

ferroli



Omnia S Hybrid

Integrated hybrid solutions. Full inverter technology with R32 refrigerant



NEW FERROLI HYBRID SYSTEMS

A similar hybrid system has never existed before



Ferroli has listened to its customers and has launched the new **OMNIA S HYBRID RANGE with R32 refrigerant**, capable of meeting the expectations of the most demanding customers.

But what is a Hybrid System? And how does it work?

A hybrid system combines all the advantages of the **heat pump** with those of the best **gas condensing boiler**, with an integrated control.

The heat pump offers the possibility of heating and cooling the home, thanks to the innovative reversible refrigerating circuit that uses the **renewable energy** in the outdoor air.

The (few) times when the heat pump works with reduced efficiency (due to high water temperature demands or very low outdoor temperatures), the boiler comes into play, exploiting all the advantages of **condensation** *without the slightest discomfort for the customer*.

What's more, a Hybrid System can operate **simultaneously** in DHW mode and air conditioning mode, using both generators without any interruption.

Which ranges are offered by Ferroli?

In short, there are 3 ranges, all available in 4 sizes with different powers:

- > **OMNIA S HYBRID C** features a heat pump for heating/cooling only, entrusting the instantaneous DHW production to the boiler (no tank needed);
- > **OMNIA S HYBRID H** exploits the heat pump to produce DHW too, and it requires an external storage tank (remember that the HP cannot produce DHW instantaneously);
- > **OMNIA S HYBRID H IN** is an advanced version of the previous one, in a cabinet or recessed (customisable), with integrated DHW tank, mixed, direct distribution units, solar integration and much more.



BUT WHAT IS R32?

Why is it considered environmentally friendly?

Europe has long laid out the path to reduce greenhouse gases, to **prevent global warming and meet the ambitious reduction of CO₂ by 80% by the year 2050**.

The **HVAC** world is not excluded.

It is no longer a matter of the ozone hole. R11, R12 and R22 refrigerants have been banned for years now. We have been talking about GWP for quite a while. In short, GWP is the acronym for **Global Warming Potential** and indicates the potential impact that a refrigerant gas could have if it was released into the environment.

This allows the impact of 1kg of gas to be compared with 1 kg of CO₂, over a period of 100 years.

For example, R410A has a GWP of 2,088. This basically means that 1 kg of R410A has the same impact as 2,088 kg of CO₂ (i.e. the equivalent of over 2 tons of CO₂).



Ferroli has chosen R32 gas for these machines with a GWP of 675, virtually a third compared to R410A. But R32 is not the latest of the innovations since it has been around for quite a while. Just consider that the "old" R410A was a mixture of 50% R32.

R32 has many advantages on small and medium power machines. It is a gas that has similar characteristics to R410A, but with even **better thermodynamic properties!**

When comparing the 2 Gases on similarly built machines (compressors of equivalent power and similar exchange surfaces), R32 allows you to achieve the same outputs, **but with greater efficiency and a reduced refrigerant charge!**

This means using less gas with a lower GWP. In practical terms, we are not far wrong by stating that R32 leads to a **reduction of about 75% of equivalent emissions**, compared to the same machine with R410A.

HERE IS AN EXAMPLE

A size 8 heat pump might have about 1.7kg of R410A. If, instead of replacing it without another one with R410A, we replaced it with a new Ferroli one with R32, it would have about 1.4kg of gas. In short:

Model	Gas hypothesis	GWP	Tonn. CO ₂ equivalent
Old heat pump to be replaced	1.7kg of R410A	2,088	3,550
New Ferroli HP with R32	1.4kg of R32	675	945

We are effectively sparing the environment more than 2,600 kg of CO₂ equivalent.

But do you know how much CO₂ the average economy car emits? About 120 grams of CO₂ per km.

2,600kg of CO₂ is equivalent to travelling from Verona to Naples... 15 times... round trip!



But will R32 be the gas of the future?

We have no problem in telling you no. We believe that R32 is an interim gas, but currently it is one of the best compromises in terms of performance and environmental impact. There are lots of other alternatives being developed, including natural ones.

Ferroli is also leading the way in this and we will let you know about any developments on the market.



FOCUS ON

What does a Hybrid System consist of?

An **Integrated Hybrid System (Factory Made)**, like a heat pump, consists of an Outdoor Unit and an Indoor Unit.

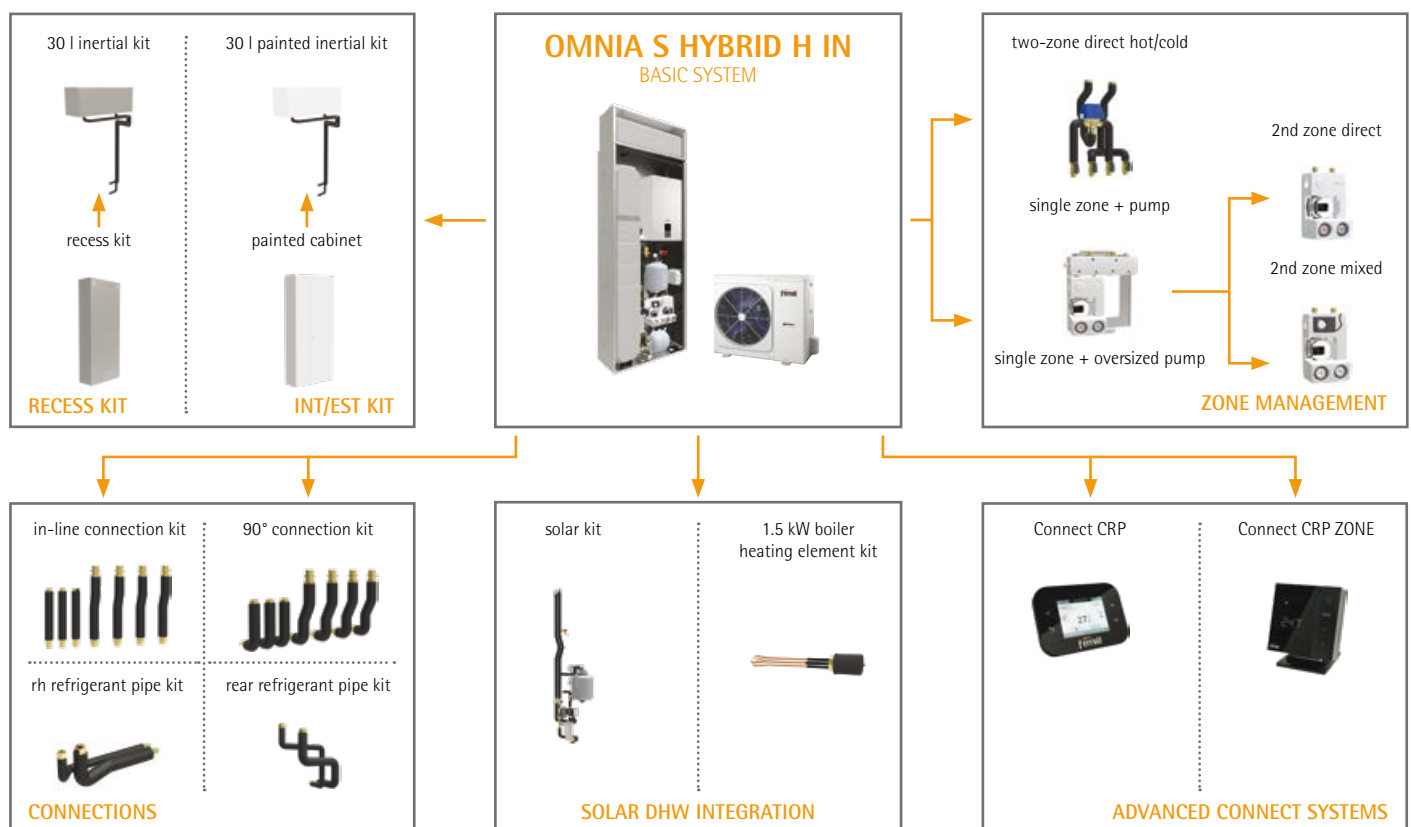
The **Outdoor Unit** contains the heart of the heat pump, i.e. the refrigerating circuit. The compressor and the fan are outside, together with the components required to invert the cycle (hot and cold) and the gas/air exchange coil. **Ferrol** installs the **inverters** on compressors, fans and pumps to achieve **maximum efficiency and minimum noise**. In these Hybrid Systems, it is the refrigerant pipes that enter the Indoor Unit (and not the water pipes), safe from very cold temperatures, without the need for glycol.



KEY 1 Axial fan with brushless DC motor complete with protection grids **2** Refrigerant separator and receiver **3** Twin Rotary compressor with DC Inverter motor on anti-vibration supports and with double sound-absorbing insulation to minimise vibrations and noise **4** Refrigerant connections **5** Control, power and inverter boards **6** Outdoor air temperature probe already pre-installed on the unit **7** Gas/air exchange coil

The **Indoor Unit** changes according to the model. A single compact system includes both the water-side exchanger of the heat pump and the boiler components. Finally, the **Smart Capsense controller** included manages the system, with communication protocols such as **Modbus** and **Smart Grid** contacts, capable of integrating a *photovoltaic system* to optimise consumption. The Indoor Units of **models C and H** have similar external dimensions, but different configurations inside. The **H IN range**, on the other hand, must be customised, with a series of options and accessories to meet the customer's needs directly in the dedicated enclosure, for *cabinet or recessed installation*.

How to configure OMNIA S HYBRID H IN



INDOOR UNIT

Omnia S Hybrid C and H

It includes a condensing heat generator with a high modulation range, integrated with a hydronic module to manage the refrigerating circuit connected to the Outdoor Unit.

It can be installed as standard also in partially protected outdoor areas with temperatures **up to -5°C** thanks to its **IPX5D** protection rating.

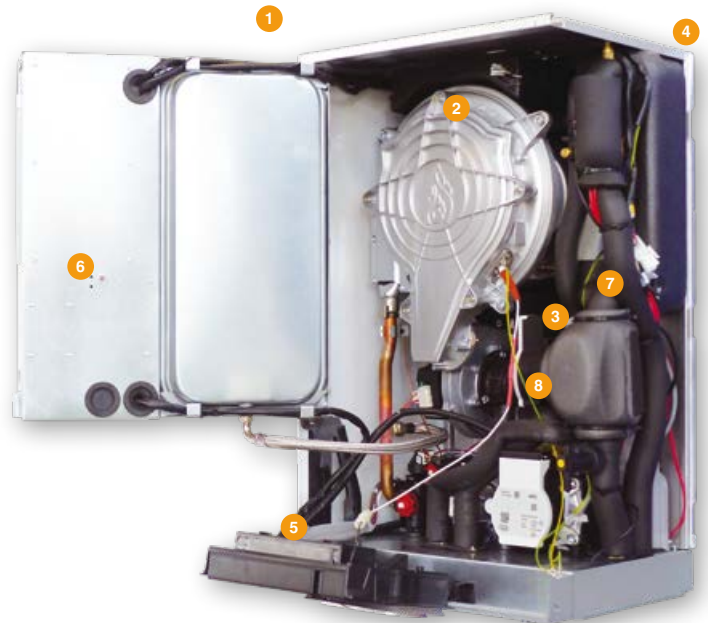
It is supplied, in its standard version, with two angled valves on the side of the system, one of which comes complete with a removable mesh filter.

The exhaust system includes a built-in non-return **clapet valve** which allows for connection to pressurised collective flue systems (*F.P.S.: Fume Protection System*); it can also be combined with existing chimney systems with diameters 50, 60 and 80 mm.



Mod. C

Maximum comfort
with condensation
heat generator for
instantaneous DHW
production.

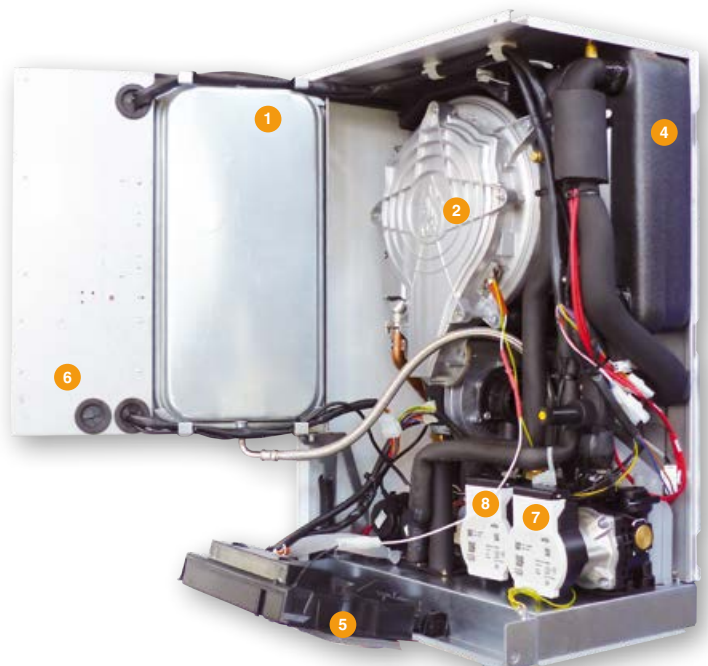


INDOOR UNIT KEY

- 1 8 litre plant expansion vessel with dappleaf opening for easy access to the internal parts
- 2 Ferrolli THERMOBALANCE™ thermal unit
- 3 20-plate exchanger for DHW production
- 4 Heat pump plate exchanger
- 5 Boiler control panel with dappleaf opening
- 6 Hybrid system electronic control panel with protective cover
- 7 High-head pump specific for the heat pump
- 8 High-head pump specific for the thermal unit

Mod. H

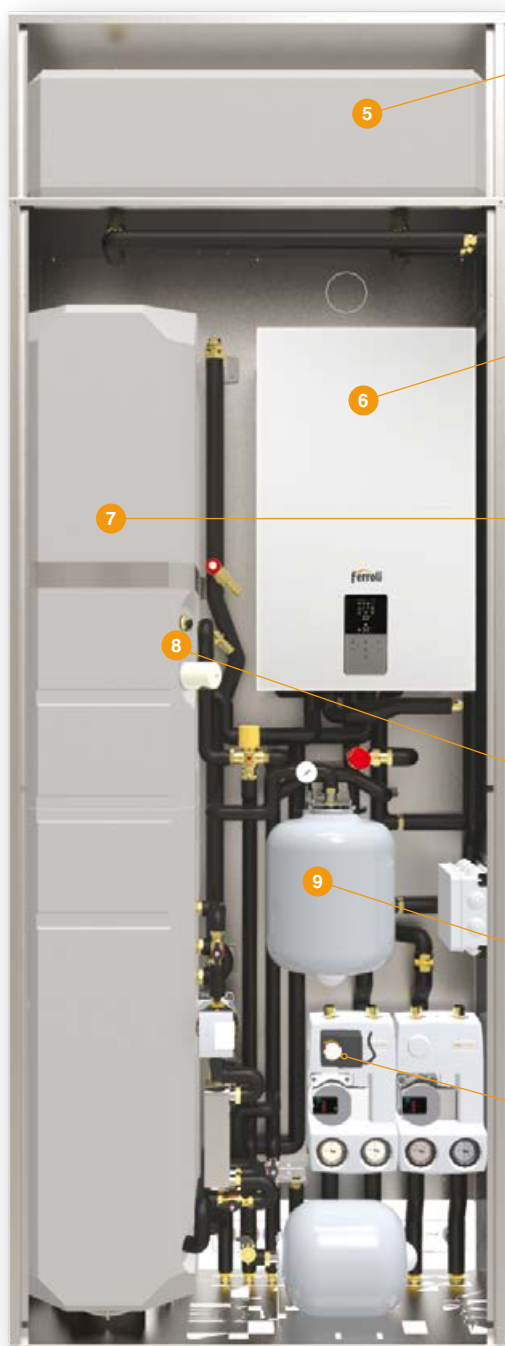
RANGE RATED
combustion generator
to adapt to the
system's needs and
DHW management
also with the heat
pump, for maximum
efficiency at all times
(external storage tank
required).





OMNIA S HYBRID H IN INDOOR UNIT

The solution with external cabinet or recessed enclosure



5 30 L INERTIAL TANK KIT (OPTIONAL)
to be placed above the enclosure

6 INDOOR UNIT
OMNIA S HYBRID H Indoor Unit complete with controls on board the machine (recessed in the cabinet/enclosure)

7 BASIC STARTER KIT
150 litre stainless steel DHW tank complete with hydraulic pipes for connection to the system

8 HEATING ELEMENT DHW INTEGRATION (OPTIONAL)
1.5 kW support heating element

9 SOLAR KIT (OPTIONAL)
complete with hydraulic pipes, 18 l solar expansion vessel, pump, plate heat exchanger

CONFIGURABLE ZONE MANAGEMENT KIT (OPTIONAL) ACCORDING TO THE DIFFERENT TYPES OF SYSTEMS

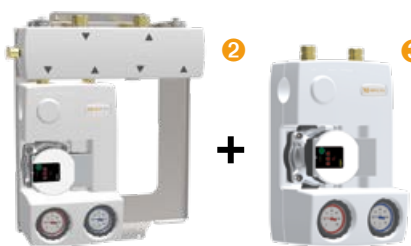
- 1** Two-zone (hot/cold) accessory kit with diverter valve
- 2** Single-zone accessory kit with manifold + pump.
Single-zone accessory kit with manifold + oversized booster pump
- 2+3** + 2nd additional direct zone accessory kit
- 2+4** + 2nd additional mixed zone kit with control unit



Two-zone (hot/cold) with diverter valve



Single-zone with manifold + pump (standard or oversized)



Kit 2 + 2nd additional direct zone



Kit 2 + 2nd additional mixed zone



TEMPERATURE CONTROL AND ACCESSORIES

Customise the system according to your installation needs

VALID FOR ALL RANGES

ACCESSORIES	
	Connect CRP
	Connect CRP Zones
ACCESSORIES	
	Twin pipe 80/80 discharge kit for condensation boilers, including test points
	Rubber anti-vibration kit for outdoor unit

VALID FOR OMNIA S HYBRID C / H

ACCESSORIES	
	Galvanised normal template
	OMNIA S HYBRID IU HYDRAULIC KIT Consisting of a gas valve, water inlet and connection pipes/fittings. NB: system supply/return valves supplied as standard
	System flow temperature probe or for hybrid solar/hybrid system integration
ACCESSORIES	
	90° coaxial bend, 360° swivel with 45° pitch ø 100/60 mm for condensation boilers
	coupling for vertical coaxial pipe ø 80/125 mm for condensation boilers
	coupling for vertical coaxial pipe ø 100/60 mm for condensation boilers
	Attachment cover kit for aesthetic cover of wall-mounted hydraulic connections

VALID FOR OMNIA S HYBRID H IN

ACCESSORIES	
	Unpainted recessed enclosure
	Painted cabinet
	Refrigeration pipe kit between OU and IU, entry from right side of the recessed enclosure
	Refrigeration pipe kit between OU and IU, entry from rear side of the painted enclosure
	In-line hydraulic connections kit (for system piping from beneath the enclosure)
	Rear hydraulic connections kit (for system piping from behind the enclosure)
	Accessory kit for direct two-zone (hot/cold) system with diverter valve
	1.5 kW heating element kit for DHW cylinder integration
ACCESSORIES	
	30 litre inertial tank kit to be placed above the enclosure
	30 litre painted inertial tank kit to be placed above the enclosure
	Accessory kit for direct single-zone with manifold + pump
	Accessory kit for direct single-zone with manifold + oversized pump
	2nd additional direct zone accessory kit (*)
	2nd additional mixed zone accessory kit (*)
	DHW cylinder integration kit with solar thermal system

(*) Kits that can be combined with the accessory (012080W0) or (012073W0) to manage different types of zone systems



THE CONTROL SYSTEM

User interface

The user interface comes with **Capsense technology** with a 2.8" graphic display, ensuring easy and extremely simple user interaction with the product.

- > **MODBUS PROTOCOL** It can be interfaced with BMS/BACS automation and management systems.
- > **HEATING AND COOLING** The **Full Inverter** modulation finely tracks the desired setpoints, with the possibility of setting hot or cold climate curves, further optimising consumption for the user.
- > **DOMESTIC HOT WATER (DHW) PRODUCTION** When there is a demand for domestic hot water, the controller decides the management logic: it can be produced using the boiler or, in the H and H IN models, using the heat pump on the dedicated storage tank.
- > **SMART GRID INPUT FROM PHOTOVOLTAIC SYSTEM AND MAINS Smart Grid** digital inputs to manage an input from the photovoltaic system and from the mains. They optimise consumption and promote savings.
- > **DHW CYLINDER HEATING ELEMENT** The electrical DHW integration serves as an integration, anti-legionella or backup source in the event of a fault (H and H IN models only).
- > **FAST DHW** Priority to DHW production to bring the cylinder to the set setpoint in the shortest time possible.
- > **ANTI-LEGIONELLA FUNCTION** Allows for weekly anti-legionella cycles to be set.
- > **SILENT MODE** Reduces the frequency of the compressor and the speed of the fan, in order to significantly reduce noise. Programmable with time slots.
- > **ON/OFF** from external contact. Activation and deactivation by means of an external contact (e.g. from a zone thermostat).
- > **HOT/COLD** from external contacts. External summer/winter switching signal (e.g. from a zone thermostat).
- > **ECO FUNCTION** Dedicated setpoint for "**Eco**" operation. Settable with a daily time slot.
- > **ANTI-FREEZE PROTECTION** Hot operation of the heat pump with pump ON and possible electric booster.



The brand new Connect CRP and Connect CRP Zone

The interface on board the machine easily communicates with the new smart **Connect CRP** systems, which can manage up to 8 thermostats (7 Connect CRP Zones + 1 Connect CRP with all programmable thermostat functions) divided into 2 zones, **one direct and one mixed**.



Connect CRP is the brand new remote controller accessible via **APP**, available for both **iOS** and for **Android**.

Connect CRP Zone, on the other hand, is a Zone thermostat that communicates via **RF** with Connect CRP.

It can be inserted in a traditional 502 box or it can be left as a stand-alone unit on its practical table feet.



HP PERFORMANCE/TECHNICAL DATA

Valid for all 3 ranges

MOD.		04	06	08	10
Seasonal efficiency in heating mode (low temperature 35°C)	ηs (%)	187	191	200	201
ERP class in heating mode (low temperature 35°C)	Class				
Seasonal efficiency in heating mode (low temperature 55°C)	ηs (%)	128	136	130	135
ERP class in heating mode (low temperature 55°C)	Class				
SCOP (low temperature 35°C)	W/W	4.75	4.85	5.08	5.10
SEER (produced water 7°C)	W/W	4.99	5.34	5.83	5.98
SEER (produced water 18°C)	W/W	7.77	8.21	8.95	8.78
Power supply	V-ph-Hz	220/240 - 1 - 50			
Maximum input current	A	12	14	16	17
Type of compressor / no. of compressors	-	Twin Rotary DC / 1			
Source / system side exchanger	-	brazed stainless steel plates / finned coil			
Type of fan / no. of fans	-	Axial brushless DC / 1			
Refrigerant fittings - liquid line	Ø	1/4" SAE / Ø 6.35		3/8" SAE / Ø 9.52	
Refrigerant fittings - gas line	Ø	5/8" SAE / Ø 15.88			
Refrigerant charge (factory)	kg	1.5		1.65	
Indoor unit expansion vessel volume	L	10			
SWL* - Sound power of Outdoor Unit in heating mode (A7W35)	dB(A)	56	58	59	60
SWL* - Sound power of Outdoor Unit in cooling mode (A35W18)	dB(A)	56	58	60	60
Weight of Outdoor / Indoor Unit (including combustion module)	kg	58		77	

NOTE: Efficiency class calculated according to the European regulation 811/2013. The values refer to a unit without any optionals or accessories. * **SWL** = Sound power levels, referred to 1×10^{-12} W. The Total sound power level in dB(A) is measured according to Standard ISO 9614. The sound pressure levels are values calculated from the sound power level (SWL) applying the ISO-3744 relationship.

PERFORMANCE DATA				04	06	08	10
A7W35 *	Thermal power	kW	nom	4.20	6.35	8.40	10.0
	Power absorbed	kW	nom	0.82	1.28	1.63	2.02
	COP	W/W		5.10	4.95	5.15	4.95
	Water flow rate	l/h		722	1092	1445	1720
	External static pressure	kPa		85	84	79	71
A7W45	Thermal power	kW	nom	4.30	6.30	8.30	10.0
	Power absorbed	kW	nom	1.13	1.70	2.16	2.67
	COP	W/W		3.80	3.70	3.85	3.75
	Water flow rate	l/h		740	1084	1428	1720
	External static pressure	kPa		85	84	79	71
A7W55	Thermal power	kW	nom	4.40	6.00	7.50	9.50
	Power absorbed	kW	nom	1.49	2.03	2.36	3.06
	COP	W/W		2.95	2.95	3.18	3.10
	Water flow rate	l/h		473	645	806	1021
	External static pressure	kPa		85	85	85	84
A35W18 *	Cooling power	kW	nom	4.50	6.50	8.30	9.90
	Power absorbed	kW	nom	0.82	1.35	1.64	2.18
	EER	W/W		5.50	4.80	5.05	4.55
	Water flow rate	l/h		774	1118	1428	1703
	External static pressure	kPa		85	84	79	71
A35W7	Cooling power	kW	nom	4.70	6.50	7.45	8.20
	Power absorbed	kW	nom	1.36	2.17	2.22	2.52
	EER	W/W		3.45	3.00	3.35	3.25
	Water flow rate	l/h		808	1118	1281	1410
	External static pressure	kPa		85	84	81	79

Data declared according to **EN 14511**: **EER** (Energy Efficiency Ratio) = ratio of cooling power to absorbed power **COP** (Coefficient Of Performance) ratio of thermal power to absorbed power **A7W35** = source: air in 7°C d.b. 6°C w.b. / system: water in 30°C out 35°C **A7W45** = source: air in 7°C d.b. 6°C w.b. / system: water in 40°C out 45°C **A7W55** = source: air in 7°C d.b. 6°C w.b. / system: water in 47°C out 55°C **A35W18** = source: air in 35°C d.b. / system: water in 23°C out 18°C **A35W7** = source: air in 35°C d.b. / system: water in 12°C out 7°C **NOTES:** Efficiency class calculated according to the European regulation **811/2013**. The values refer to a unit without any options or accessories. * Performance values useful for declaration purposes to gain access to incentives.



INDOOR UNIT TECHNICAL DATA

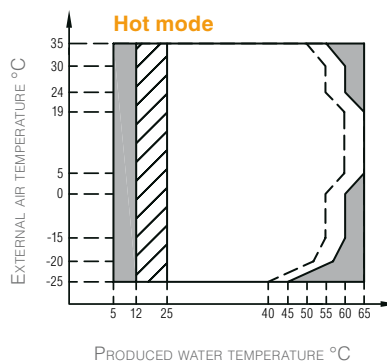
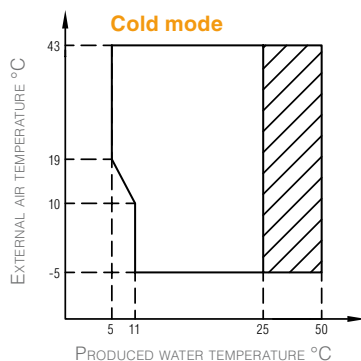
With built-in boiler

DATA COMMON TO ALL RANGES		OMNIA S HYBRID C	OMNIA S HYBRID H/H IN
Maximum/minimum heat output in heating mode (Hi)	kW	24.5 / 3.5	28.5 / 3.5
Maximum/minimum thermal power in heating mode (80/60°C)	kW	24.0 / 3.4	27.9 / 3.4
Maximum/minimum thermal power in heating mode (50/30°C)	kW	26.0 / 3.8	30.2 / 3.8
Maximum/minimum power efficiency in heating mode (80/60°C) (Hi)	%	98.1 / 98.0	97.8 / 98.0
Maximum/minimum power efficiency in heating mode (50/30°C) (Hi)	%	106.1 / 107.5	106.1 / 107.5
Efficiency 30% (Hi)	%	109.7	109.5
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50
Maximum flue gas head at rated power	Pa	100	100
SWL* - Sound power of Indoor Unit	dB(A)	39	39
Weight of Indoor Unit	kg	43	43
DHW DATA FOR OMNIA S HYBRID C		All sizes	
Class ErP	Profile/class		
DHW maximum/minimum heat output (Hi)	kW	28.5 / 3.5	
DHW maximum/minimum thermal power	kW	28.0 / 3.4	
DHW maximum/minimum operating pressure	bar	9.0 / 0.3	
DHW flow rate with ΔT 25°C / 30°C	L/min	16.1 / 13.4	

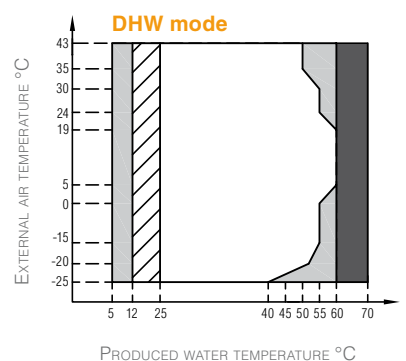
* OMNIA S HYBRID H/H IN features a combustion generator with RANGE RATED technology, capable of adapting power and heat output to the system's needs.

OPERATIONAL LIMITS

ALL MODELS



OMNIA S HYBRID H and H IN



Operating range with heat pump with possible limitation and protection

With IBH (system heating element heat.) installed

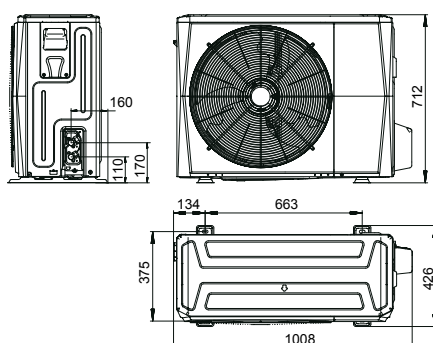
With TBH (DHW heating element, mod. H IN only) installed

Maximum inlet water temperature for heat pump operation

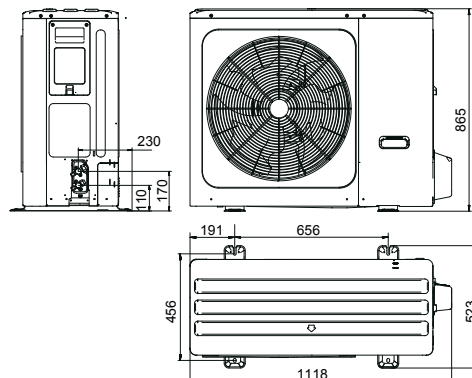
NOTE DHW MODE: the produced water temperature is the temperature of the water produced by the unit and not the DHW temperature available to the user, which is a function of this parameter and of the surface of the coil of the DHW cylinder, if any.

OVERALL DIMENSIONS OF OUTDOOR UNIT (mm)

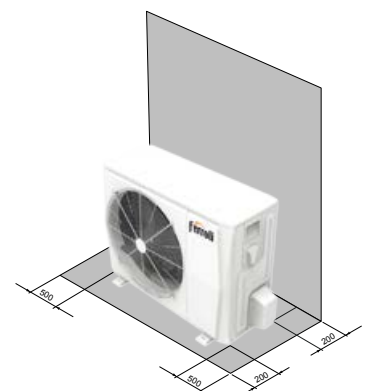
mod. 4 - 6



mod. 8 - 10



MINIMUM OPERATIONAL SPACE (mm)

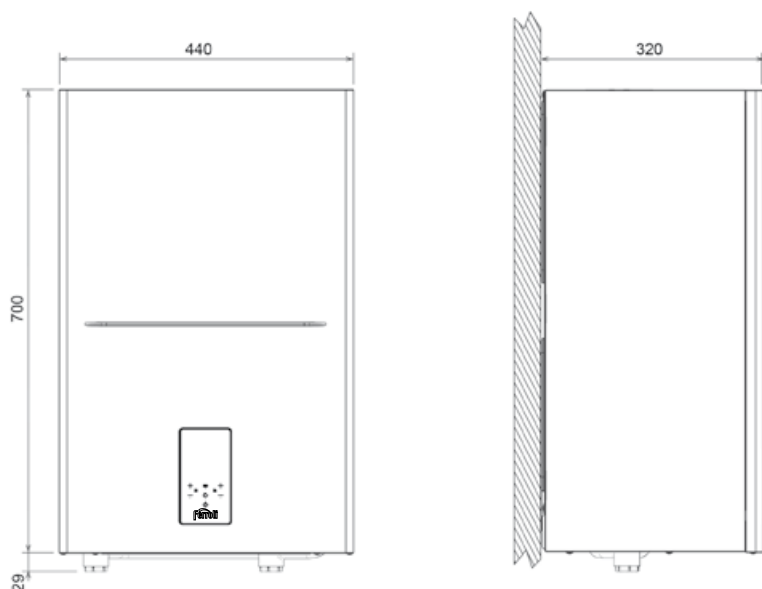




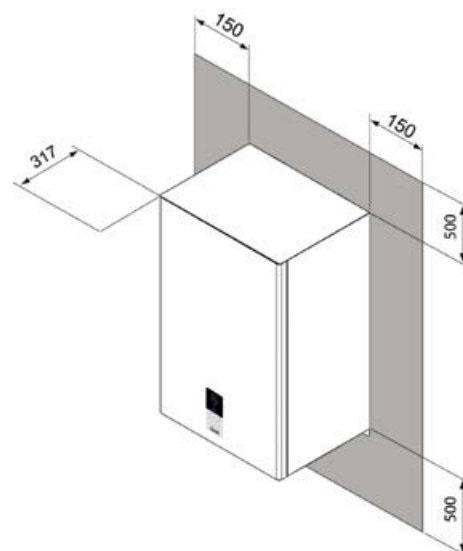
DIMENSIONS AND CONNECTIONS

Indoor unit

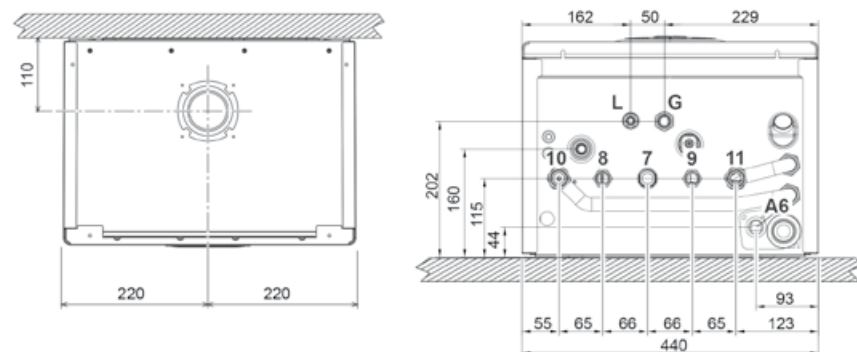
OVERALL DIMENSIONS OF INDOOR UNIT (mm)



MINIMUM OPERATIONAL SPACE (mm)



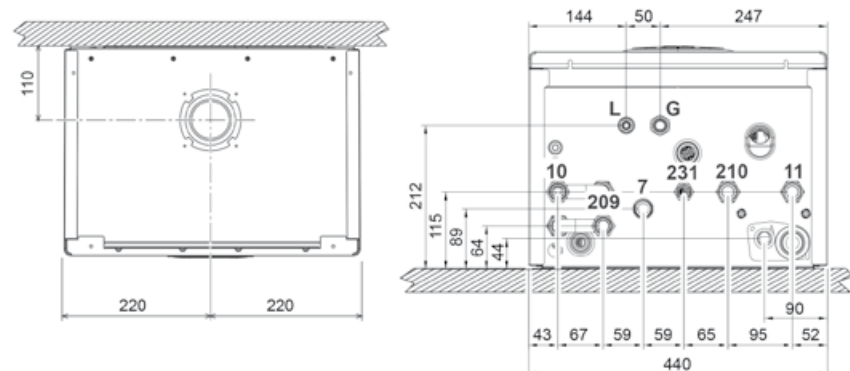
OMNIA S HYBRID C INDOOR UNIT CONNECTIONS



LEGEND

- 7 Gas inlet - Ø 3/4"
- 8 DHW outlet - Ø 1/2"
- 9 DHW inlet - Ø 1/2"
- 10 System supply - Ø 3/4"
- 11 System return - Ø 3/4"
- A6 Condensate drain connection
- L Liquid line
- G Gas line

OMNIA S HYBRID C INDOOR UNIT CONNECTIONS



LEGEND

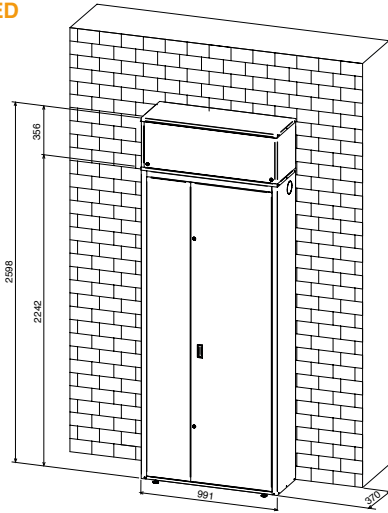
- 7 Gas inlet - Ø 3/4"
- 10 System supply - Ø 3/4"
- 11 System return - Ø 3/4"
- 209 Water heater supply - Ø 3/4"
- 210 Water heater return - Ø 3/4"
- 231 Filling coupling - Ø 1/2"
- A6 Condensate drain connection
- L Liquid line
- G Gas line



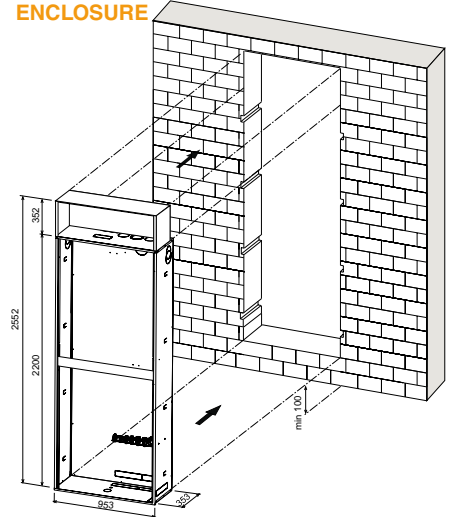
OMNIA S HYBRID H IN INDOOR UNIT

Installation spaces

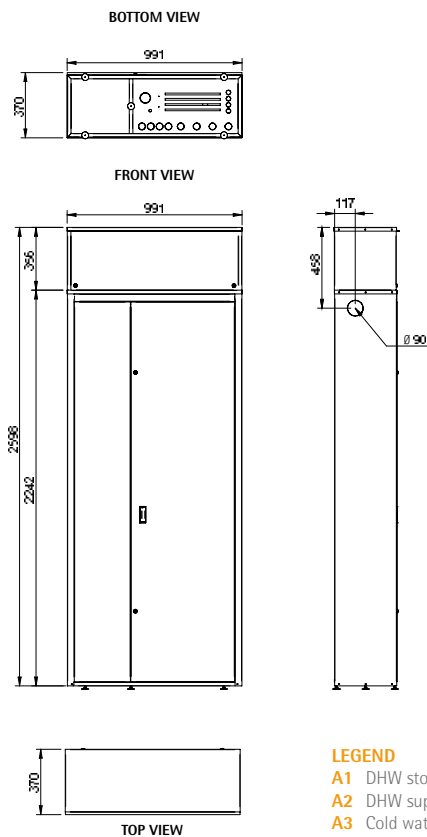
RECESSED



ENCLOSURE

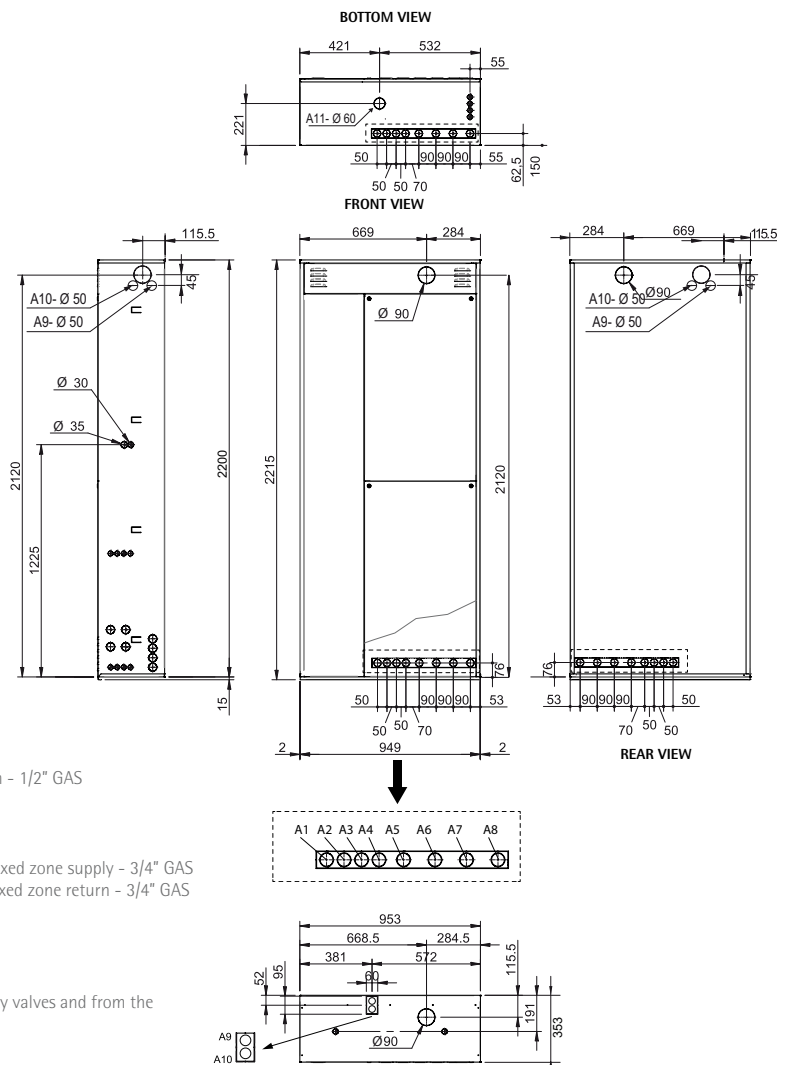


Dimensions and connections



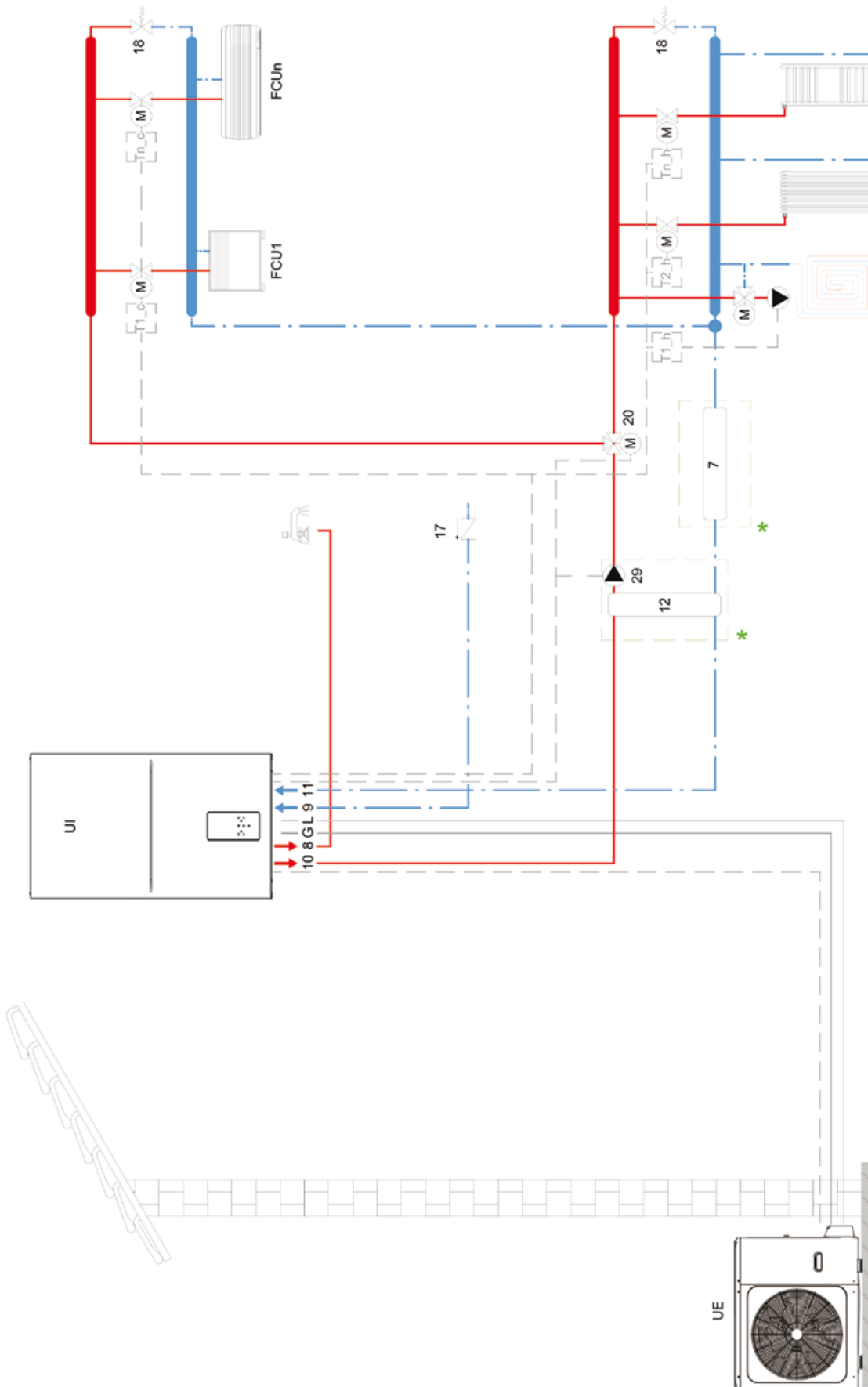
LEGEND

- A1 DHW storage tank water recirculation - 1/2" GAS
- A2 DHW supply - 1/2" GAS
- A3 Cold water - water mains - 1/2" GAS
- A4 Natural gas - 1/2" GAS
- A5 System supply (zone 1) or possible mixed zone supply - 3/4" GAS
- A6 System return (zone 1) or possible mixed zone return - 3/4" GAS
- A7 System supply (zone 2) - 3/4" GAS
- A8 System return (zone 2) - 3/4" GAS
- A9 Return from solar connection
- A10 Supply to solar connection
- A11 Funnel collecting drainage from safety valves and from the boiler condensate drain pipe



EXAMPLE OF SYSTEM DIAGRAM

Omnia S Hybrid C, solution for existing systems

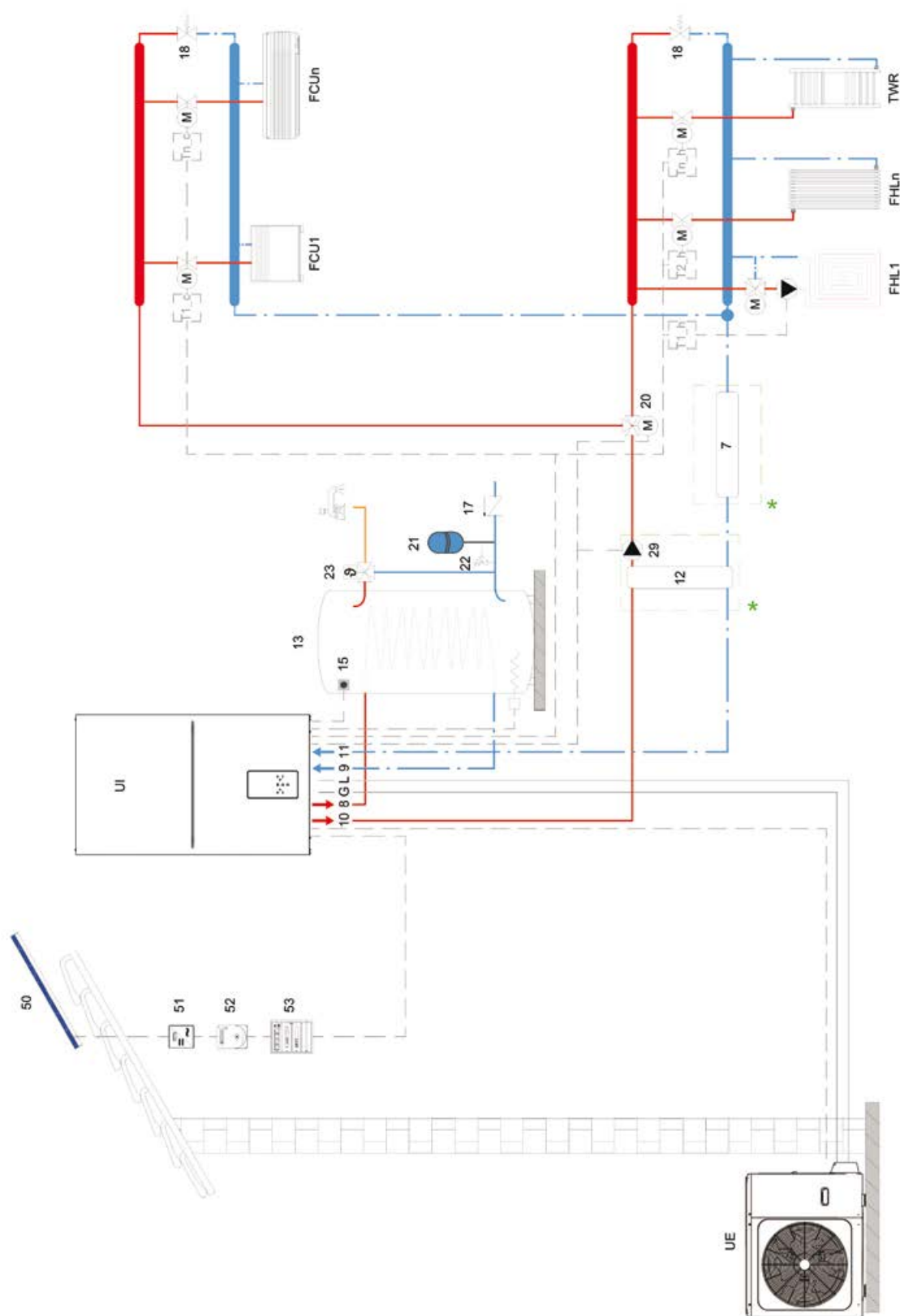


IU Indoor Unit **OU** Outdoor Unit **7** Inertial storage tank (in series) to be decided if necessary to install **8** DHW outlet - Ø1/2" **9** DHW inlet - Ø1/2" **10** System supply - Ø3/4" **11** System return - Ø3/4" **12** Inertial storage tank (in series) to be decided if necessary to install based on system load losses **17** Non-return valve (not supplied) **18** Bypass valve (not supplied) **20** Three-way valve with spring return (not supplied), controlled by SV2 **29** Pump outside unit (P-o), (not supplied) to be decided if necessary to install based on system load losses, managed by the heat pump **G** Gas Line **L** Liquid Line **T1-c** - **Tn-c** Room thermostat for cold request (not supplied) **T1-h** - **Tn-h** Room thermostat for hot request (not supplied) **FCU1** 1...n Air terminal: can be used for cooling only with radiant floor heating or for cooling and heating without radiant floor/radiator heating only with n zones **TWR** Bathroom integration towel warmer: if connected to the heating system it must be integrated with heating element - - - - Electrical connections

Warning, Ferroli S.p.A. informs you that this is a concept diagram! This diagram does not replace the system design in any way.

• **OPTIONAL**

Omnia S Hybrid H with photovoltaic system, solution for new systems



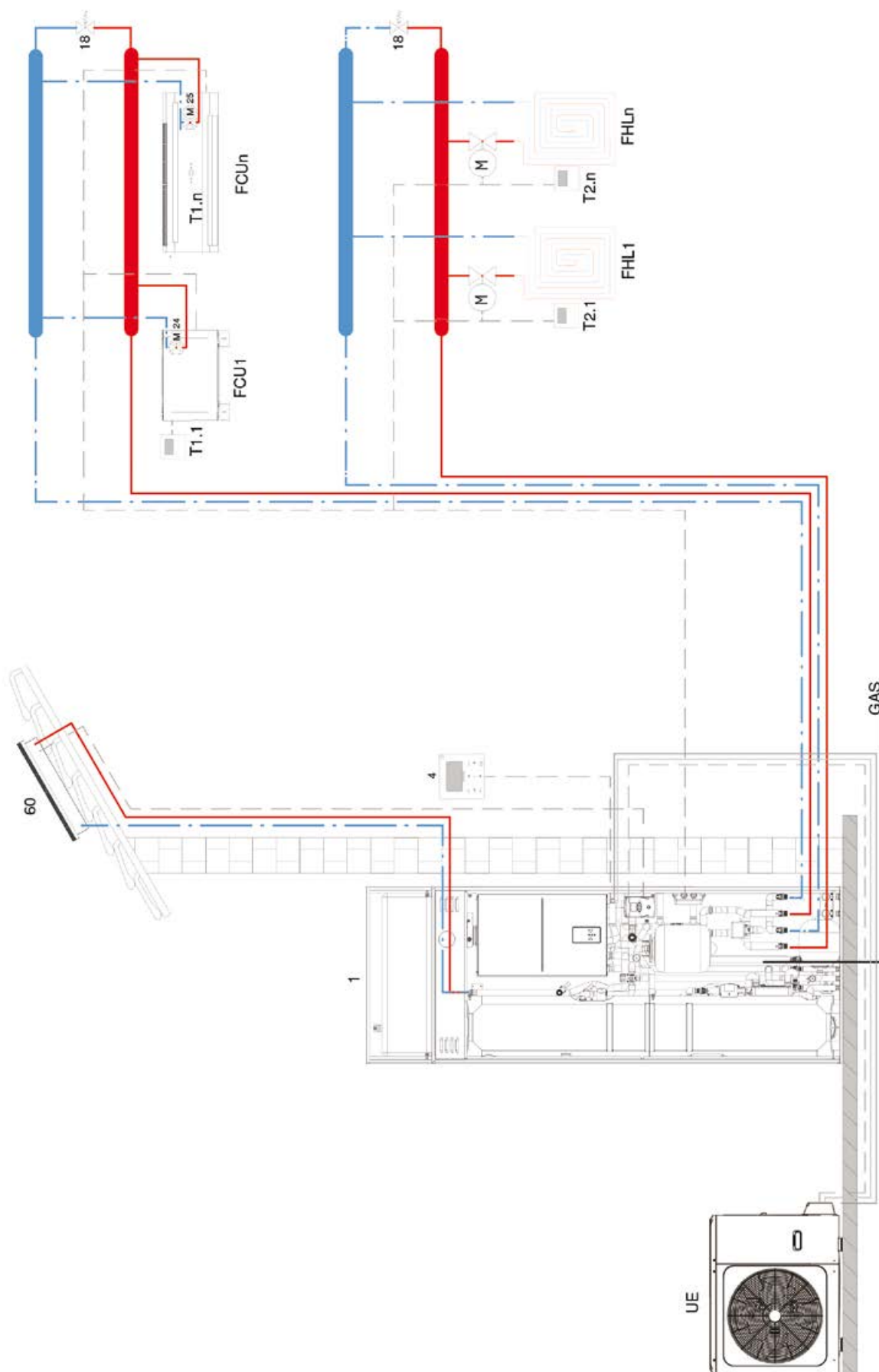
IU Indoor Unit **OU Outdoor Unit** **7** Inertial storage tank (in series) to be decided if necessary to install **8** DHW outlet – $\varnothing 1/2"$ **9** DHW inlet – $\varnothing 1/2"$ **10** System supply – $\varnothing 3/4"$ **11** System return – $\varnothing 3/4"$ **12** Inertial storage tank (in parallel) **13** DHW cylinder, minimum exchange surface of the heat pump coil (1.4 m² for mod. 10-14-14T) **15** Cylinder temperature probe (available as a boiler accessory) **17** Non-return valve (not supplied) **18** Bypass valve (not supplied) **20** Three-way valve with spring return (not supplied), controlled by SV2 **29** Pump outside unit (P-o) (not supplied) to be decided if necessary to install according to system load losses, managed by the heat pump **G** Gas Line **L** Liquid Line **T1-c** – **Tn-c** Room thermostat for cold request (not supplied) **T1-h** – **Tn-h** Room thermostat for hot request (not supplied) **FCU 1...n** Air terminal: can be used for cooling only with radiant floor heating or for cooling and heating without radiant floor **FHL 1...n** Radiant floor/radiator heating only with n zones **TWR** Bathroom integration towel warmer: if connected to the heating system, it must be integrated with heating element **50** Photovoltaic panel **51** Inverter **52** Meter **53** Electrical panel – – – – – Electrical connections

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*** OPTIONAL**



Omnia S Hybrid H In with solar thermal system, solution for existing/new systems



1 OMNIA S HYBRID H IN Basic system + Two-zone (hot/cold) direct accessory kit with diverter valve + 30l inertial storage tank kit + solar kit with plate heat exchanger 4 Wired remote controller (as standard with heat pump)
18 Bypass valve (not supplied) 24 Three-way valve (accessory, to be installed inside the fan coil unit) 25 Built-in three-way valve 60 Solar collector FCU1 ...n Air system terminals 1...n FHL 1...n Radiant floor heating only
T1.1 ...T1.n Room thermostat zone 1, terminals 1...n T2.1...T2.n Room thermostat zone 2, terminals 1...n OU Outdoor Unit
Warning, Ferrolli S.p.A. informs you that this is a concept diagram! This diagram does not replace the system design in any way.



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With a view to constantly improve its production range and customer satisfaction levels, the Company hereby specifies that aesthetic and/or dimensional features, specifications and accessories may be subject to changes.

Please place the utmost care to ensure all technical and/or sales documents (lists, catalogues, brochures, etc.) provided to the final Customer are updated according to the latest edition.

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