MAGIS M TOP
R290 monobloc heat pumps

MAGIS M TOP is the new range of **Immergas** monobloc air-water heat pumps with **R290** refrigerant gas.

This project had a significant impact on the entire company and has led to important investments in the production process to create the new line dedicated to the production of heat pumps.
MAGIS M TOP is in fact **the first range of heat pumps assembled, registered and tested at the Immergas plant in Brescello**.
The choice made highlights the company's strong commitment to invest in its future to face international competition, today and in the coming years.

MAGIS M TOP is the ideal product for both **new and existing buildings**, thanks to the **high energy performance** of **R290** gas (system flow temperature up to **75°C**) which allows operation even on systems **with high temperature emitters (radiators and fan coils).** MAGIS M TOP can be installed individually or in series on **centralized** systems to heat, cool and produce domestic hot water.

Magis M Top will join the existing Magis M in the catalog, positioned as the high-end option in monobloc heat pumps.

Range

The range includes 6 models from 5 up to 16 kW, mono-phase and three-phase.

MAGIS M TOP RANGE			
Model	Power A7/W35	Power supply	Gas
MAGIS M5 TOP	5 kW	mono-phase	R290
MAGIS M8 TOP	8 kW	mono-phase	
MAGIS M12 TOP	12 kW	mono-phase	
MAGIS M16 TOP	16 kW	mono-phase	
MAGIS M12 T TOP	12 kW	three-phase	
MAGIS M16 T TOP	16 kW	three-phase	

MAGIS M TOP

MAGIS M 5 TOP

MAGIS M 8 TOP

MAGIS M 12 TOP

MAGIS M 12 T TOP

**MAGIS M 16 TOP**

MAGIS M 16 T TOP

MAGIS M TOP

The MAGIS M TOP monobloc heat pump consists, as standard, of:

1. **external hydronic air to water** unit complete with expansion vessel, safety valve, flow meter, filter, circulator and heating cable;
2. **E-BOX TOP: electrical box**, to be installed internally;
3. **NEXIS: control panel, for electronic management of the outdoor unit and the system**.

MAGIS M TOP

E-BOX TOP

NEXIS
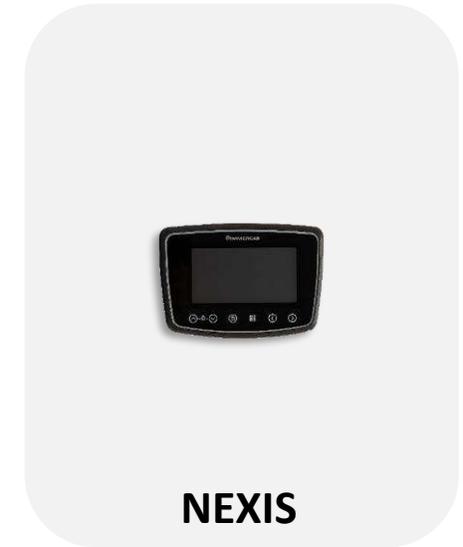
Main features

- ✓ **Single fan** – *full range*

- ✓ **Exclusive Immergas design** – *Schumann design*

- ✓ **Color remote panel** – *TFT 4,3'' display*

- ✓ **Natural refrigerant gas R290** – *GWP = 3*

- ✓ **Maximum system flow temperature = 75°C**

- ✓ **Maximum DHW (Domestic Hot Water) flow temperature = 65°C**

- ✓ **Silent mode – 35 dB(A)** – *sound pressure at 3 meters*

- ✓ **Connectivity for User and Service** – *in combination to GATEWAY V2*

- ✓ **Modbus protocol for integration with home automation systems** *(BMS)*

- ✓ **Advanced stand-alone electronics** – *management of complex systems with cascades of up to 6 MAGIS M TOP units of the same size*

- ✓ **Photovoltaic and SG Ready function**

- ✓ **Energy class A+++ LT (35°C) and A++ MT (55°C)**

- ✓ **HP Keymark Certification** – *ongoing*

Main dimensions

The main dimensions, weight and connections of the entire range are shown in the table.

| PARAMETERS/MODELS		MAGIS M5 TOP	MAGIS M8 TOP	MAGIS M12 TOP MAGIS M 12 T TOP	MAGIS M16 TOP MAGIS M 16 T TOP
Length	mm	1270	1270	1270	1270
Height	mm	850	850	1018	1018
Depth	mm	500	500	530	530
Weight	Kg	126	126	137	137
Hydraulic connections	Inches	1	1	1	1
Compressor		Rotary		Scroll	
Gas quantity	gr	630	870	1250	

Main indicative performance data

The main performances of the entire range are shown in the table.

| PARAMETERS/MODELS		MAGIS M5 TOP	MAGIS M8 TOP	MAGIS M12 TOP MAGIS M12 T TOP	MAGIS M16 TOP MAGIS M16 T TOP
Heat output A7/W35	kW	5	8	12	16
COP A7/W35	-	5,10	4,91	4,80	4,51
EER A35/W18	-	3,91	3,90	4,00	3,80
Energy class SCOP (35°C)	-	A+++	A+++	A+++	A+++
Energy class SCOP (55°C)	-	A++	A++	A++	A++
Max. flow temp. HEATING	°C	75	75	75	75
Max. DHW temperature	°C	65	65	65	65
HEATING operating range	°C	-25/+35	-25/+35	-25/+35	-25/+35
COOLING operating range	°C	10/+46	10/+46	10/+46	10/+46
DHW operating range	°C	-25/+43	-25/+43	-25/+43	-25/+43

Operating range with integration

HEATING
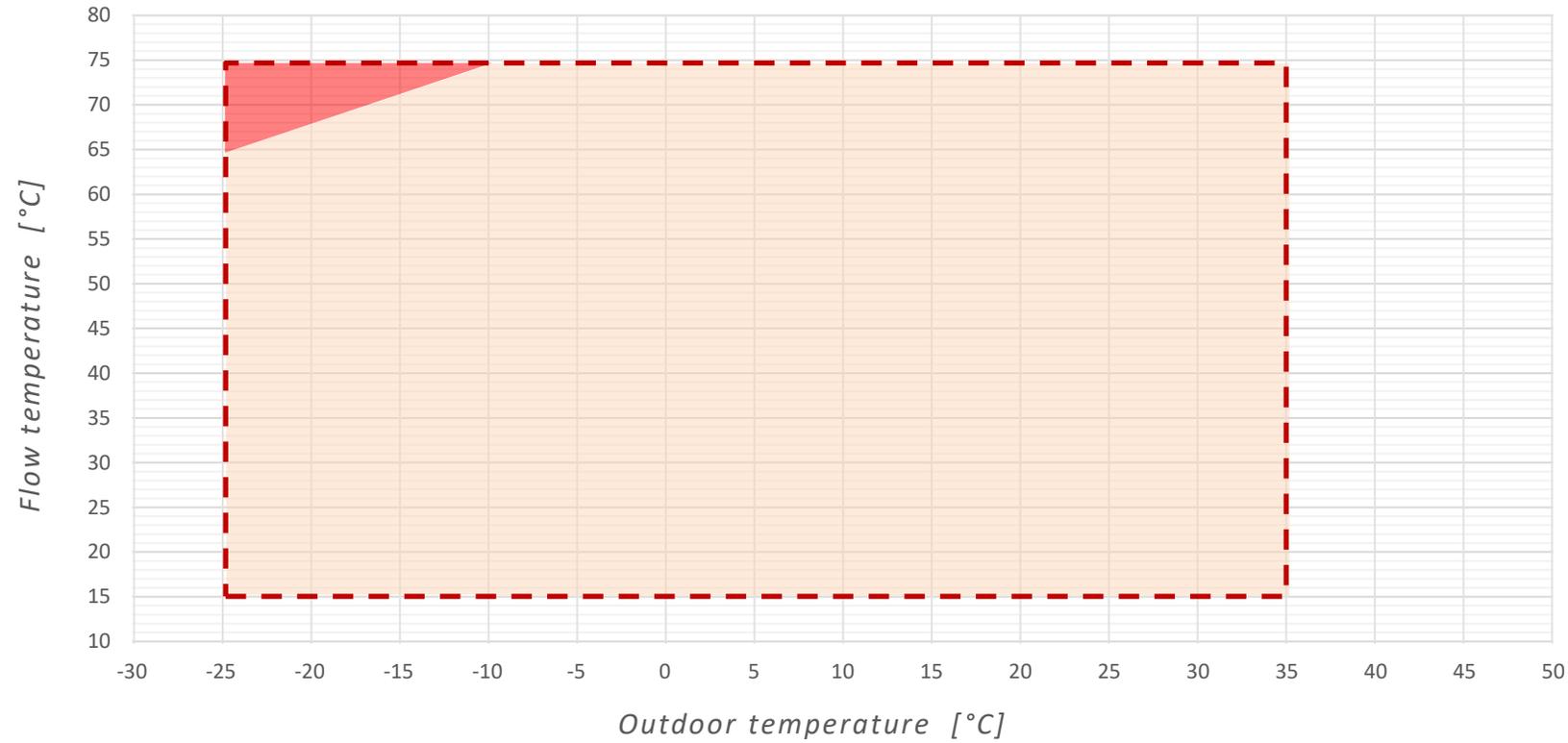
ONLY WITH INTEGRATION ENABLED
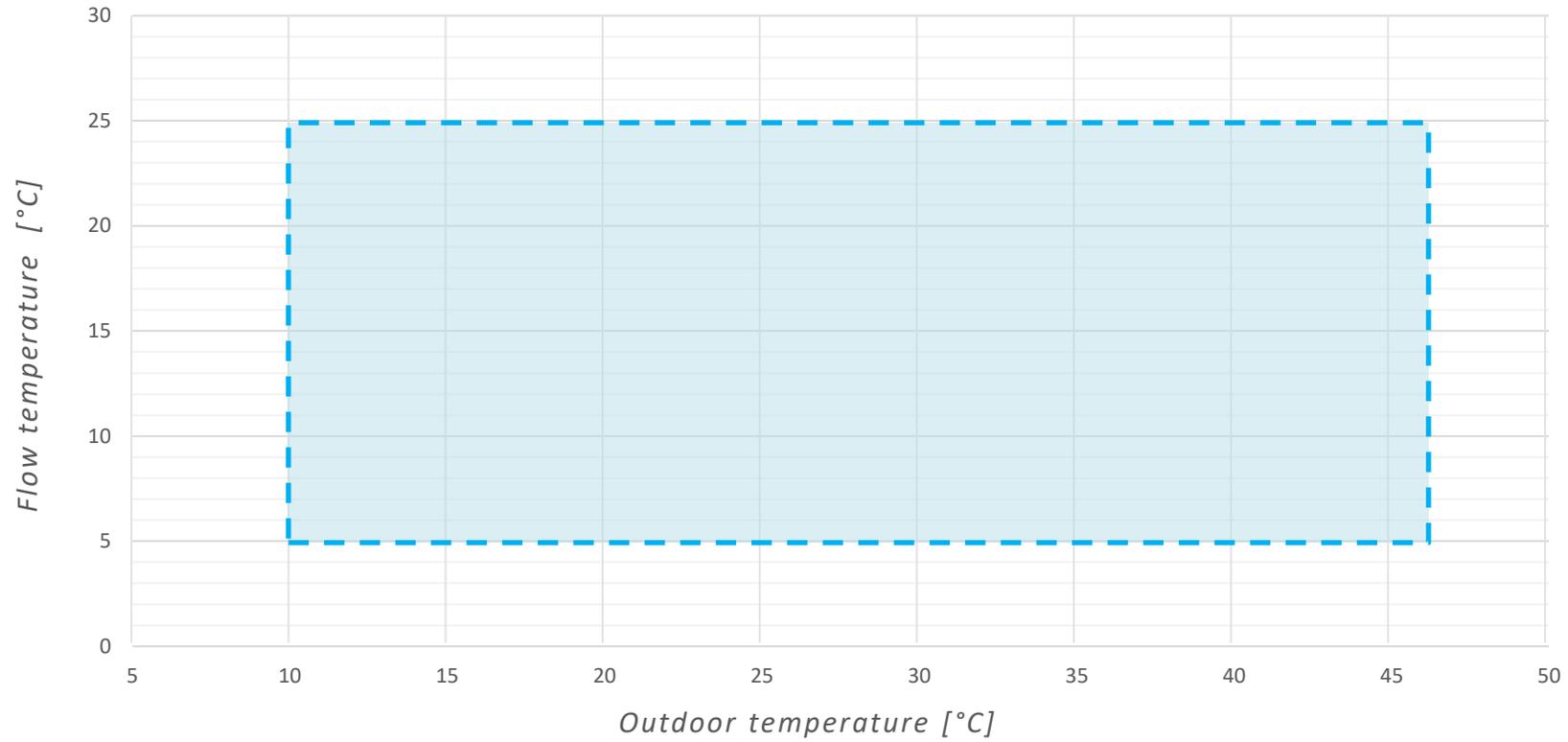
Operating range with integration

DOMESTIC HOT WATER (DHW)
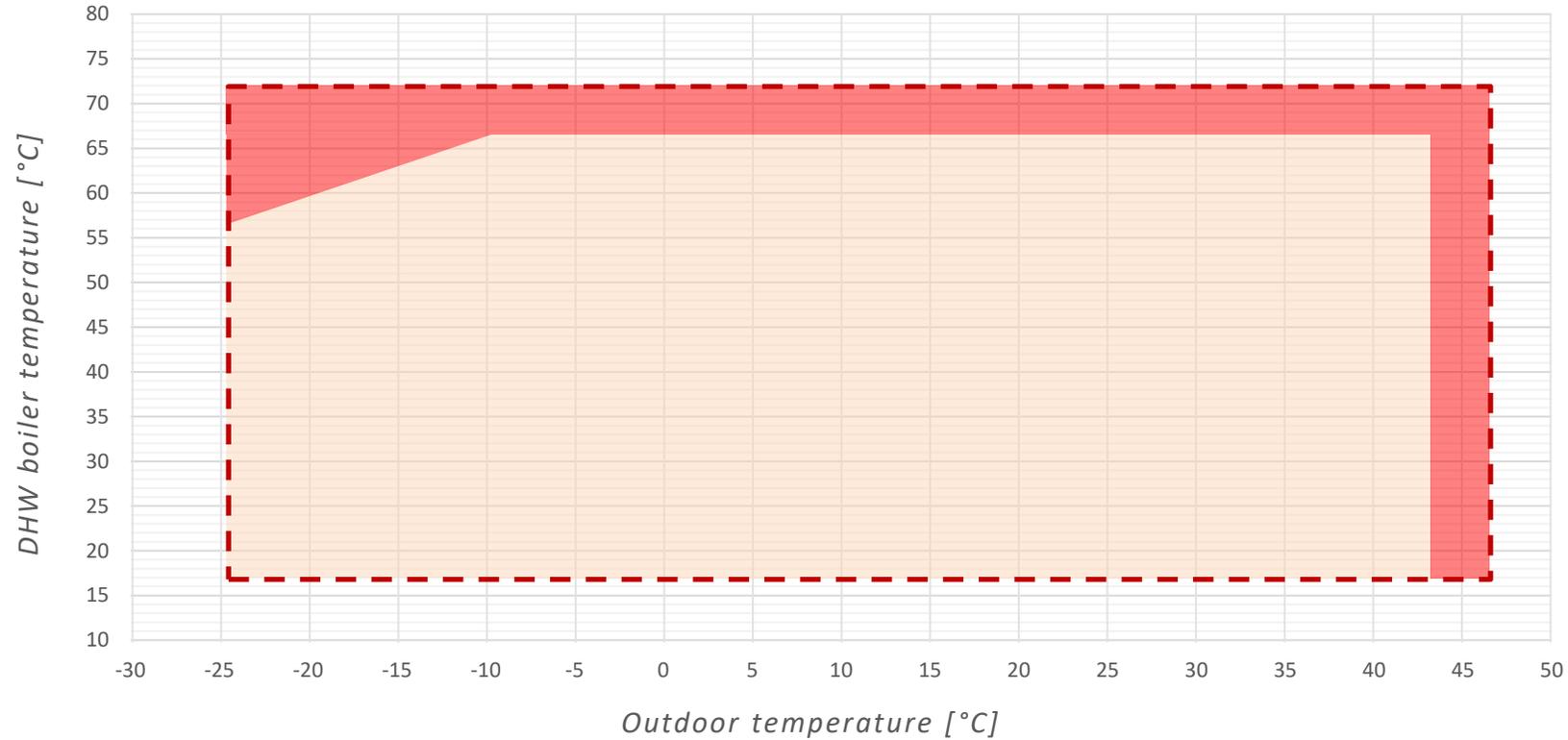
ONLY WITH INTEGRATION ENABLED

Operating range

COOLING

Main features

Standard equipment to ensure **SAFETY** in operation with R290 refrigerant gas:

- ✓ **High-efficiency deaerator**
  to prevent any gas leaks into the hydronic circuit

- ✓ **Safety valve calibrated at 2.5 bar**
  to avoid discharge of the safety valve installed inside the dwelling (3 bar)

- ✓ **Hermetically sealed electrical part**
  for explosion-proof safety

- ✓ **Initial fan start-up**
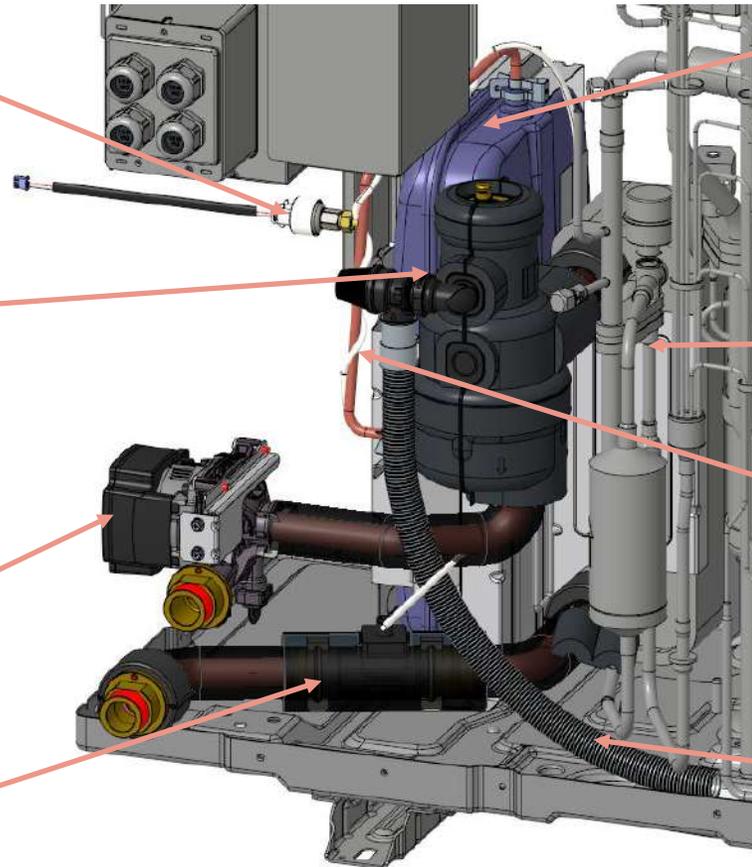 *to evacuate any potential leaks*
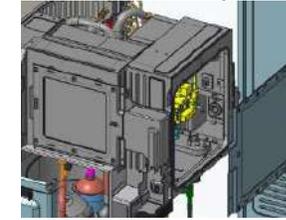
Main features

Standard equipment:

✓ Circulator

✓ Expansion vessel

✓ Flow meter (Minimum flow rate 500 l/h)

✓ Y-filter

✓ 50 W anti-freeze heating cable

Protects against frost (expansion vessel and connecting pipe), not protected by anti-freeze logic.

✓ 150 W condensate heating element

PRESSURE SENSOR

DEGASIFIER
+
2,5 bar
SAFETY VALVE

CIRCULATOR

FLOW METER
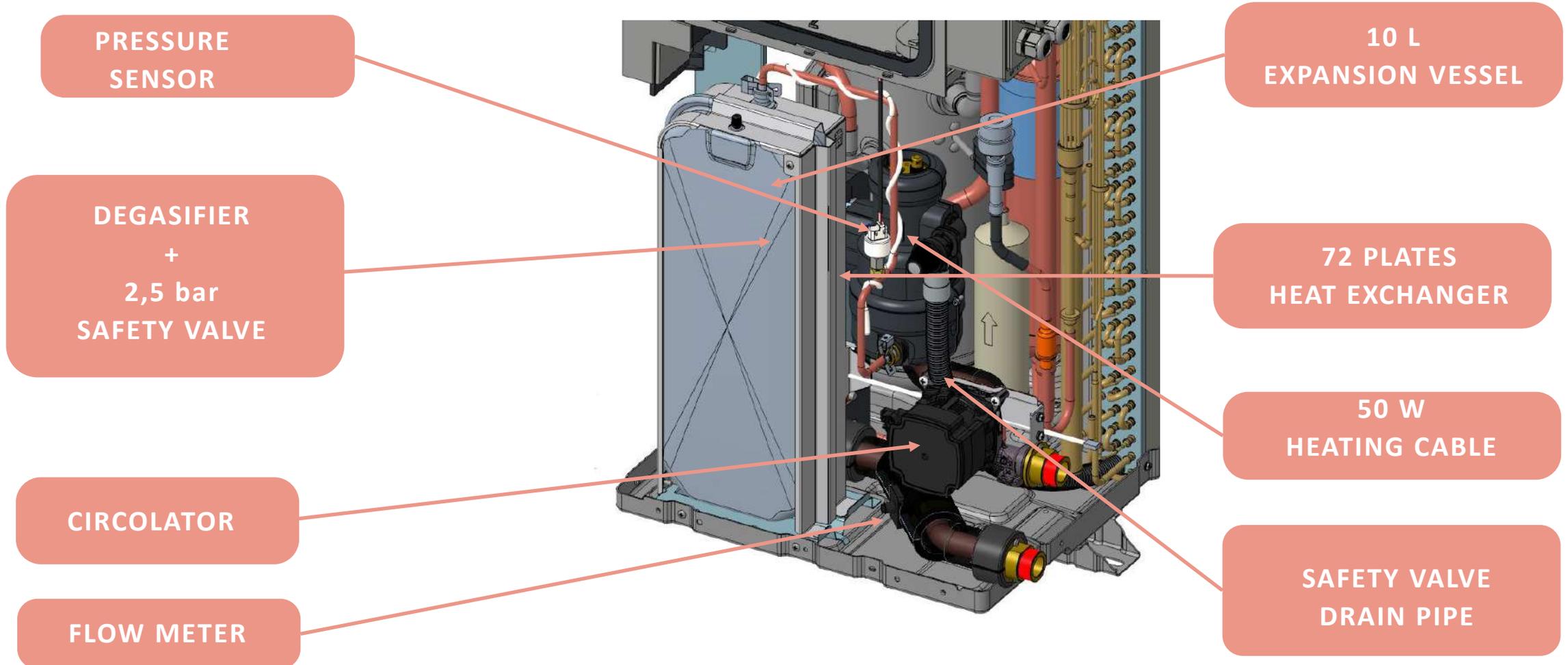
10 L
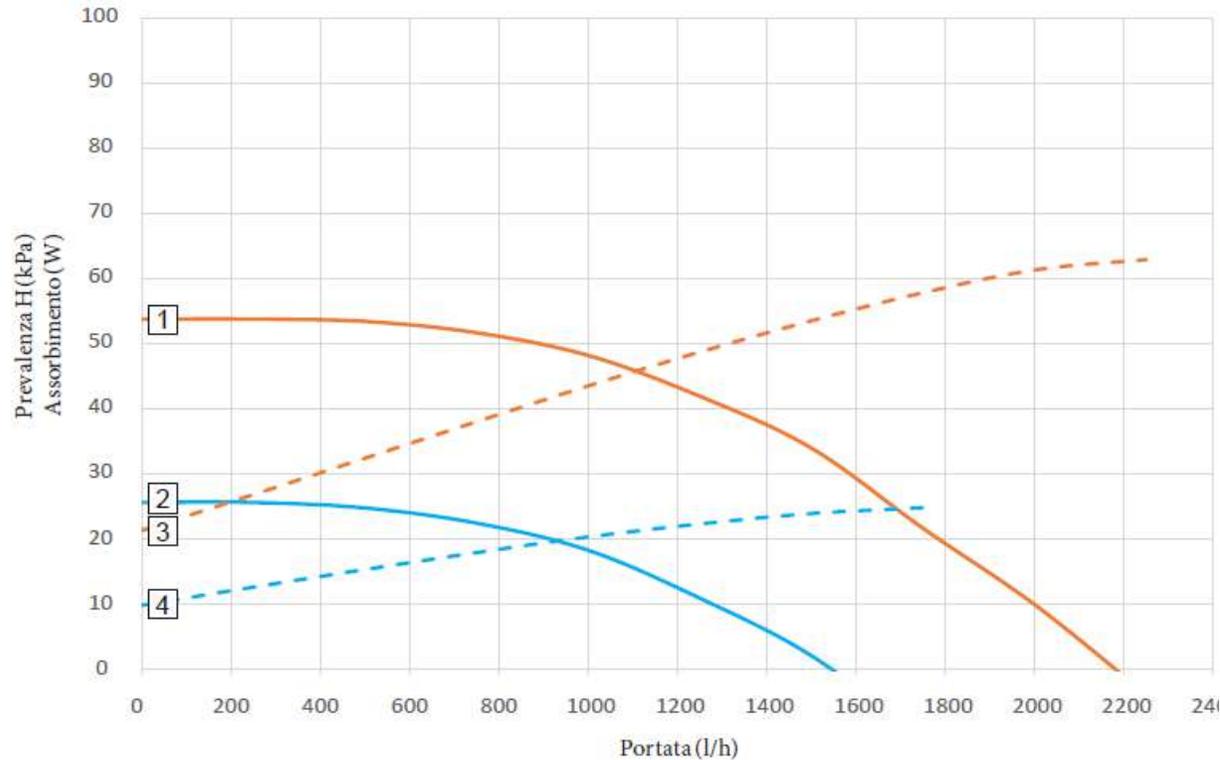EXPANSION VESSEL

42 PLATES
HEAT EXCHANGER

50 W
HEATING CABLE

SAFETY VALVE
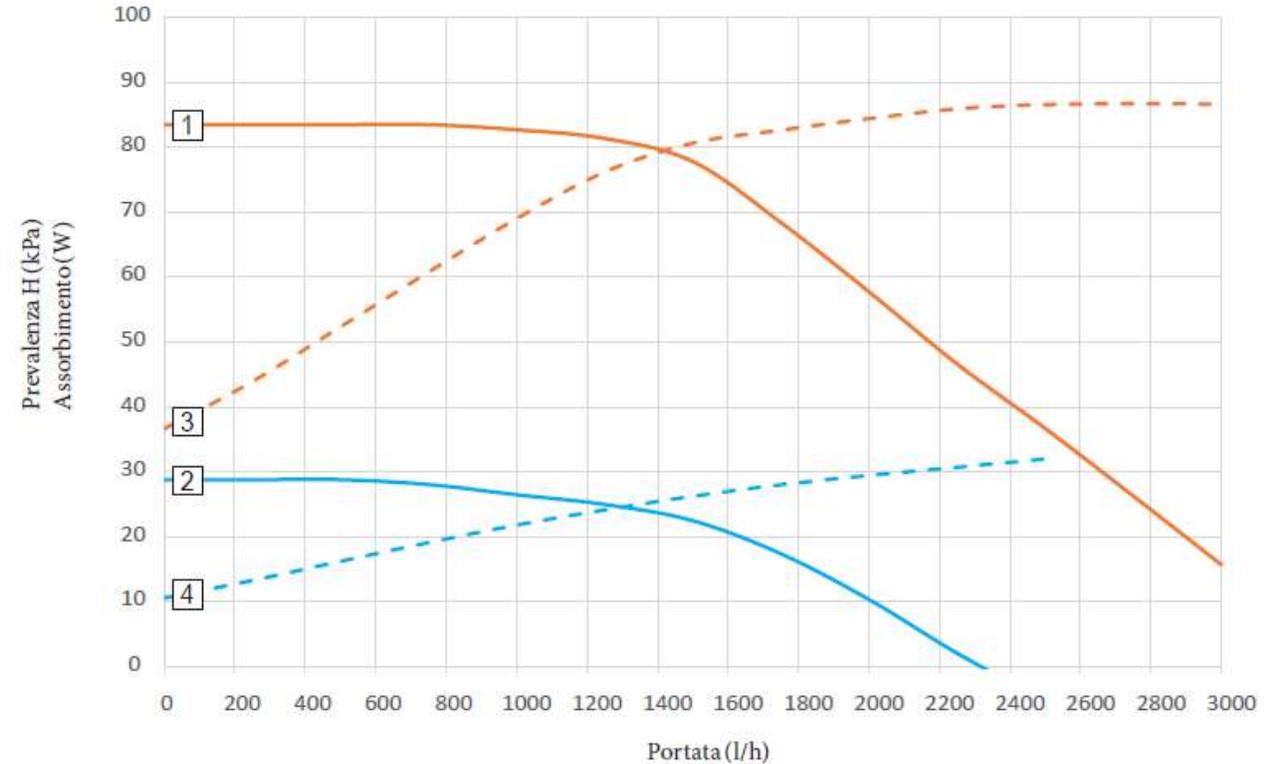DRAIN PIPE

Hydraulic part MAGIS M 12 – 16 TOP

PRESSURE SENSOR

DEGASIFIER + 2,5 bar SAFETY VALVE

CIRCOLATOR

FLOW METER

10 L EXPANSION VESSEL

72 PLATES HEAT EXCHANGER

50 W HEATING CABLE

SAFETY VALVE DRAIN PIPE

Circulator

MAGIS M 5 – 8 TOP

(7m – 63 W)

MAGIS M 12 – 16 TOP

(9m – 90 W)

1	=	Prevalenza disponibile all'impianto con velocità fissa massima
2	=	Prevalenza disponibile all'impianto con velocità minima
3	=	Potenza assorbita dal circolatore con velocità fissa massima
4	=	Potenza assorbita dal circolatore con velocità minima

Area compresa tra le curve 1 e 2 = Prevalenza disponibile
*Area compresa tra le curve 3 e 4 = Potenza assorbita dal circolatore*

1	=	Prevalenza disponibile all'impianto con velocità fissa massima
2	=	Prevalenza disponibile all'impianto con velocità minima
3	=	Potenza assorbita dal circolatore con velocità fissa massima
4	=	Potenza assorbita dal circolatore con velocità minima

Area compresa tra le curve 1 e 2 = Prevalenza disponibile
Area compresa tra le curve 3 e 4 = Potenza assorbita dal circolatore

E-Box Top

E-Box Top contains the electronics that manages MAGIS M TOP.

To be installed inside the building, it simplifies the electrical connections of the system elements (probes, circulators, three-way, integrative resistances, zone panels and more).

It communicates with the external unit, the internal system and the user panel via the Modbus communication protocol.

E-Box Top
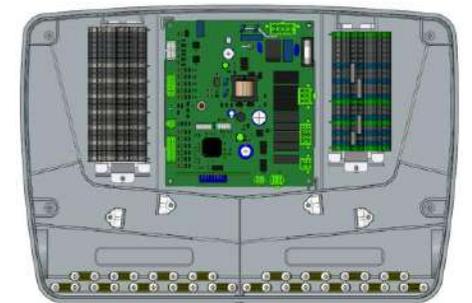
The board, through configurable inputs and outputs, manages:

- up to 6 units in simple cascade;
- up to **3 system zones**;
- a DHW diverter valve or a storage tank loading circulator;
- a heating/cooling 3-way valve;
- back-up sanitary and/or system electrical resistances;
- up to 2 dehumidifiers;
- up to 2 Nexis remote panels in addition to the one supplied as standard;
- up to 3 temperature/humidity active sensors;
- remote management using the Gateway V2 kit;
- remote management with BMS home automation systems (without the need of additional kits).

E-Box Top
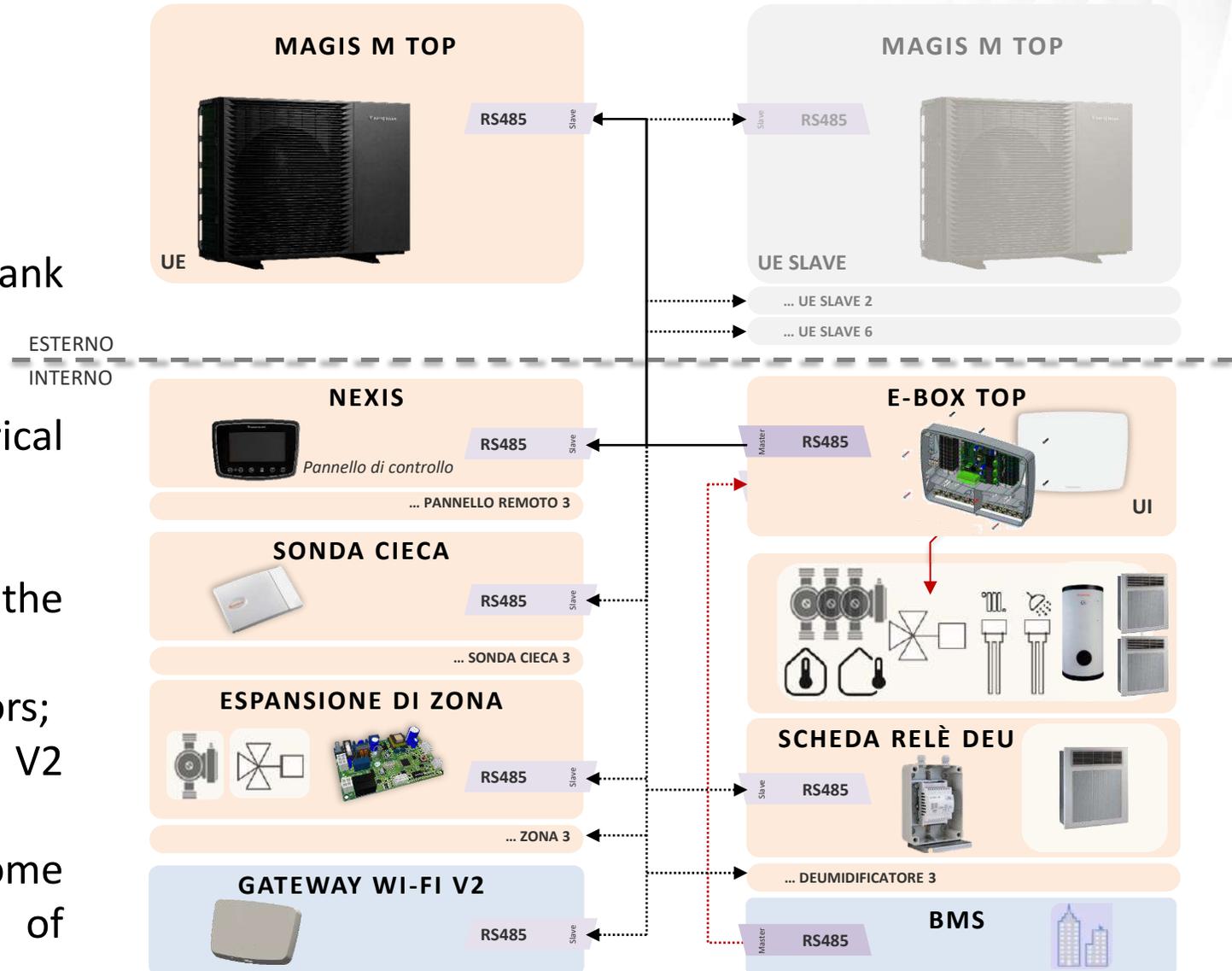
Through configurable inputs/outputs, it is possible to manage **FUNCTIONS** of:

- ✓ **Concurrency**

- ✓ **DHW boost**

- ✓ **DHW priority**

- ✓ **Antifreeze protection**

- ✓ **SILENT MODE ON 4 levels**

- ✓ **Photovoltaic**

- ✓ **Anti-legionella without electric heating element**

- ✓ **History and anomaly management**

367

266

sp.
57.5

NEXIS

147.4

103

sp.
20.5
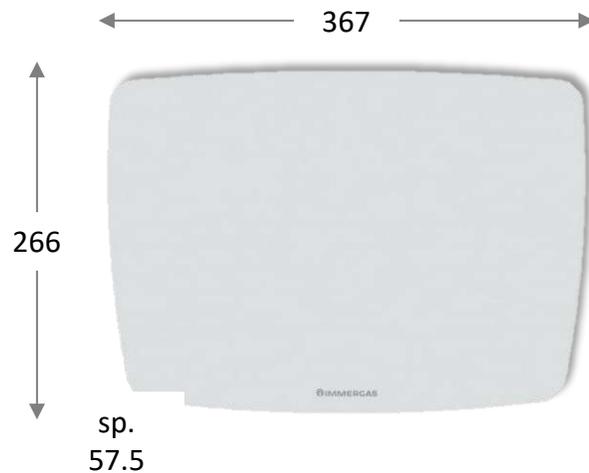
- ✓ 4.3'' color TFT display + 6 backlit touch buttons

- ✓ **Black** as standard – black/white optional available

- ✓ Modbus communication

- ✓ **Heat pump user interface**
  functions as EU (External Unit) control panel + zone panel

- ✓ **T° and Ur (Temperature and Humidity) sensor**

- ✓ **Calendar** management
  available for system and domestic hot water zones, with 8 time slots and temperature customization for each slot

- ✓ **24V** electrical power supply

- ✓ Available languages: Italian, English, Romanian, Lithuanian, Slovenian, French, Portuguese, Polish, Czech, Slovak, Hungarian, Spanish, Greek, Russian, Ukrainian, Dutch, Bulgarian, German, Turkish.

Minimum water content

The presence of a minimum water content is important, especially to facilitate the correct execution of defrost cycles. The minimum amount of water to be ensured is:

→ **30 liters for MAGIS M 5-8 TOP**
→ **50 liters for MAGIS M 12-16 TOP (single-phase and three-phase)**

A **NEW 50 LITER VERTICAL INERTIAL STORAGE TANK** is available in the range with the <u>same color as the MAGIS M TOP</u>.

GATEWAY WI- FI V2 – code 3.035537


124

87

26

Through the new **app/web app** and new **cloud infrastructure**, it will allow remote management of:

- *Zones and calendars for climate control and domestic hot water*

- *System status – standby / winter / summer / …*

- *Room and DHW conditions (Setting and monitoring)*

- Multi-user geo location *(Away Function)*

- *Error management/OTA (Remote firmware updates for devices) via* **pop-up notifications**

- *System backup via Cloud (in case of Gateway breakdown)*

- *Possibility of* **targeted marketing**

- *It will be* **compatible with major voice assistants** *(with Nexis installed)*

Advanced Smart Thermoregulation System – MAGIS M TOP
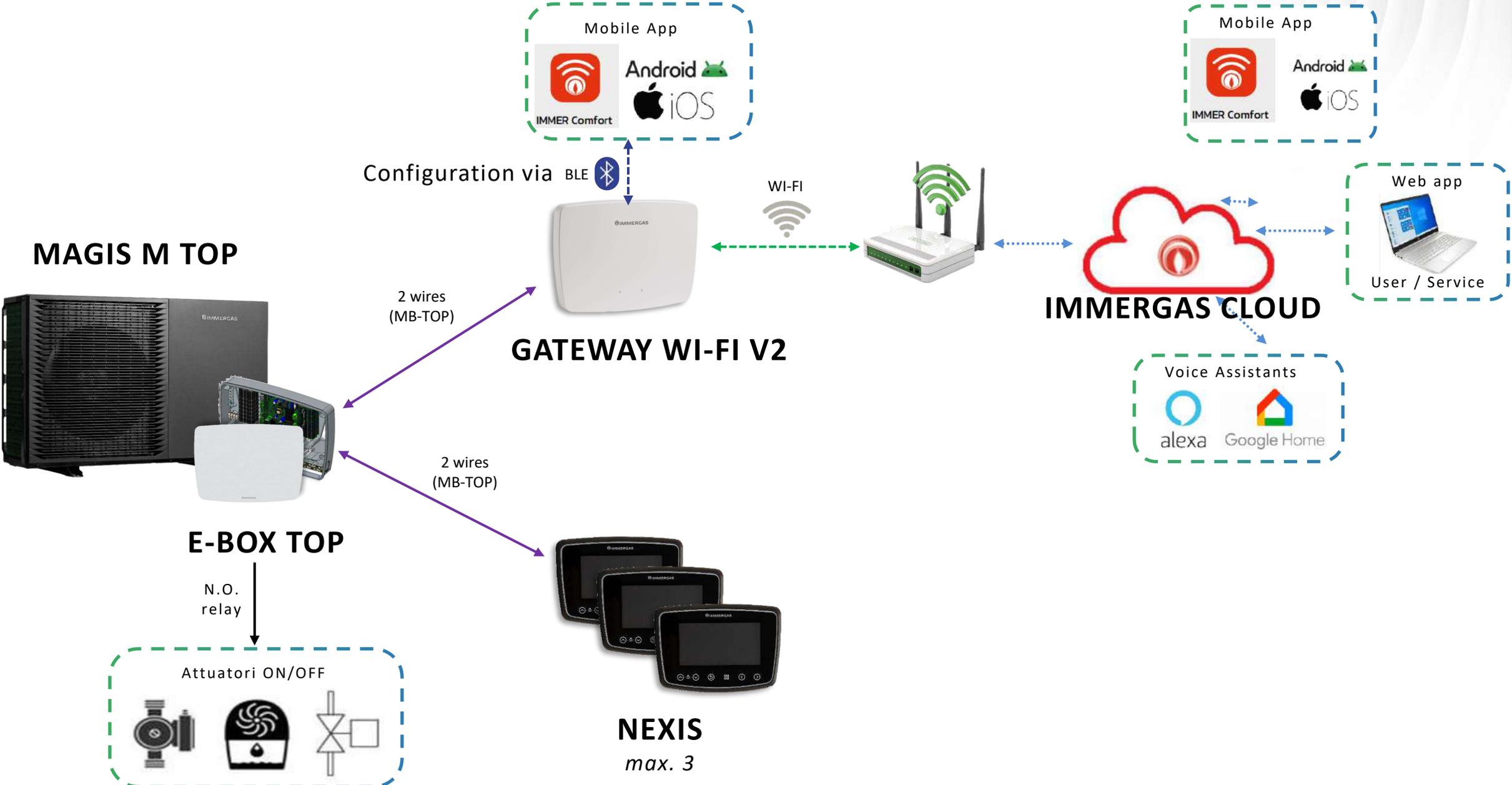
Additional zone board kit – code 3.035840

Board
A15

242

49

199
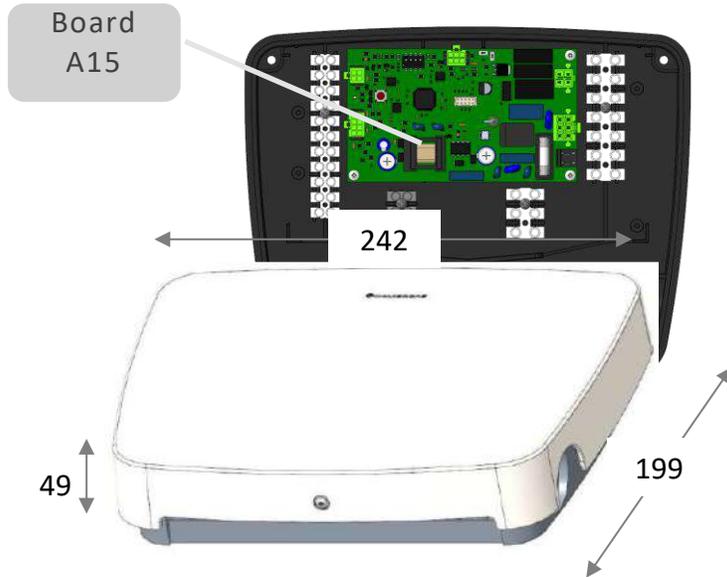
OPTIONAL BOARD:

✓ For each zone, it controls one circuit, direct or mixed

✓ Manages:

  • *1 Circulator*
  • *1 Mixer*
  • *1 NTC Probe*
  • *1 On-Off Thermostat - Humidistat*

✓ The zone panel and blind zone probe will be connected directly to the EBOX-TOP via Modbus.

✓ Communicates via Modbus with the E-Box Top.

✓ Installable up to 3, one per zone

✓ 230V power supply.

DEU (Dehumidifier) management relay board kit – code 3.03623
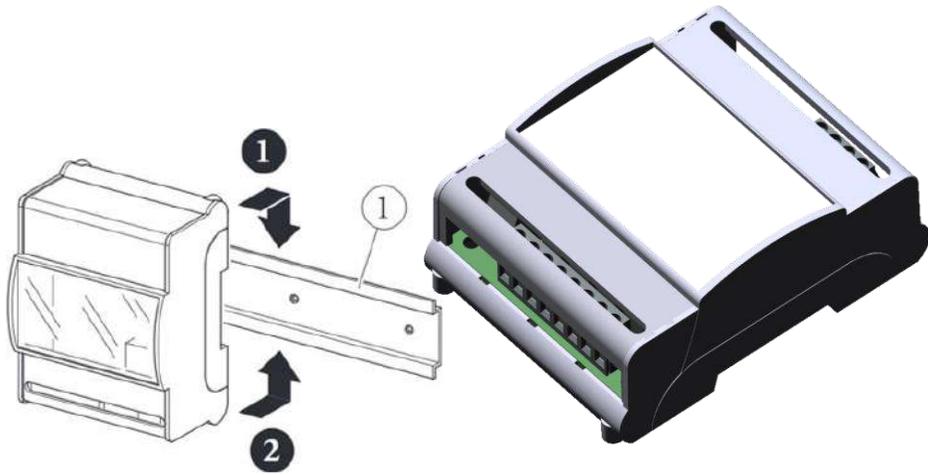
OPTIONAL BOARD:

- ✓ Controls **1 dehumidifier for each zone in AN and AR**

- ✓ Manages **the dehumidifier alarm** (via NEXIS panel)

- ✓ Controls any **dehumidifier zone val**ve with a 230V command

- ✓ Installable **up to 3**, one for each thermal zone

- ✓ Aesthetics identical to Dominus V1

- ✓ **DIN rail or wall mount** support

- ✓ **MODBUS connection** on E-BOX TOP board

- ✓ External **24Vdc** power supply (transformer NOT supplied)

Accessories

Description	Code
CONNECTION KIT WITH FLEXIBLE PIPES AND SHUT-OFF KNOBS 1"	3.025954
ANTIVIBRATION SUPPORTS KIT MAGIS M TOP	**3.035580**
3-WAY DIVERTER VALVE KIT	3.020632
12 LITRES SYSTEM EXPANSION VESSEL KIT	3.011679
INTEGRATION ELECTRIC RESISTANCE KIT	3.021525
ADDITIONAL 2 KW ELECTRIC RESISTANCE KIT	3.020861
2 ZONES KIT (1 DIRECT AND 1 MIXED) FOR 5-8 KW MODELS	3.026301
2 ZONES KIT (1 DIRECT AND 1 MIXED) FOR 12-16 KW MODELS	3.031695
2 ZONES KIT (1 DIRECT AND 1 MIXED) HEATING ONLY FOR 5-8 KW MODELS	3.032265
2 ZONES KIT (1 DIRECT AND 1 MIXED) HEATING ONLY FOR 12-16 KW MODELS	3.035333
2 DIRECT ZONES KIT, HEATING ONLY FOR 12-16 KW MODELS	3.035334
2 DIRECT ZONES KIT, HEATING ONLY FOR 5-8 KW MODELS	3.032264
VERTICAL 50 LITRES BUFFER TANK (WHITE COLOR)	3.027539
VERTICAL 50 LITRES BUFFER TANK (RAL 7030)	**3.036742**
75 LITRES BUFFER TANK	3.027288
75 LITRES BUFFER TANK WALL-HUNG BRACKET KIT	3.027290

Accessories

Description	Code
NEXIS CONTROL PANEL KIT – BLACK	**3.035812**
NEXIS CONTROL PANEL KIT – WHITE	**3.035829**
ADDITIONAL ZONE EXPANSION KIT	**3.035840**
GATEWAY WI-FI V2	**3.035537**
DEHUMIDIFIER RELAY BOARD KIT	**3.036231**
SYSTEM CONTROLLER	3.021522
ROOM HYGROSTAT	3.023302
STORAGE TANK NTC PROBE	3.019375
CRONO 7	3.021622
CRONO 7 WIRELESS	3.021624
EXTERNAL PROBE	3.015266
TEMPERATURE/HUMIDITY ACTIVE SENSOR MODBUS KIT	3.030992
OMNISTOR 300	3.027910
OMNISTOR 500	3.027911

Availability

IMMERGAS
Da 60 anni siamo l'energia del cambiamento

MAGIS M 5 TOP	MAGIS M 8 TOP
3.035574	3.035575

MAGIS M 12 TOP	MAGIS M 12 T TOP
3.035576	3.035578

MAGIS M 16 TOP	MAGIS M 16 T TOP
3.035577	3.035579

4° QUARTER 2025