

Alpha

ADVANCED HEATING & COOLING SOLUTION

For residential buildings.
No F-Gas certification required.



MAGIS M TOP

Monobloc heat pump
with R290 refrigerant gas





INTRODUCING THE MAGIS M TOP

The Magis M Top monobloc air source heat pump uses natural refrigerant gas R290 to deliver high performance with a lower environmental impact.

Available in six versions, with a range of power outputs, the Magis M Top is ideal for new build and retrofit residential projects. It provides heating and cooling, with flow temperatures of up to 75°C, making it suitable for use with high-temperature emitters such as radiators and fan coil units in addition to low-temperature under floor or radiator systems.

Designed for efficient operation, the unit helps to minimise electricity consumption, while inverter technology allows it to modulate output in line with demand. This improves overall

performance, particularly during milder weather conditions when full capacity is not required.

Part of the Italian, family-owned Immergas Group, which operates in over 30 countries, Alpha brings advanced manufacturing and proven technology to the UK market. The Magis M Top forms part of a wider range of products available through Alpha.



Designed for efficient, sustainable heating and cooling

OVERVIEW

- Available in six versions: four single-phase and two three-phase models, from 5 kW to 16 kW
- Can be installed as a standalone unit or in a cascade as part of a centralised system
- Provides heating, cooling and domestic hot water
- Hermetically sealed unit with no requirement for F-Gas certified installation
- Single fan and Silent Mode function to ensure quiet operation
- Compatible with solar PV systems

WHAT IS R290 GAS?

R290 is a natural refrigerant gas composed of carbon and hydrogen. It is widely recognised as a leading alternative to conventional refrigerants, helping to reduce environmental impact without compromising performance.



LOW CLIMATE IMPACT

R290 has an extremely low global warming potential (GWP), making it a more sustainable choice than conventional synthetic refrigerants. It has zero ozone depletion potential (ODP) and does not contribute to ozone layer damage.



SAFE

R290 is a flammable refrigerant, but systems that use it are specifically designed to operate safely. The Magis M Top meets strict international standards governing refrigerant use, ensuring safe and reliable operation.



ENERGY EFFICIENT

R290 offers high thermal efficiency, supporting strong performance while reducing overall energy consumption.

NEXIS WIRED REMOTE CONTROL PANEL

NEXIS is the user interface designed to manage the operation of the Magis M Top and is supplied as standard. It features a 4.3" TFT colour display, offering improved visibility compared to standard LCD screens. Six backlit touch keys ensure easy operation, even in low light conditions.

NEXIS also functions as an optional programmable thermostat, with built-in temperature and humidity sensors to help maintain comfortable conditions throughout the day.



E-BOX TOP SUPPLIED AS STANDARD

This box houses the electronic control board and full wiring hub for the complete system.

Essential for system setup and configuration, it communicates with the Magis M Top heat pump and the NEXIS wired control panel via Modbus protocol.

Installed internally, the E-BOX TOP enables the management of different system configurations and components, such as sensors, pumps, zone valves, back-up heaters and hybrid solutions.

It also controls the system electronics, including the control panel and any additional devices.

If the optional Gateway Wi-Fi V2 is selected, it must be connected via Modbus to the E-BOX TOP.





REMOTE MANAGEMENT

With the optional Gateway Wi-Fi V2 kit, the heat pump can be controlled remotely via an app or web portal.

KEY FEATURES:

- View and manage system status and operating schedules
- Control individual zones, including temperature settings and time programmes
- Receive notifications for errors and software updates

USERS CAN ALSO MONITOR SYSTEM PERFORMANCE, INCLUDING:

- Heating and domestic hot water set temperatures
- Zone-specific data, such as set temperature, actual room temperature, humidity levels and any active alerts



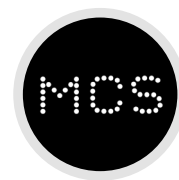
IMMER Comfort



Alexa and Google Home compatible

TECHNICAL FEATURES

- Heating and cooling operation (reversible)
- Hermetically sealed **R290 refrigerant gas circuit (GWP=0.02)**
- Max flow temperature: **75°C (central heating) and 65°C (domestic hot water)**, without needing additional heat sources
- Ultra-quiet operation: **35 dB (A)**
- Protection rating **IPX4** (approved for fully exposed outdoor installation)
- Energetic class in heating: **A+++ LT (35 °C), A++ MT (55 °C)**
- Can be installed individually, in a cascade or in combination with an Alpha boiler for hybrid solutions
- **Smart Grid** ready function
- Entire range features a single-fan and Bluefin treatment
- Modbus communication protocol integrates with home automation systems via BMS port
- HP Keymark Certification meaning it is **MCS approved**



REFRIGERANT CIRCUIT:

equipped with inverter compressor, electronic control valve, 4-way valve, high and low pressure switches


HYDRONIC CIRCUIT AS STANDARD:

circulation pump, expansion vessel, flow meter, pressure sensor, Y filter, condensate drain fitting, 50 W heating cable, 150 W condensate heating resistance and external probe

STANDARD SAFETY FEATURES:

- High efficiency deaerator to prevent any refrigerant gas leaks in the hydronic circuit
- 2.5 bar safety valve
- Hermetically sealed electrical components to protect against ignition



 **IMMERGAS**

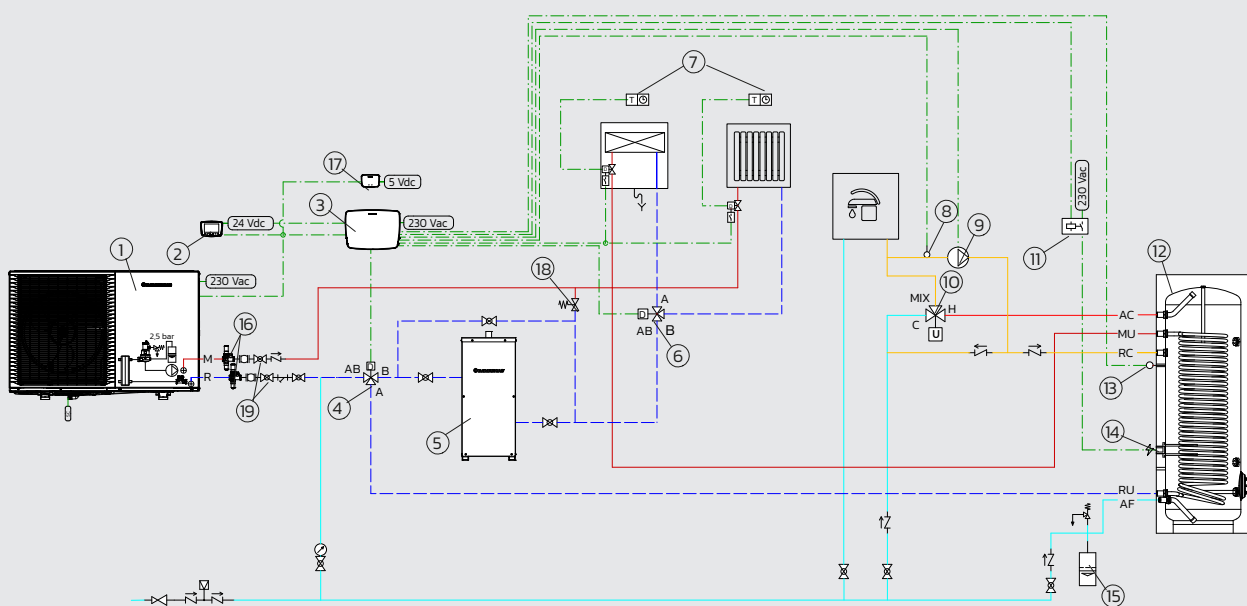


SINGLE-ZONE SYSTEM EXAMPLE

Heating with radiators and cooling with fan coils;
production of domestic hot water with cylinder

Key

1	MAGIS M TOP	9	Recirculation pump	17	Gateway Wi-Fi V2
2	Wired remote panel, NEXIS	10	Mixing valve	18	Adjustable by-pass
3	Electrical box, E-BOX TOP	11	Relay DHW integration resistance	19	Isolation valves
4	Divterter valve	12	Hot water cylinder		
5	50 litres buffer tank	13	Cylinder sensor		
6	Divterter valve	14	DHW integration resistance		
7	Thermostat	15	Safety inlet group		
8	Recirculation probe	16	Antifreeze valves		



HEATING/COOLING MODE

The heat pump (1) starts when it receives a heating request from the thermostat (7) or a cooling request from the fan coil controlled by the room thermostat (7).

Using the NEXIS panel (2) or remotely (APP/web portal) by means of the Gateway Wi-Fi V2 (17), it is possible to switch the operating mode (heating or cooling) and consequently the flow of the internal diverter valve (6).

DOMESTIC HOT WATER MODE

When the DHW temperature drops below the set point - checked by the sensor located in the cylinder (13) - the electronics switches the 3-way valve for domestic hot water (4) and turns on the heat pump.

An optional immersion in the cylinder (14) is switched on if the DHW requirement is outside the heat pump operating range.

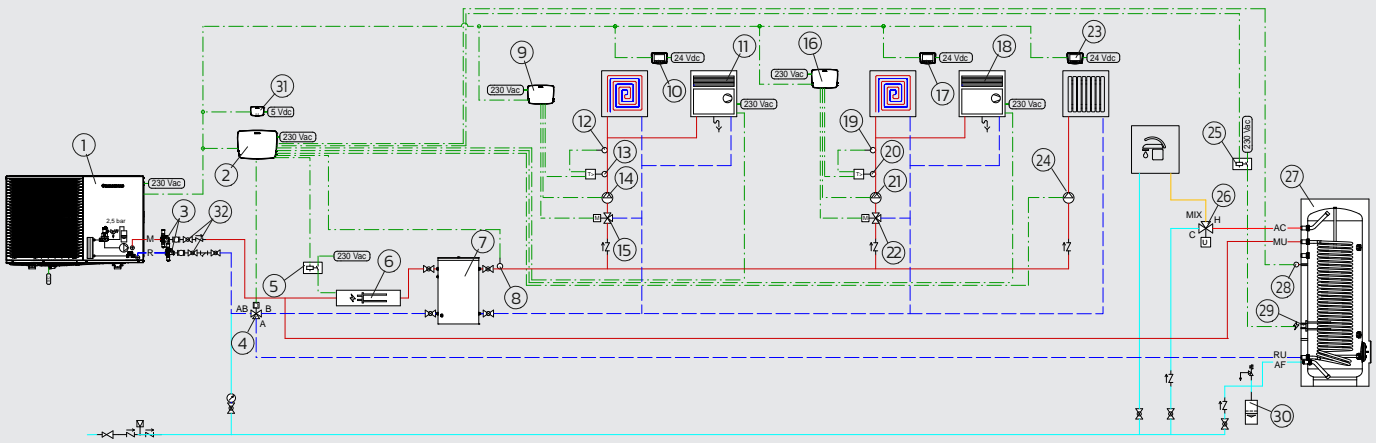
By activating the simultaneous function, in case of an extended heating or hot water request, the immersion provides the domestic hot water and the heat pump the heating.

MULTI-ZONE SYSTEM EXAMPLE

2 heating/cooling zones with radiant panels and dehumidifiers,
1 heating-only zone with radiators and a cylinder for domestic hot water

Key

1	MAGIS M TOP	12	System delivery probe	23	Wired remote panel NEXIS zone 3
2	Electrical box, E-BOX TOP	13	Safety thermostat zone 1	24	Circulator pump zone 3
3	Antifreeze valves	14	Circulator pump zone 1	25	Relay DHW integration resistance
4	Divterter valve	15	Mixing valve zone 1	26	Mixing valve
5	Relay C.H. integration resistance	16	Additional zone board kit	27	Hot water cylinder
6	C.H. integration resistance	17	Wired remote panel NEXIS zone 2	28	Cylinder sensor
7	75 litres buffer tank	18	Dehumidifier zone 2	29	DHW integration resistance
8	System delivery probe	19	System delivery probe	30	Safety inlet group
9	Additional zone board kit	20	Safety thermostat zone 2	31	Gateway Wi-Fi V2
10	Wired remote panel NEXIS zone 1	21	Circulator pump zone 2	32	Isolation valves
11	Dehumidifier zone 1	22	Mixing valve zone 2		



HEATING/COOLING MODE

Following a heating, cooling, or dehumidification request from at least one of the NEXIS panels in the zone, the heat pump (1) is activated in conjunction with the relevant system components (circulator and/or mixing valve and/or dehumidifier).

Using the NEXIS panels or remotely (APP/web portal) by means of the Wi-Fi Gateway V2 (31), it is possible to switch the operating mode (heating or cooling).

An optional back-up heater (6) is activated if the heating time is longer than the set time or outside the heat pump operating range.

DOMESTIC HOT WATER MODE

When the DHW temperature drops below the set point - measured by the sensor located in the cylinder (28)-the electronics switch the 3-way valve for domestic hot water (4) and turns on the heat pump.

An optional immersion (29) in the cylinder is switched on if the DHW requirement is outside the heat pump operating range.

By activating the simultaneous function, in case of an extended heating or hot water request, the immersion provides the domestic hot water and the heat pump the heating.



Supporting your low-carbon offer

“For us, partnering with Alpha is as much about support as it is about product. The combination of reliable products and responsive, knowledgeable support gives us confidence as we grow our low-carbon offer and build on our MCS accreditation.”

Lauren McDonald,
Director of Business Development, Solv Group

TECHNICAL DATA

Technical characteristics	Unit of measurement	MAGIS M5 TOP	MAGIS M8 TOP	MAGIS M12 TOP	MAGIS M16 TOP	MAGIS M12 T TOP	MAGIS M16 T TOP
Code		3.035574	3.035575	3.035576	3.035577	3.035578	3.035579
Energy class in heating at 55 °C		A++	A++	A++	A++	A++	A++
Energy class in heating at 35 °C		A+++	A+++	A+++	A+++	A+++	A+++
Refrigerant charge (R290)	g	630	870	1,250	1,250	1,250	1,250
Power in CH with water set at 35 °C	kW	5	8	12	16	12	16
Power in CH with water set at 45 °C	kW	5	8	12	16	12	16
Power in CH with water set at 55 °C	kW	5	8	12	16	12	16
Flow temperature range (C.H.)	°C	15/75	15/75	15/75	15/75	15/75	15/75
COP with water set at 35 °C		5.10	4.91	4.80	4.51	4.80	4.51
COP with water set at 45 °C		3.79	3.70	3.70	3.50	3.70	3.50
COP with water set at 55 °C		3.11	3.00	3.00	2.90	3.00	2.90
Power in cooling with water set at 18 °C	kW	5	8	12	14	12	14
Power in cooling with water set at 7 °C	kW	3.9	5.7	9	10.4	9	10.4
Flow temperature range (cooling)	°C	5/25	5/25	5/25	5/25	5/25	5/25
EER with water set at 18 °C		3.91	3.90	4.00	3.80	4.00	3.80
EER with water set at 7 °C		3.05	3.00	2.90	2.90	2.90	2.90
Flow temperature range (DHW)	°C	25/70	25/70	25/70	25/70	25/70	25/70
Max. operating pressure hydraulic system (vessel preload pressure)	bar	2.5 (1)	2.5 (1)	2.5 (1)	2.5 (1)	2.5 (1)	2.5 (1)
Heat pump power absorbed*	W	980	1.630	2.500	3.550	2.500	3.550
Power supply	V - Hz	230-50	230-50	230-50	230-50	400-50	400-50
Net heat pump weight (gross)	kg	113 (124.7)	125 (136.7)	154 (166.7)	154 (166.7)	154 (166.7)	154 (166.7)
Expansion vessel capacity (C.H.)	l	10	10	10	10	10	10
Maximum absorbed current	A	16.1	26	32	32	16.1	16.1
Electrical insulation rating	IP	X4D	X4D	X4D	X4D	X4D	X4D

* The maximum values are with the assistance of in built electric resistances. For the relationship between flow temperature and outdoor temperature, refer to the product technical data sheet.

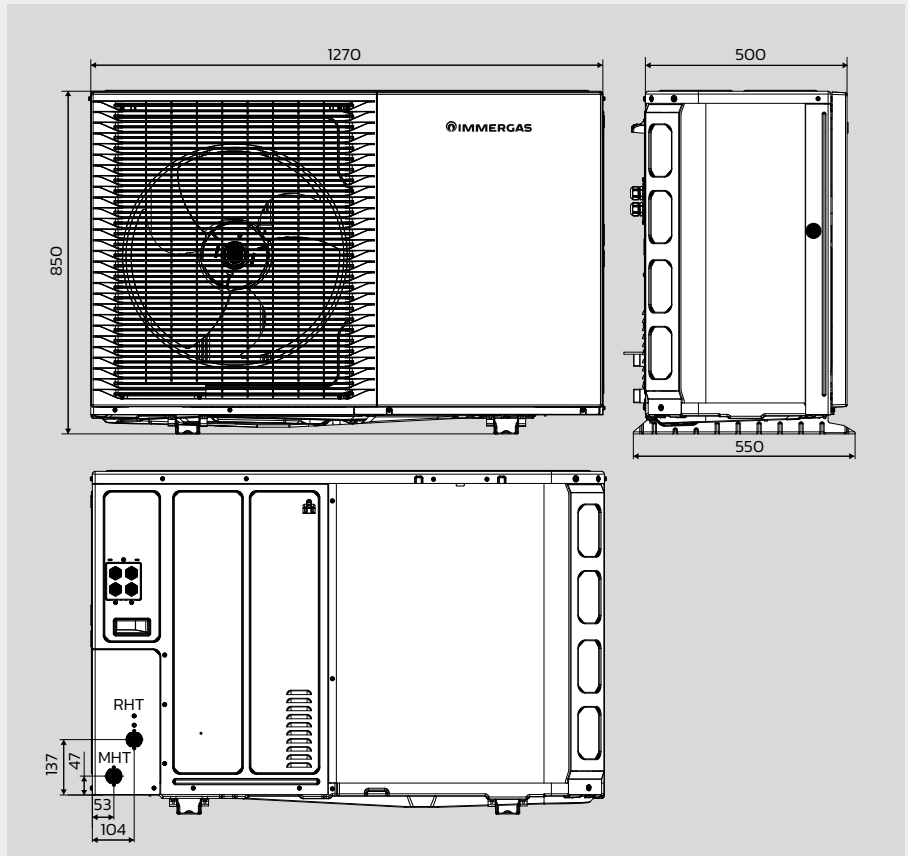
MAGIS M5/8 TOP

**Connections
MAGIS M 5/8 TOP**

RHT	MHT
1" M	1" M

Key

R	System return
M	System flow



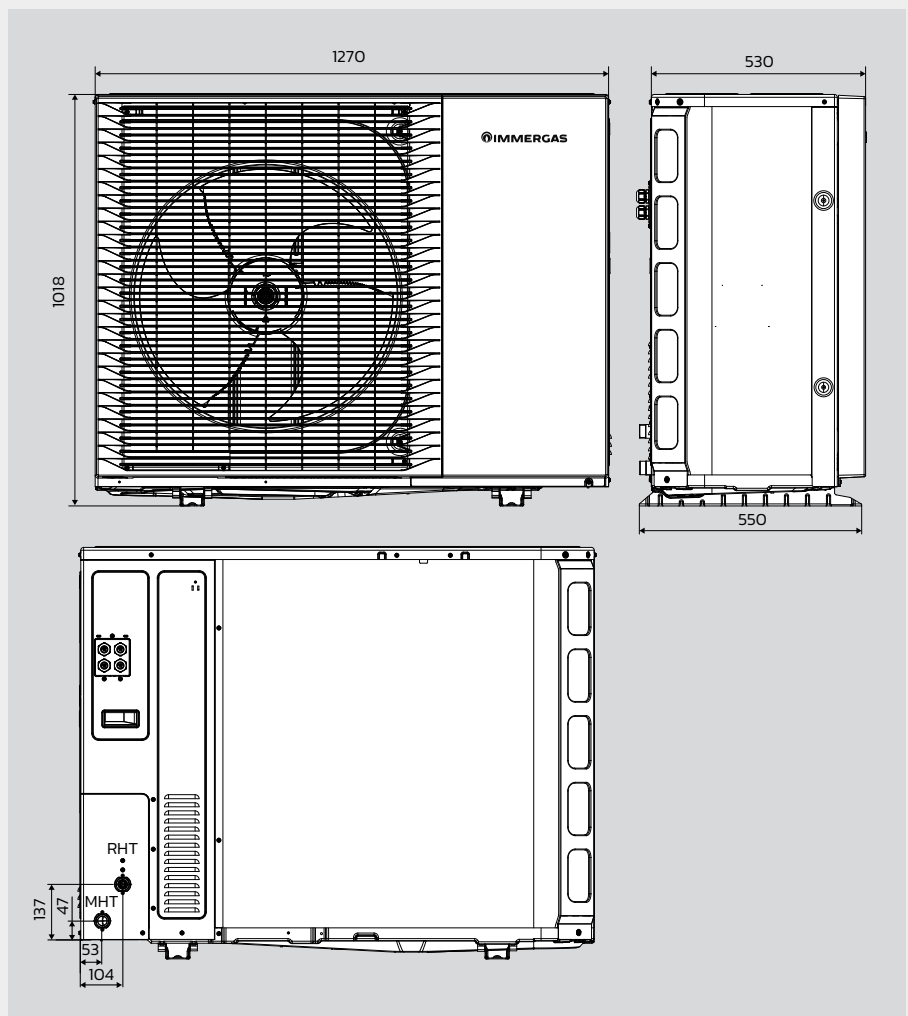
MAGIS M12/16 TOP (SINGLE AND THREE-PHASE)

**Connections
MAGIS M 12/16 TOP
(single and three-phase)**

RHT	MHT
1" M	1" M

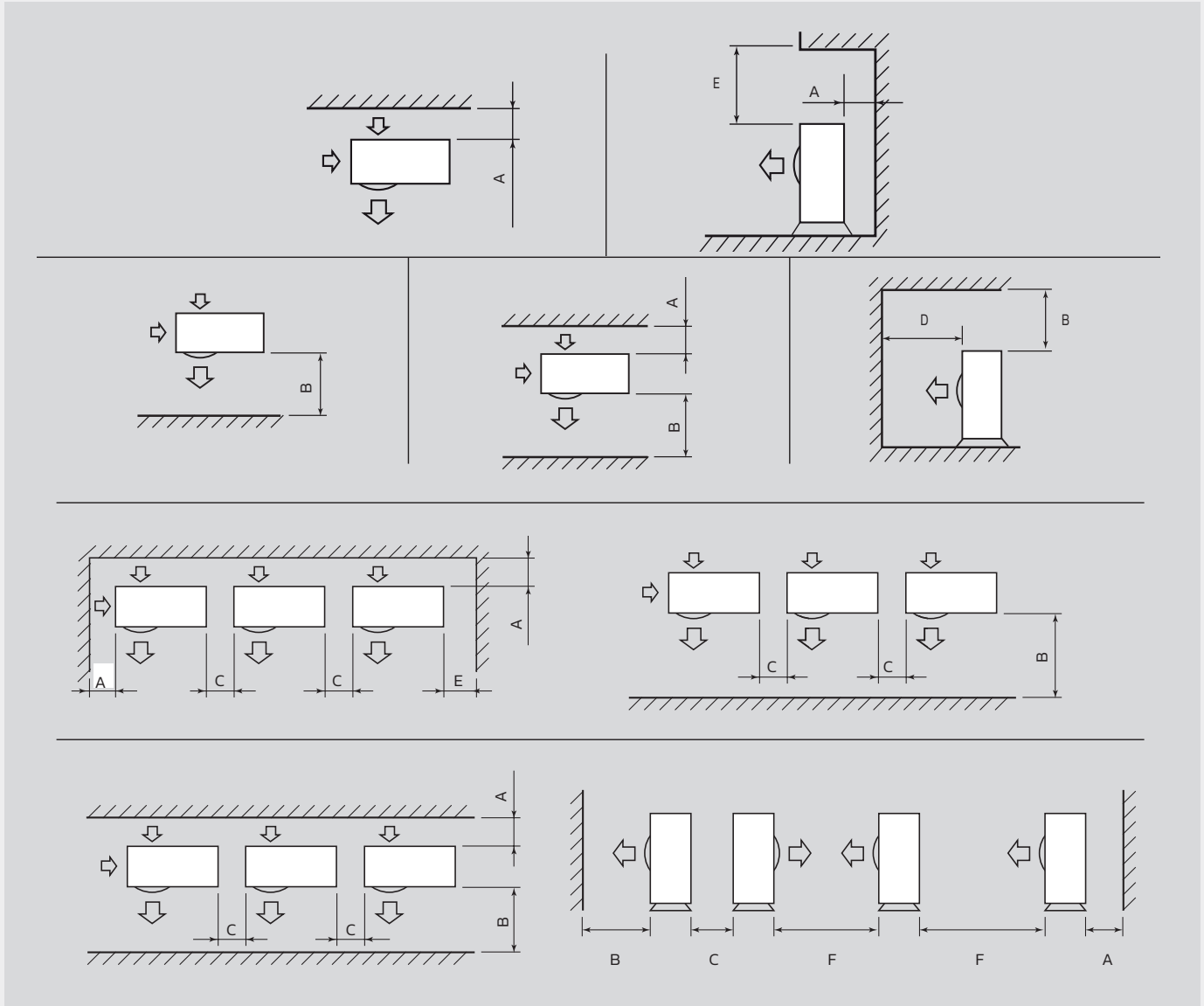
Key

R	System return
M	System flow



MINIMUM DISTANCES

For proper machine operation and maintenance.



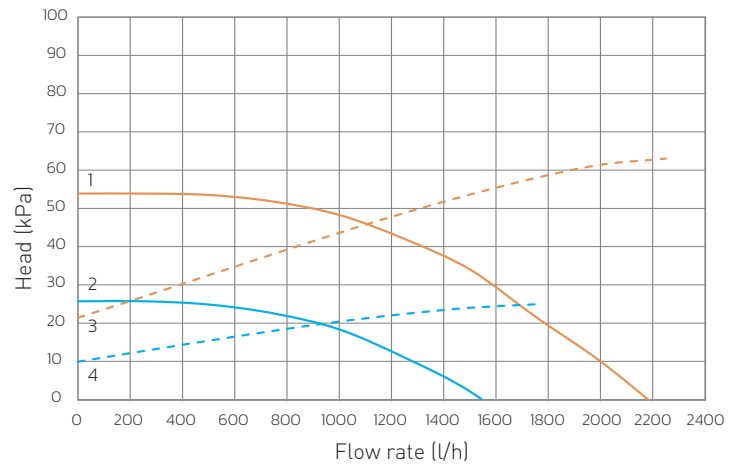
Model	A	B	C	D	E	F
MAGIS M TOP	300	1500	1000	2300	600	3000

Warning: Be sure to observe the “Safety Zone” around the installation area. Refer to the appliance manual for further details.

Key

- 1 = Head available to the system max speed
- 2 = Head available to the system min speed
- 3 = Absorbed power by the circulator max speed
- 4 = Absorbed power by the circulator min speed

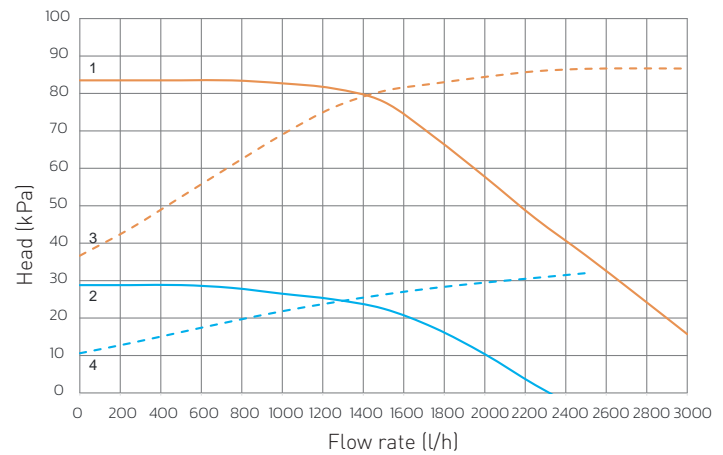
Head-flow rate curve for MAGIS M5/8 TOP



Key

- 1 = Head available to the system max speed
- 2 = Head available to the system min speed
- 3 = Absorbed power by the circulator max speed
- 4 = Absorbed power by the circulator min speed

Head-flow rate curve for MAGIS M12/16 TOP
(single and three-phase)





THERMOREGULATION


Combining MAGIS M TOP with a thermoregulation device is an excellent investment because it improves the seasonal energy efficiency of the system.




NEXIS - Wired remote additional panel

<p>User interface for managing the operation of MAGIS M TOP. It is also a programmable thermostat and a temperature/humidity sensor. NEW</p> <p>[Supplied as Standard]</p>	 <p>Dimensions (H x W x D) 103 x 147.4 x 20.5 mm</p>	<p>3.035812</p>
<p>User interface for managing the operation of MAGIS M TOP. It is also a programmable thermostat and a temperature/humidity sensor. NEW</p> <p>[Optional]</p>	 <p>Dimensions (H x W x D) 103 x 147.4 x 20.5 mm</p>	<p>3.035829</p>

Additional zone board kit

<p>It allows you to manage system components such as: circulation pump, mixing valve and delivery probe. NEW</p>	 <p>Dimensions (H x W x D) 199 x 242 x 49 mm</p>	<p>3.035840</p>
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Gateway Wi-Fi V2

<p>To remotely manage MAGIS M TOP using both the dedicated app and the portal. Alexa and Google Home compatible. NEW</p> <p>[Optional]</p>	 <p>Dimensions (H x W x D) 87 x 214 x 26 mm</p>	<p>3.035537</p>
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Dehumidifier relay board kit

<p>To manage the dehumidifier (and any related valve) in neutral and/or cooled air. NEW</p> <p>[Optional]</p>		<p>3.036231</p>
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Temperature/humidity active sensor Modbus kit

<p>To control temperature and humidity</p> <p>[Optional]</p>	 <p>Dimensions (H x W x D) 80 x 127 x 30 mm</p>	<p>3.030992</p>
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OPTIONAL ACCESSORIES




Buffer tanks

To ensure proper defrost cycle operation and to prevent intermittent running of the heat pump, the system must contain a minimum water volume of 30 litres for Magis M5/8 Top and 50 litres for Magis M12/16 Top (single or three-phase).


In addition, it is recommended that the dehumidifier circuit has a minimum water content of 3 l/kW of the unit capacity.

<p>Vertical 50 litres buffer tank (RAL 7030) NEW</p>	 <p>IMMERCAS</p> <p>Dimensions (H x W x D) 820 x 360 x 360 mm</p>	<p>3.036742</p>
<p>Vertical 50 litres buffer tank</p>	 <p>IMMERCAS</p> <p>Dimensions (H x W x D) 820 x 360 x 360 mm</p>	<p>3.027539</p>
<p>75-litres vertical buffer tank kit. With 4 connections, it also works as a hydraulic separator. It can only be installed inside the building.</p>		<p>3.027288</p>
<p>Bracket kit for wall mounting 75 litres buffer tank.</p>		<p>3.027290</p>

3 way diverter valve kit

To exclude the inertial buffer tank (in summer mode) or for summer/winter switching.		3.020632
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System electric heater kit


Adjustable to 2, 4 or 6 kW (to be installed inside the home).		3.021525
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Dehumidifier kit

Dehumidifier kit* (only for recessed installation with codes 3.022146 and 3.022147).		3.021529
Dehumidifier back frame kit*		3.022146
Dehumidifier back frame kit*		3.022147

* Useful for radiant systems that work also in cooling.

Mechanical ventilation

ZENITAIR-MONO Mechanical bidirectional ventilation unit.		3.030601
External cover kit with acoustical insulation for ZENITAIR-MONO. Anti-insect net and anti-wind in pre-painted steel.		3.030636

Shut off knobs kit

With G 1" steel flexible pipes		3.025954
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Antivibration support kit

The kit includes: - 2 anti-vibration supports - 100 mm high - 4 M8 nuts, washers, and bolts NEW		3.035580
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System expansion vessel

12 litres		3.011679
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Fancoil units

HYDRO FS 200 Floor standing hydronic fancoil		3.028500
HYDRO FS 400 Floor standing hydronic fancoil		3.028501
HYDRO FS 600 Floor standing hydronic fancoil		3.028502
HYDRO FS 800 Floor standing hydronic fancoil		3.028503
HYDRO FS 1000 Floor standing hydronic fancoil		3.028505
HYDRO IN 200 Recessed hydronic fancoil		3.029841
HYDRO IN 400 Recessed hydronic fancoil		3.029842
HYDRO IN 600 Recessed hydronic fancoil		3.029843
HYDRO IN 800 Recessed hydronic fancoil		3.029844
HYDRO IN 1000 Recessed hydronic fancoil		3.029845
Smart touch wall controller with temperature probe (black casing)*		3.030877
Smart touch wall controller with temperature probe (white casing)*		3.030878
On board electronic control with PID full modulating fan*		3.030876
Sheet metal feet kit for HYDRO FS		3.028506
Modulating thermoregulation kit for HYDRO FS*		3.028509
4 speed thermoregulation kit for HYDRO FS*		3.028510
Universal control board for commercial thermoregulation*		3.028511
Electronic control board with 0-10 V connection*		3.028512
Connection cable to shift water connections from left to right		3.029834
2-way group valve kit		3.028507
3-way group valve kit		3.028508
HYDRO 3 V2 Wall-hung hydronic fancoil with remote control and three-way valve with end switch for ON-OFF contacts.		3.033625
HYDRO 4 V2 Wall-hung hydronic fancoil with remote control and three-way valve with end switch for ON-OFF contacts.		3.033626
Connection kit for HYDRO 3/4 V2 left exit		3.029520

* Note: one of these kits is required for fancoil operation.

The logo for Alpha, featuring the word "Alpha" in a bold, red, sans-serif font.

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