – SRHM-TH + MDAN-XMi	2.1	3.1	4.1	5.1	6.1	7.1	8.1
Basic configuration (230/1/50)	std	std	std	std	std	std	std
Basic configuration (400/3/50)	-	-	-	-	optional	optional	optional

SOLX Drain-back solar integration for domestic hot water

ACS280X Auxiliary domestic hot water storage

KTCGPLX Conversion kit boiler from methane to LPG

HIDTI5²BX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. White

HIDTI5²NX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Black

AMRX Rubber antivibration mounts

AL12X Power supply unit for HIDTi52 thermostats and HID-UR sensor

KAS80X Suction and exhaust fittings 80 mm diameter

KSDFX Twin Pipe Flue System

KIR2HX 2 zones: external kit, both at high temperature

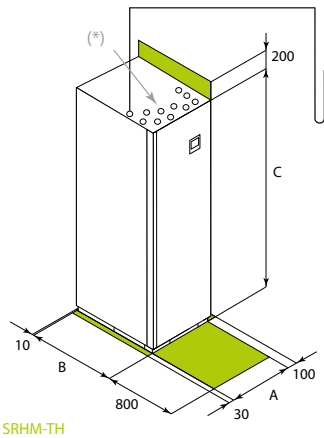
KIR2HLX 2 zones: external kit, high temperature + low temperature (mixed)

DTX Auxiliary condensate collection tray

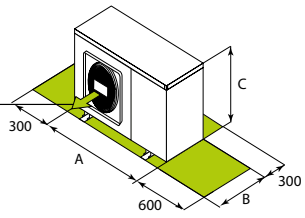
KVE8X 8 litres expansion tank kit

Accessories whose code ends with "X" are separately supplied.

dimensions



SRHM-TH



MDAN-XMi

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

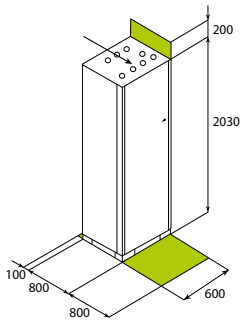
(*) Unit hydraulic and gas connections

Size – SRHM-TH		A	B
A - Length	mm	600	600
B - Width	mm	800	800
C - Height	mm	2020	2020
Operating weight	kg	480	500

Size – MDAN-XMi		2.1	3.1	4.1	5.1	6.1	7.1	8.1
A - Length	mm	960	960	1075	900	900	900	900
B - Width	mm	380	380	395	400	400	400	400
C - Height	mm	860	860	965	1327	1327	1327	1327
D - Max length of cooling lines	m	20	20	30	50	50	50	50
D - Max difference of cooling lines	m	15	15	15	25	25	25	25
Operating weight	kg	60	60	76	109	109	109	109

OPTIONAL ACCESSORY

Default water connections with SPHERA



AUXILIARY DOMESTIC HOT WATER STORAGE

Optional accessory for installations with domestic hot water consumption

Capacity: 280-litres

SPHERA-i

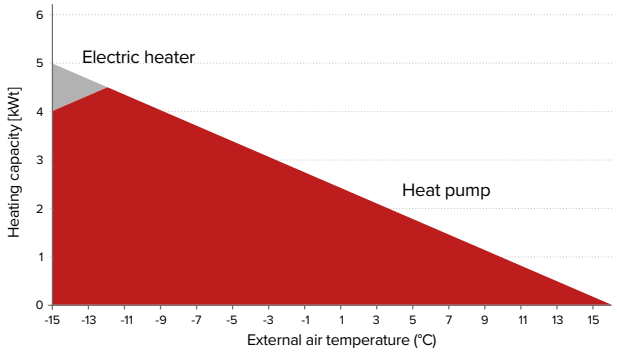
Uncased heat pump with integrated hot domestic storage

SPHERA-i is a configurable system with several modules which allow maximum flexibility of installation choices and the integration of different energy sources: solar, heat pump, fuel.

Through the composition of the different modules it is possible to create the following BASIC versions of the product:

SPHERA-i Comfort

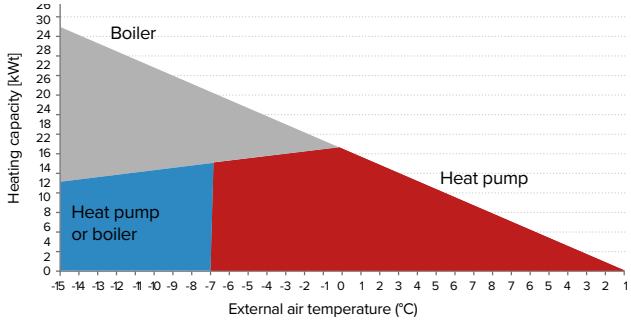
Heat pump with integrated hot domestic storage



Heat pump can satisfy completely the plant load. It is possible to use an optional electric heater in integration that allows a better sizing and operation of the heat pump without compromising the seasonal efficiency.

SPHERA-i Hybrid

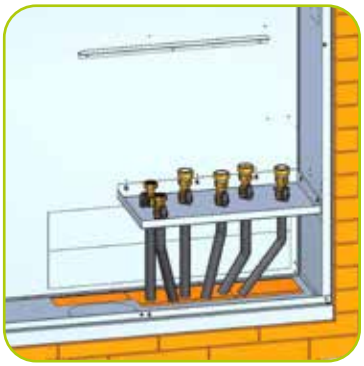
Heat pump with condensing boiler for integration with integrated hot domestic storage



The control allows to manage the integrated boiler in SPHERA-i either as a integration or a replacement of the heat pump, according to system type, heating requirements and energy costs. The integrated condensing boiler is modulating.

SEQUENCE OF INSTALLATION

Positioning of the recessed cabinet in the wall



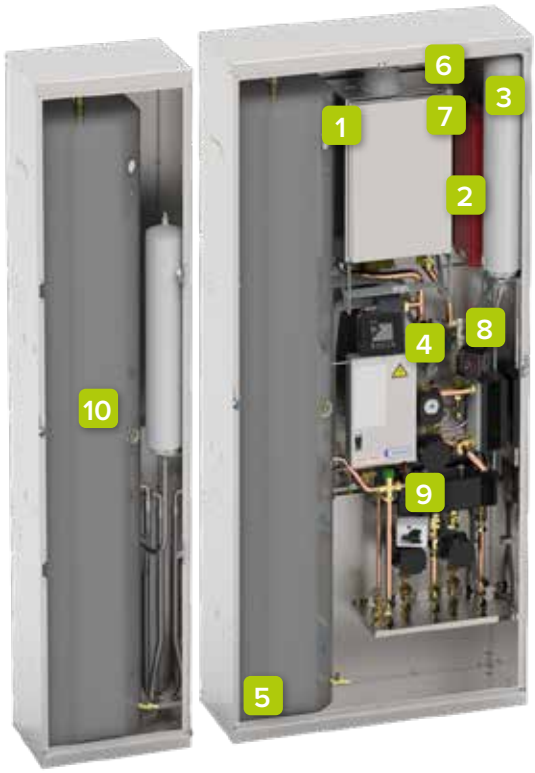
Connection of the plant to the attacks

Installation and connection of the selected modules according to the choices

PRODUCTS

MODULARITY

1. 150-L DHW STORAGE TANK
2. SYSTEM EXPANSION TANK
3. DHW EXPANSION TANK
4. HYDRONIC MODULE WITH ELECTRICAL PANEL
5. UNCASED CABINET WITH JIGS FOR FITTINGS AND CONDENSATE COLLECTION TRAY



6. **CCGIX** (*) (Optional)
   Integration condensing boiler

7. **KCVEX** (*) (Optional)
   Solar circulation kit

8. **EH246X** (*) (Optional)
   2-4 kW system integration electric heater as an alternative to the boiler (CCGIX)

9. **KIR2HX** (Optional)
   Circuit breaker with 2 zones, both at high temperature

9. **KIR2HLX** (Optional)
   Circuit breaker with 2 zones: high temperature and low temperature (mixed)

10. **ADI150X+ACS150X+KC150X** (Optional)
    150-litre recessed storage unit with additional storage tank

(*) Use CCGIX as an alternative to EH246X.
Use CCGIX as an alternative to KCVEX.

SPHERA-i enables the realization of a system with the full integration of the hydraulic components inside the uncased unit built in just 35cm depth.
The different modules are pre-assembled and tested. They can be installed in different moments according to the building realization timing. Each module is designed to simplify and speed up installation time.

SIMPLIFIED CONTROL

SPHERA-i

SRHM-IC + MDAN-XMi 2.1÷4.1

technical data

Size – SRHM-IC + MDAN-XMi			2.1	3.1	4.1
Unit for radiant panels					
A7/W35					
▶ Heating capacity		kW	4,23	6,33	8,09
Total power input		kW	0,81	1,31	1,77
COP (EN 14511:2018)		-	5,21	4,83	4,57
A2/W35					
▶ Heating capacity		kW	4,02	5,44	6,35
Total power input		kW	1,16	1,45	1,74
COP (EN 14511:2018)		-	3,46	3,75	3,65
A-7/W35					
▶ Heating capacity		kW	4,78	5,68	6,09
Total power input		kW	1,56	1,95	2,18
COP (EN 14511:2018)		-	3,06	2,91	2,79
A35/W18					
▶ Cooling capacity		kW	4,47	6,19	8,01
Total power input		kW	0,80	1,29	1,81
EER (EN 14511:2018)		-	5,58	4,80	4,43
Terminal units					
A7/W45			4,06	6,00	7,29
▶ Heating capacity		kW	1,10	1,65	2,15
Total power input		kW	3,69	3,64	3,39
COP (EN 14511:2018)		-			
A2/W45			4,04	5,52	6,74
▶ Heating capacity		kW	1,32	1,83	2,39
Total power input		kW	3,07	3,02	2,82
COP (EN 14511:2018)		-			
A-7/W45			3,98	4,96	5,54
▶ Heating capacity		kW	1,69	2,08	2,51
Total power input		kW	2,36	2,38	2,20
COP (EN 14511:2018)		-			
A35/W7			4,34	6,24	7,57
▶ Cooling capacity		kW	1,27	2,05	2,73
Total power input		kW	3,42	3,05	2,77
EER (EN 14511:2018)		-	4,82	4,58	3,85
ESEER		-			
Radiators					
A7/W55					
▶ Heating capacity		kW	3,96	5,43	6,66
Total power input		kW	1,34	1,82	2,45
COP (EN 14511:2018)		-	2,94	2,99	2,72
A2/W55					
▶ Heating capacity		kW	3,52	4,97	6,40
Total power input		kW	1,43	1,99	2,72
COP (EN 14511:2018)		-	2,46	2,50	2,35
A-7/W55					
▶ Heating capacity		kW	3,15	4,49	5,09
Total power input		kW	1,80	2,39	2,85
COP (EN 14511:2018)		-	1,75	1,88	1,79
Type of gas	(1)	-		G20-G30-G31	
Nominal heat flow-rate		kW		24	
Minimal heat flow-rate		kW		2,9	
Water flow-rate (User Side	(2)	l/s	0,20	0,30	0,39
Useful pump discharge head	(2)	kPa	50	50	47
Domestic hot water storage		l	150	150	150
Standard power supply		V	230/1/50	230/1/50	230/1/50
Sound pressure level (1m) outdoor unit		dB(A)	46	48	50
Min inlet air temperature (W.B.)		°C	-20	-20	-20
Max. leaving water temperature		°C	60	60	60

(1) G20: Methane gas 100%, standard; G30 / G31: LPG gas, a separate accessory is supplied for converting the boiler to LPG

(2) A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

Performances according to EN 14511:2018
A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W35 internal exchanger water 30/35°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W45 internal exchanger water 40/45°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W55 internal exchanger water 50/55°C; external air temperature -7°C D.B./ -8°C W.B.
A35/W18 internal exchanger water 23/18°C; external air temperature 35°C
A35/W7 internal exchanger water 12/7°C; external air temperature 35°C

Refrig. R-410A

ELFOControl³ EVO

Full Inverter DC

Two-section air-water reversible heat pump with integration boiler

ErP

Size – SRHM-IC + MDAN-XMi		2.1	3.1	4.1
ErP System Energy Class - AVERAGE Climate - W55	(1)	A++	A++	A++
ErP Space Heating Energy Class - AVERAGE Climate - W55	(2)	A++	A++	A++
ErP Domestic Hot Water Energy Class	(3)	A	A	A
ErP Domestic Hot Water Profile	(4)	L	L	L

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

(1) Seasonal Space Heating Energy Efficiency Class of the package according to Commission delegated Regulation (EU) No 811/2013

(2) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

(3) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013

(4) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 811/2013. Class of the package with ELFOControl³ EVO

accessories

SIZE – SRHM-IC + MDAN-XMi	2.1	3.1	4.1
Basic configuration (230/1/50)	std	std	std

ADIX Recessed storage unit with jigs for fittings

ACS150X 150-litre domestic hot water storage tank

CCGIX Integration condensing boiler 3-24 kW

HIDTI5²BX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. White

HIDTI5²NX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Black

AMRX Rubber antivibration mounts

KTCGPLX Conversion kit boiler from methane to LPG

AL12X Power supply unit for HIDTi52 thermostats and HID-UR sensor

ADI150X 150-litre recessed storage unit for additional storage tank

KC150X 150-litre DHS additional storage tank connection kit

KAS80X Suction and exhaust fittings 80 mm diameter

KSDFX Twin Pipe Flue System

EH246X 2-4 and 6 kW integration electric heater

KIR2HX 2 zones: both at high temperature

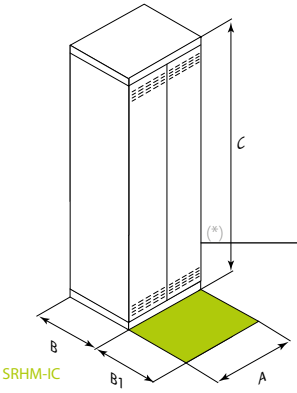
KIR2HLX 2 zones: high temperature + low temperature (mixed)

KCVEX Circulation kit : circulation group, control unit, expansion tank

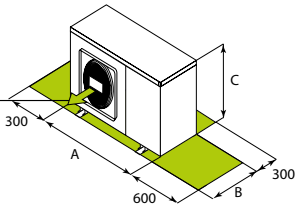
DTX Auxiliary condensate collection tray

Accessories whose code ends with "X" are separately supplied.

dimensions



SRHM-IC



MDAN-XMi

ATTENTION!

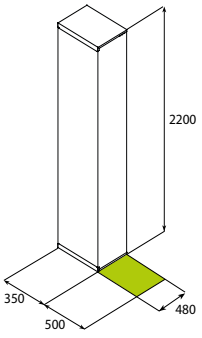
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

(*) Unit hydraulic and gas connections

Size – SRHM-IC		A
A - Length	mm	950
B - Width	mm	350
C - Height	mm	2200
B1	mm	500
Operating weight	kg	290

Size – MDAN-XMi		2.1	3.1	4.1
A - Length	mm	960	960	1075
B - Width	mm	380	380	395
C - Height	mm	860	860	965
D - Max length of cooling lines	m	20	20	30
D - Max difference of cooling lines	m	15	15	15
Operating weight	kg	60	60	76

OPTIONAL ACCESSORY



AUXILIARY DOMESTIC HOT WATER STORAGE

Optional accessory for installations with domestic hot water consumption

Capacity: 150-litres

PRODUCTS

SPHERA-B Comfort

Split heat pump compact

It is the high efficiency heat pump, which offers high seasonal efficiency thanks to the possibility of modulating the capacity according to the actual energy needs.

- IT SATISFIES 100% NEEDS WITH THE HEAT PUMP
- QUIET AND EFFICIENT EXTERNAL UNIT WITH DC INVERTER COMPRESSOR
- MAXIMUM SEASONAL EFFICIENCY THANKS TO THE REGULATION, WHICH MANAGES ALL THE HEAT PUMP FUNCTIONS
- USER FRIENDLY MENU FOR A SIMPLE PLANT REGULATION

IDEAL FOR LOW-TEMPERATURE SYSTEM

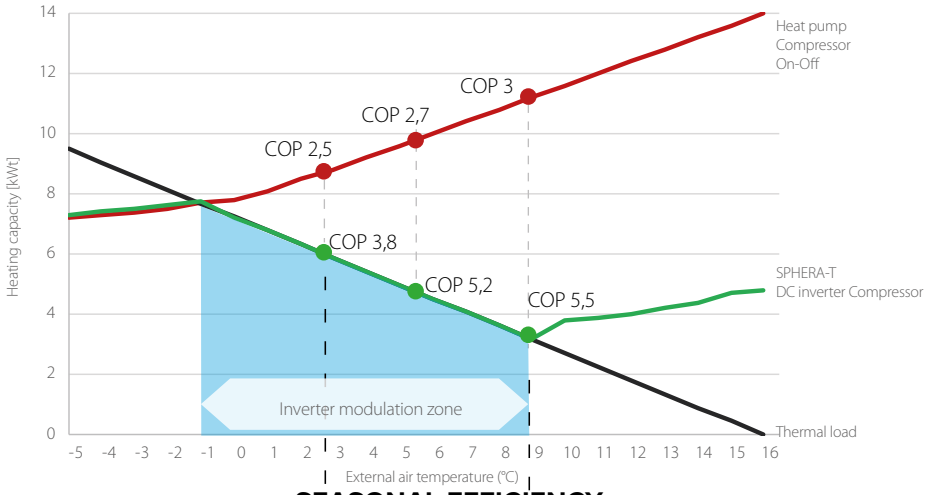
SPHERA B represents an excellent alternative for installations where it is not possible to install the tower or built-in version.

Combined with AQUA, SPHERA B provides the advantage of a system that provides simultaneous heating or cooling and domestic hot water production.

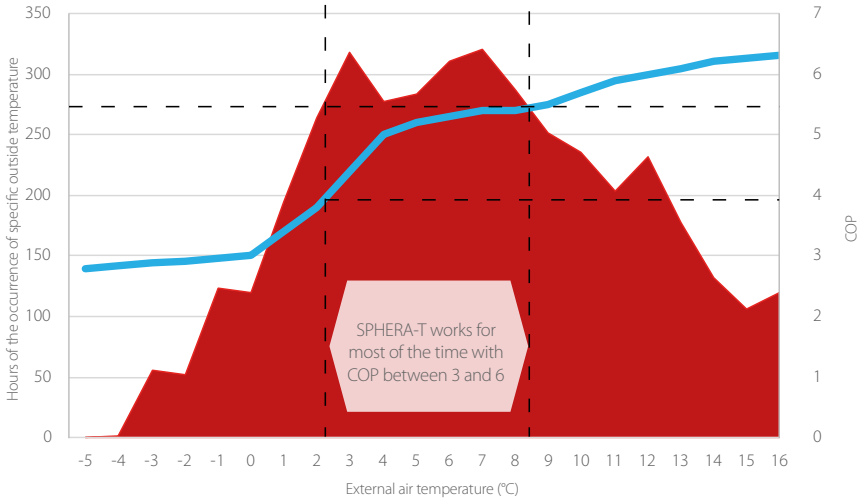
IDEAL WITH AQUA

COMFORT AND SEASONAL EFFICIENCY

CAPACITY MODULATION



SEASONAL EFFICIENCY



Since the maximum power generated by the system is required only for short periods of time, it is fundamental to dispose of the maximum efficiency in the conditions of part-load. This is the only way to actually reduce overall yearly consumptions.
Thanks to automatic capacity modulation, the direct current inverter compressor supplies only the thermal energy that is needed, thereby avoiding wasting energy and increasing the energy efficiency so that the exchange surfaces are larger in relation to the output capacity.

SPHERA-B Comfort

SRHM-BC + MDAN-XMi 2.1÷8.1

technical data

Size – SRHM-BC + MDAN-XMi			2.1	3.1	4.1	5.1	6.1	7.1	8.1
Unit for radiant panels									
A7/W35									
▶ Heating capacity		kW	4,23	6,33	8,09	9,69	12,2	14,2	15,8
Total power input		kW	0,81	1,31	1,77	2,11	2,54	2,91	3,28
COP (EN 14511:2018)		-	5,21	4,83	4,57	4,59	4,79	4,87	4,81
A2/W35									
▶ Heating capacity		kW	4,02	5,44	6,35	7,66	9,13	10,8	11,6
Total power input		kW	1,16	1,45	1,74	2,08	2,6	3,34	3,55
COP (EN 14511:2018)		-	3,46	3,75	3,65	3,68	3,52	3,23	3,26
A-7/W35									
▶ Heating capacity		kW	4,78	5,68	6,09	7,69	9,76	11,3	12,1
Total power input		kW	1,56	1,95	2,18	2,8	3,32	3,9	4,14
COP (EN 14511:2018)		-	3,06	2,91	2,79	2,75	2,94	2,9	2,91
A35/W18									
▶ Cooling capacity		kW	4,47	6,19	8,01	10,2	11,4	14,3	15,4
Total power input		kW	0,8	1,29	1,81	2,03	2,59	3,1	3,56
EER (EN 14511:2018)		-	5,58	4,8	4,43	5	4,4	4,63	4,33
Terminal units									
A7/W45									
▶ Heating capacity		kW	4,06	6	7,29	9,77	12,2	14,6	16,4
Total power input		kW	1,1	1,65	2,15	2,7	3,35	3,86	4,42
COP (EN 14511:2018)		-	3,69	3,64	3,39	3,62	3,65	3,79	3,72
A2/W45									
▶ Heating capacity		kW	4,04	5,52	6,74	7,3	9,16	11,3	11,7
Total power input		kW	1,32	1,83	2,39	2,57	3,32	3,99	4,3
COP (EN 14511:2018)		-	3,07	3,02	2,82	2,83	2,76	2,83	2,71
A-7/W45									
▶ Heating capacity		kW	3,98	4,96	5,54	8,69	9,31	11,1	11,3
Total power input		kW	1,69	2,08	2,51	3,84	4,25	4,94	5,24
COP (EN 14511:2018)		-	2,36	2,38	2,2	2,26	2,19	2,24	2,16
A35/W7									
▶ Cooling capacity		kW	4,34	6,24	7,57	9,52	11,3	14,2	15,5
Total power input		kW	1,27	2,05	2,73	3,2	4,25	5,14	5,71
EER (EN 14511:2018)		-	3,42	3,05	2,77	2,97	2,67	2,75	2,72
ESEER		-	4,82	4,58	3,85	3,57	4,32	4,07	4,02
Radiators									
A7/W55									
▶ Heating capacity		kW	3,96	5,43	6,66	8,87	10,3	13,1	14,8
Total power input		kW	1,34	1,82	2,45	3,27	3,86	4,4	5,37
COP (EN 14511:2018)		-	2,94	2,99	2,72	2,72	2,66	2,98	2,75
A2/W55									
▶ Heating capacity		kW	3,52	4,97	6,4	7,84	7,83	10,8	10,9
Total power input		kW	1,43	1,99	2,72	3,49	3,5	4,54	4,65
COP (EN 14511:2018)		-	2,46	2,5	2,35	2,25	2,24	2,38	2,35
A-7/W55									
▶ Heating capacity		kW	3,15	4,49	5,09	7,85	7,96	9,96	10,3
Total power input		kW	1,8	2,39	2,85	4,58	4,56	5,81	5,7
COP (EN 14511:2018)		-	1,75	1,88	1,79	1,71	1,74	1,71	1,81
Water flow-rate (User Side)	(1)	l/s	0,2	0,3	0,39	0,47	0,56	0,66	0,74
Useful pump discharge head		kPa	50	50	47	42	54	49	42
Power supply		V	230/1/50	230/1/50	230/1/50	230/1/50	380-400/3/50	380-400/3/50	380-400/3/50
Sound pressure level (1m) outdoor unit		dB(A)	46	48	50	52	54	55	55
Min inlet air temperature (W.B.)		°C	-20	-20	-20	-20	-20	-20	-20
Max. leaving water temperature		°C	60	60	60	60	60	60	60

(1) A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

Performances according to EN 14511:2018
A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W35 internal exchanger water 30/35°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W45 internal exchanger water 40/45°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W55 internal exchanger water 50/55°C; external air temperature -7°C D.B./ -8°C W.B.
A35/W18 internal exchanger water 23/18°C; external air temperature 35°C
A35/W7 internal exchanger water 12/7°C; external air temperature 35°C

Refrig. R-410A

ELFOControl³ EVO

Full Inverter DC

Two-section air-water reversible heat pump

ErP

Size – SRHM-BC + MDAN-XMi		2.1	3.1	4.1	5.1	6.1	7.1	8.1
ErP System Energy Class - AVERAGE Climate - W55	(1)	A++	A++	A++	A++	A++	A++	A++
ErP Space Heating Energy Class - AVERAGE Climate - W55	(2)	A++	A++	A++	A++	A++	A++	A++

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

(1) Seasonal Space Heating Energy Efficiency Class of the package according to Commission delegated Regulation (EU) No 811/2013

(2) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

accessories

Size – SRHM-BC + MDAN-XMi	2.1	3.1	4.1	5.1	6.1	7.1	8.1
Basic configuration (230/1/50)	std	std	std	std	std	std	std
Basic configuration (400/3/50)	-	-	-	-	optional	optional	optional

EH246X 2-4 and 6 kW integration electric heater

ACS300X 300-litre domestic hot water storage

ACS500X 500-litre domestic hot water storage

ACS3SX 300-litre domestic hot water storage with coil for solar applications

ACS5SX 500-litre domestic hot water storage with coil for solar applications

HIDTI5²BX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. White

HIDTI5²NX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Black

AMRX Rubber antivibration mounts

AL12X Power supply unit for HIDTi52 thermostats and HID-UR sensor

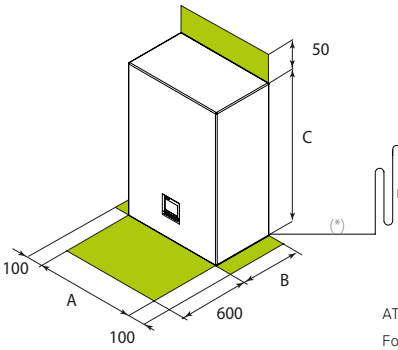
KIRE2HX 2 zones: external kit, both at high temperature

KIRE2HLX 2 zones: external kit, high temperature + low temperature (mixed)

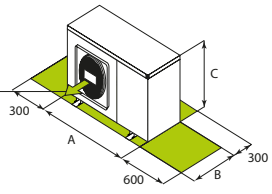
DTX Auxiliary condensate collection tray

Accessories whose code ends with "X" are separately supplied.

dimensions



SRHM-BC



MDAN-XMi

ATTENTION!

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

(*) Unit hydraulic and gas connections

Size – SRHM-BC		A	B
A - Length	mm	462	462
B - Width	mm	316	316
C - Height	mm	698	698
Operating weight	kg	48	50

Size – MDAN-XMi		2.1	3.1	4.1	5.1	6.1	7.1	8.1
A - Length	mm	960	960	1075	900	900	900	900
B - Width	mm	380	380	395	400	400	400	400
C - Height	mm	860	860	965	1327	1327	1327	1327
D - Max length of cooling lines	m	20	20	30	50	50	50	50
D - Max difference of cooling lines	m	15	15	15	25	25	25	25
Operating weight	kg	60	60	76	109	109	109	109

ELFOEnergy Extended Inverter

WSAN-XIN 81÷171

technical data

Size – WSAN-XIN (Excellence)			81	91	101	121	131	141	151	161	171
Unit for radiant panels											
A7/W35											
▶ Heating capacity		kW	16,6	18,5	19,7	23,7	28,8	32,9	37,2	43,9	50,2
Total power input		kW	4,07	4,68	5,04	5,74	7,06	8,33	9,79	11,6	13,4
COP (EN 14511:2018)		-	4,08	3,95	3,91	4,13	4,08	3,95	3,80	3,80	3,74
A2/W35											
▶ Heating capacity		kW	13,3	14,6	16,4	19,8	22,7	26,1	29,5	34,8	39,8
Total power input		kW	4,04	4,65	5,21	5,93	6,92	8,16	9,58	11,3	13,1
COP (EN 14511:2018)		-	3,29	3,14	3,15	3,34	3,28	3,20	3,08	3,08	3,04
A-7/W35											
▶ Heating capacity		kW	10,6	11,9	12,9	14,5	17,6	20,4	23,1	27,2	31,2
Total power input		kW	4	4,61	5,02	5,60	6,74	7,85	9,17	10,9	12,5
COP (EN 14511:2018)		-	2,65	2,58	2,57	2,59	2,61	2,60	2,52	2,50	2,49
A35/W18											
▶ Cooling capacity		kW	15,9	17,6	19,4	25,4	30,8	35,0	39,8	45,4	50,9
Total power input		kW	4,15	4,61	5,32	6,51	8,35	8,95	10,6	11,9	13,8
EER (EN 14511:2018)		-	3,83	3,82	3,65	3,90	3,69	3,91	3,77	3,82	3,68
Terminal units											
A7/W45											
▶ Heating capacity		kW	16,2	18,6	20,5	25,8	27,2	31,9	36,7	43,0	49,3
Total power input		kW	5,05	5,92	7,00	8,04	8,58	9,88	11,5	13,6	15,7
COP (EN 14511:2018)		-	3,21	3,14	2,93	3,21	3,17	3,23	3,20	3,17	3,14
A2/W45											
▶ Heating capacity		kW	13,3	14,9	16,3	21,0	21,6	25,4	29,3	34,4	39,5
Total power input		kW	4,98	5,82	6,88	7,92	8,44	9,69	11,3	13,3	15,4
COP (EN 14511:2018)		-	2,67	2,56	2,37	2,65	2,56	2,62	2,60	2,58	2,56
A-7/W45											
▶ Heating capacity		kW	10,4	11,9	13,3	16,0	17,0	20,2	23,3	27,4	31,6
Total power input		kW	4,86	5,67	6,68	7,69	8,21	9,44	10,9	13,0	14,9
COP (EN 14511:2018)		-	2,14	2,10	1,99	2,08	2,07	2,14	2,13	2,11	2,12
A35/W7											
▶ Cooling capacity		kW	15,4	16,8	19,4	24,1	28,2	32,5	38,2	43,6	49,2
Total power input		kW	5,52	6,06	8,15	9,41	10,3	12,2	14,4	16,2	19,1
EER (EN 14511:2018)		-	2,79	2,77	2,38	2,56	2,74	2,67	2,66	2,69	2,58
ESEER		-	5,01	5,14	4,70	5,13	4,14	4,00	3,69	3,66	3,55
Radiators											
A7/W55											
▶ Heating capacity		kW	15,2	17,7	19,9	24,0	25,0	30,3	34,2	40,1	46,7
Total power input		kW	6,18	7,25	8,61	10,2	10,5	11,9	13,6	16,1	18,5
COP (EN 14511:2018)		-	2,46	2,44	2,31	2,35	2,39	2,55	2,51	2,49	2,52
A2/W55											
▶ Heating capacity		kW	12,2	14,4	16,0	19,5	20,0	24,5	27,6	32,2	37,5
Total power input		kW	6,1	7,20	8,51	10,1	10,3	11,8	13,5	15,9	18,3
COP (EN 14511:2018)		-	2	2,00	1,88	1,94	1,94	2,08	2,05	2,02	2,05
A-7/W55											
▶ Heating capacity		kW	9,9	11,6	13,1	15,4	16,1	-	-	-	-
Total power input		kW	5,96	6,99	8,24	9,81	10,1	-	-	-	-
COP (EN 14511:2018)		-	1,66	1,66	1,59	1,57	1,60	-	-	-	-
Water flow-rate (User Side)	(1)	l/s	0,79	0,88	0,94	1,13	1,38	1,57	1,78	2,10	2,40
Useful pump discharge head	(1)	kPa	63	60	58	75	116	121	110	96	76
Standard power supply		V	400/3/50+N								
Sound pressure level (1m) outdoor unit		dB(A)	56	56	57	55	63	69	70	73	73
Min inlet air temperature (W.B.)		°C	-20	-20	-20	-20	-20	-20	-20	-20	-20
Max. leaving water temperature		°C	60	60	60	60	60	60	60	60	60

(1) A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.

Performances according to EN 14511:2018
A7/W35 internal exchanger water 30/35°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W35 internal exchanger water 30/35°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W35 internal exchanger water 30/35°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W45 internal exchanger water 40/45°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W45 internal exchanger water 40/45°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W45 internal exchanger water 40/45°C; external air temperature -7°C D.B./ -8°C W.B.
A7/W55 internal exchanger water 50/55°C; external air temperature 7°C D.B./ 6°C W.B.
A2/W55 internal exchanger water 50/55°C; external air temperature 2°C D.B./ 1,1°C W.B.
A-7/W55 internal exchanger water 50/55°C; external air temperature -7°C D.B./ -8°C W.B.
A35/W18 internal exchanger water 23/18°C; external air temperature 35°C
A35/W7 internal exchanger water 12/7°C; external air temperature 35°C

Refrig. R-410A

ELFOControl³ EVO

Full Inverter DC

Air cooled Inverter heat pump for outdoor installation

ErP

Size – WSAN-XIN (EXCELLENCE)		81	91	101	121	131	141	151	161	171
ErP System Energy Class - AVERAGE Climate - W35	(1)	A++	A+	A+	A++	A+	A+	A+	A+	A+
ErP System Energy Class - AVERAGE Climate - W55	(1)	A++	A++	A+	A++	A+	-	-	-	-

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

(1) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

accessories

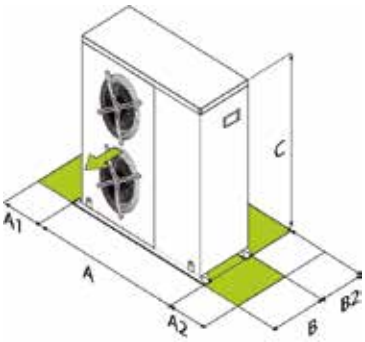
SIZE – WSAN-XIN	81	91	101	121	131	141	151	161	171
Basic configuration (400/3/50) Excellence	std	std	std	std	std	std	std	std	std
Basic configuration (400/3/50) Premium	std	std	std	std	std	std	-	-	-

For Premium (PRM) version details, refer to the relative Technical Bulletin.

HEDIF	Diffuser for high efficiency axial fan (only for Excellence)
ACS500X	500-litre domestic hot water storage tank
ACS5SX	500-litre domestic hot water storage tank with solar coil
3DHWX	Three-way valve for domestic hot water
-	User side hydronic assembly: not required (version Excellence)
-	User side hydronic assembly: not required (version Premium)
KSAX	100-litre circuit breaker
KTFLX	Hose kit for connection to the chiller/heat pump.
CMACSX	Domestic hot water module
CMSC2X	Serial communication module with RS485 serial converter kit
RCTX	Remote control
AMRX	Rubber antivibration mounts
PGFCX	Finned coil protection grill (version Excellence)
PGFCX	Finned coil protection grill (version Premium)
KG4UPX	Management kit up to 4 units in parallel by the two set point available for each unit

Accessories whose code ends with "X" are separately supplied.

dimensions



CAUTION!

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

Size – WSAN-XIN (EXC)		81	91	101	121	131	141	151	161	171
A - Length	mm	1731	1731	1731	1731	1341	1341	1341	1341	1341
B - Width	mm	724	724	724	724	1159	1159	1159	1146	1146
C - Height	mm	1137	1137	1137	1517	1520	1520	1520	1770	1770
A1	mm	400	400	400	400	1000	1000	1000	1000	1000
A2	mm	600	600	600	600	1000	1000	1000	1000	1000
B2	mm	400	400	400	400	1000	1000	1000	1000	1000
Operating weight	kg	240	240	240	310	300	310	330	400	400

Size – WSAN-XIN (PRM)		81	91	101	121	131	141
A - Length	mm	1731	1731	1731	1731	1731	1731
B - Width	mm	724	724	724	724	724	724
C - Height	mm	1137	1137	1137	1517	1517	1517
A1	mm	400	400	400	400	400	400
A2	mm	600	600	600	600	600	600
B2	mm	400	400	400	400	400	400
Operating weight	kg	240	240	240	310	310	310

Version:
PRM Premium
EXC Excellence

NEW PRODUCT

ELFOEnergy Edge EVO

WSAN-YMi 21÷141

technical data

SIZE – WSAN-YMi (230/1/50)			21	31	41	61	71	81
▶ Cooling capacity (EN14511:2018)	(1)	kW	4,85	6,3	7,95	10,9	12,9	13,8
Total power input (EN14511:2018)	(1)	kW	1,63	2,27	3,15	3,74	4,64	5,21
EER (EN 14511:2018)	(1)	-	2,98	2,77	2,53	2,92	2,78	2,65
SEER	(4)	-	4,71	4,99	4,92	4,85	4,73	4,54
▶ Heating capacity (EN14511:2018)	(2)	kW	4,8	6,7	8,6	12,4	14,1	16,2
Total power input (EN14511:2018)	(2)	kW	1,33	1,88	2,5	3,52	4,06	4,72
COP (EN14511:2018)	(2)	-	3,6	3,57	3,44	3,53	3,47	3,43
Water flow-rate (User Side)		l/s	0,23	0,3	0,35	0,52	0,62	0,66
Useful pump discharge head		kPa	59,9	50,5	37,9	79,7	66,6	61,1
Sound pressure level	(3)	dB(A)	49	52	55	54	55	56
Refrigeration circuits		-	1					
No. of compressor		-	1					
Type of compressor		-	Rotary Inverter DC					
Standard power supply		V	230/1/50					
Standard air flow		m³/h	3050	3050	3050	6150	6150	6150

SIZE – WSAN-YMi (400/3/50)			61	71	81	91 *	101 *	121 *	141 *
▶ Cooling capacity (EN14511:2018)	(1)	kW	10,9	12,9	13,8	16,2	20,5	25,4	29,4
Total power input (EN14511:2018)	(1)	kW	3,72	4,62	5,19	5,41	6,98	9,67	13
EER (EN 14511:2018)	(1)	-	2,93	2,8	2,66	3	2,93	2,63	2,25
SEER	(4)	-	4,85	4,73	4,54	-	-	-	-
▶ Heating capacity (EN14511:2018)	(2)	kW	12,4	14,1	16,2	18,2	22,1	26,2	30,3
Total power input (EN14511:2018)	(2)	kW	3,45	3,99	4,7	5,35	6,66	8,24	10,3
COP (EN14511:2018)	(2)	-	3,59	3,54	3,45	3,41	3,32	3,18	2,94
Water flow-rate (User Side)		l/s	0,52	0,62	0,66	0,77	0,98	1,21	1,4
Useful pump discharge head		kPa	79,7	66,6	61,1	-	-	-	-
Sound pressure level	(3)	dB(A)	54	56	56	56	58	60	61
Refrigeration circuits		-	1						
No. of compressor		-	1						
Type of compressor		-	Rotary Inverter DC						
Standard power supply		V	400/3/50+N						
Standard air flow		m³/h	6150	6150	6150	9800	11000	11300	11500

(1) Data calculated in compliance with Standard EN 14511:2018 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Entering eExternal exchanger air temperature = 35°C

(2) Data calculated in compliance with Standard EN 14511:2018 referred to the following conditions: Internal exchanger water temperature = 40/45°C. External exchanger air temperature 7 D.B. /6 (°C) W.B.

(3) The sound levels refer to the unit at full load, in the rated test conditions. The sound pressure level refers to a distance of 1m from the external surface of the units operating in an open field. Measures according to UNI EN ISO 9614-2 regulations, with respect to the EUROVENT 8/1 certification. Data referred to the following conditions: Internal exchanger water = 12/7°C; Outdoor air temperature 35°C

(4) Data calculated according to the EN 14825:2016 Regulation

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

*Available from the Second Half 2020

Refrig. R-32

ELFOControl³ EVO

Full Inverter DC

Air cooled Inverter heat pump for outdoor installation

ErP

Size – WSAN-YMi		21	31	41	61	71	81	91	101	121	141
ErP System Energy Class - AVERAGE Climate - W35	(1)	A+++	A+++	A+++	A++	A++	A++	A++	A++	A++	A++
ErP System Energy Class - AVERAGE Climate - W55	(1)	A++	A++	A++	A++	A++	A++	A+	A+	A+	A+
SCOP - AVERAGE Climate - W35		4,48	4,49	4,51	4,3	4,35	4,3	4,28	4,32	4,25	4,25
SCOP - AVERAGE Climate - W55		3,23	3,24	3,22	3,23	3,26	3,27	2,86	2,94	2,82	2,82

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

(1) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C)

accessories

Size – WSAN-YMi	21	31	41	61	71	81	91	101	121	141
Basic configuration (230/1/50)	std	std	std	std	std	std	-	-	-	-
Basic configuration (400/3/50+N)	-	-	-	optional	optional	optional	std	std	std	std

IBHX Backup electric heater (sizes 21-41)

KTFLX Hose kit for connection to the chiller/heat pump

KSAX 100-litre circuit breaker

QERAX Connection electrical panel of the DHW storage heater

ACS500X 500-litre domestic hot water storage tank

ACS300X 300-litre domestic hot water storage tank (sizes 21÷51)

ACS5SX 500-litre domestic hot water storage tank with solar coil

ACS3SX 300-litre domestic hot water storage tank with solar coil (sizes 21÷51)

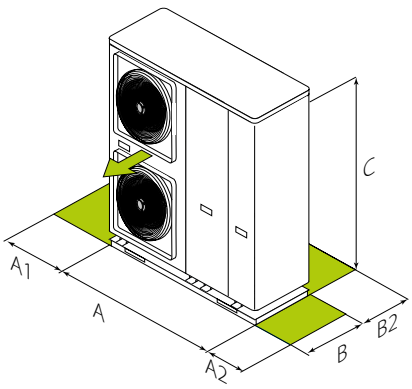
3DHWX Three-way valve for domestic hot water

TANKX Buffer tank

KTCAX Piping kit for the connection to the buffer tank

Accessories whose code ends with "X" are separately supplied.

dimensions



CAUTION!

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

Size – WSAN-YMi		21	31	41	61	71	81	91	101	121	141
A - Length	mm	1210	1210	1210	1404	1404	1404	1120	1120	1120	1120
B - Width	mm	402	402	402	405	405	405	440	440	440	440
C - Height	mm	945	945	945	1414	1414	1414	1558	1558	1558	1558
A1	mm	400	400	400	400	400	400	400	400	400	400
A2	mm	400	400	400	400	400	400	400	400	400	400
A3	mm	300	300	300	300	300	300	300	300	300	300
Operating weight (200/1/50)	kg	99	99	99	158	158	158	-	-	-	-
Operating weight (400/3/50+N)	kg	-	-	-	172	172	172	-	-	-	-

AQUA

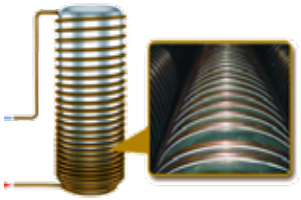
Heat pumps
for domestic hot water

AQUA allows you to reduce the costs related to the production of domestic hot water.

Using heat pump technology, AQUA is able to transform the renewable energy contained in the air into heat to be used to increase the temperature of the domestic hot water contained in the storage tank. This with a minimum use of electricity.

- HIGH EFFICIENCY IN THE PRODUCTION OF DOMESTIC HOT WATER
- SIMPLICITY AND VERSATILITY OF INSTALLATION
- WIDE OPERATING RANGE
- SOLAR VERSION

Storage Tank



The exchanger (condenser) is composed of a copper coil wound outside the DHW storage tank. This guarantees maximum safety, avoiding any contamination between refrigerant and domestic hot water.

1. FAN
2. EVAPORATOR
3. ANODE
4. HANDLES
5. CONDENSER
6. COMPRESSOR
7. SAFETY THERMOSTATS
8. ELECTRIC HEATER
9. INTEGRATION EXCHANGER
10. TANK
11. INSULATION

AQUA

SWAN 190÷300

Air cooled heat pump for domestic hot water production

technical data

Size – SWAN			190	190S	300	300S
DHW tank		l	180	180	280	280
▶ Heating capacity	(1)	kW	1,62	1,62	2,3	2,3
Average Power Input	(1)	kW	0,42	0,42	0,53	0,53
COP	(1)	-	3,86	3,86	4,34	4,34
E-Heater Capacity		kW	1,5	1,5	1,5	1,5
Standard power supply		V	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Sound Pressure Level (1m)		dB(A)	36,6	38,2	36,6	38,2
Heating Time	(1)	h/min	3/53	3/53	4/22	4/22
Max Water Temperature		°C	70	70	65	65
Min/ Max Air Temperature		°C	-20/43	-20/43	-20/43	-20/43
Air Flow		m³/h	270	270	414	414
Max Available Static Pressure		Pa	25	25	25	25

(1) Inlet water 15°C and water set 45°C, air temperature 15°C D.B./ 13°C W.B.

ErP

Size – SWAN		190	190S	300	300S
ErP Domestic Hot Water Profile	(1)	L	L	XL	XL
ErP Domestic Hot Water Energy Class	(2)	A+	A+	A+	A+

The Product is compliant with the ErP (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 812/2013 and the Commission delegated Regulation (EU) No 814/2013

(1) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 812/2013.

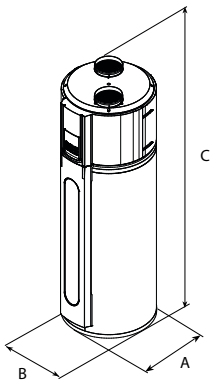
(2) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 812/2013

accessories

Size – SWAN	190	190S	300	300S
Basic configuration (230/1/50)	std	std	std	std

190S = 190 liters solar version
300S = 300 liters solar version

dimensions



Size – SWAN		190	190S	300	300S
A - Length	mm	610	610	700	700
B - Width	mm	560	560	650	650
C - Height	mm	1830	1830	1930	1930
Operating weight	kg	284	284	424	424

ELFOFresh EVO

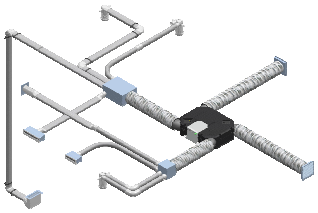
New, clean and fresh air at home

NEW PRODUCT

THERMODYNAMIC HEAT RECOVERY

ELFOFresh EVO offers active thermodynamic heat recovery both in summer and in winter. It is equipped with high efficiency finned coils and guarantees very low pressure drops throughout the entire operating cycle, noticeably reducing the energy used
for ventilation.
Traditional static recovery devices are subject to burdensome air flow pressure drops.
They constantly hinder ventilation, generating higher electricity consumption and doing away with much of the energy effectively recovered over the year.

DISTRIBUTION



It can be connected to Clivet ELFOAir distribution system

ELIMINATES POLLUTANTS

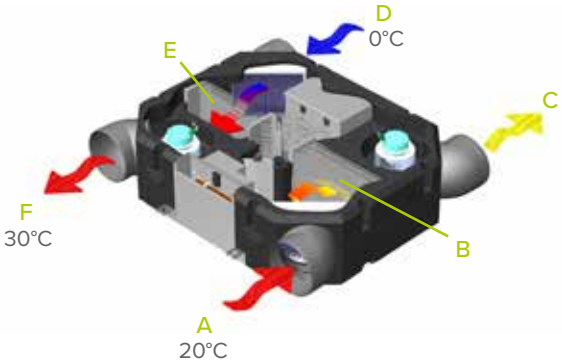
ELFOFresh EVO rejects the stale air and introduces purified and conditioned fresh air. The harmful elements and smells present in the outdoor air are eliminated by the efficient filtration system. The electrostatic filter is easy to extract and can be fully restored by washing.

HUMIDITY CONTROL (*)

During summer operation ELFOFresh EVO, cooling the air renewal, dehumidifies the air increasing comfort. The use of ELFOFresh EVO in cooling systems using underfloor, wall or ceiling heating, makes it unnecessary to install the dehumidifier. In winter operation, thanks to the use of accessories dedicated, ELFOFresh EVO maintains a correct humidity value.

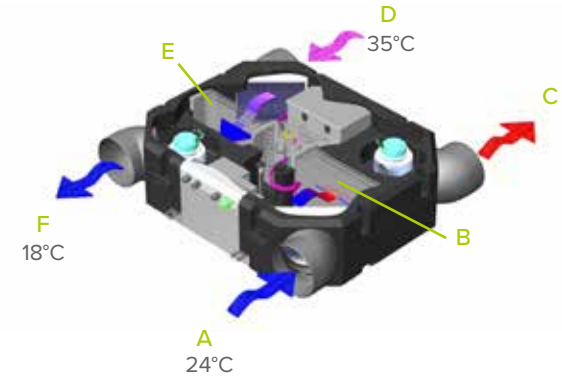
- ✓ SUMMER AND WINTER ACTIVE THERMODYNAMIC HEAT RECOVERY AND 80% BUILDING ENERGY SATISFACTION
- ✓ ELECTRONIC FILTRATION (OPTIONAL)
- ✓ SUMMER DEHUMIDIFICATION (*)
- ✓ FREE COOLING

WINTER OPERATION



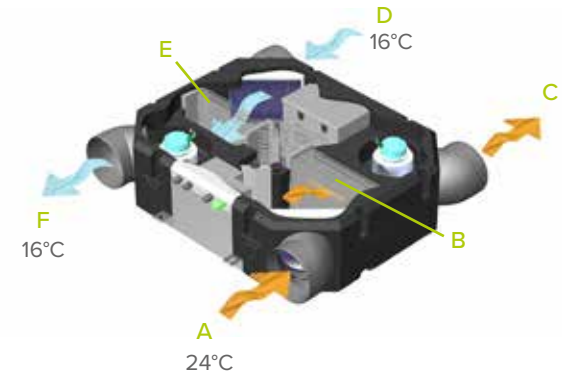
The indoor air (A), extracted from the most dirty and humid as bathrooms and kitchen, flows through the evaporator coil (B) and transfers heat to the heat pump. Only then it is rejected (C). After having taken energy from the exhaust air, the refrigerant in the heat pump transfers it through the condenser coil (E) to the outdoor fresh air (D) before being introduced in the room (F), before the inlet in the living room and bathrooms.

SUMMER OPERATION



The cooling cycle is inverted thanks to the 4-way valve, so that the “cold” contained in the exhaust air (A) is recoverd in the condenser coil (B) before the air is rejected (C). The outdoor air (D) is filtered and then cooled and dehumidified, passing through the evaporator (E) before being introduced into the room (F).

FREE COOLING: FREE COMFORT



During mid-seasons, the climate may be more pleasant outside than inside, especially in the evening. In these situations, the clever design of ELFOFresh EVO allows to keep the required conditions in the rooms using outdoor air at no cost just using the fan.

(*) For further details on the dehumidification capacity, please refer to the technical documentation.

NEW PRODUCT

ELFOFresh EVO

CPAN-YIN Size 2

ELFOFresh²

CPAN-U 500

technical data

Size – CPAN-YIN (R-32)			Size 2		
			Min	Nominal	Max
Supply airflow		l/s	35	75	89
Supply airflow		m³/h	125	270	320
A7					
▶ Heating capacity		kW	1,42	2,05	2,49
Total power input		kW	0,46	0,42	0,54
COP (EN 14511:2018)		-	3,09	4,93	4,61
A-5					
▶ Heating capacity		kW	1,97	2,37	2,45
Total power input		kW	0,40	0,37	0,32
COP (EN 14511:2018)		-	4,93	6,50	7,66
A30					
▶ Cooling capacity		kW	0,92	1,72	2,07
Total power input		kW	0,36	0,54	0,81
EER (EN 14511:2018)		-	2,56	3,21	2,56
A35					
▶ Cooling capacity		kW	1,57	1,92	2,23
Total power input		kW	0,36	0,55	0,81
EER (EN 14511:2018)		-	4,34	3,5	2,77
Rated static pressure supply fan		Pa	50	50	50
Max. static pressure supply fan		Pa	120	120	120
Standard power supply		V	220-240/1/50	220-240/1/50	220-240/1/50
Min. entering air temperature (D.B.)	(2)	°C	-15	-15	-15
Sound pressure level	(1)	dB(A)	34	41	45

Size – CPAN-U (R410A)			500
Supply airflow		l/s	139
Supply airflow		m³/h	500
A7			
▶ Heating capacity		kW	3,58
Total power input		kW	0,84
COP (EN 14511:2018)		-	4,26
A-5			
▶ Heating capacity		kW	3,74
Total power input		kW	0,67
COP (EN 14511:2018)		-	5,58
A30			
▶ Cooling capacity		kW	3,01
Total power input		kW	1,04
EER (EN 14511:2018)		-	2,89
A35			
▶ Cooling capacity		kW	3,13
Total power input		kW	1,10
EER (EN 14511:2018)		-	2,85
Max. static pressure supply fan		Pa	120
Standard power supply		V	230/1/50
Min. entering air temperature (D.B.)	(2)	°C	-15
Sound pressure level	(1)	dB(A)	44

(1) The sound levels refer to the unit at full load, in the rated test conditions. The sound pressure level refers to a distance of 1m from the external surface of the units operating in an open field.

(2) In places where temperatures drop under -5°C for a considerable number of hours a year, it is recommended to use EHPCX - electric duct heaters kit.

All the data provided meets standard EN 14511:2018 and refers to an available head of 50 Pa. When in cooling mode it is possible that the unit is operating at a reduced flow to ensure a specific humidity for the air introduced into the environment in keeping with the setpoint.

A7 External air temperature 7°C D.B./ 6°C W.B., Exhaust air temperature 20°C D.B./ 15°C W.B.
A-5 External air temperature -5°C D.B./ -5.4°C W.B., Exhaust air temperature 20°C D.B./ 15°C W.B.
A30 External air temperature 30°C D.B./ 22°C W.B., Exhaust air temperature 27°C D.B./ 19°C W.B.
A35 External air temperature 35°C D.B./ 24°C W.B., Exhaust air temperature 27°C D.B./ 19°C W.B.

Refrig. R-32 (CPAN-YIN)

Refrig. R-410A (CPAN-U)

Indoor installation

ELFOControl[3] EVO

Full Inverter DC

Air renewal unit with thermodynamic heat recovery

accessories

Size	CPAN-YIN Size 2	CPAN-U 500
Basic configuration (230/1/50)	std	std

EI Cased version with protective panel (CPAN-YIN Size 2)

OHO Heating-only operation (CPAN-U 500)

FESX Electronic filter kit

FAEX Kit of exhaust air filter (CPAN-U 500)

CDPX Condensate drain pump (CPAN-U 500)

CMMBX Serial communication module to supervisor (Modbus) (CPAN-U 500)

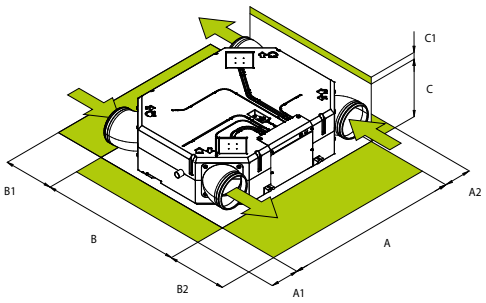
EHPCX Preheating elements in duct (CPAN-U 500)

HIDTI52BX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. White (CPAN-U 500)

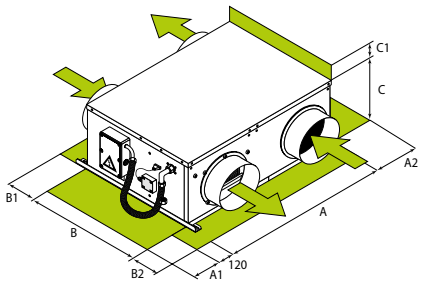
HIDTI52NX Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Black (CPAN-U 500)

Accessories whose code ends with "X" are separately supplied.

dimensions



Size – CPAN-YIN		Size 2
A - Length	mm	1107
B - Width	mm	900
C - Height	mm	290
A1	mm	150
A2	mm	100
B1	mm	200
B2	mm	300
C1	mm	10
Operating weight	kg	44



Size – CPAN-U		500
A - Length	mm	1158
B - Width	mm	741
C - Height	mm	423
A1	mm	620
A2	mm	20
B1	mm	300
B2	mm	300
C1	mm	20
Operating weight	kg	95

CAUTION!

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

ELFORoom²

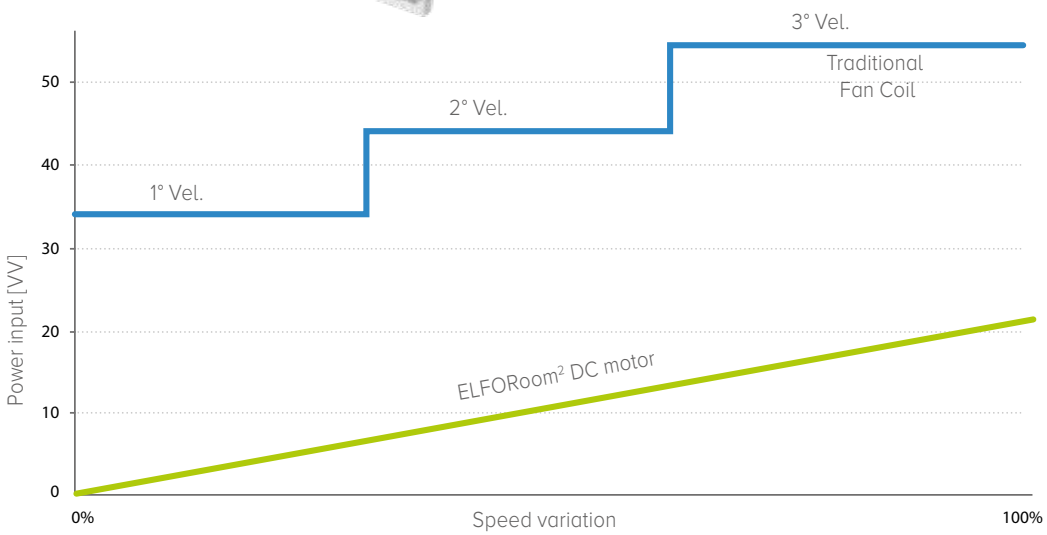
Consistently uniform temperature and lower energy consumption

Thanks to the continuous fan operation and the gradual speed variations, ELFORoom² guarantees constant air movement. The exclusive fan electric motor of the ELFORoom² guarantees low energy consuptions thanks to the modulation of ventilation. The innovative technological solution considerably limits the energy generated for its correct operation, reducing the required power and the operating costs if compared to the traditional fan coils.

- UNIFORM TEMPERATURE
- LOWER ENERGY CONSUMPTIONS
- LESS NOISE
- LARGE AND EASY TO ACCESS FILTER

QUIET OPERATION

The continuously running fan allows to operate the fan coil at very low speeds, making the noise that it produces almost imperceptible. ELFORoom² is equipped with a control system that permits the continuous adjustment of the rpm to suit the system requirements



SATISFIES ALL INSTALLATIONS

ELFORoom^2 is a room terminal that can be installed in any architectural setting as it comes with both a vertical uncased and built-in wall version and a horizontal uncased and built-in ceiling version.

A full range of accessories – such as the feet used for floor installation, the supply and intake plenums, the formwork for built-in installation and many other accessories – make ELFORoom^2 a complete system to meet a number of installation solutions.

Vertical cased installation

Vertical uncased installation

Horizontal cased installation

Horizontal uncased installation

IT CLEANS THE AIR AS IT CONTROLS THE TEMPERATURE

In addition to its complete and flexible temperature control, ELFORoom^2 also takes care of air quality.
In fact, it is equipped with a large filter, easily accessible via the front panel, which ensures efficient air purification and makes it possible to reduce cleaning operations

ELFORoom²

ELFORoom² 003.0÷017.0

technical data

Size - ELFORoom²			003.0	005.0	011.0	015.0	017.0
▶ Cooling capacity	(1)	kW	0,89	1,91	2,83	3,69	4,19
Sensible capacity	(1)	kW	0,65	1,29	1,94	2,50	2,78
Total power input	(1)	kW	0,012	0,020	0,022	0,030	0,033
▶ Heating capacity	(2)	kW	0,93	1,97	2,71	3,45	4,11
Supply airflow	(3)	l/s	45,0	89,0	128	160	180
Type of supply fan	(4)	-	TGZ	TGZ	TGZ	TGZ	TGZ
Standard power supply	(5)	V	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
L Sound pressure level	(6)	dB(A)	23	26	27	23	27
M Sound pressure level	(6)	dB(A)	32	32	33	30	37
H Sound pressure level	(6)	dB(A)	39	40	39	39	43

(1) Ambient air at 27°C/19.5 W.B.; inlet water 7°C and outlet 12°C; Air flow at max speed measured with clean filters

(2) Ambient temperature 20°C DB; Water inlet 45°C and outlet 40°C; Air flow at max speed measured with clean filters

(3) Air flow at max speed measured with clean filters

(4) TGZ=tangential

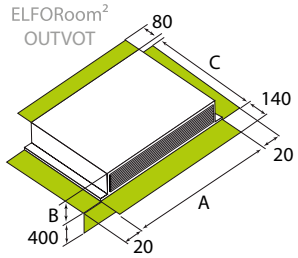
(5) Power supply 230/1/50 Hz +/-10%

(6) The values have been detected in a closed ambient with a volume of 100 m³ and a reverberation time of 0.5 seconds. The sound levels are referred to unit operating at a full load in nominal conditions. The sound pressure level is referred at a distance of 1m. from the external unit surface, with fairing, fitted to a wall. Please note that when the unit is installed in conditions other than nominal test conditions /for example near walls or obstacles in general) the sound levels may undergo substantial variation.

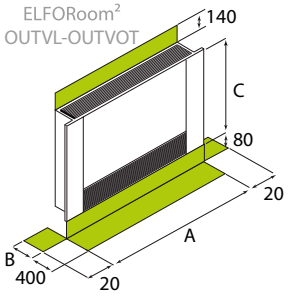
L Low speed (L)
M Medium speed (M)
H High speed (H)

dimensions

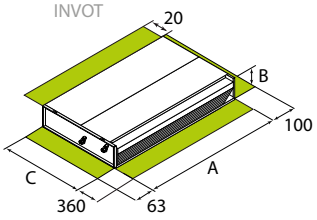
ELFORoom² OUTVOT



ELFORoom² OUTVL-OUTVOT



ELFORoom² INVOT



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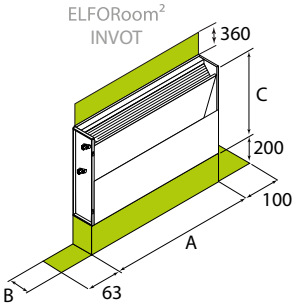


CAUTION!

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

ELFORoom² cased version OUTVOT-OUTVL

Size		003.0	005.0	011.0	015.0	017.0
A - Length	mm	737	937	1137	1337	1537
B - Width	mm	130	130	130	130	130
C - Height	mm	579	579	579	579	579
Operating weight	kg	17	20	23	26	29

ELFORoom² uncased version INVOT

Size		003.0	005.0	011.0	015.0	017.0
A - Length	mm	527	727	927	1127	1327
B - Width	mm	130	130	130	130	130
C - Height	mm	586	586	586	586	586
Operating weight	kg	9	12	15	18	21

The above mentioned data are referred to standard units.

accessories

Size - ELFORoom²	003.0	005.0	011.0	015.0	017.0
Basic configuration (OUTVL - 230/1/50) Vertical cased with LCD display, continuous modulation DC motor, RS485 interface and built-in thermostat	std	std	std	std	std
Basic configuration (OUTVOT - 230/1/50) Vertical - Horizontal cased with continuous modulation DC motor, RS485 interface without built-in thermostat	std	std	std	std	std
Basic configuration (INVOT - 230/1/50) Vertical - Horizontal uncased with continuous modulation DC motor, RS485 interface without built-in thermostat	std	std	std	std	std
Basic configuration (OUTRAD - 230/1/50) Vertical cased with continuous modulation DC motor, RS485 interface with built-in thermostat and ventilated radiant plate	std	std	std	std	std
Basic configuration (OUTSRAD - 230/1/50) Vertical cased with continuous modulation DC motor, RS485 interface, without built-in thermostat and with ventilated radiant plate	std	std	std	std	std
Basic configuration (INRAD - 230/1/50) Vertical uncased with continuous modulation DC motor, RS485 interface, without built-in thermostat and with ventilated radiant plate (Available only with PCIX-CSFIX)	std	std	std	std	std

B4T Additional coil for 4-pipe syst.
KASPX Return plenum kit
GMX Outlet grille
GRA1X Air outflow grille
PR90MX 90° air outlet plenum
PMSTX Telescopic upper supply plenum kit
KV3B4X 3-way valve kit with electrothermal head and balancing for 4-pipe system (Available only with B4T)
KV3VBX 3-way valve kit with electrothermal head and balancing
CSEMP Simplified electronic control with 4 speeds DC motor, built-in thermostat without RS485 interface (with option: OUTVL - OUTRAD)
SC3V DC motor modulation electronic board for matching to 3 speeds thermostats
SC010 DC motor modulation electronic board for matching to 0-10V thermostats
HIDE1X Remote control with 3 position switch + on/off for wall installation (Available only with SC3V)
HIDE2X Remote control with E/I +3V +on/off for wall installation (Available only with SC3V)
HIDE3X Plurifunctional remote control for wall installation (Available only with SC3V)
HIDT2X HID-T2 electronic room control
HIDT3X HID-T3 electronic room control
HIDTI2X HID-TI2 Flush-mounted electronic room control
KCMDX Motor connection cables for unit with couplings on the right
BACKVX Painted rear panel for cased version
PCIX Uncased closure panel
CSFIX Formwork for uncased installation
FXPPX Floor fixing bracket kit
KPDX Plinth kit
UV UV germicidal lamp kit with support

Accessories whose code ends with "X" are separately supplied.

ELFOAir

The air distribution system for ELFOFresh EVO and ELFOPack

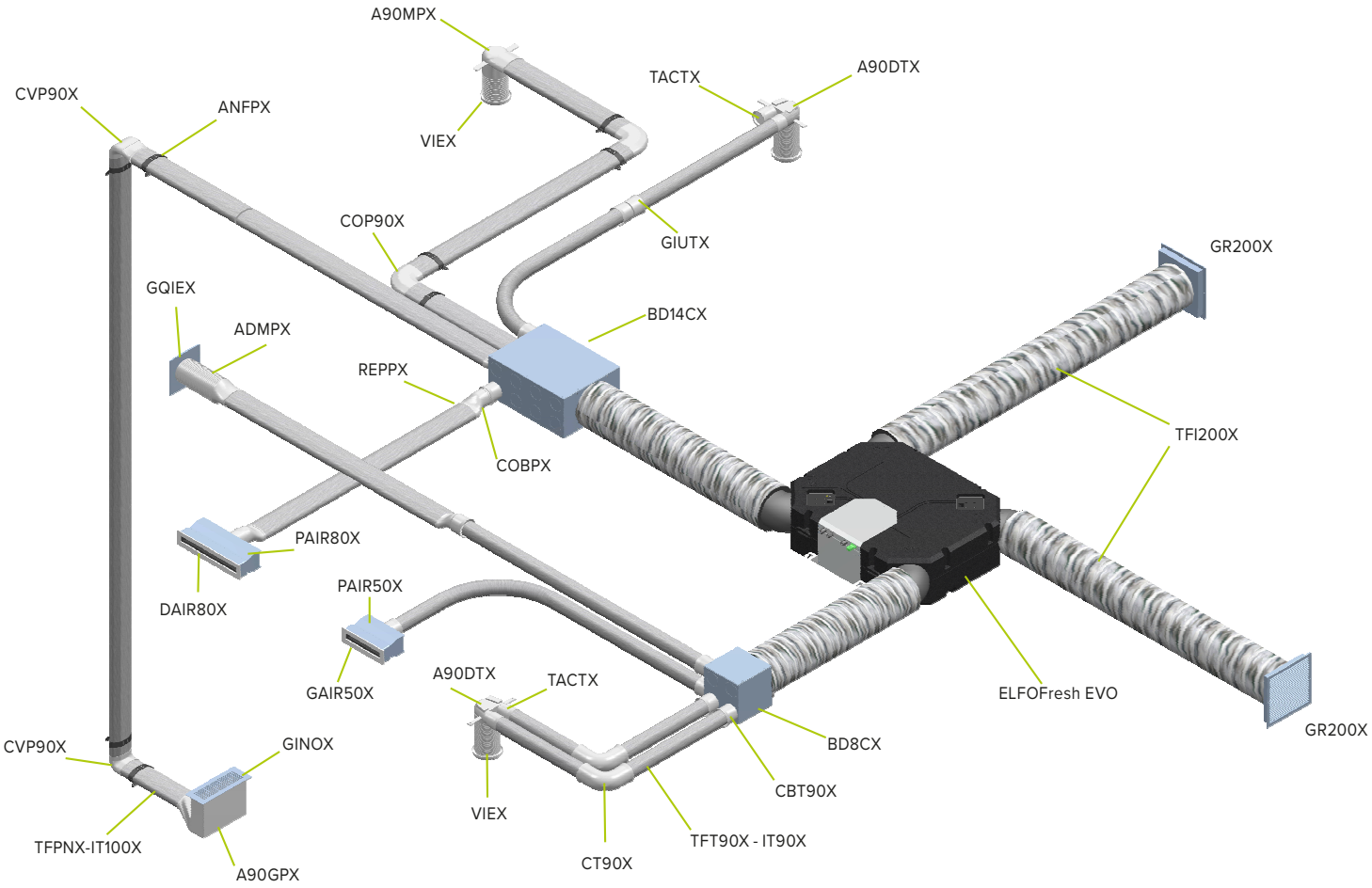
In new buildings and redevelopment works on existing buildings ELFOAir is the best solution to fully enjoy the benefits of the ELFOFresh EVO ventilation system or ELFOPack thanks to its stepped flexible ducts. These are ideal for underfloor applications, as well as for installations in attics and false ceilings. Specially designed grids and outlets can also be fitted and can be perfectly integrated in any kind of architectural context. The modular system ELFOAir with Plug&Play connection of the different elements makes the system extremely easy and quick to install.

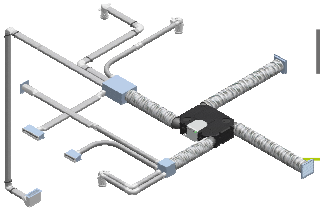
Thanks to special induction air diffusers, supplied air imperceptibly involves the whole air already present in the ambient and creates a uniform temperature and air quality in the entire room.

- ✓ FLEXIBLE IN INSTALLATION THANKS TO THE USE OF FLEXIBLE AND USABLE DUCTS
- ✓ SIMPLE IN SELECTING THE COMPONENTS AND IN THE INSTALLATION
- ✓ AIR QUALITY ASSURED BY THE USE OF ANTISTATIC AND ANTIBACTERIAL DUCTS
- ✓ HOMOGENOUS AIR DIFFUSION THANKS TO THE SPECIAL DIFFUSERS AIRJET

ANTISTATIC AND ANTIBACTERIAL

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


A90MPX
CVP90X
ANFPX
VIEX
TACTX
A90DTX
COP90X
GIUTX
GR200X
GQIEX
ADMPX
BD14CX
REPPX
TFI200X
COBPX
PAIR80X
DAIR80X
PAIR50X
GAIR50X
A90DTX
TACTX
ELFOFresh EVO
GR200X
BD8CX
CVP90X
GINOX
CBT90X
VIEX
TFPNX-IT100X
TFT90X - IT90X
A90GPX
CT90X



ELFOAir

Functionalities	Accessories		
Internal suction and supply grilles		DAIR50X	AIRJET 50/I supply diffuser - white frame and black inside
		DAIR80X	AIRJET 80/I supply diffuser - white frame and black inside
		GAIR50X	Intake grille + extractable filter AIRJET 50/A - white frame and black inside
		GAIR80X	Intake grille + extractable filter AIRJET 80/A - white frame and black inside
		PAIR50X	Suction/supply plenum with AIRJET 50 control damper - rear connection
		PAIR80X	Suction/supply plenum with AIRJET 80 control damper - rear connection
		GINOX	Suction/supply rectangular grill 350x130mm stainless
		GIVEX	Suction/supply rectangular grill 350x130mm white
		FREX	Filter for rectangular grilles 350x130mm (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
Flat tube distribution (from the distribution box to outlet)		TFPNX	Flat flexible tube 132x52mm in a 20mt. coil without insulation
		IT100X	Insulation in a 20mt. coil for flat flexible tube 132x52
		COBPX	Connector to distribution box for flat tube
		GIUPX	Seal and connecting joint for flat tube (10pz.)
		CVP90X	Vertical 90-degree curve for flat tube
		COP90X	Horizontal 90-degree curve for flat tube
		CTP180X	Joint for 180-degree flat tube rotation
		A90MPX	90-degree adaptor, single tube for DN125 valve
		A90DPX	90-degree adaptor, double flat tube for DN125 valve
		ADMPX	Straight adaptor, single flat tube for DN125 valve
		A90GPX	90-degree adaptor, single flat tube for level grill
		TACPX	Blind plug for flat tube (5pz.)
		ANFPX	Fixing ring for flat tube (10pz.)
		REPPX	Flow controller for flat tube
		RTPTX	Round/flat tube connecting joint

Round tube distribution (from the distribution box to outlet)		TFT90X	DN90 round flexible tube (Int. diam. 78mm) in a 20m. coil without insulation
		IT90X	Insulation in a 20mt. coil for DN90 round flexible tube
		CBT90X	Connector to distribution box for DN90 round tube
		GIUTX	Connecting joint for DN90 round tube
		CT90X	Printed curve of 90-degree angle for DN90 round tube
		A90DTX	90-degree adaptor, double DN90 round tube for DN125 valve
		TACTX	Blind plug for DN90 round tube (5pz.)
		ANFTX	DN90 seal O-Ring (10pz.)
External distribution (Ducts from the outside to the unit and from the unit to the distribution boxes)		BD8CX	Distribution box of DN150-200 joint with 8 connections
		BD14CX	Distribution box of DN200 joint with 14 connections
		TFIS150X	DN150 soundproofing insulated flexible tube in a 10mt. coil
		TFIS200X	DN200 soundproofing insulated flexible tube in a 10mt. coil
		TFIS250X	DN250 soundproofing insulated flexible tube in a 10mt. coil
		GR150X	Exhaust / return square wall grille with circular coupling DN150
		GR200X	Exhaust / return square wall grig with circular coupling DN200
		GR250X	Exhaust / return square wall grig with circular coupling DN250
		GF150X	F/F DN150 Joint
		GF200X	F/F DN200 Joint
		GF250X	F/F DN250 Joint
		R2015X	DN200-DN150 Reducer
		R2520X	DN250-DN200 Reducer
		DY200X	DN200-DN200-DN200 Y-branch
		DY250X	DN250-DN200-DN200 Y-branch
Air recirculation (ELFOPack only)		GPRX	Grill for recirculation air return plenum 325x175 mm white
		PRX	Soundproofed plenum for air recirculation
		CPRX	Manifold for air recirculation plenum DN150-200

For technical details see technical bulletin

ELFOControl³ EVO

The entire system at your fingertips

NEW PRODUCT

Even the best cooling system without correct temperature control can generate discomfort instead of comfort, with ELFOControl³ EVO it is sufficient a simple touch screen to access the control of each single ELFOSystem part.

ELFOControl³ EVO controls and manages the whole system smartly and efficiently to give always the best comfort at the lower cost.

- **IT MANAGES UP TO 12 ELEMENTS SIMULTANEOUSLY**
- **SET THE TEMPERATURES DIRECTLY FROM "TOUCH" SCREEN OR FROM THE THERMOSTAT** FIG. 1
- **SET DIFFERENT TEMPERATURES INSIDE THE SAME CLIMATE AREA** - FIG. 2
- **UP TO 10 CUSTOMISED TIMED PROGRAMMING FOR OPTIMISING THE FUNCTIONING AND EFFICIENCY OF THE ENTIRE SYSTEM** - FIG. 3

TEMPERATURE AND HUMIDITY ROOM BY ROOM MANAGEMENT

HID-TI52 thermostat, with a modern design, is equipped with a colour touch screen display that allows, thanks to its extremely intuitive graphic, to easily manage the comfort parameters.

FIG 1

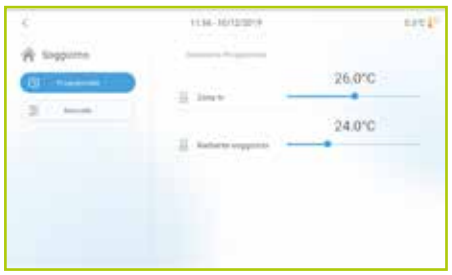


FIG 2

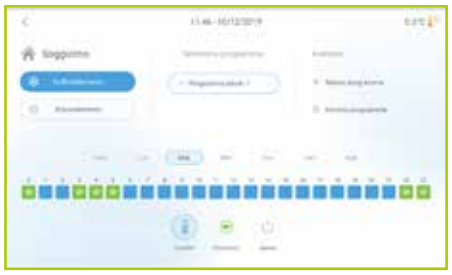
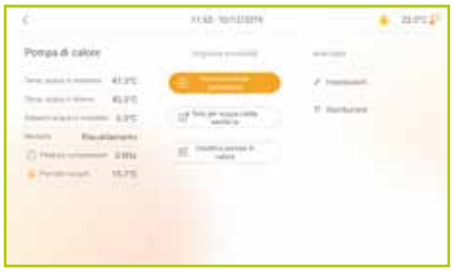


FIG 3

RADIANT CONTROL IN COOLING

In case there is a radiant installation used also for cooling purposes, the humidity control is made by ELFOFresh EVO, while the water temperature of the water produced by SPHERA is defined based on the outdoor temperature and modified based on dew point through the humidity level measured by the themostats.

Each of us differently perceives well-being, for this reason it is not easy to define comfort. ELFOControl^{3} EVO allows the user to adjust all system settings and adjustments, even the most advanced, to its own requirements, to guarantee everyone with the ideal comfort.



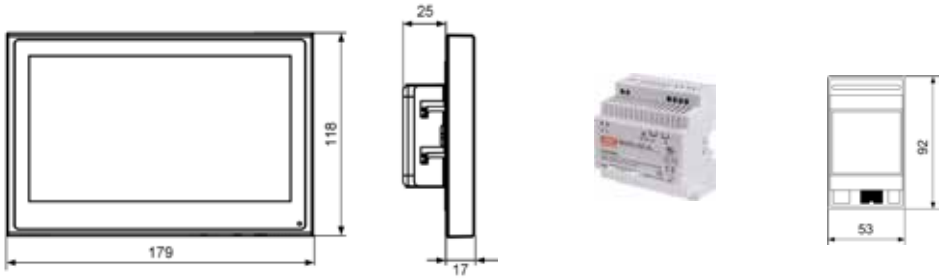
NEW PRODUCT

ELFOControl³ EVO

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

dimensions



ELFOControl³ EVO is supplied with:

- ✓ 12Vdc AL12X power supply unit (4 DIN modules)
- ✓ Ethernet/485 converter (3 DIN modules)
- ✓ Cat. 5 UTP Ethernet cable (5m long)

NOTE: the maximum distance between the Ethernet/485 converter and ELFOControl³ EVO is 90 meters

PRODUCTS

CONTROL CHARACTERISTICS

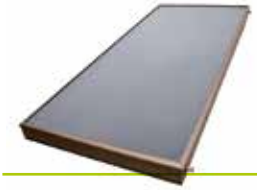
- ✓ Maximum of 12 climate areas
- ✓ 2 pipe system
- ✓ Maximum of 40 elements manageable
- ✓ Maximum of 1 heat pump: SPHERA, ELFOEnergy Extended Inverter, ELFOEnergy EDGE EVO, ELFOEnergy Ground, ELFOEnergy Duct Inverter, ELFOEnergy Medium, ELFOEnergy Vulcan Medium
- ✓ Maximum 4 unit for mechanical ventilation: ELFOFresh EVO, ELFOFresh², ELFOFresh Large
- ✓ Hydronic terminal units : ELFORoom² 003.0-017.0, ELFOSpace 003.0 - 051.0, ELFODuct MP 15 - 71, ELFODuct HP 015.0 - 071.0, ELFODuct CF-V 31 - 242
- ✓ Maximum of 4 radiant modules - BMZRX
- ✓ Maximum of 3 mixed zones (including intra Gaia) KGPRX
- ✓ Single zone module - CMRSX
- ✓ Input/Output Module - MIOX
- ✓ Maximum of 1 connection device with domotics - DOMX

Functionalities		Accessories			Dimensions
	Home automation system connection		DOMX	Device for connection with home automation systems	53 x 92 x 63 mm
	Communication with the room thermostat for temperature and humidity control		HID-T3X	Temperature and humidity thermostat – wall installation	184 x 82 x 27 mm
			HIDT2X	Temperature only thermostat – wall installation	184 x 82 x 27 mm
			HIDTI52NX	Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Colour black	121 x 94 x 19 mm
			HIDTI52BX	Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Colour white	121 x 94 x 19 mm
			HIDURX	Temperature and humidity sensor - built-in installation.	22 x 45 x 50 mm
	Floor radiant panel management (heating and cooling), radiators, towel rail		BMZRX	Module to manage up to 6 HID thermostats and 6 control outputs, shut-off valves to feed radiant panels, radiators or heating furniture	157 x 90 x 60 mm 9 Modules DIN
			AL12X	Power supply unit for HIDTi52 thermostats and HID-UR sensor	85 x 90 x 65 mm 4 Modules DIN
			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 Modules DIN
	Elements for the complete installation		CIECX	Allows recessed installation of ELFOControl[3] EVO	154 x 92 x 70 mm
			CBSX	Shielded cable for the connection to all devices	50 meter skein

SPHERA includes all system elements such as domestic hot water production with 280 liters 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 ELFOControl[3] EVO.

If the system, controlled by ELFOControl[3] 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 the following elements..

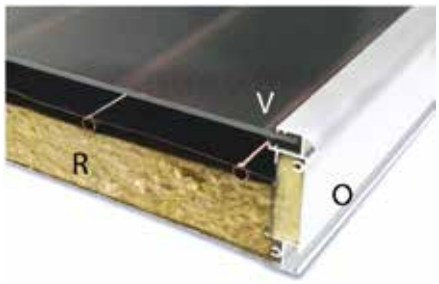
	Dual temperature system		KGPRX	Management module of a mixing group	210 x 155 x 80 mm
	Zone valve, circulatingpump and remote consent management		MIOX	Module for management of substitution generator (boiler), zone valves or boosters and remote consent	70 x 85 x 65 mm 4 Modules DIN

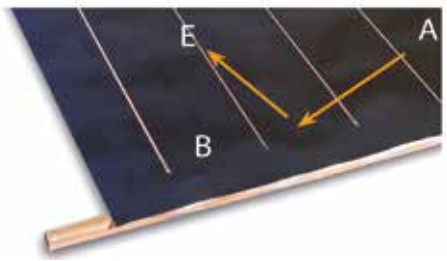


ELFOSun

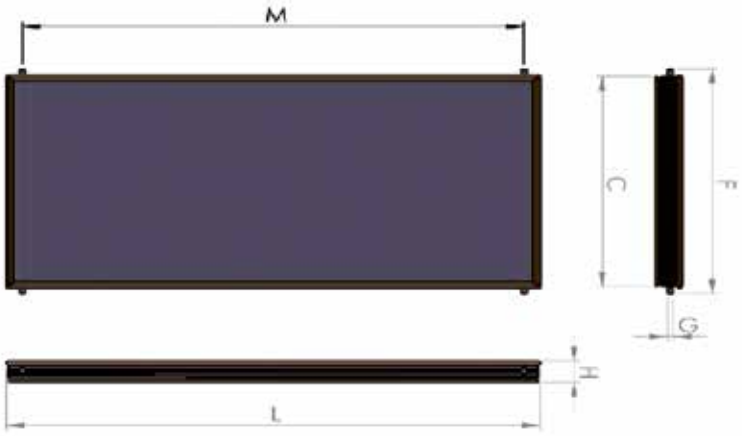
technical data

Single solar panel H1TX	Rif.	
Net absorbent surface		2,305 m²
Open surface		2,345 m²
Gross collector surface		2,586 m²
Glass	V	Extra light, tempered, prismatic
Absorbent plate	B	Copper
Surface coating	B	Selective TITAN (titanium oxide)
Efficiency (open surface)	η_0	0,716
Loss ratio (open surface)	α_1	3,87 W/m²K
Loss ratio (open surface)	α_2	0,0069 W/m²K²
Absorptance	A	95%
Emittance	E	4,7%
Advised panel flow		130 lt/h
Collector water capacity		2 lt
Max. pressure		10 bar
Stagnant temperature		192 °C
Casing material	O	Aluminum
Insulation thickness	R	45 mm
Standard case color		Brown / RAL8017





dimensions



Dimensions		
L - Length	mm	2005
C - Height	mm	1290
H - Thickness	mm	100
G - Collector pipes	mm	22
F - Pipe length	mm	1340
M - Pipes distance	mm	1880
Weight	kg	50

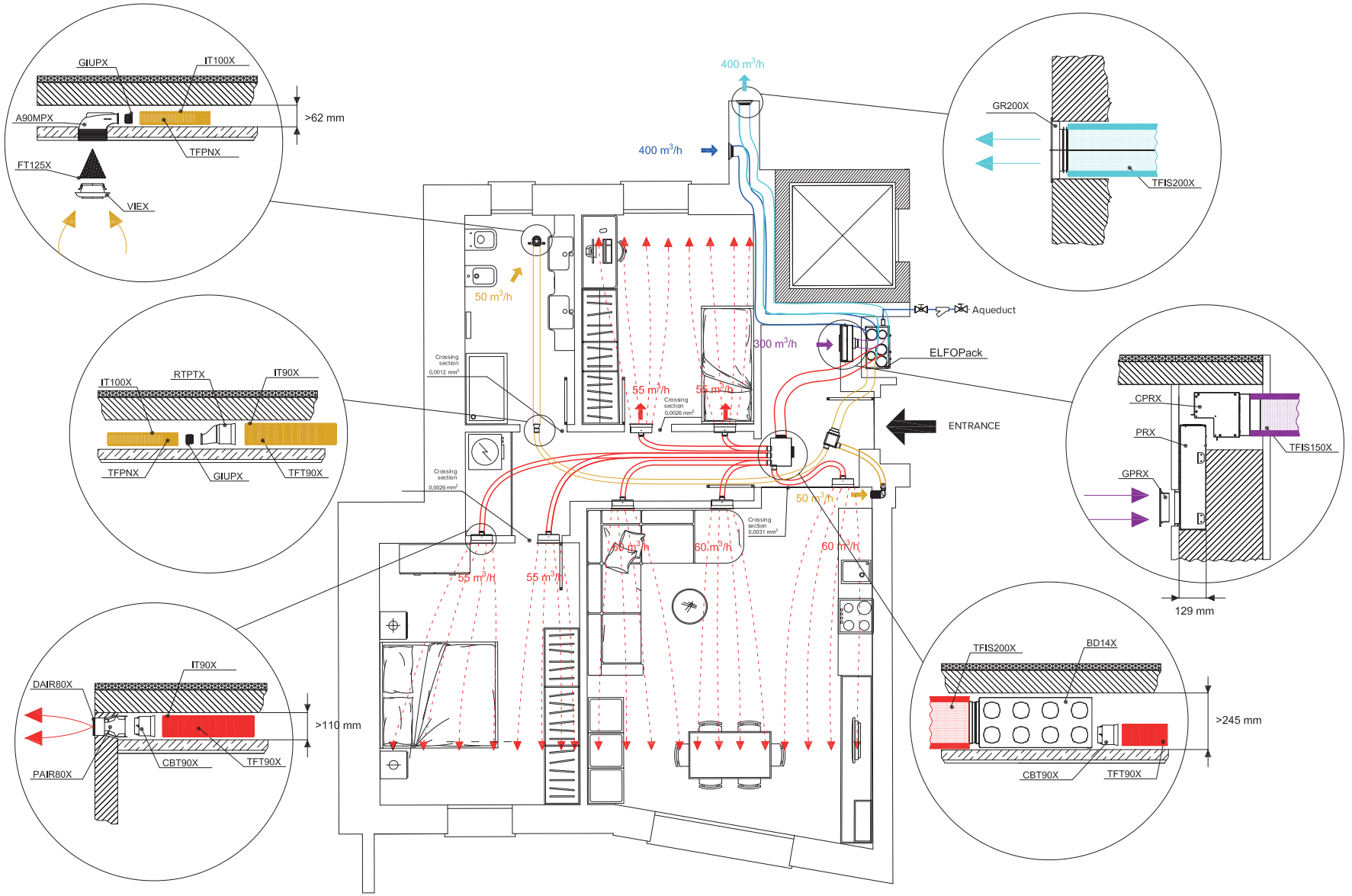
accessories

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

Accessories whose code ends with "X" are separately supplied.

SYSTEM SCHEMES

Air-Air heat pump for total comfort / Flat 70m²



The diagram is purely indicative. The executive design and subsequent installation must be carried out in compliance with the regulations in force.

EPK-00000-1M/R00

DWG version available on www.clivet.com

Heat Pump

- ✓ Heating
- ✓ DHW Production
- ✓ Cooling
- ✓ Air renewal
- ✓ Summer dehumidification
- ✓ Thermodynamic recovery
- ✓ Freecooling

ELFOPack [CPAR- XIN]

Reversible heat pump

Distribution system

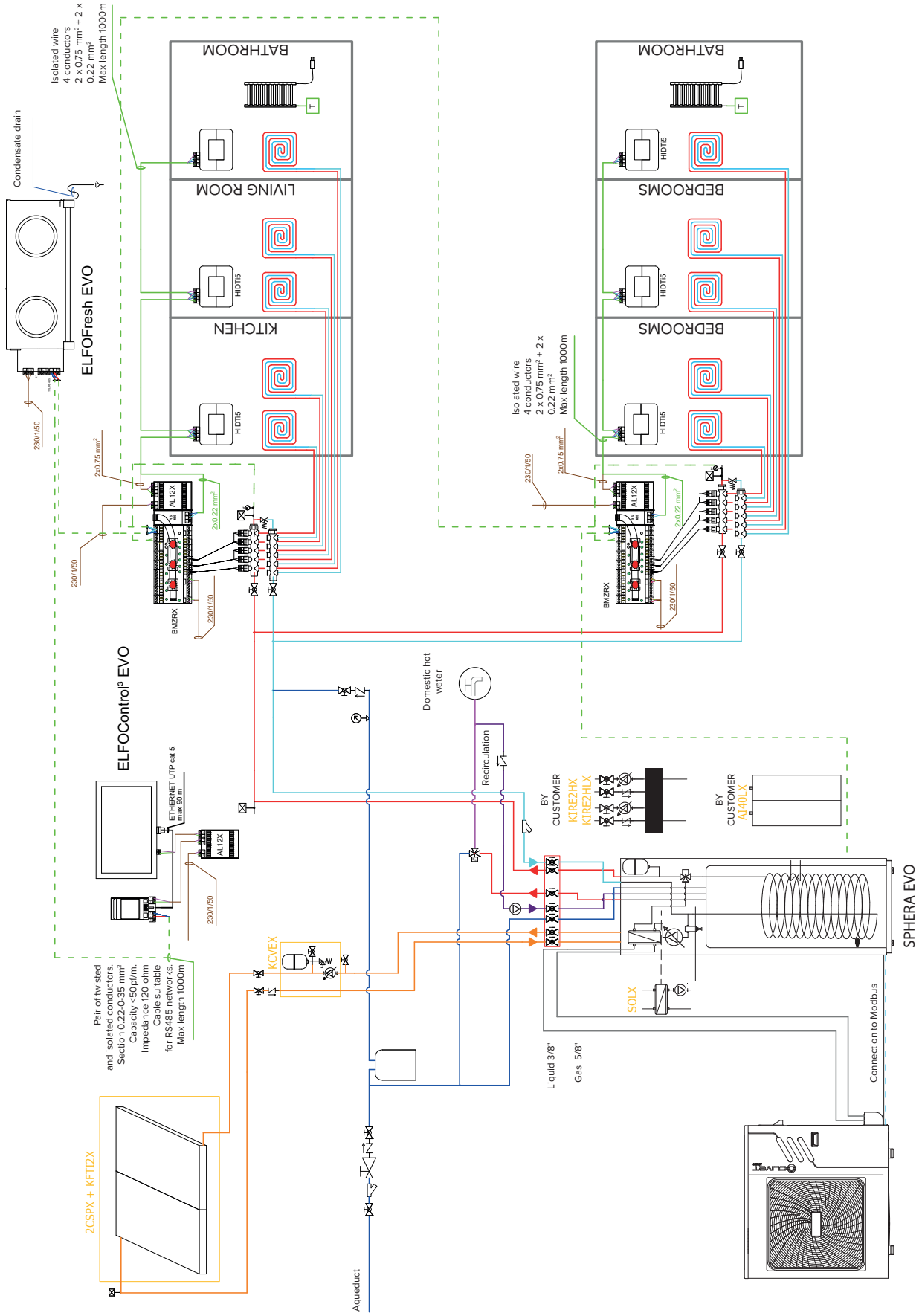
ELFOAir

Air distribution system

Accessories

- 7 x DAIR80X: AIRJET 80/I supply diffuser - white frame and black inside
- 7 x PAIR80X: Suction/supply plenum with AIRJET 80 control damper - rear connection
- 2 x VIEX: Extraction/intake valveDN125
- 2 x FT125X: Filter for DN125 valve (5pz.)
- 2 x TFT90X: DN90 round flexible tube (Int. diam. 78mm) in a 20m. coil without insulation
- 2 x IT90X: Insulation in a 20mt. coil for DN90 round flexible tube
- 16 x CBT90X: Connector to distribution box for DN90 round tube
- 1 x A90DTX: 90-degree adaptor, double DN90 round tube for DN125 valve
- 2 x ANFTX: DN90 seal O-Ring (10pz.)
- 1 x TFPNX: Flat flexible tube 132x52mm in a 20mt. coil
- 1 x IT100X: Insulation in a 20mt. coil for flat flexible tube 132x52
- 1 x GIUPX: Seal and connecting joint for flat tube (10pz.)
- 1 x A90MPX: 90-degree adaptor, single tube for DN125 valve
- 1 x ANFPX: Fixing ring for flat tube (10pz.)
- 1 x RTPTX : Round/flat tube connecting joint
- 1 x BD8CX: Distribution box of DN150-200 joint with 8 connections
- 1 x BD14CX: Distribution box of DN200 joint with 14 connections
- 1 x TFI150X: DN150 soundproofing insulated flexible tube
- 2 x TFI200X: DN200 soundproofing insulated flexible tube
- 2 x GR200X: Exhaust / return square wall grig with circular coupling DN200
- 1 x GPRX: Grill for recirculation air return plenum 325x175 mm white
- 1 x PRX: Soundproofed plenum for air recirculation for tube DN90 x 5 connections
- 1 x CPRX: Manifold for air recirculation plenum DN150-200

ELFOSystem SPHERA EVO



FAAHL0002

DWG version available on www.clivet.com

The diagram is purely indicative. The executive design and subsequent installation must be carried out in compliance with the regulations in force.

Air-Air heat pump for total comfort / Flat 70m²

Heat Pump

- ✓ Heating
- ✓ DHW Production
- ✓ Cooling
- ✓ Solar integration on the DHW system

SPHERA EVO T [SRHME T]

Two-section reversible heat pump

Configuration

- SOLX: Drain-back solar integration for domestic hot water

Control

- ✓ System domotics with advanced algorithms for optimising energy and comfort

ELFOControl³ EVO

Control for independent residential systems

Includes

- Power supply unit 12 V DC AL12X (4 modules DIN)
- Converter Ethernet/485 (3 modules DIN)
- Cable Ethernet UTP cat 5 (length 5 m)

Accessories

- 2 x AL12X: Power supply unit for HIDTi52 thermostats and HID-UR sensor
- 2 x BMZRX: Module to manage up to 6 HID thermostats and 6 control outputs,
  shut-off valves to feed radiant panels, radiators or heating furniture.
  + TTL-RS485 serial converter
- 1 x CBSX: Shielded cable for the connection to all devices (Modbus RS485 cable)
- 1 x CIECX : Allows recessed installation of ELFOControl³ EVO
- 6 x HIDTi52NX: Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Colour black

Heat recovery

- ✓ Air renewal
- ✓ Thermodynamic recovery
- ✓ Summer dehumidification
- ✓ Freecooling

ELFOFresh EVO [CPAN-YIN]

Air renewal and purification unit, full fresh air

Configuration

- Cooling and heating operation

Accessories

- 1 x FESX: Electronic filters

Thermal solar panels kit

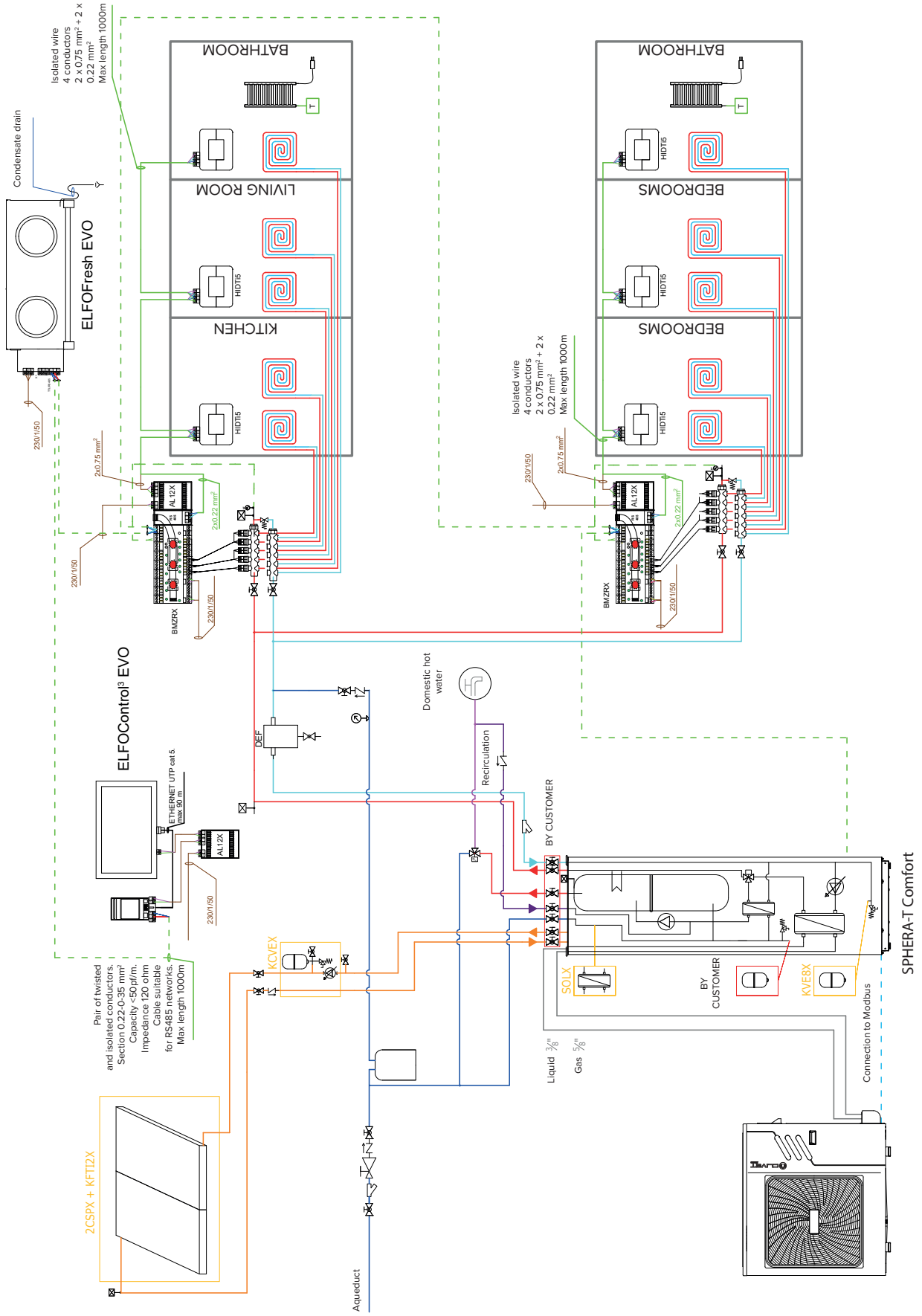
ELFOSun

Flat Solar collectors

Accessories

- 1 x 2CSPX 2 flat solar collectors
- 1 x KFTI2X Fixing systems for pitched roofs for the 2-collector installation
- 1 x KCVEX Circulation kit : circulation group, control unit, expansion tank

ELFOSystem SPHERA-T Comfort



STC-FCS00-11/R01

DWG version available on www.clivet.com

The diagram is purely indicative. The executive design and subsequent installation must be carried out in compliance with the regulations in force.

Heat Pump

- ✓ Heating
- ✓ DHW Production
- ✓ Cooling
- ✓ Solar integration on the DHW system

SPHERA-T Comfort [SRHM-TC]

Two-section reversible heat pump

Control

- ✓ System domotics with advanced algorithms for optimising energy and comfort

ELFOControl³ EVO

Control for independent residential systems

Includes

- Power supply unit 12 V DC AL12X (4 modules DIN)
- Converter Ethernet/485 (3 modules DIN)
- Cable Ethernet UTP cat 5 (length 5 m)

Accessories

- 2 x AL12X: Power supply unit for HIDTi52 thermostats and HID-UR sensor
- 2 x BMZRX: Module to manage up to 6 HID thermostats and 6 control outputs,
  shut-off valves to feed radiant panels, radiators or heating furniture.
  + TTL-RS485 serial converter
- 1 x CBSX: Shielded cable for the connection to all devices (Modbus RS485 cable)
- 1 x CIECX : Allows recessed installation of ELFOControl³ EVO
- 6 x HIDTi52NX: Temperature and humidity thermostat / Remote control with touch screen display, for built-in installation (box 503) or for wall installation. Colour black

Heat recovery

- ✓ Air renewal
- ✓ Thermodynamic recovery
- ✓ Summer dehumidification
- ✓ Freecooling

ELFOFresh EVO [CPAN-YIN]

Air renewal and purification unit, full fresh air

Configuration

- Cooling and heating operation

Accessories

- 1 x FESX: Electronic filters

Thermal solar panels kit

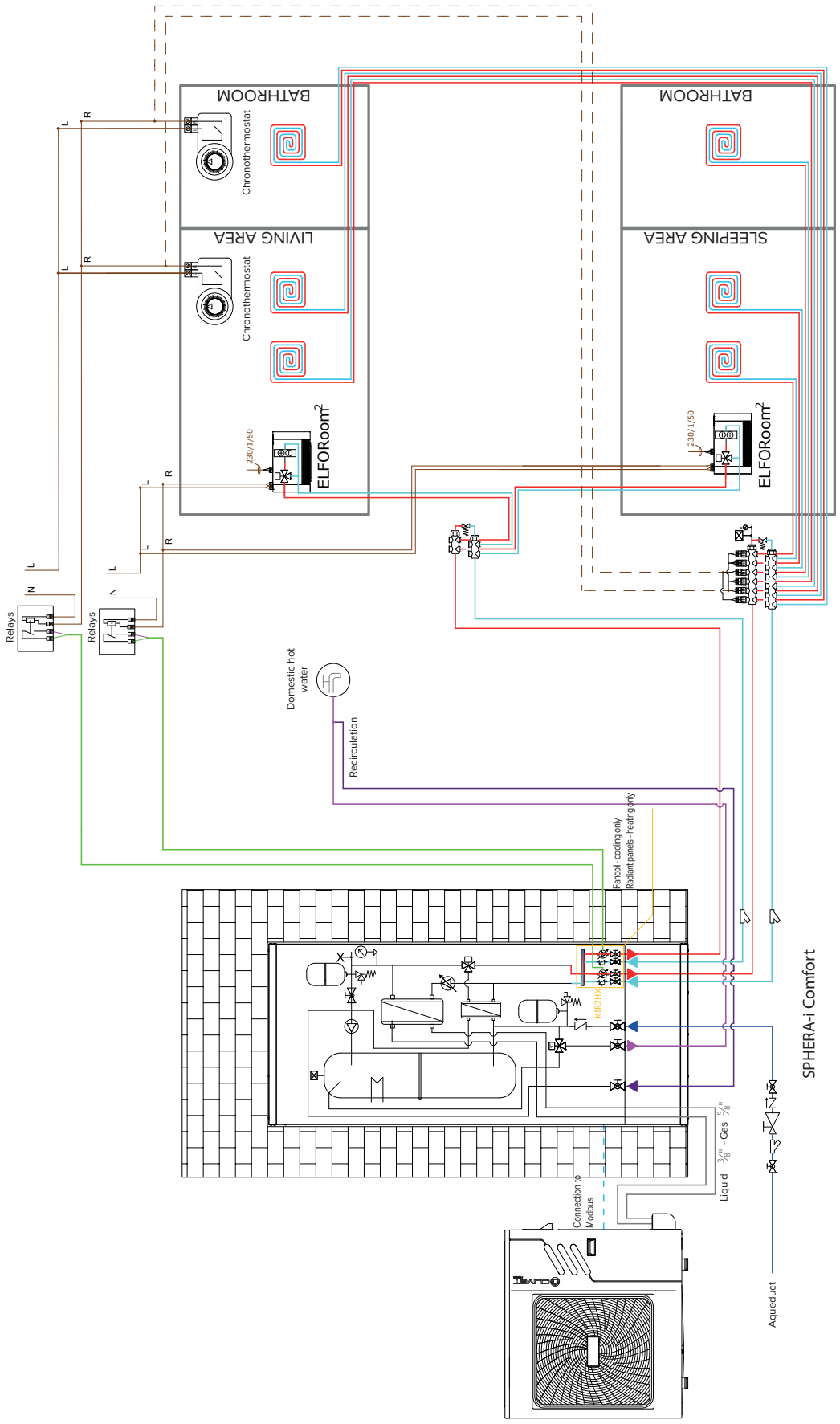
ELFOSun

Flat Solar collectors

Accessories

- 1 x 2CSPX 2 flat solar collectors
- 1 x KFTI2X Fixing systems for pitched roofs for the 2-collector installation
- 1 x KCVEX Circulation kit : circulation group, control unit, expansion tank

ELFOSystem SPHERA-i Comfort



Water-air heat pump + 2 water circuits + electromechanical thermostats

SIC-00000-22/R01

DWG version available on www.clivet.com

The diagram is purely indicative. The executive design and subsequent installation must be carried out in compliance with the regulations in force.

Heat Pump

- ✓ Heating
- ✓ DHW Production
- ✓ Cooling

SPHERA-i Comfort [SRHM-IC]

Two-section reversible heat pump

Accessories

- 1 x ADIX: Recessed storage unit (mandatory)
- 1 x ACS150X: 150-litre domestic hot water storage tank (mandatory)
- 1 x KIR2HX: 2 zones: both at high temperature

Plant terminal units

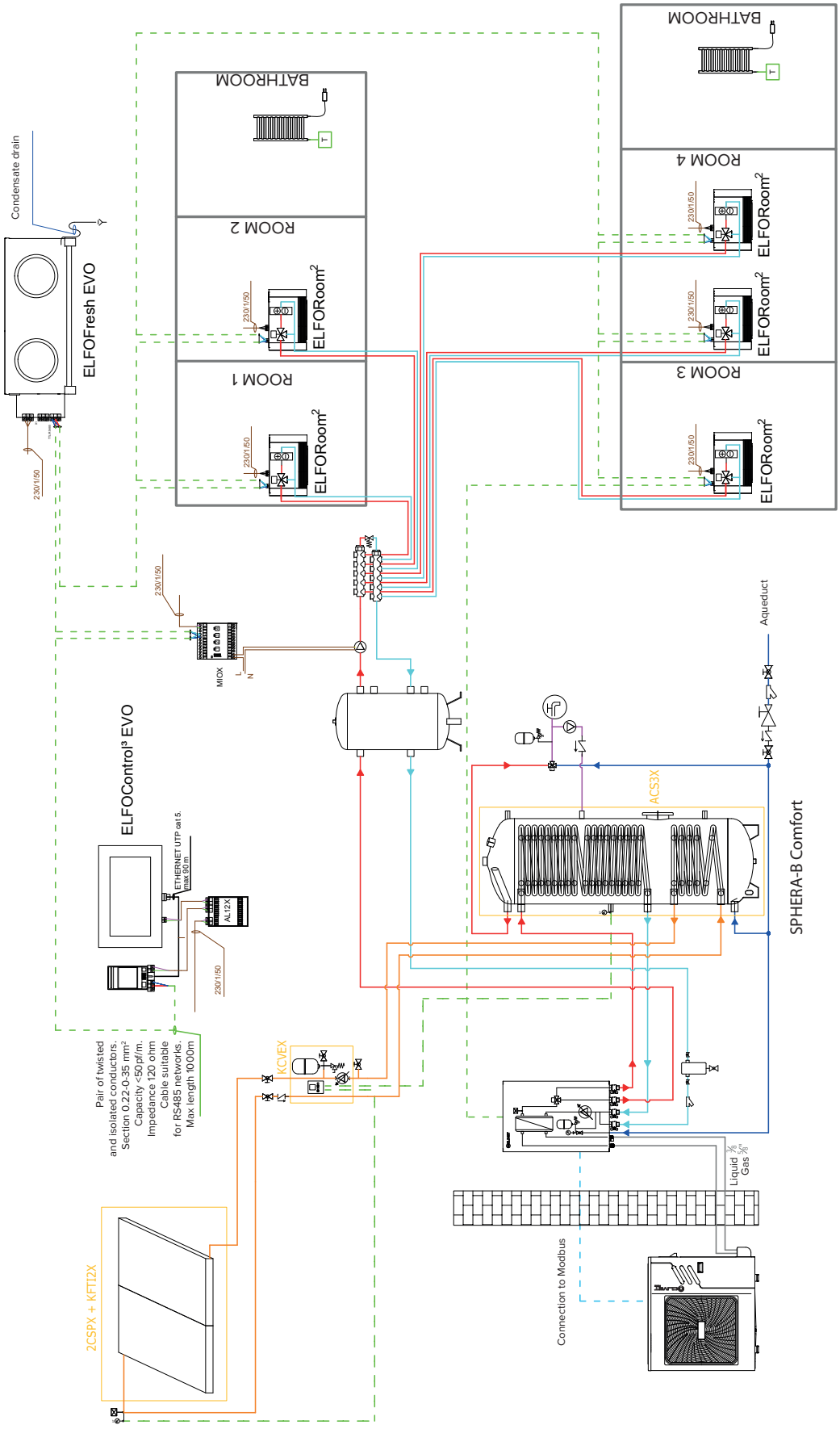
ELFORoom²

Water terminal unit, vertical and horizontal indoor installation, cased or uncased

Configuration

- OUTVL: Vertical cased with LCD display, continuous modulation DC motor, RS485 interface and built-in thermostat

ELFOSystem SPHERA-B Comfort



Water-air heat pump + solar integration + 1 water circuit + CMV with thermodynamic recovery / ELFOControl

SBC-FCS00-11/R01

DWG version available on www.clivet.com

The diagram is purely indicative. The executive design and subsequent installation must be carried out in compliance with the regulations in force.

Heat Pump

- ✓ Heating
- ✓ DHW Production
- ✓ Cooling
- ✓ Solar integration on the DHW system

SPHERA-B COMFORT [SRHM-BC]

Two-section reversible heat pump

Accessories

- 1 x acs3Sx: 300-litre domestic hot water storage with coil for solar applications

Control

- ✓ System domotics with advanced algorithms for optimising energy and comfort

ELFOControl³ EVO

Control for independent residential systems

Includes

- Power supply unit 12 V DC AL12X (4 modules DIN)
- Converter Ethernet/485 (3 modules DIN)
- Cable Ethernet UTP cat 5 (length 5 m)

Accessories

- 1 x MIOX: Module for management of substitution generator (boiler), zone valves or boosters and remote consent
- 1 x CBSX: Shielded cable for the connection to all devices (Modbus RS485 cable)
- 1 x CIECX : Allows recessed installation of ELFOControl³ EVO

Heat recovery

- ✓ Air renewal
- ✓ Thermodynamic recovery
- ✓ Summer dehumidification
- ✓ Freecooling

ELFOFresh EVO [CPAN-YIN]

Air renewal and purification unit, full fresh air

Configuration

- Cooling and heating operation

Accessories

- 1 x FESX: Electronic filters

Plant terminal units

ELFORoom²

Water terminal unit, vertical and horizontal indoor installation, cased or uncased

Configuration

- OUTVL: Vertical cased with LCD display, continuous modulation DC motor, RS485 interface and built-in thermostat

Thermal solar panels kit

ELFOSun

Flat Solar collectors

Accessories

- 1 x 2CSPX 2 flat solar collectors
- 1 x KFTI2X Fixing systems for pitched roofs for the 2-collector installation
- 1 x KCVEX Circulation kit : circulation group, control unit, expansion tank

CONTENTS

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).

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

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www.clivet.com

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