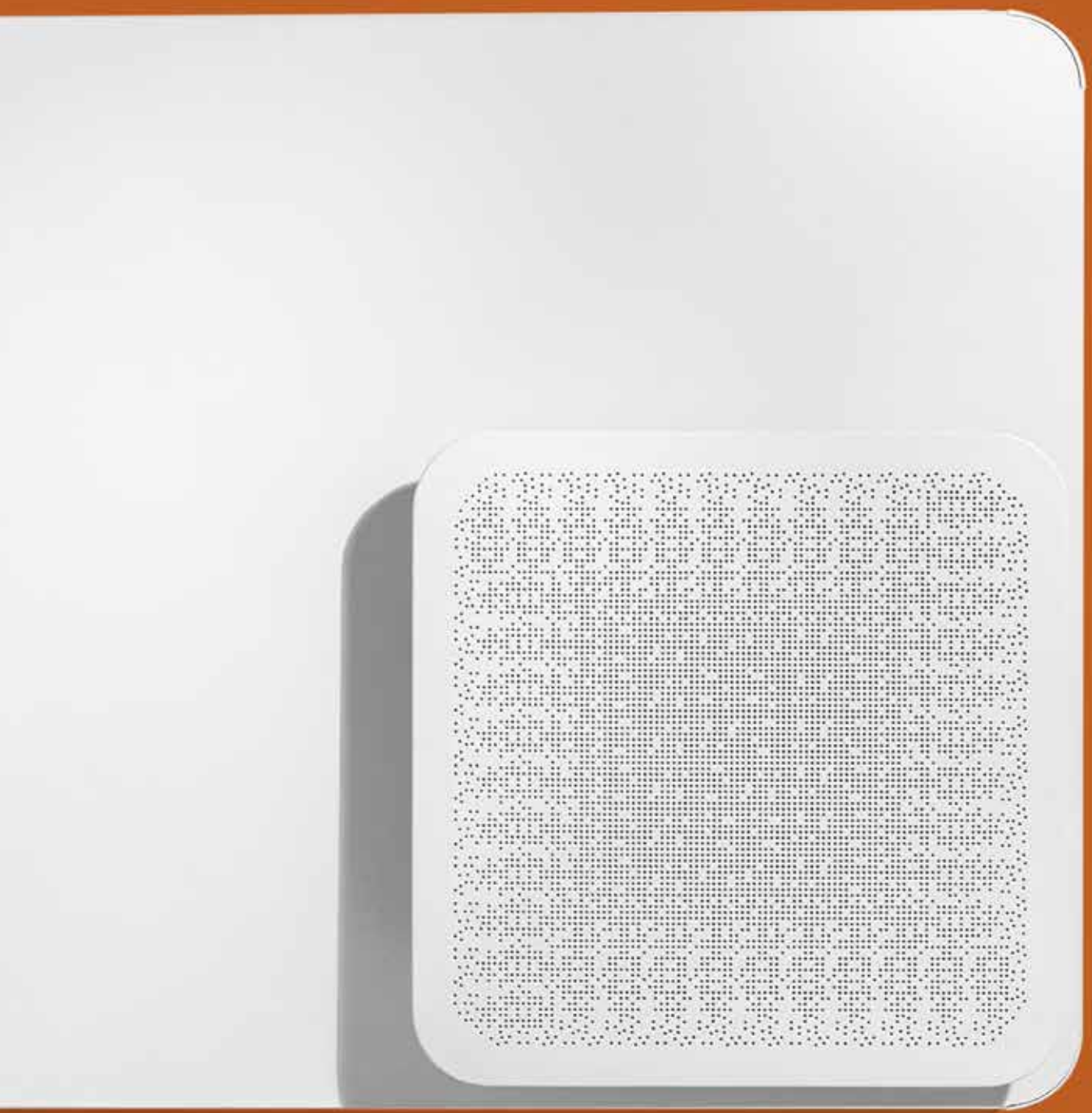
innova

STØNE

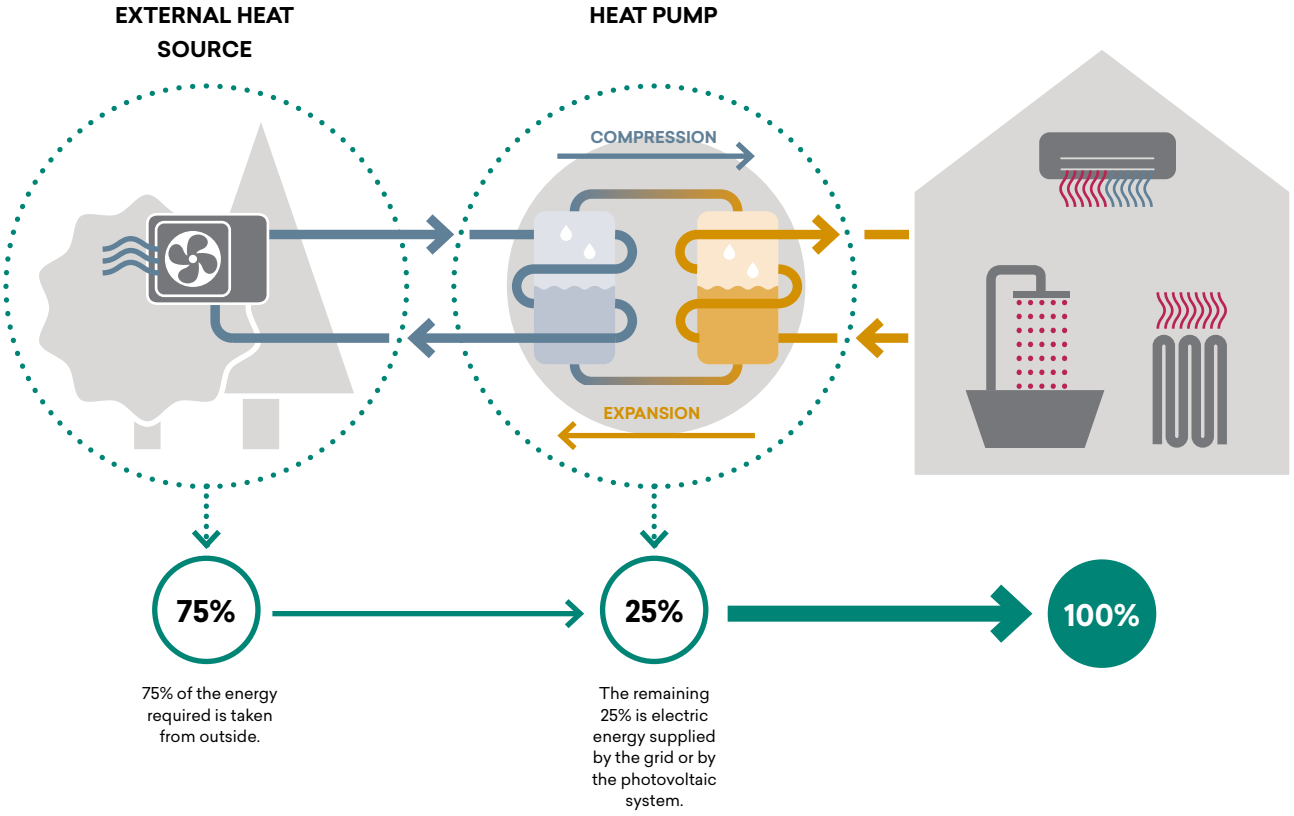
Don't hide it anymore.



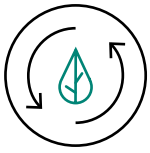
The heat pump we were
waiting for now is here.

What is a heat pump?

A refrigerator does not cool: it removes heat from a low-temperature environment and transfers it to a warmer environment.
A heat pump works with the same principle: it removes heat from a cool outdoor environment and transfers it to a warmer indoor environment.
The cycle can be inverted during summer, as indoor environments can be cooled by releasing the heat towards the outside.
This process uses thermal energy already present in nature.
A heat pump needs electricity to activate but it produces heat by absorbing energy from outside sources: air, water or, in the case of geothermal systems, the ground.
If the electricity is generated by a photovoltaic system or by wind turbines, the thermal energy produced is entirely free and renewable.

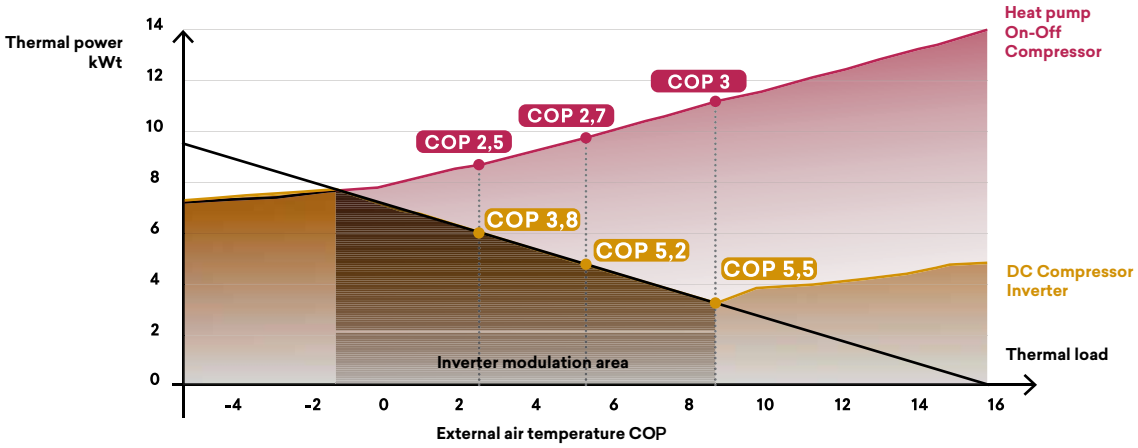


Comparison between a boiler and a heat pump

	ENERGY REQUIRED	ENERGY PRODUCED BY A BOILER	ENERGY PRODUCED BY THE HEAT PUMP	
 HEATING	10 kWh	1,02€	0,50€	-50%
 DOMESTIC HOT WATER (DHW)	1,3* kWh	0,15€	0,09€	-40%
 RENEWABLE ENERGY		0	8,4 kWh	100%
 EMISSIONS		2,68kg CO_2	1,25kg** CO_2	-50%

* daily energy requirements of a person = 50 litres of hot water at 40°C
** indirect CO_2 emissions produced by the national electricity production system 1 kWhe = 0.4332 kg of CO_2

Efficiency of a Heat pump Inverter vs on/off

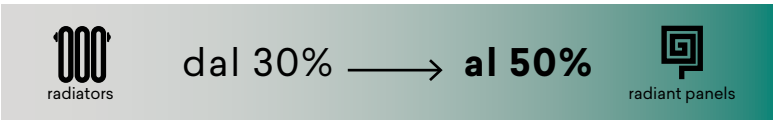


COP: represents the power supplied and the power absorbed

The requirement of a building is maximum at the design temperature and decreases linearly as the outside temperature increases.
The heat pump with inverter compressor adjusts the power supplied on the basis of the building's requirements.
The higher the outside temperature the lower the power supplied and, consequently, the higher the efficiency.
The heat pump with on/off compressor always works at 100% and, the higher the outside temperature the higher the power generated, conversely to the building's requirements. In these conditions, to satisfy the requested load the compressor works with repeated stops and starts, which sensibly reduce its efficiency.

Energy saving

The INNOVA DC Inverter heat pumps ensure considerable energy saving both during heating and when producing domestic hot water, thanks to their high SCOP (Seasonal Coefficient of Performance). Compared to a boiler, the heating cost for the entire winter season can be 30/50% lower.



BUTLER PRO, advanced control of the system

BUTLER PRO Web server is the system developed by INNOVA for managing an entire heating and cooling system directly from a local network or remotely.
BUTLER PRO allows you to connect the heat pump, controlled mechanical ventilation system, fan coils and all the other system elements via a serial connection.
BUTLER PRO is complete, simple and intuitive at the same time. You can configure a weekly calendar with time zones, create specific zones and change the settings so your home is at the right comfort level for your needs.

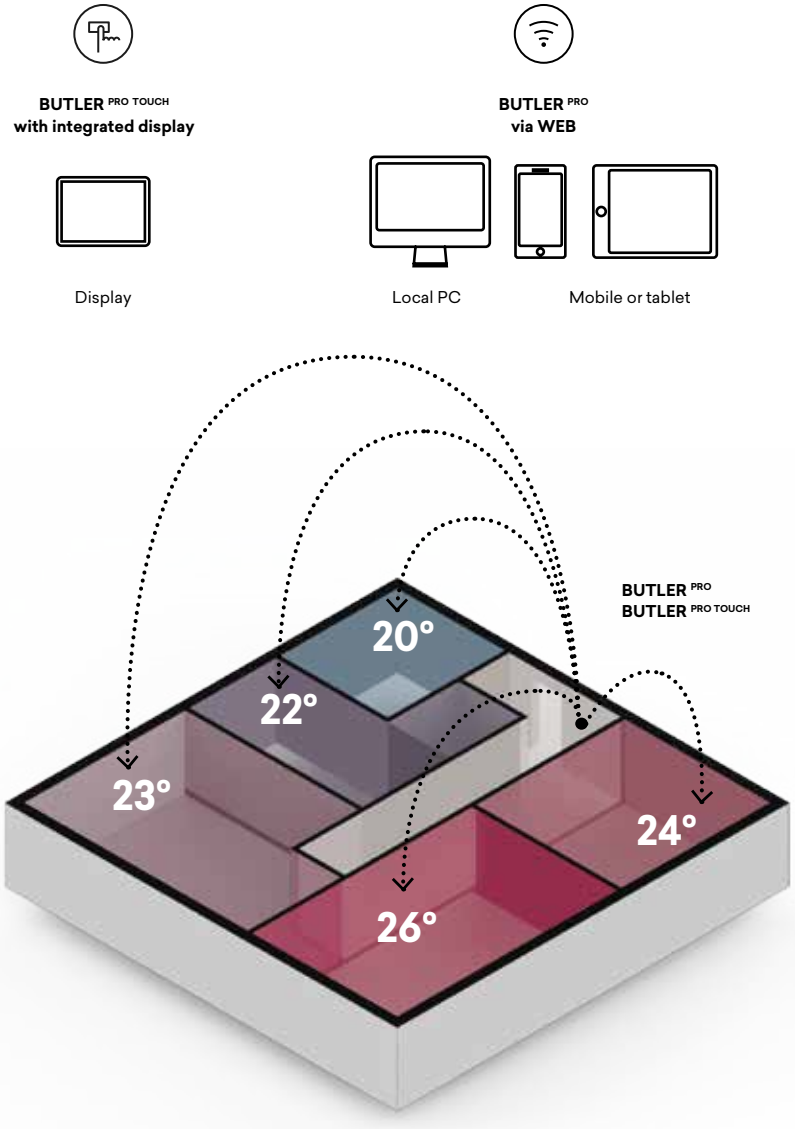
TWO VERSIONS:

BUTLER PRO:settings and display via smartphone / tablet / computer only with internet connection. Installation on a 35 mm DIN rail in the electrical cabinet of the heat pump or in the electrical cabinet of the house.

BUTLER PRO TOUCH: settings and display via the integrated 10" touch screen. Can be connected to the internet remotely via smartphone / tablet / computer. Recessed wall installation. The pre-installation box is supplied separately.

ROOM-BASED CONTROL

You can control each room with BUTLER by configuring a weekly calendar with time zones, creating settings for each room or area, modifying the settings so your home is at just the right comfort level for your needs.



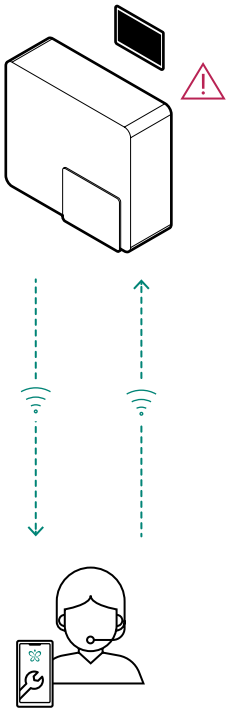
MAIN FUNCTIONS

- **Supervision and control through local network or remotely.**
  The system can be managed through a smartphone, tablet or computer
- **Summer and winter personalised programming.**
  Different programmes can be set for each season
- **Setting of three temperature levels on the INNOVA fan coil network.**
  For each room or zone it is possible to select 3 different work temperatures, which can be modified at any time
- **Weekly time programming.**
  In each room it is possible to set different operating times; the same applies to HRV and fan coils
- **Network interface like the one on PCs.**
  Once the bus network between the heat pump and the fan coils has been made, the connection with the Web server is the same as that of a normal computer
- **Remote assistance.**
  With the user's consent, BUTLER can automatically access the INNOVA cloud for diagnostics and assistance in case of need.

A **WEEKLY SCHEDULING**

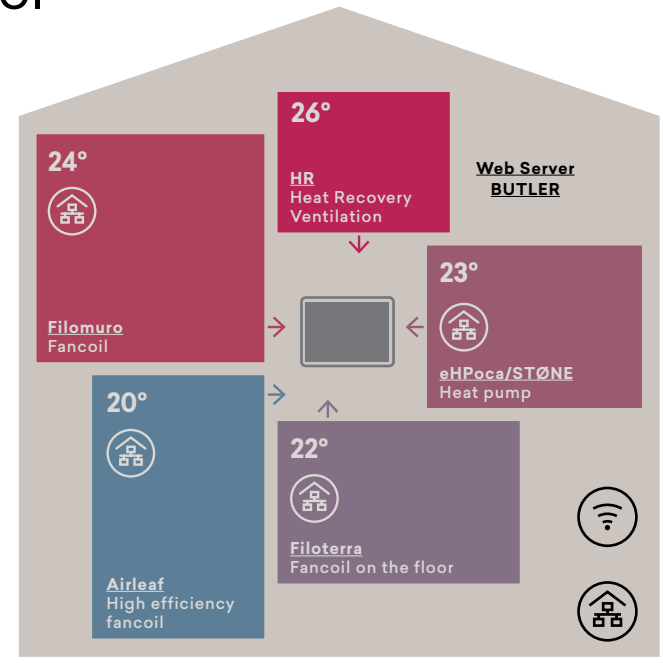
B **DOMESTIC HOT WATER SETTINGS**

Remote assistance



With the user's consent, BUTLER can automatically access the INNOVA cloud for diagnostics and assistance in case of need. Thanks to the Internet connection, it is possible to verify remotely the correct operation of INNOVA products connected to the BUTLER.
Any operating anomalies can be transmitted automatically from the BUTLER to the assistance centre which can intervene by modifying the functional parameters or decide to physically intervene by providing a quick and timely service.

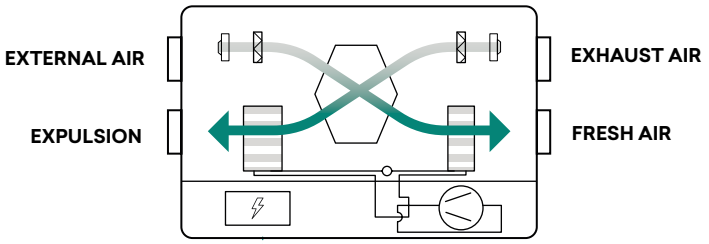
Total control



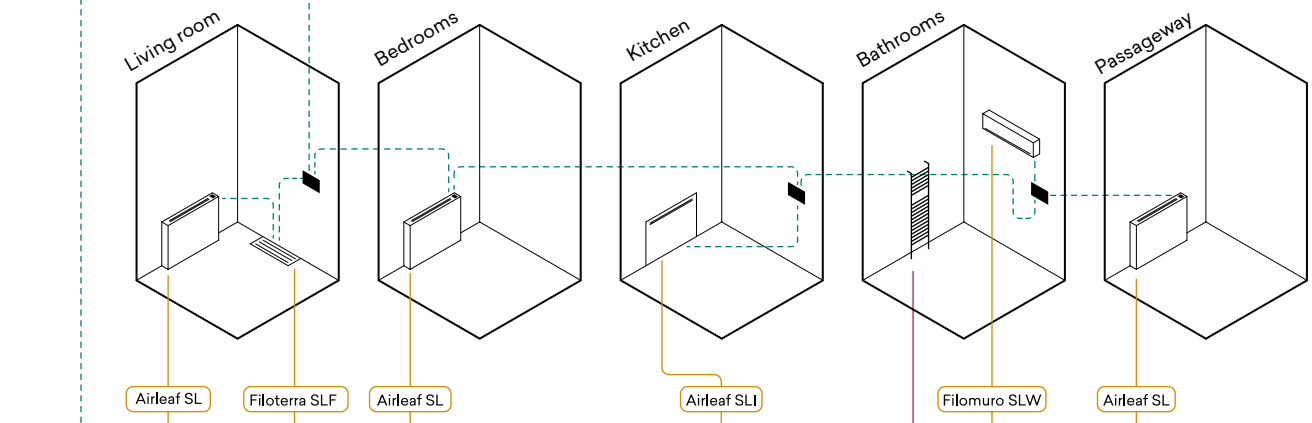
The advantage of choosing a complete INNOVA system is that, for any need, we are the only reference both for routine maintenance and for assistance purposes. A comprehensive and high-quality system.

INNOVA HRA -i PLUS

CONTROLLED MECHANICAL VENTILATION
with thermodynamic heat recovery



Comunication cable

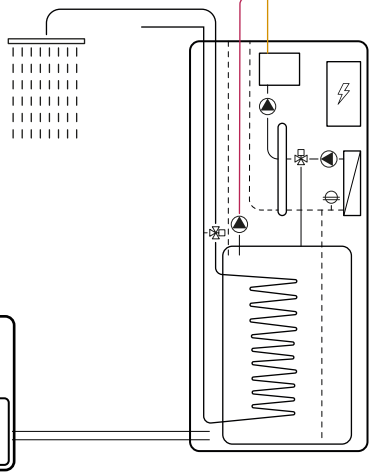


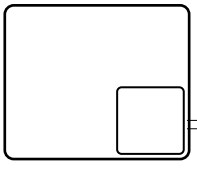
Airleaf SL | Filoterra SLF | Airleaf SL | Airleaf SLI | Filomuro SLW | Airleaf SL

1 2 3 4 5 6

BUTLER PRO TOUCH

Daily/weekly programming
of the single rooms.
Time-based scheduling of
the HRV operation with heat
pump management





STØNE

Don't hide it
anymore.

Design and integration with the building

The heat pumps currently available on the market are all characterised by a bulky and visually unpleasant outdoor unit.
They are hard to insert in a refined architectural context. It is almost impossible to imagine them in a block of flats.
STØNE originates from a new and comprehensive approach to design that blends:

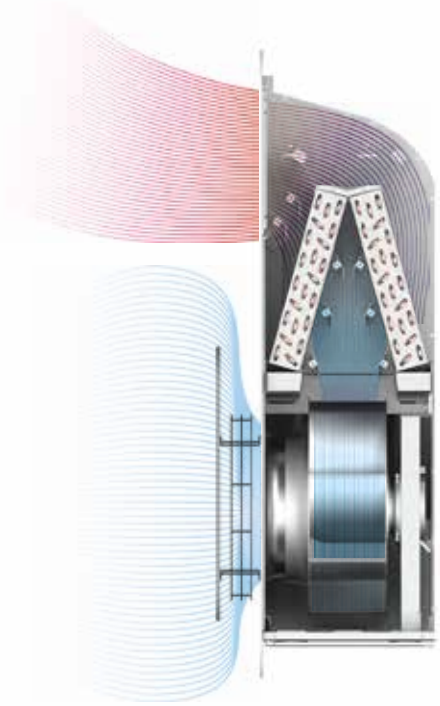
- A “ground-breaking” design that demolishes existing design paradigms to merge the elements into a new and bold combination.
- Components designed and manufactured to size, of extremely high quality and capable of providing optimal performances in terms of efficiency, comfort and silence.

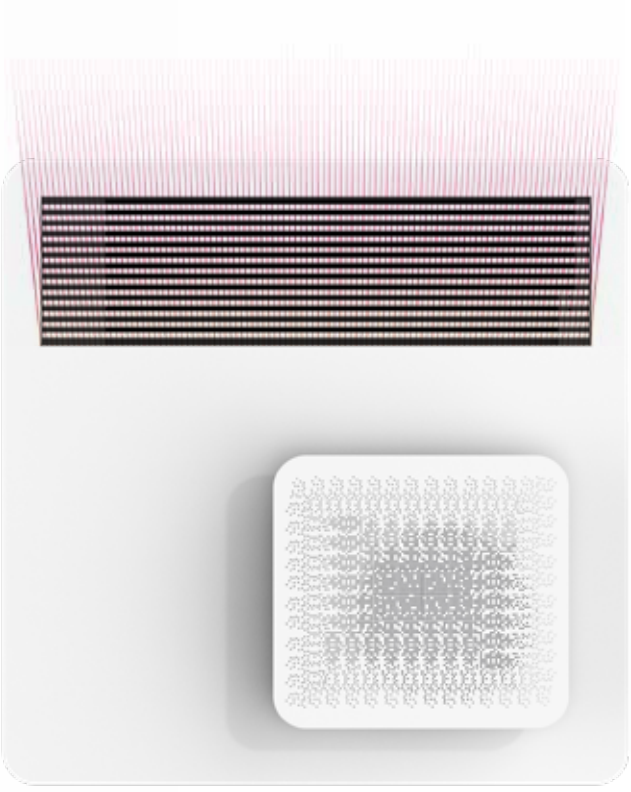
STØNE is an extremely advanced technological solution that is inconspicuous outdoors and optimally blends into any setting – even improving it.

Silence and comfort

- Air extraction from the front.
- Plug fan inside the structure, which extracts air from the front of the unit and directs the air flow towards the heat exchange batteries.
- The noise generated by the fan is very low and absorbed within the structure.
- The batteries dampen the noise generated by the air flow.
- Thanks to the vertical or horizontal flow of the delivery air, the air flow and the resulting noise can be directed towards a spot where they do not annoy, avoiding air recirculation.

Delivery
Suction





Efficiency

A. Overturned “V” heat exchange batteries

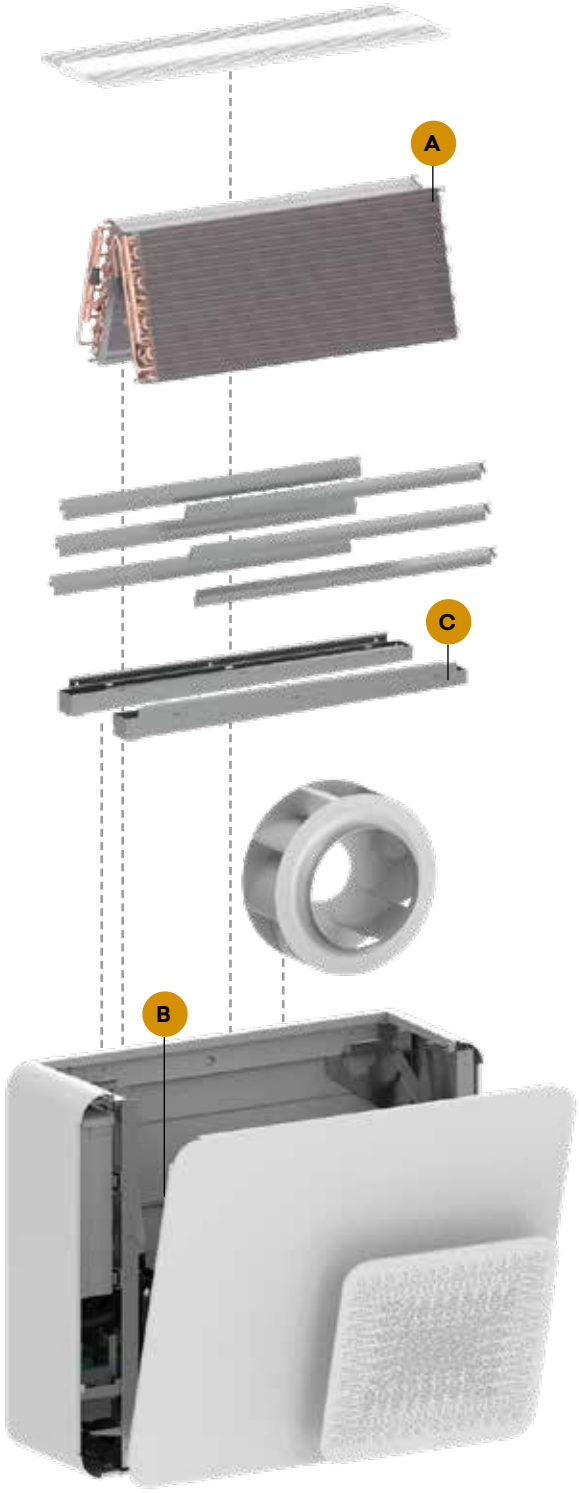
Greater heat exchange surface
Even distribution of air over the entire surface
Reduced pressure loss
Lower air flow given the same level of efficiency
Lower air flow = greater silence during operation

B. Heat exchange batteries inside the cabinet

The unit can be installed against the wall
The batteries do not get dirty and guarantee constant efficiency over time
Faster defrosting because the heat generated does not disperse into the outside air but is used for melting the ice on the fin
Batteries with hydrophilic fin and undercooling circuit for reducing defrosting cycles and ice build-up on the base

C. Two condensate trays

The battery does not adhere to the tray so that condensate can be discharged effectively and rapidly
The trays are highly inclined so that condensate can drain rapidly without icing up
The discharge outlet of the condensate trays lies 40 cm above the ground, inside the compressor compartment which is hot



Low-bulk installation and modularity

STØNE eliminates any unnecessary bulkiness and makes it possible to create unprecedented modular combinations, always with a minimal visual impact outdoors.

Outdoor configurations

STØNE heat pumps can be installed also in contexts and ways that are currently unheard of.
Thanks to its innovative design, STØNE can be placed entirely against the home's wall, blending elegantly into the setting.
In the built-in or semi built-in version, it can disappear completely or partially into the wall.

V

Exposed with vertical air delivery.

H

Exposed with horizontal air delivery.

IN

Built-in.

PI

Semi built-in.

STØNE

The versions

Range:

5kW — 15kW

STØNE M1

Monobloc heat pump complete with pump, safety valve and expansion vessel. A compact solution that does not require any specific expertise in connecting the refrigeration lines.

STØNE H1

An exposed tower indoor unit with integrated 200-litre storage tank for domestic hot water, connected to an outdoor unit through water connections. A complete, reliable solution with compact dimensions that does not require any specific expertise in connecting the refrigerant lines.

STØNE B1

Indoor hydraulic module connected to the outdoor unit through refrigerant lines. A flexible solution suitable for creating tailor-made systems.

STØNE T1

An exposed tower indoor unit with integrated 200-litre storage tank for domestic hot water, connected to an outdoor unit through refrigerant lines. A complete solution guaranteeing reliability and compact overall dimensions.

STØNE C1

A built-in cabinet with integrated 170-litre storage tank for domestic hot water, connected to an outdoor unit through refrigerant lines. Ideal for apartments with installation in the perimeter wall.

STØNE M1

STØNE can be used in the monobloc version, in various configurations.

This version, with hermetic monobloc cooling circuit, contains all the hydraulic devices such as, for example, the electronic pump and the expansion vessel.

The connection with the system is made through water connection.

OUTDOOR CONFIGURATIONS

V

Exposed with vertical air delivery

H

Exposed with horizontal air delivery

IN

Built-in

PI

Semi built-in

R32

Refrigerant with low GWP for the entire range.

kW

Available power range of up to 15 kW.

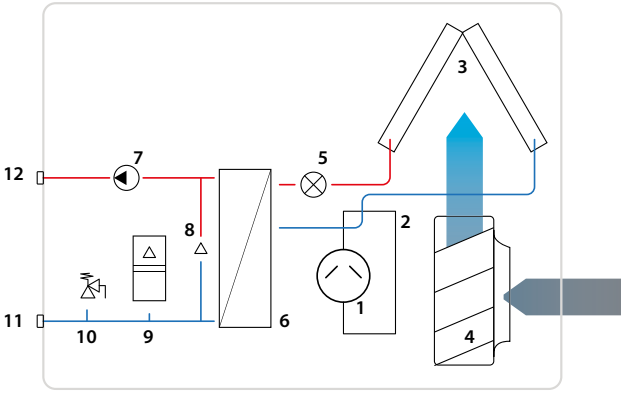
Remote Wi-Fi control using BUTLER (optional).

A+++

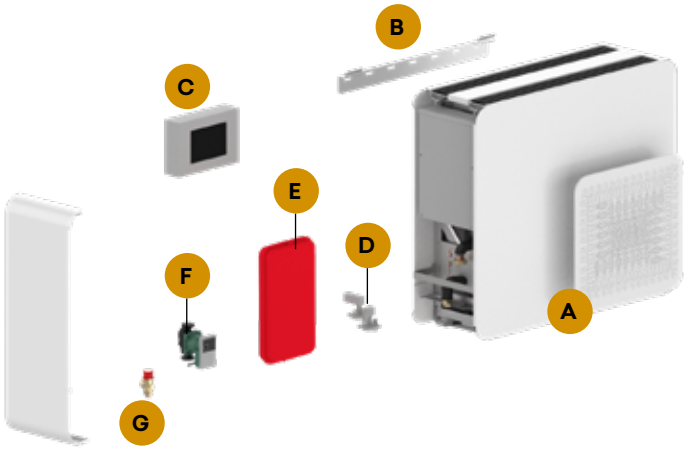
Highest energy class A+++.

Diagrams STØNE M1

1. Compressor
2. 4-way valve
3. Finned-pack heat exchanger
4. Plug fan
5. Electronic thermostatic valve
6. Brazed plate heat exchanger
7. Pump
8. Differential pressure switch
9. Expansion vessel
10. 3-bar safety valve
11. System return plumbing connection
12. System delivery plumbing connection



Standard components



STANDARD COMPONENTS

A. Structure and RAL9003 panels
B. Wall-mounting brackets
C. Remote control panel with control interface display
D. Differential pressure switch
E. 6-litre expansion vessel (not present in the 5M version)
F. Primary circuit circulator pump
G. 3-bar safety valve

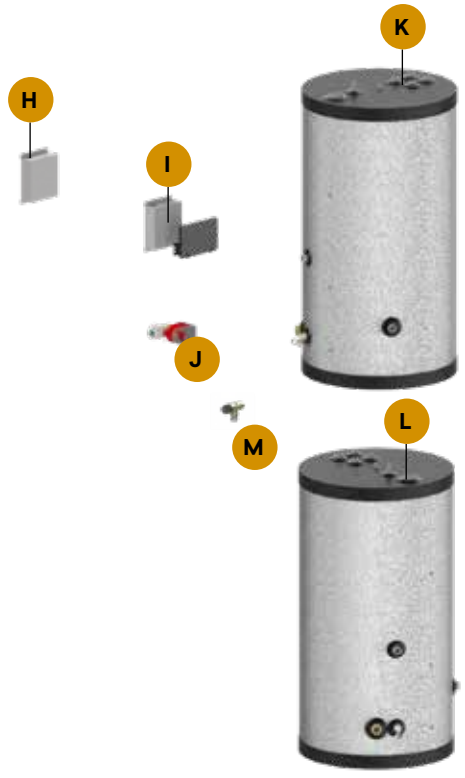
ACCESSORIES (SUPPLIED INSTALLED IN THE UNIT)

H. BUTLER PRO (installed in the remote electrical cabinet)

ACCESSORIES (SUPPLIED SEPARATELY)

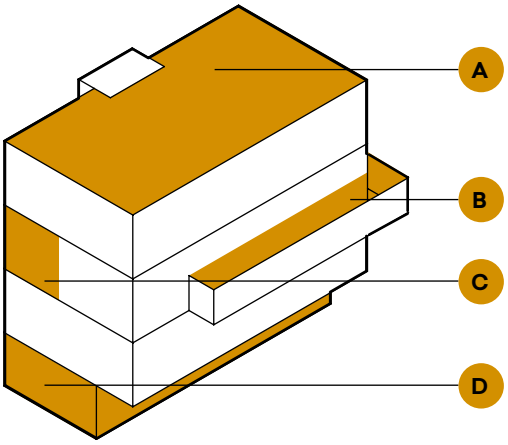
I. BUTLER PRO TOUCH
J. 3-way DHW valve
K. DHW preparation tank with capacity from 200 to 1,500 litres
L. Inertial storage tank with capacity from 100 to 1,000 litres
M. Anti-frost safety valve

Accessories (supplied separately)



Installing STØNE M1

STØNE M1 is a flexible solution suitable for all applications. The unit and the system are connected through plumbing connections.
STØNE M1 is a heat pump that can be modular and used in cascade mode for satisfying high power levels.



A. Roof
B. Terrace / Balcony
C. Wall
D. Floor

Example of a system

1. Indoor unit
2. Outdoor unit

— Hydraulic connections
— Domestic hot water / heating

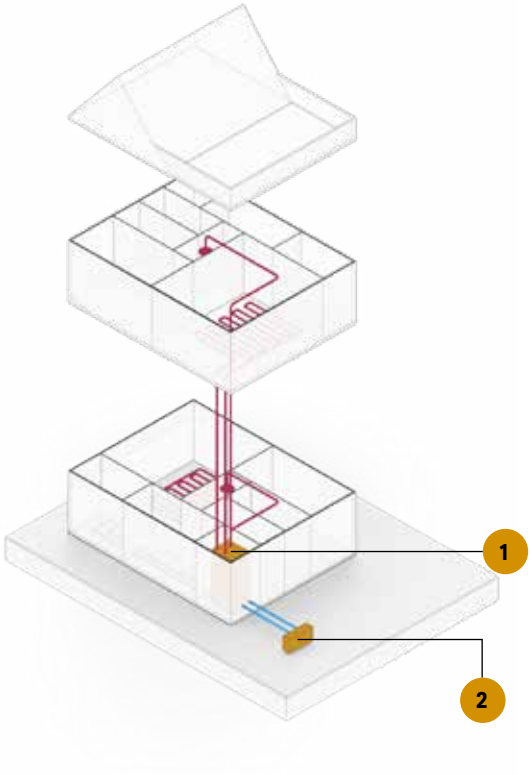
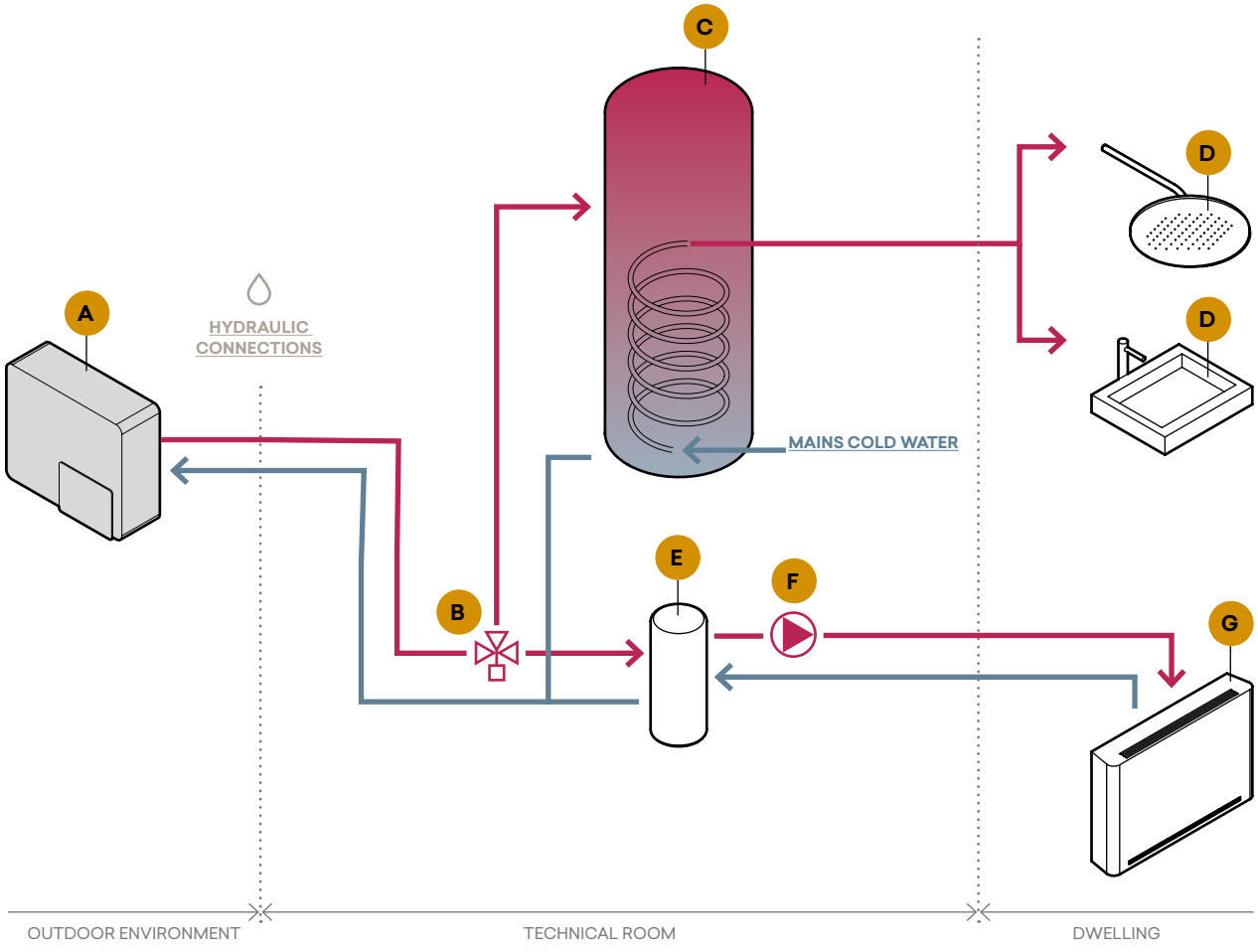


Diagram of STØNE M1 system



A. STØNE M1 outdoor unit
B. 3-way valve
C. Thermal storage tank for instantaneous preparation of domestic hot water
D. Domestic hot water point of use
E. Hydraulic separator
F. Secondary circuit pump
G. Heating and cooling system

Domestic hot water
Cold water

STØNE H1

Water connection between the outdoor unit and the indoor unit

Tower with integrated 200-litre storage tank for domestic hot water, connected to an outdoor unit through water pipes. Not special expertise requested for installation of connections.
Ideal for houses and apartments for 4 people with normal consumption of domestic hot water.
All options are factory buit in and included in the indoor unit not more need of a separate technical room.

OUTDOOR CONFIGUATION

V

Exposed with vertical air delivery

H

Exposed with horizontal air delivery

IN

Built-in

PI

Semi built-in

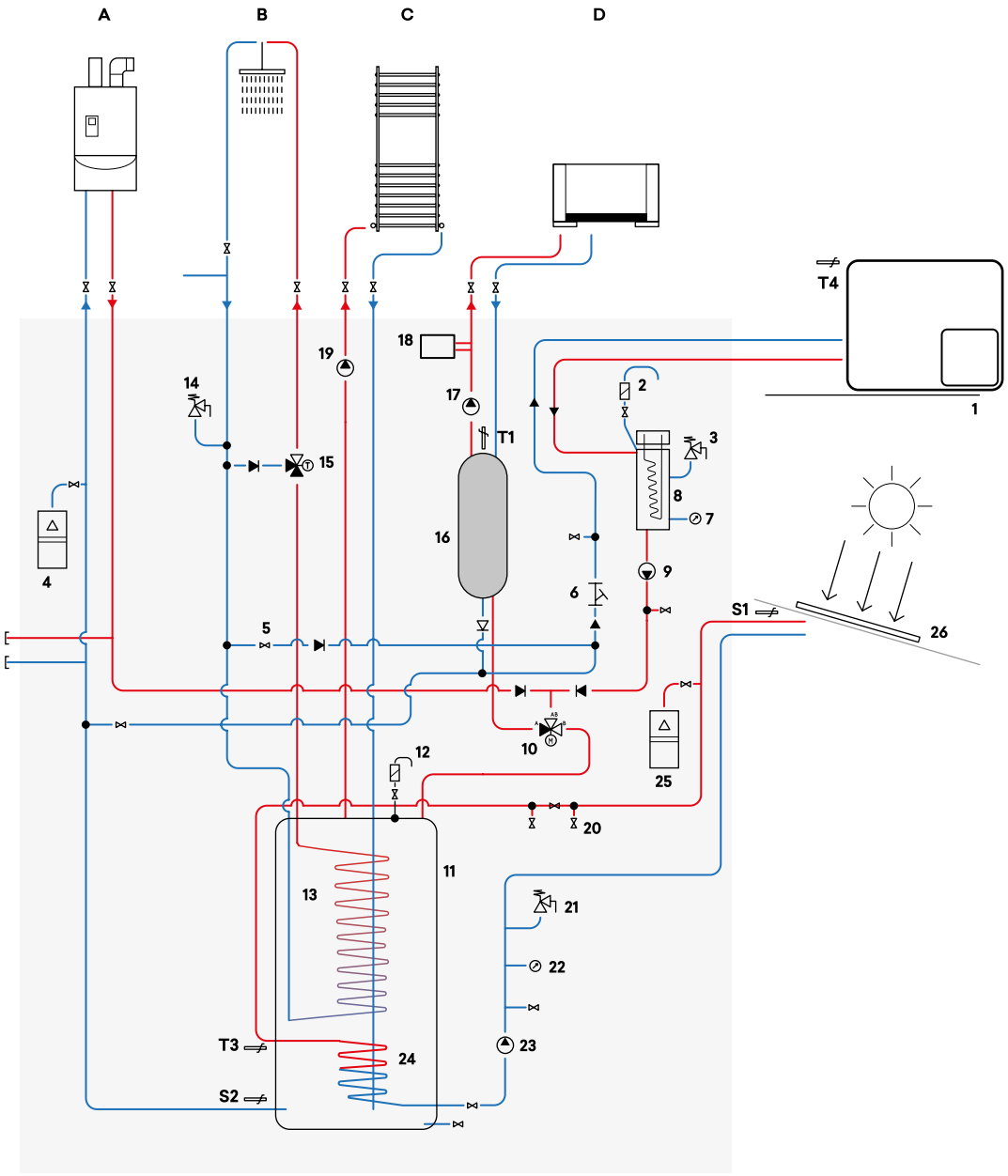
The indoor unit has all the hydraulic components integrated into it.

Production of domestic hot water from –20°C to 40°C outside air.

Remote Wi-Fi control using BUTLER (optional).

Highest energy class A+++.

Diagrams STØNE H1

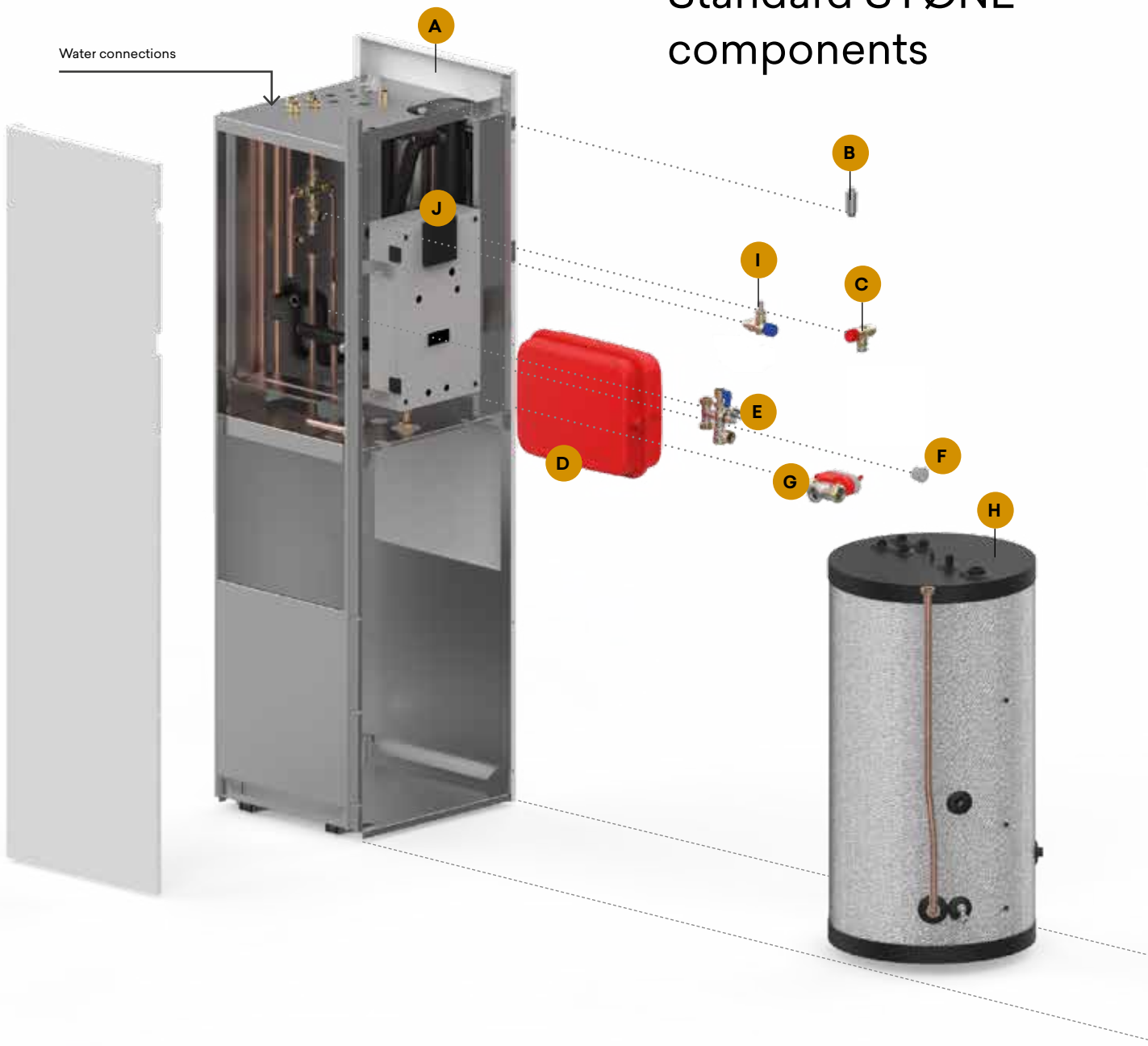


A. Boiler
B. Domestic hot water points of use
C. High temperature points of use (design radiators)
D. System points of use

1. Outdoor unit
2. Automatic relief valve
3. 3-bar system safety valve
4. 24-litre system expansion vessel
5. Filling unit
6. Y-shaped filter
7. System pressure gauge
8. 2-4-6 kW electrical heater manifold (optional)
9. Primary circuit pump
10. 3- way valve DHW system
11. 200-litre domestic hot water preparation storage tank
12. Hot water tank relief valve
13. DHW instantaneous heating stainless steel coil
14. 7-bar domestic hot water safety valve
15. Domestic hot water thermostatic mixer (optional)
16. Hydraulic separator (optional)
17. Secondary circuit pump (optional)
18. 20-litre inertial tank (optional)
19. Heated towel rail pump (optional)
20. Solar heating system fill valve (optional)
21. 3-bar solar heating system safety valve (optional)
22. Solar heating circuit pressure gauge (optional)
23. Solar heating circuit pump (optional)
24. Solar heating system coil (optional)
25. 24-litre solar heating system expansion vessel (optional)
26. Solar panel

— — — Hydraulic connections

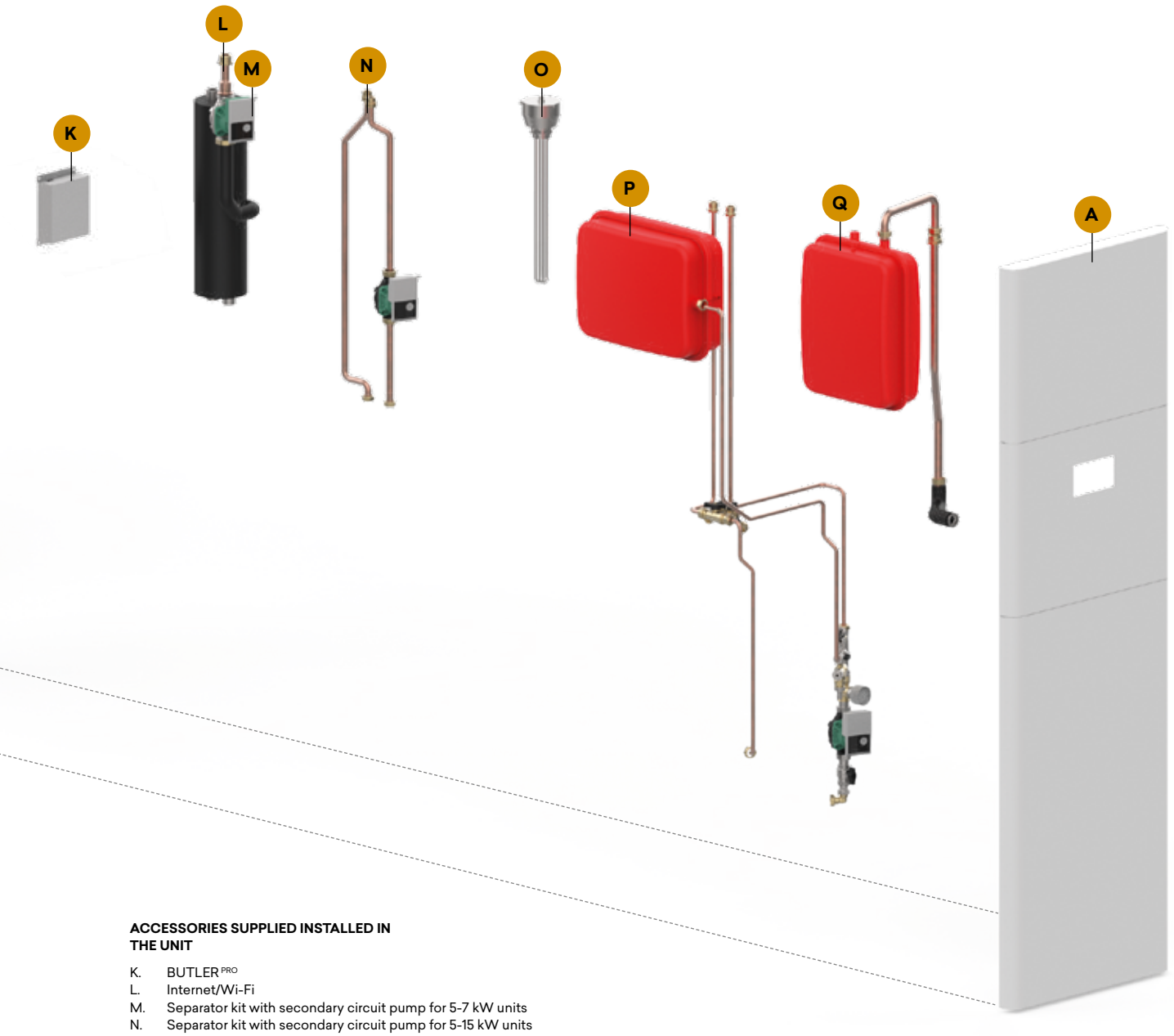
Standard STØNE H1 components



STØNE H1 STANDARD COMPONENTS

A. STØNE H1 structure and RAL9003 covering panels
B. Automatic relief valve
C. 3-bar system safety valve
D. 24-litre system expansion vessel
E. System filling unit and Y-shaped filter
F. Pressure gauge
G. 3-way DHW system valve
H. 200-litre domestic hot water preparation storage tank
I. 7-bar domestic hot water safety valve
J. Control panel with control interface display

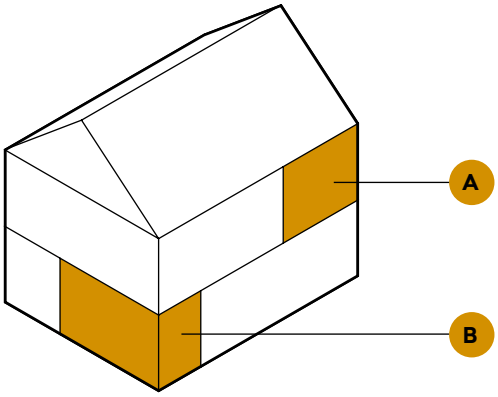
STØNE H1 accessories supplied installed in the unit



ACCESSORIES SUPPLIED INSTALLED IN THE UNIT

K. BUTLER PRO
L. Internet/Wi-Fi
M. Separator kit with secondary circuit pump for 5-7 kW units
N. Separator kit with secondary circuit pump for 5-15 kW units
O. Heated towel rail kit
P. 2-4-6 kW heater kit for system and DHW
Q. Solar heating kit (can be used if the inertial tank kit is not present): power pack, pump, safety valve, 24-litre expansion vessel, filling unit, system fill valve
R. 20-litre inertial tank kit

Installing STØNE H1



H1 is a complete solution.
All the system's elements are contained within the cabinet, resulting in lower overall dimensions and greater reliability, since all the elements are installed, adjusted and tested at the factory.

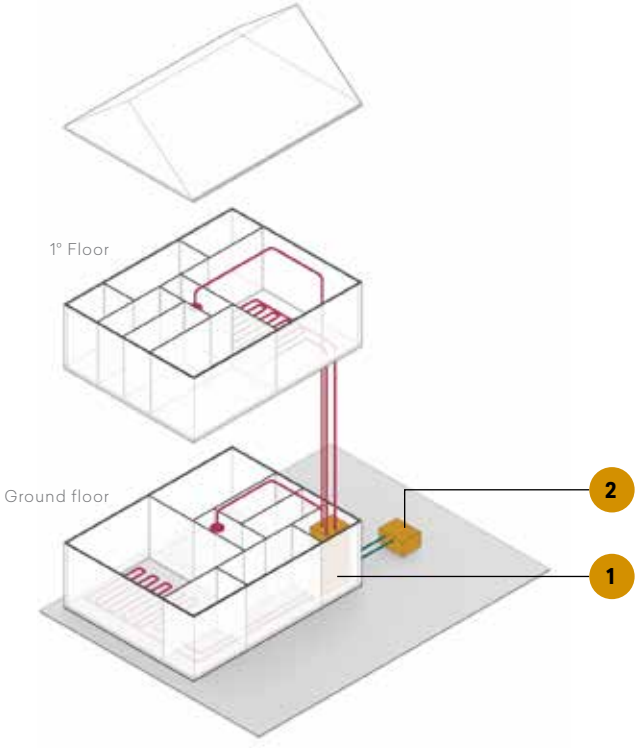
Medium-size dwellings

Apartments

The indoor unit is suitable for being installed in any room thanks to its compact size and elegant forms.

A. Kitchen / Living room
B. Laundry room / Basement

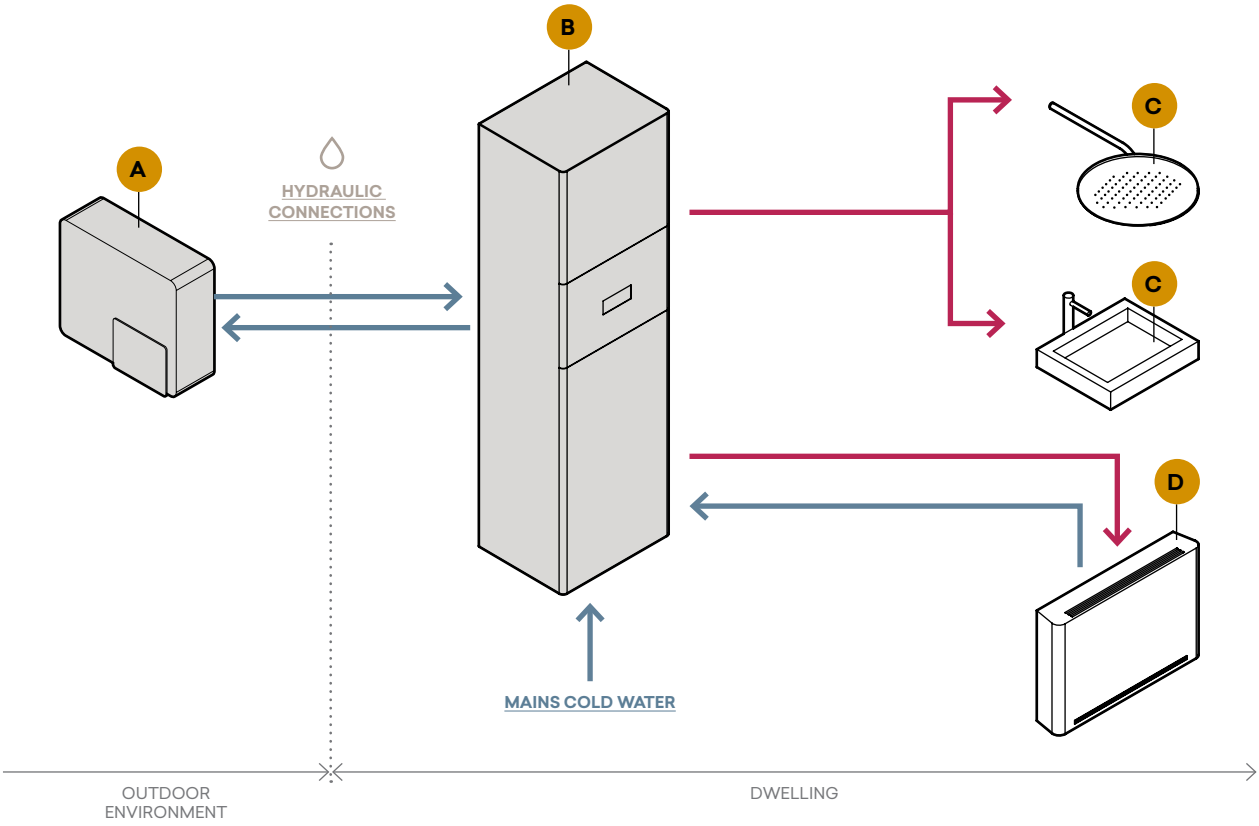
Example of a system



1. Indoor unit
2. Outdoor unit

Hydraulic connections
Domestic hot water / heating

Diagram of STØNE H1 system



A. outdoor unit
B. indoor unit
C. Domestic hot water point of use
D. Heating system
Domestic hot water
Cold water

STØNE B1

Split version with refrigerant connection between the indoor and outdoor units.

Indoor hydraulic module connected to the outdoor unit through refrigeration lines. Ideal for:

- Offices, where there is no need to produce domestic hot water.
- Villas, thanks to the combination with a domestic hot water storage tank suitably sized for satisfying high requirements.
- Multi-family central heating systems with the possibility of installing multiple units in cascade mode and the availability of domestic hot water storage tanks of suitable capacity for several users.

OUTDOOR CONFIGURATION

V

Exposed with vertical air delivery

H

Exposed with horizontal air delivery

IN

Built-in

PI

Semi built-in

Indoor unit with compact dimensions. Merely 30 cm deep.

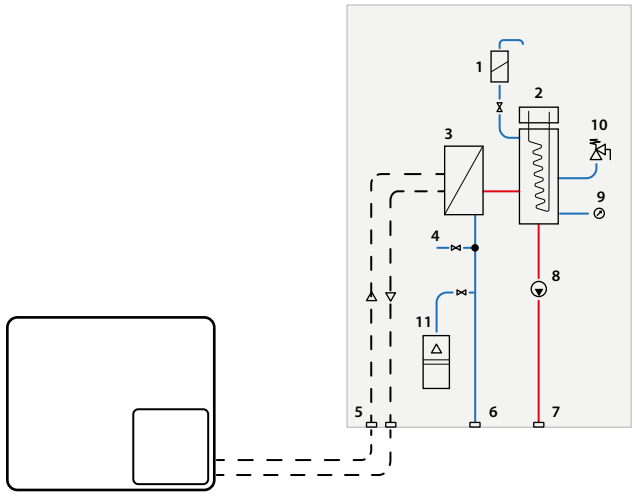
Extensive power range available, up to 15 kW maximum power.

Remote Wi-Fi control using BUTLER (optional).

Highest energy class A+++.

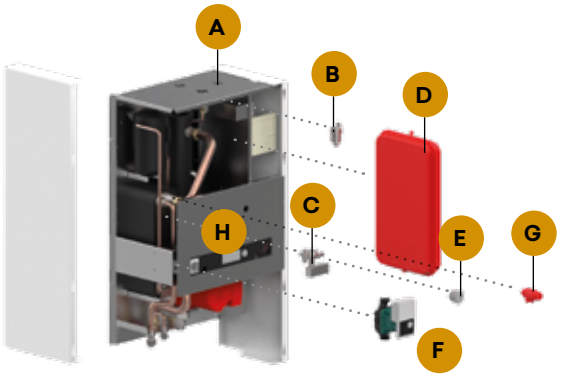
Diagram of STØNE B1

1. Automatic relief valve
2. Electrical heater manifold (optional)
3. Plate heat exchanger
4. Differential pressure switch
5. Refrigeration connections
6. System return plumbing connection
7. System delivery plumbing connection
8. Pump
9. Pressure gauge
10. 3-bar safety valve
11. 6-litre expansion vessel

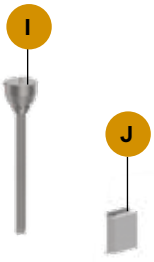


Refrigeration connections

Standard components



Accessories (supplied installed in the unit)



Accessories (supplied separately)

STANDARD COMPONENTS

A. Structure and RAL9003 covering panels
B. Automatic relief valve
C. Differential pressure switch
D. 6-litre expansion vessel
E. Pressure gauge
F. Primary circuit circulator pump
G. 3-bar safety valve
H. Control panel with control interface display

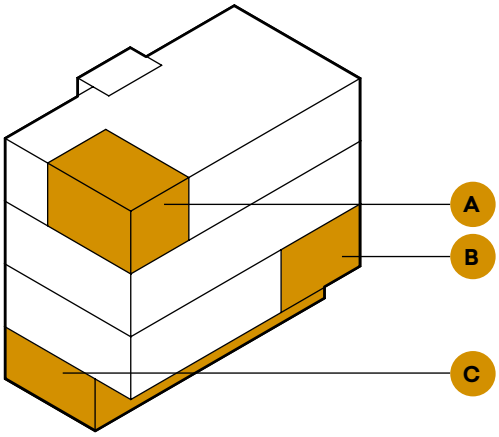
ACCESSORIES (SUPPLIED INSTALLED ON THE UNIT)

I. 2-4-6 kW heater kit for system and DHW
J. BUTLER PRO

ACCESSORIES (SUPPLIED SEPARATELY)

K. 3-way DHW valve
L. DHW preparation tank with capacity from 200 to 1,500 litres
M. Inertial storage tank with capacity from 100 to 1,000 litres
N. BUTLER PRO TOUCH

Installing STØNE B1



INDOOR UNIT POSITION

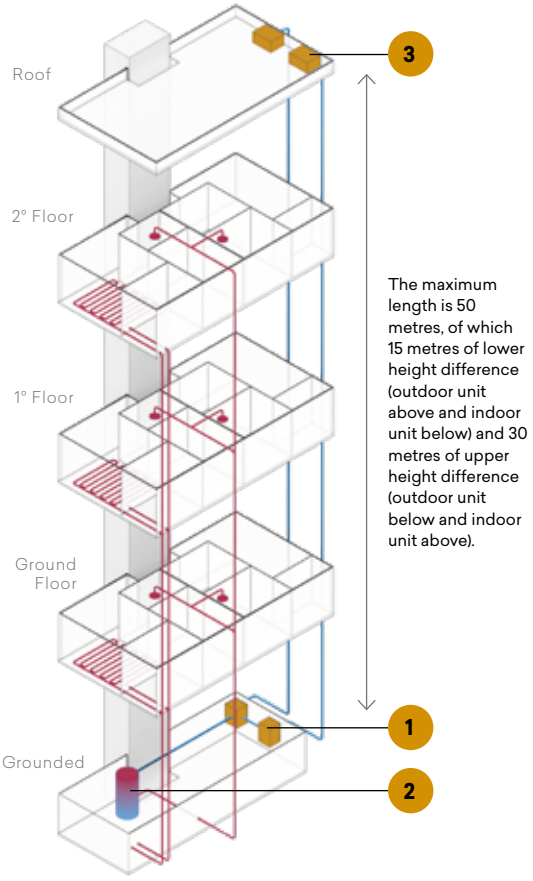
A. Loft
B. Laundry room
C. Basement

STØNE B1 is a flexible solution.
Suitable accessories are supplied depending on the application.
For large-size dwellings or blocks of flats, for example, the domestic hot water requirements can be satisfied by choosing the adequate capacity for the storage tank between 200 and 1,500 litres.

Offices | Large dwellings | Central heating systems

STØNE B1 is a heat pump that can be modular and used in cascade mode for satisfying high power levels.
The indoor unit must be installed inside a room that can house all the system's components.

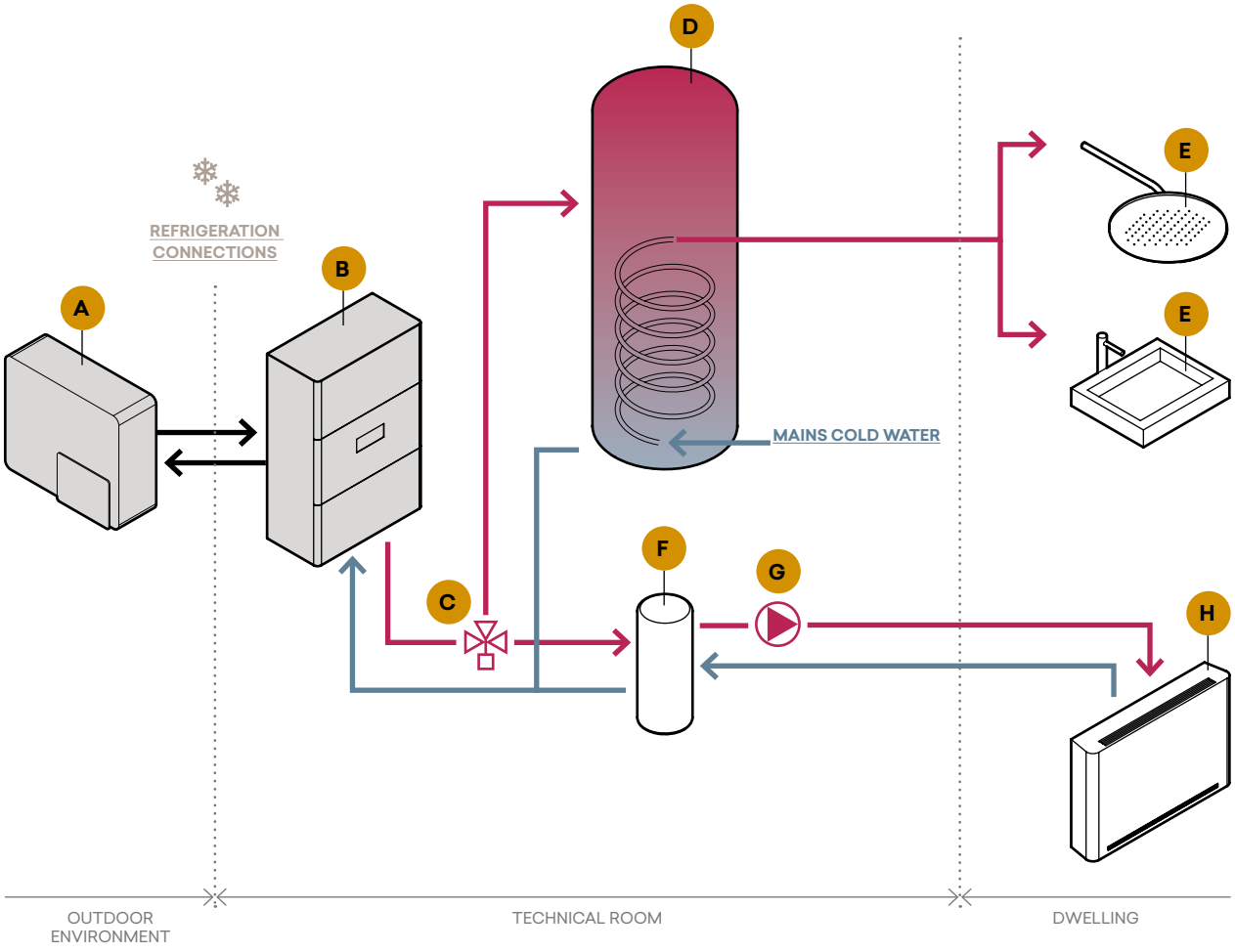
Example of a central heating system



1. eHPoca indoor unit
2. Domestic hot water storage tank
3. Outdoor unit

— Refrigeration lines
— Domestic hot water / heating

Diagram STØNE B1



A. Outdoor unit
B. indoor unit
C. 3-way valve
D. Thermal storage tank for instantaneous preparation of domestic hot water
E. Domestic hot water point of use
F. Hydraulic separator
G. Secondary circuit pump
H. Heating and cooling system

Domestic hot water
Cold water

STØNE T1

Split version with refrigerant connection between the indoor and outdoor units.

Tower with integrated 200-litre storage tank for domestic hot water, connected to an outdoor unit through refrigerant lines.
Ideal for houses and apartments for 4 people with normal consumption of domestic hot water.
All options are factory buit in and included in the indoor unit not more need of a separate technical room.

OUTDOOR CONFIGURATION

V

Exposed with vertical air delivery

H

Exposed with horizontal air delivery

IN

Built-in

PI

Semi built-in

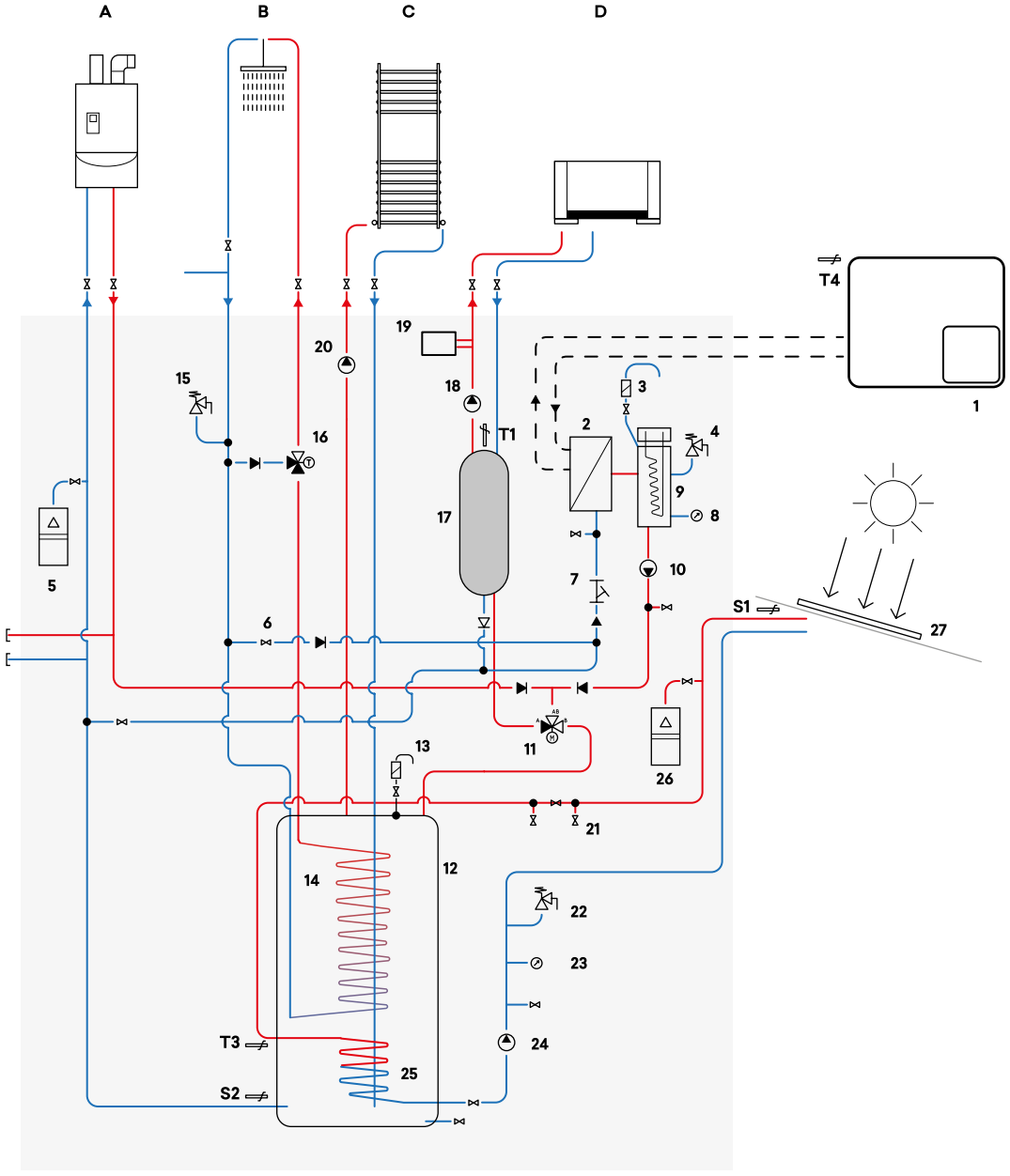
The indoor unit has all the hydraulic components integrated into it.

Production of domestic hot water from –20°C to 40°C outside air.

Remote Wi-Fi control using BUTLER (optional)

Highest energy class A+++

Diagram STØNE T1

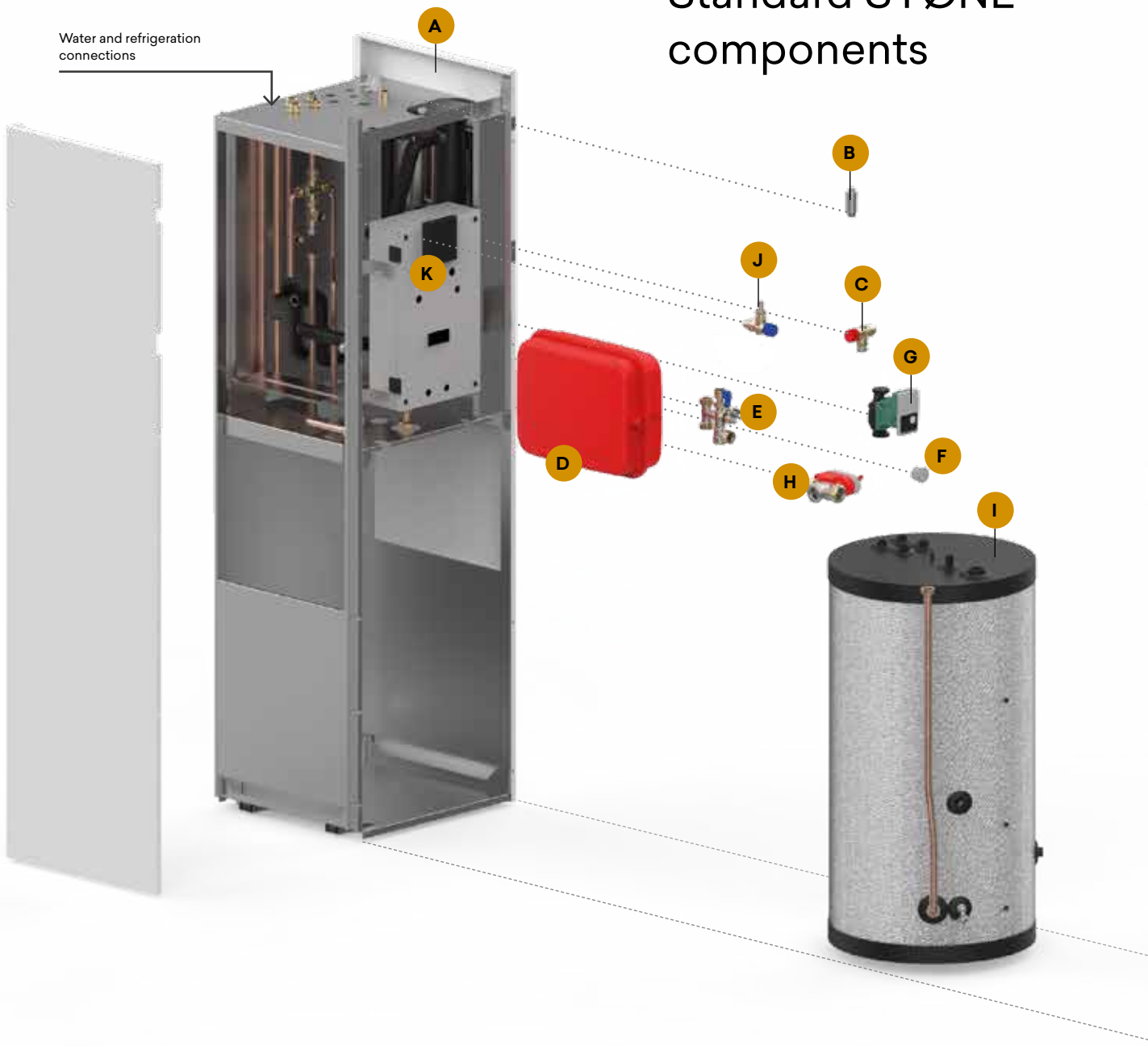


A. Boiler
B. Domestic hot water points of use
C. High temperature points of use (design radiators)
D. System points of use

1. Outdoor unit
2. Plate heat exchanger
3. Automatic relief valve
4. 3-bar system safety valve
5. 24-litre system expansion vessel
6. Filling unit
7. Y-shaped filter
8. System pressure gauge
9. 2-4-6 kW electrical heater manifold (optional)
10. Primary circuit pump
11. 3-way system/DHW valve
12. 200-litre domestic hot water preparation storage tank
13. Hot water tank relief valve
14. DHW instantaneous heating stainless steel coil
15. 7-bar domestic hot water safety valve
16. Domestic hot water thermostatic mixer (optional)
17. Hydraulic separator (optional)
18. Secondary circuit pump (optional)
19. 20-litre inertial tank (optional)
20. Heated towel rail pump (optional)
21. Solar heating system fill valve (optional)
22. 3-bar solar heating system safety valve (optional)
23. Solar heating circuit pressure gauge (optional)
24. Solar heating circuit pump (optional)
25. Solar heating system coil (optional)
26. 24-litre solar heating system expansion vessel (optional)
27. Solar panel

— — — Refrigeration connections

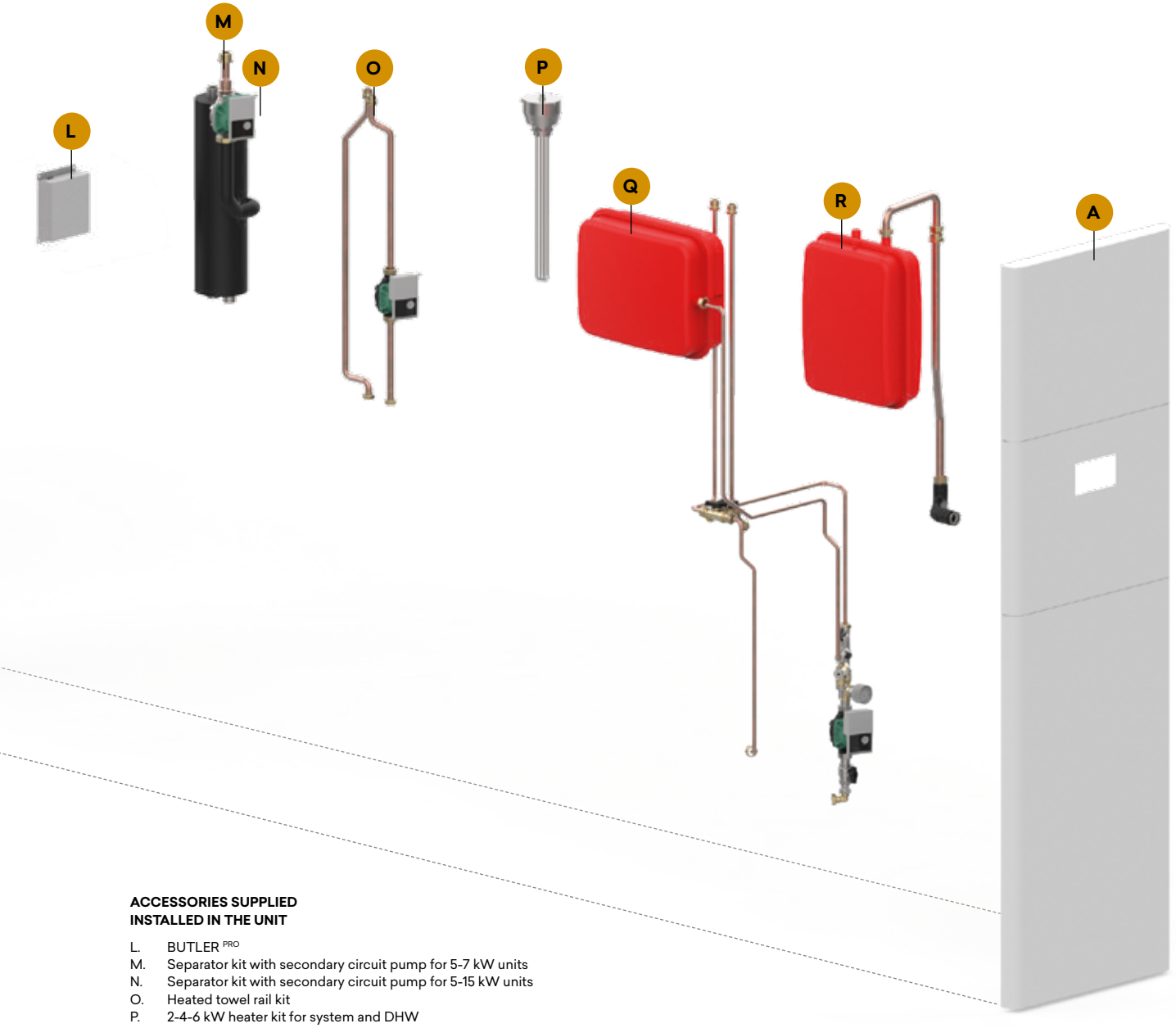
Standard STØNE T1 components



STØNE T1 STANDARD COMPONENTS

A. Structure and RAL9003 covering panels
B. Automatic relief valve
C. 3-bar system safety valve
D. 24-litre system expansion vessel
E. System filling unit and Y-shaped filter
F. Pressure gauge
G. Primary circuit circulator pump
H. 3-way DHW system valve
I. 200-litre domestic hot water preparation storage tank
J. 7-bar domestic hot water safety valve
K. Control panel with control interface display

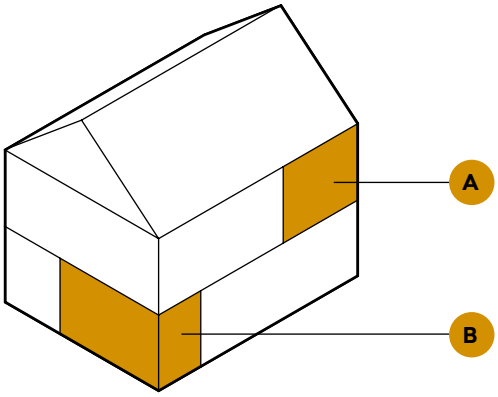
STØNE T1 accessories supplied installed in the unit



ACCESSORIES SUPPLIED INSTALLED IN THE UNIT

L. BUTLER PRO
M. Separator kit with secondary circuit pump for 5-7 kW units
N. Separator kit with secondary circuit pump for 5-15 kW units
O. Heated towel rail kit
P. 2-4-6 kW heater kit for system and DHW
Q. Solar heating kit (can be used if the inertial tank kit is not present): power pack, pump, safety valve, 24-litre expansion vessel, filling unit, system fill valve, domestic hot water thermostatic mixer
R. 20-litre inertial tank kit (as an alternative to the solar kit)

Installing STØNE T1



STØNE T1 is a complete solution.
All the system's elements are contained within the cabinet, resulting in lower overall dimensions and greater reliability, since all the elements are installed, adjusted and tested at the factory.

Medium-size dwellings

Apartments

The indoor unit is suitable for being installed in any room thanks to its compact size and elegant forms.

A. Kitchen / Living room
B. Laundry room / Basement

Example of a system

1. Indoor unit
2. Outdoor unit

Refrigerant
Domestic hot water / heating

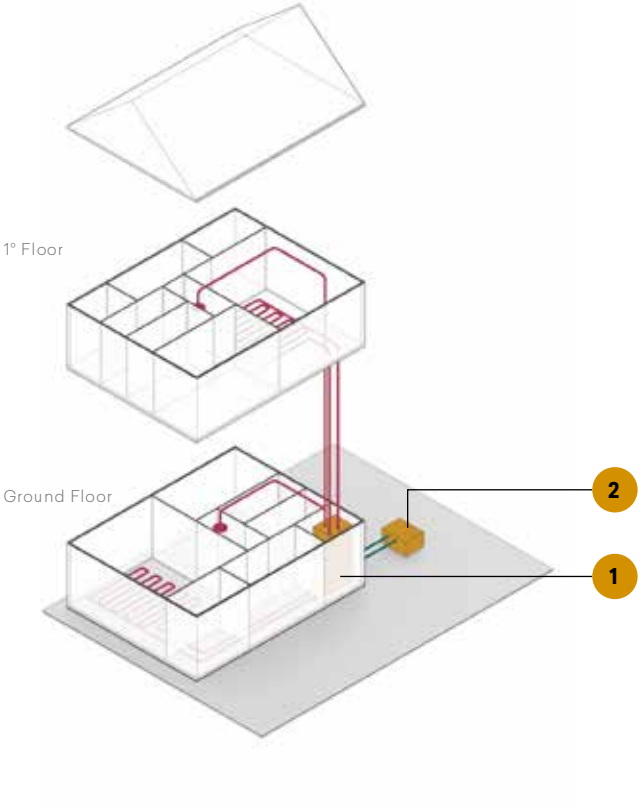
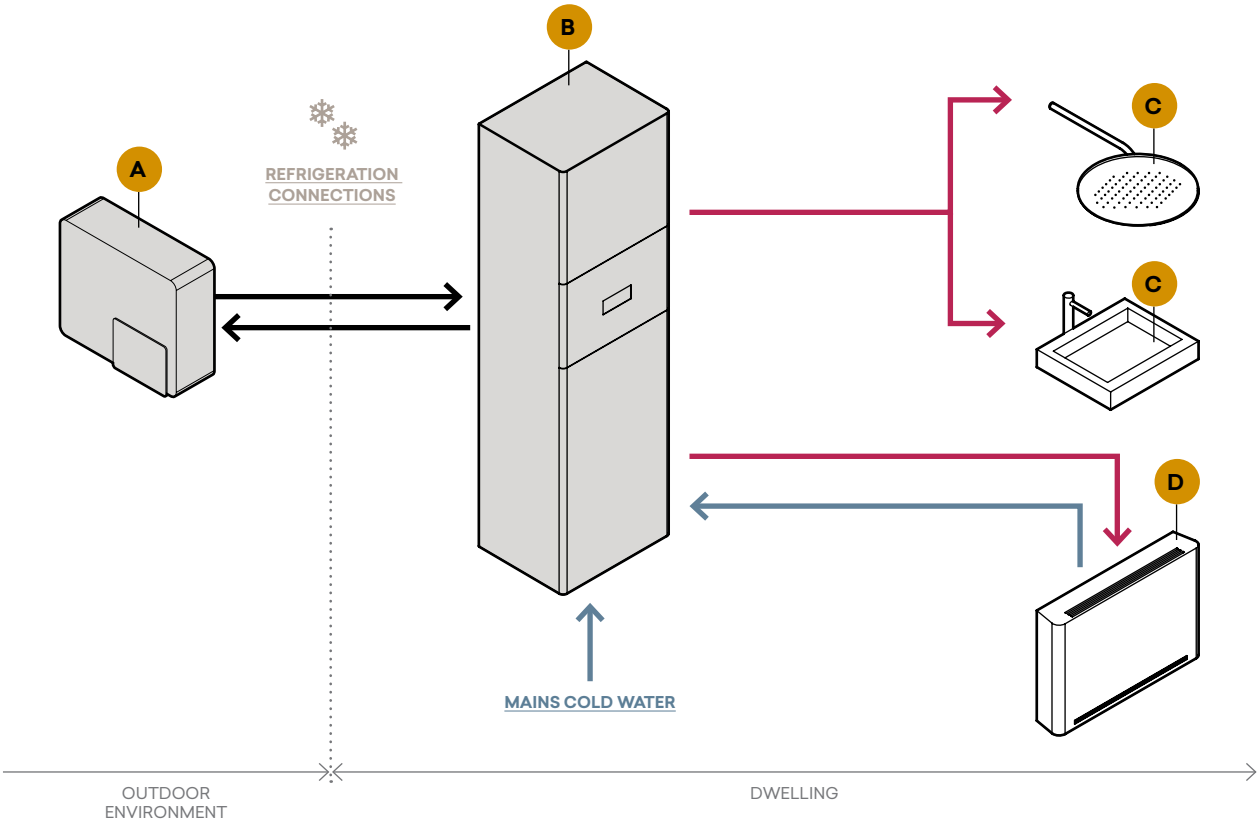


Diagram of STØNE T1 system



A. Outdoor unit
B. indoor unit
C. Domestic hot water point of use
D. Heating system
Domestic hot water
Cold water

STØNE C1

Split version with refrigerant connection between the outdoor and indoor units.

Indoor unit consisting of a cabinet to be built into the inner or perimeter wall with access to the outside through, for example, a balcony, and connected to the outdoor unit through refrigerant lines.

Ideal for apartments with 3/4 people with adequate domestic hot water consumption, thanks to the 170-litre storage tank.
Modular indoor unit with various options for satisfying all requirements of an apartment.

OUTDOOR CONFIGURATION

V

Exposed with vertical air delivery

H

Exposed with horizontal air delivery

IN

Built-in

PI

Semi built-in

Modularity, thanks to various optional modules for satisfying all the system configurations.

R32

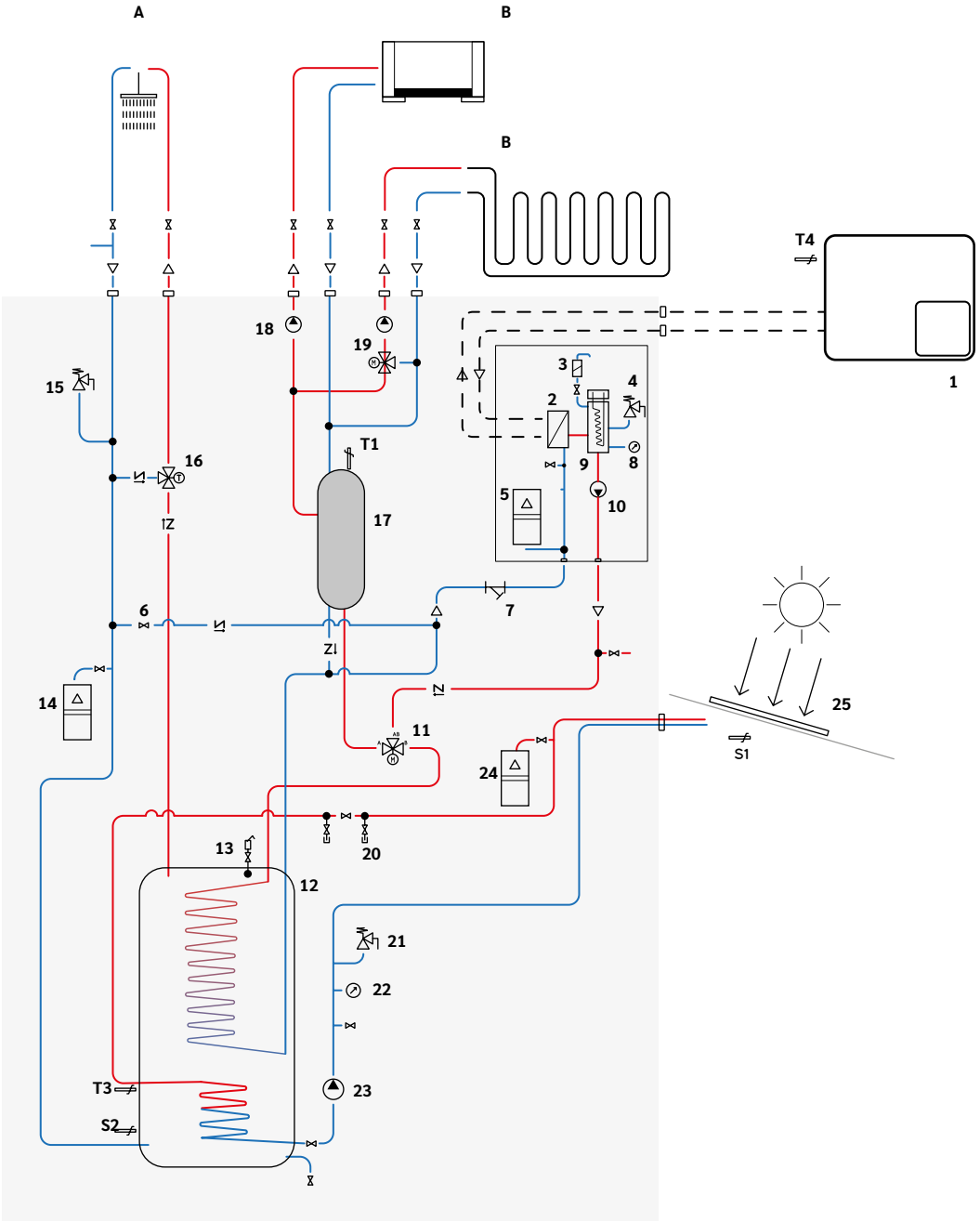
Refrigerant with low GWP for the entire range.

Remote Wi-Fi control using BUTLER (optional).

A+++

Highest energy class A+++.

Diagram STØNE C1

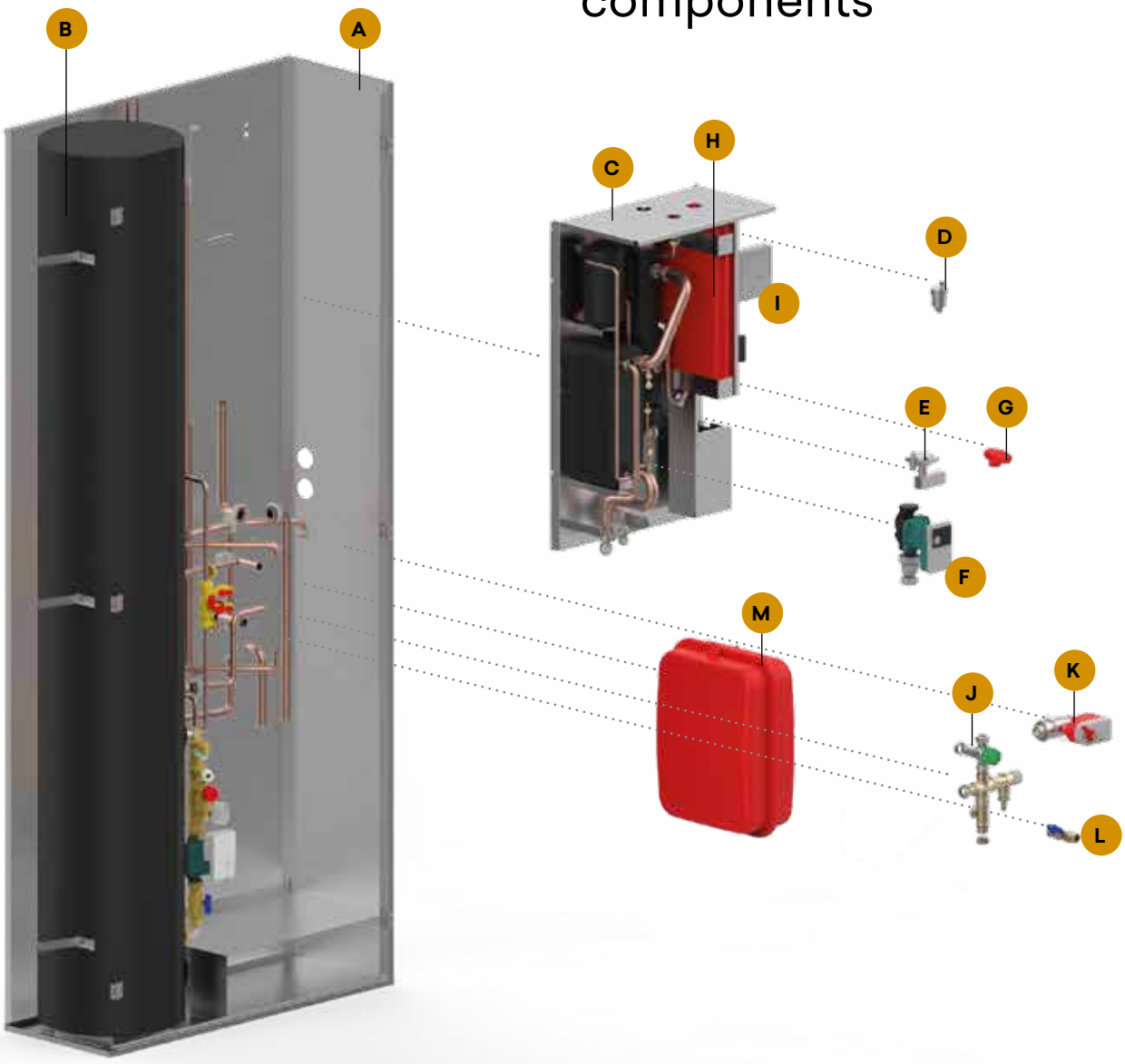


A. Domestic hot water points of use
B. Points of use

1. Outdoor unit
2. Plate heat exchanger
3. Automatic relief valve
4. 3-bar system safety valve
5. 8-litre system expansion vessel
6. Filling unit
7. Y-shaped filter
8. System pressure gauge
9. 2-4-6 kW electrical heater manifold (optional)
10. Primary circuit pump
11. 3-way system/DHW valve
12. 170-litre domestic hot water storage tank
13. Hot water tank relief valve
14. 4-litre expansion vessel
15. 7-bar domestic hot water safety valve
16. Domestic hot water thermostatic mixer
17. Inertial storage tank / 30-litre hydraulic separator (optional)
18. Secondary circuit pump (optional)
19. Secondary circuit pump and mixing valve (optional)
20. Solar heating system fill valve (optional)
21. 3-bar solar heating system safety valve (optional)
22. Solar heating circuit pressure gauge (optional)
23. Solar heating circuit pump (optional)
24. Solar heating system expansion vessel (optional)
25. Solar panel

— — — Refrigeration connections

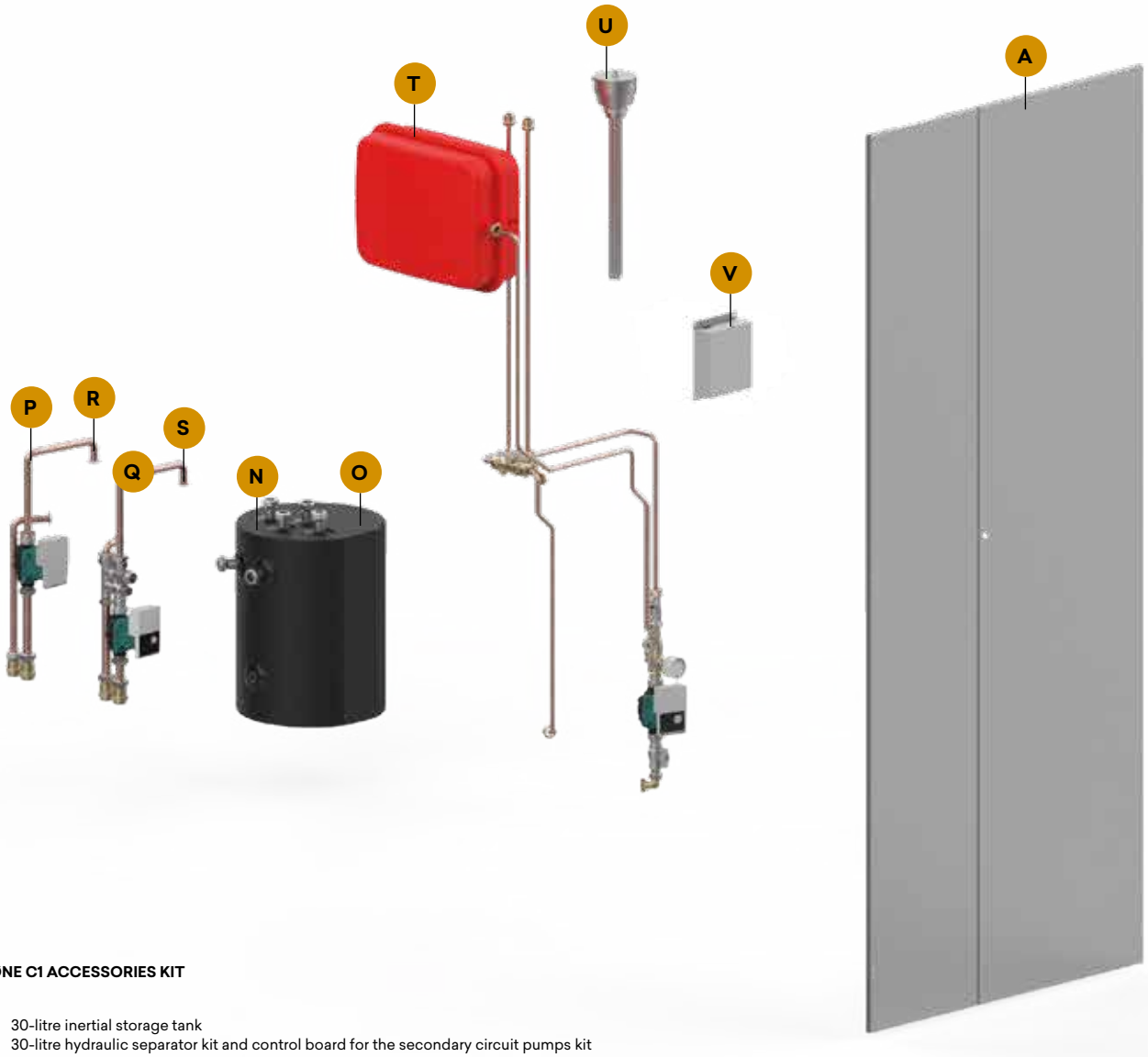
Standard STØNE C1 components



STØNE C1 STANDARD COMPONENTS

A. Casing with doors on the front
B. 170-litre domestic hot water storage tank
C. Hydronic module
D. Automatic relief valve
E. Differential pressure switch
F. Primary circuit circulator pump
G. 3-bar safety valve
H. 8-litre expansion vessel
I. Control panel with control interface display
J. System filling unit and Y-shaped filter
K. 3-way DHW system valve
L. 7-bar domestic hot water safety valve
M. 4-litre domestic hot water expansion vessel

STØNE C1 accessories supplied separately

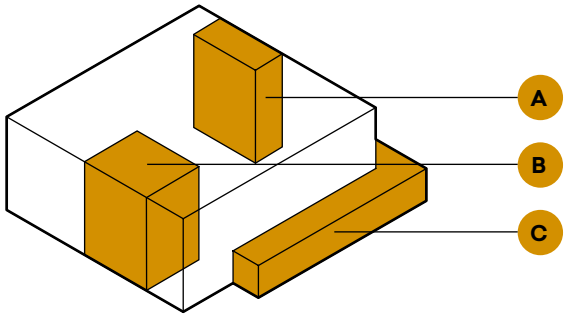


STØNE C1 ACCESSORIES KIT

N. 30-litre inertial storage tank
O. 30-litre hydraulic separator kit and control board for the secondary circuit pumps kit
P. Secondary circuit pump kit for 5-7 kW units
Q. Secondary circuit pump+mixing valve kit for 5-7 kW units
R. Secondary circuit pump kit for 5-15 kW units
S. Secondary circuit pump+mixing valve kit for 5-15 kW units
T. Solar heating kit: power pack, pump, safety valve, filling unit expansion vessel, domestic hot water thermostatic mixer
U. 2-4-6 kW heater kit for system and DHW
V. BUTLER PRO

Installing STØNE C1

STØNE C1 is a flexible solution with various modules that can be installed also at a later stage, depending in the system's configuration.



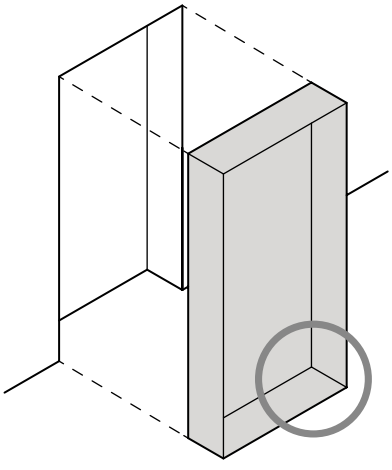
Medium-size dwellings

Apartments

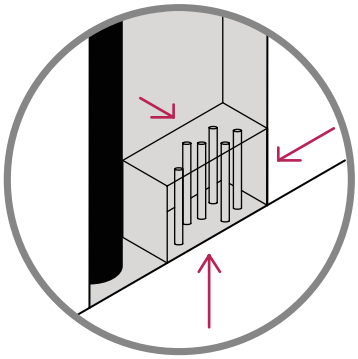
The unit's casing is fitted into the wall recess during the masonry works. The casing includes the hydraulic fittings for connection to the system.
The various modules are installed subsequently, once the system has been completed.

A. Landing of the apartment
B. Laundry room
C. Terrace / Balcony

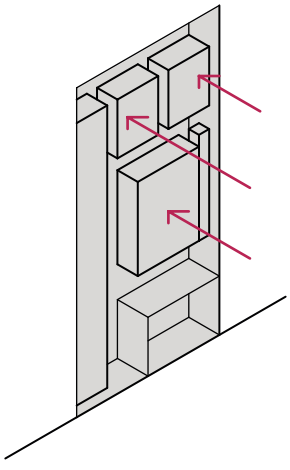
STØNE C1 installation phases



1. Positioning of the casing to be recessed into the wall.



2. Connections to the system from three different positions: from the rear, side and below.



3. Install the internal components and make the relative connections.

Example of a system

1. Indoor unit
2. Outdoor unit

Refrigerant

Domestic hot water / heating

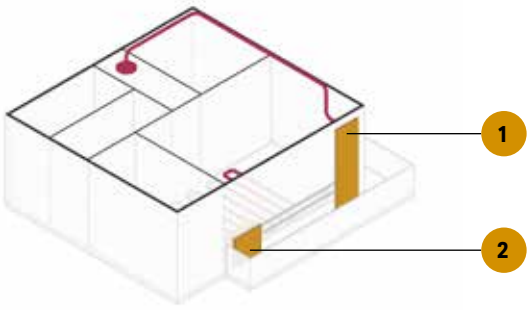
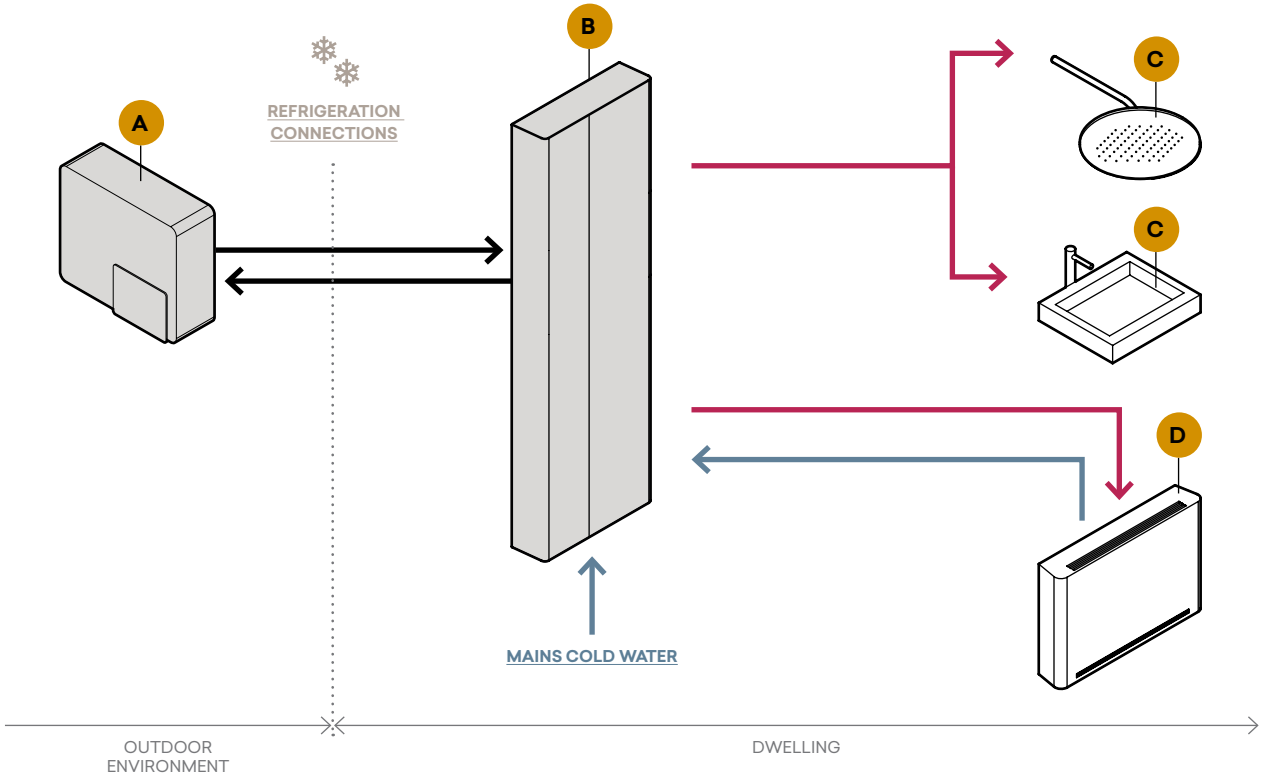


Diagram of STØNE C1 system



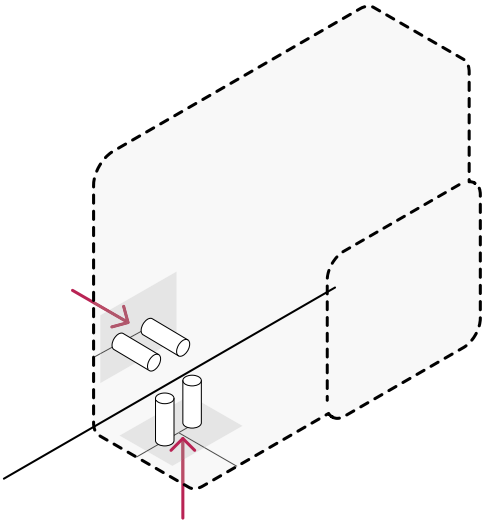
A. Outdoor unit
B. indoor unit
C. Domestic hot water point of use
D. Heating system

Domestic hot water

Cold water

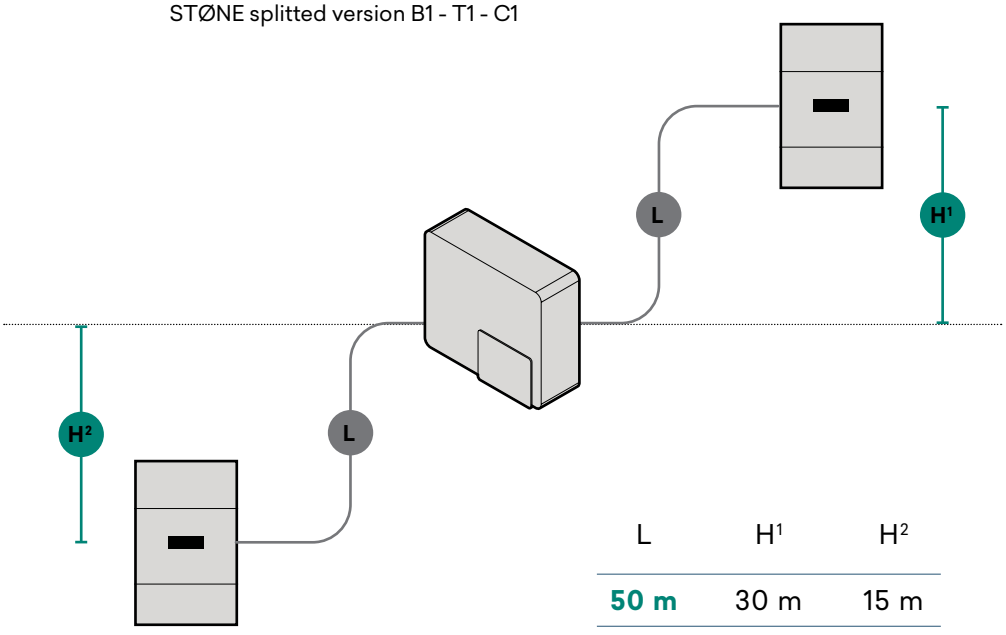
STØNE CONNECTION POSITIONS

The input for the electronic, hydraulic (STØNE M1 e H1) or refrigeration connections (STØNE B1, T1, C1) are on the rear or lower side of the STØNE.



DISTANCES BETWEEN COMPONENTS

STØNE splitted version B1 - T1 - C1



L	H¹	H²
50 m	30 m	15 m

Dimensions STØNE M1 - H1

STØNE exposed with vertical air delivery

		M1-H1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	1089		1343			1539			
Height	mm	941		1117			1449			
Depht	mm	320		348			405			
Net weight	Kg	90	94	130	134	134	150	150	155	155

STØNE exposed with horizontal air delivery

		M1-H1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	1089		1343			1539			
Height	mm	1168		1343			1627			
Depht	mm	320		348			405			
Net weight	Kg	93	97	134	138	138	155	155	160	160

STØNE built-in

		M1-H1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	1066		1320			1539			
Height	mm	1119		1294			1649			
Depht	mm	320		348			405			
Net weight	Kg	86	90	125	129	129	144	144	149	149

STØNE semi built-in

		M1-H1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	1066		1320			1539			
Height	mm	1119		1294			1649			
Depht	mm	320		348			405			
Net weight	Kg	89	93	128	132	132	147	147	152	152

Dimensions of the outdoor units STØNE B1, STØNE T1, STØNE C1

STØNE exposed with vertical air delivery

		B1 - T1 - C1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	972		1226			1423			
Height	mm	941		1117			1449			
Depht	mm	320		348			405			
Net weight	Kg	85	89	125	129	129	145	145	150	150

STØNE exposed with horizontal air delivery

		B1 - T1 - C1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	972		1226			1423			
Height	mm	1168		1343			1627			
Depht	mm	320		348			405			
Net weight	Kg	88	92	129	133	133	150	150	155	155

STØNE built-in

		B1 - T1 - C1								
TAGLIE		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	1066		1320			1539			
Height	mm	1119		1294			1649			
Depht	mm	320		348			405			
Net weight	Kg	81	85	120	124	124	139	139	144	144

STØNE semi built-in

		B1 - T1 - C1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	1066		1320			1539			
Height	mm	1119		1294			1649			
Depht	mm	320		348			405			
Net weight	Kg	84	88	123	127	127	142	142	147	147

Dimensions of the indoor units STØNE B1, STØNE H1 -T1, STØNE C1

STØNE B1

		B1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	505								
Height	mm	900								
Depht	mm	300								
Net weight	Kg	41							43	

STØNE H1 - T1

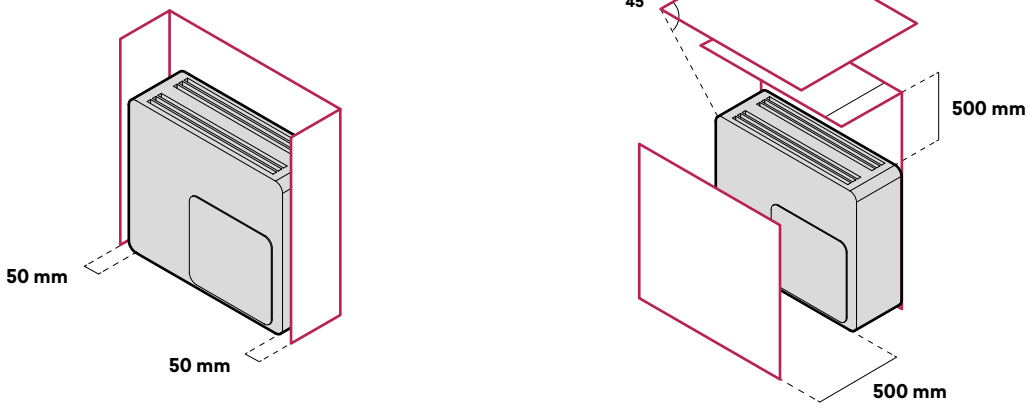
		H1 - T1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	600								
Height	mm	2000								
Depht	mm	600								
Net weight	Kg	172								

STØNE C1

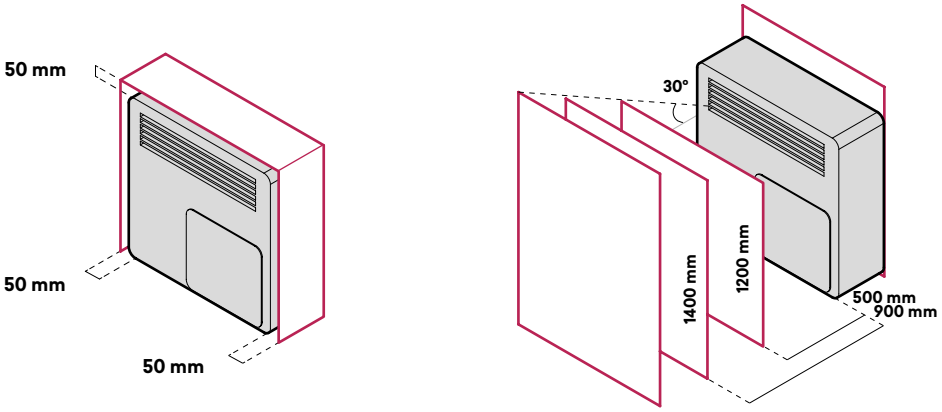
		C1								
SIZES		**5M**	**7M**	**9M**	**11M**	**11T**	**13M**	**13T**	**15M**	**15T**
Widht	mm	950								
Height	mm	2200								
Depht	mm	350								
Net weight	Kg	172								

Installation distances

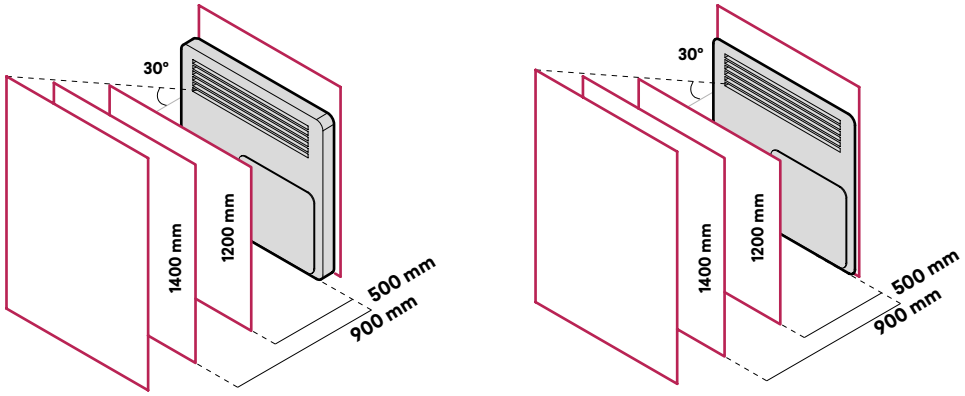
STØNE exposed with top air delivery V



STØNE exposed with front air delivery H

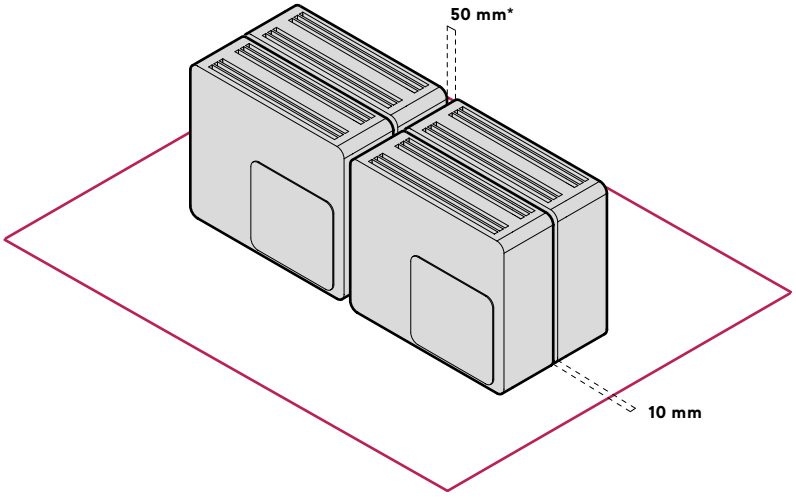


STØNE BUILT-IN and SEMI BUILT-IN IN e PI

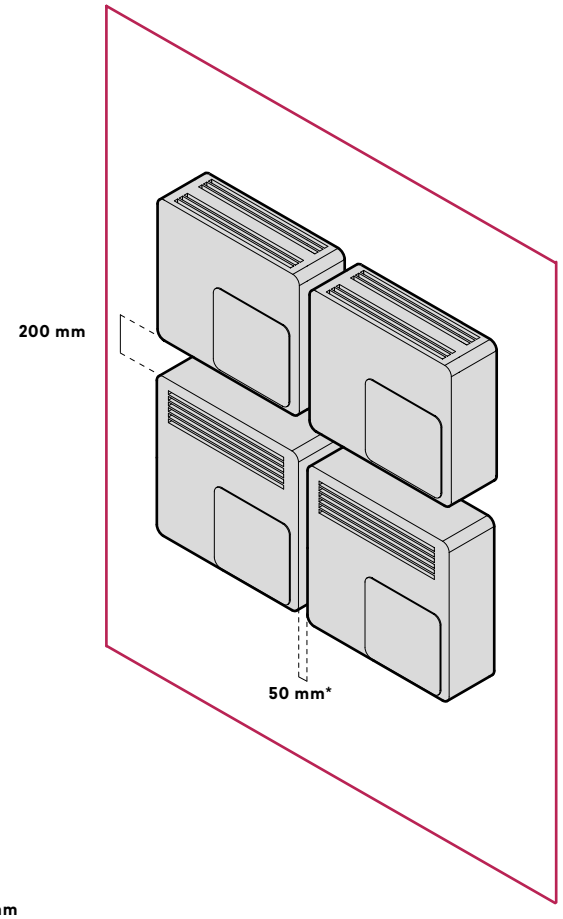


Multiple installation

Ground installation



Wall installation



*** Split version 200 mm**

Technical datas sheets

TECHNICAL DATAS		STØNE M1 - H1 - B1 - T1 - C1								
	u.m.	5M	7M	9M	11M	11T	13M	13T	15M	15T
HEATING PERFORMANCES (A7°C BS; W35°C)										
Max heat power (1)	kW	7,54	10,75	11,45	13,53	13,53	15,20	15,20	19,05	19,05
Nominal heat power (1)	kW	5,51	7,46	9,12	10,63	10,63	12,48	12,48	15,15	15,15
Total absorbed power (1)	kW	1,16	1,62	1,83	2,37	2,37	2,62	2,62	3,23	3,23
COP (1)		4,74	4,43	4,67	4,48	4,48	4,76	4,76	4,70	4,70
SCOP (5)		4,55	4,22	4,52	4,18	4,18	4,64	4,64	4,53	4,53
Energy efficiency class (5)		A+++	A++	A+++	A++	A++	A+++	A+++	A+++	A+++
HEATING PERFORMANCES (A-7°C BS; W35°C)										
Max heat power (2)	kW	4,85	6,45	7,05	7,88	7,88	9,05	9,05	11,42	11,42
Total absorbed power (2)	kW	1,62	2,26	2,38	2,91	2,91	2,87	2,87	3,91	3,91
COP (2)		2,98	2,85	2,95	2,70	2,70	3,15	3,15	2,92	2,92
COOLING PERFORMANCES (A35°C; W18°C)										
Nominal cooling power (3)	kW	9,20	11,55	13,05	14,35	14,35	16,90	16,90	20,50	20,50
Nominal cooling power (3)	kW	6,90	9,50	10,50	12,15	12,15	13,05	13,05	17,45	17,45
Total absorbed power (3)	kW	1,59	2,25	2,44	2,87	2,87	2,96	2,96	4,04	4,04
EER (3)		4,33	4,23	4,31	4,23	4,23	4,41	4,41	4,32	4,32
COOLING PERFORMANCES (A35°C; W7°C)										
Max cooling power (4)	kW	6,70	8,85	9,50	11,15	11,15	12,45	12,45	15,90	15,90
Nominal cooling power (4)	kW	4,07	6,44	7,78	8,80	8,80	10,02	10,02	12,10	12,10
Total absorbed power (4)	kW	1,20	1,98	2,32	2,63	2,63	2,95	2,95	3,73	3,73
EER (4)		3,40	3,24	3,35	3,35	3,35	3,39	3,39	3,24	3,24
HYDRAULIC DATA										
Nominal flow rate in heating (A7/W35 °C) (1)	l/min	15,87	21,48	26,27	30,61	30,61	35,94	35,94	43,63	43,63
Nominal flow rate in cooling (A35/W7 °C) (4)	l/min	11,72	18,55	22,41	25,34	25,34	28,86	28,86	34,85	34,85
M1-H1-B1 available pressure primary circuit	kPa	71	60	54	70	70	60	60	58	58
T1-C1 available pressure primary circuit	kPa	71	60	54	45	45	40	40	43	43
Diameter of hydraulic fittings	“ GAS					1"				
M1 expansion vessel capacity	L	2	2	4	4	4	6	6	6	6
B1 expansion vessel capacity	L					6				
H1-T1-C1 expansion vessel capacity	L					24				
Minimum system water content	L	20	25	30	35	35	40	40	50	50
H1-T1 tank capacity	L					200				
C1 tank capacity	L					170				

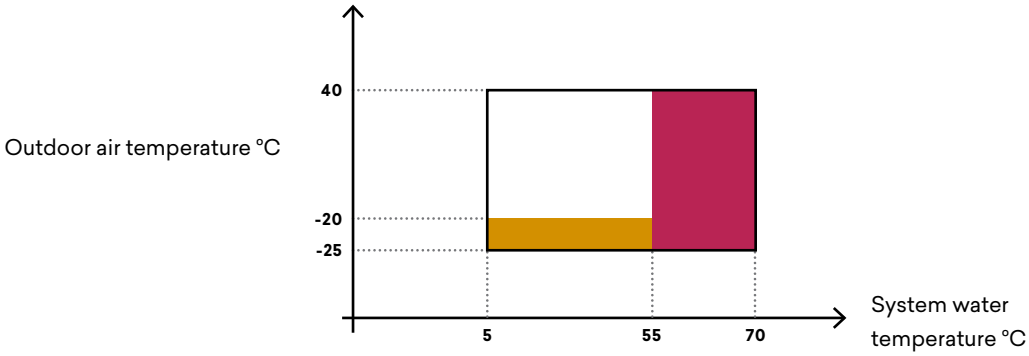
TECHNICAL DATAS		STØNE M1 - H1 - B1 - T1 - C1								
	u.m.	5M	7M	9M	11M	11T	13M	13T	15M	15T
REFRIGERATOR FITTINGS (versioni B1 - T1 - C1)										
Aspiration	“ SAE	5/8"								
Liquid	“ SAE	3/8"								
REFRIGERATION CIRCUIT										
Compressor		Twin Rotary DC Inverter								
Refrigerant charge R32	kg	1,8	1,8	2,7	2,7	2,7	3,8	3,8	3,8	3,8
SOUND DATA										
Outdoor unit sound pressure Cooling/Heating 50% of the load (6)	dB(A)	45	47	48	49	49	47	47	51	51
Sound pressure external Cooling/Heating unit (7)	dB(A)	48	49	50	52	52	50	50	54	54
Sound pressure internal unit (7)	dB(A)	30	30	30	31	31	31	31	31	31
ELECTRICAL DATA										
Power Supply	V/50Hz	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50	230/1/50	400/3/50	230/1/50	400/3/50
Max power input	kW	2,9	3,8	4,5	5,3	5,3	5,9	5,9	7,3	7,3
Max current absorbed	A	14,00	18,00	21,30	25,00	8,50	28,00	9,30	34,50	11,50
Indoor unit protection degree		IPX2								
Degree of protection outdoor unit		IPX4								

1. In/Out. water T 20/35°C / Outside air T 7°C / R.H. 85%
2. In/Out. water T 20/35°C / Outside air T –7°C
3. In/Out. water T 18°C / Outside air T 35°C
4. In/Out. water T 7°C / Outside air T 35°C
5. Seasonal efficiency according to UNI 14825. Energy Efficiency Class referred to the climatic profile Average for flow temperature of 35°C in compliance with regu lation 811/2013
6. Sound pressure at a distance of 1 metre in open field with compressor in 50% load modulation
7. Sound pressure at a distance of 1 metre in open field at rated power

Rated performances as per the UNI EN 14511 standard

The performance data indicated may be subject to change

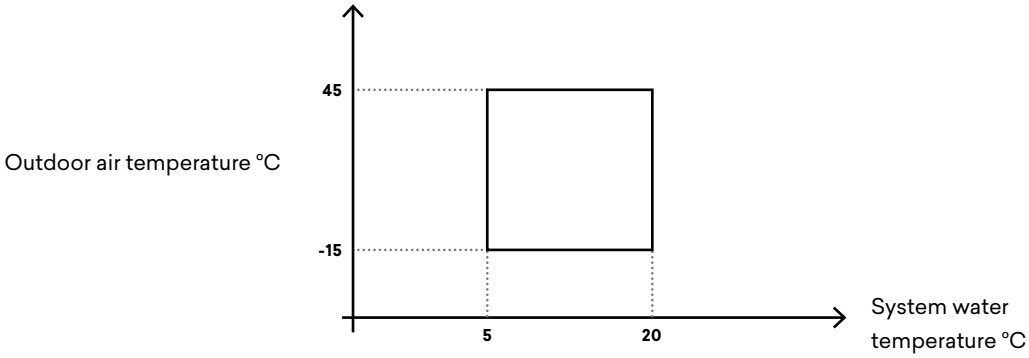
Heating and domestic hot water



Heating through heating element, boiler or solar heating integration

Integration with heating element or boiler

Cooling



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We turn ideas into products.

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