



Multi-zone hydraulic separator for the management of independent heating zones

- / Management of up to 3 independent heating zones
- / High and low temperature zones available
- / Thermostatic or motorized mixing valves
- / Interception valves: fitting G 3/4" F whole pass
- / Circulation pump: 3 speed, high efficiency modulating
- / Patented manifold: stainless steel insulated body
- / Visualization of delivery/return temperature for each zone
- / Set-up for:
 - external temperature sensor
 - OpenTherm connection
 - remote control

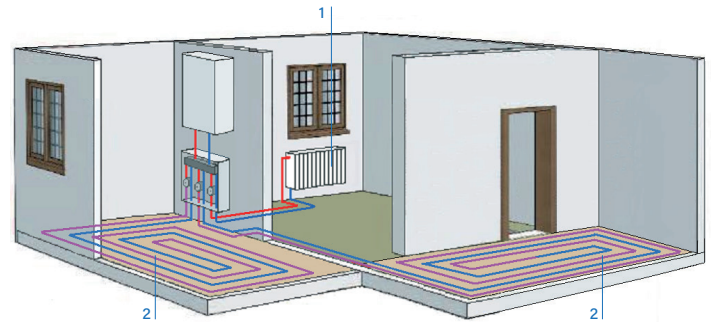
www.otma.it

/ application example

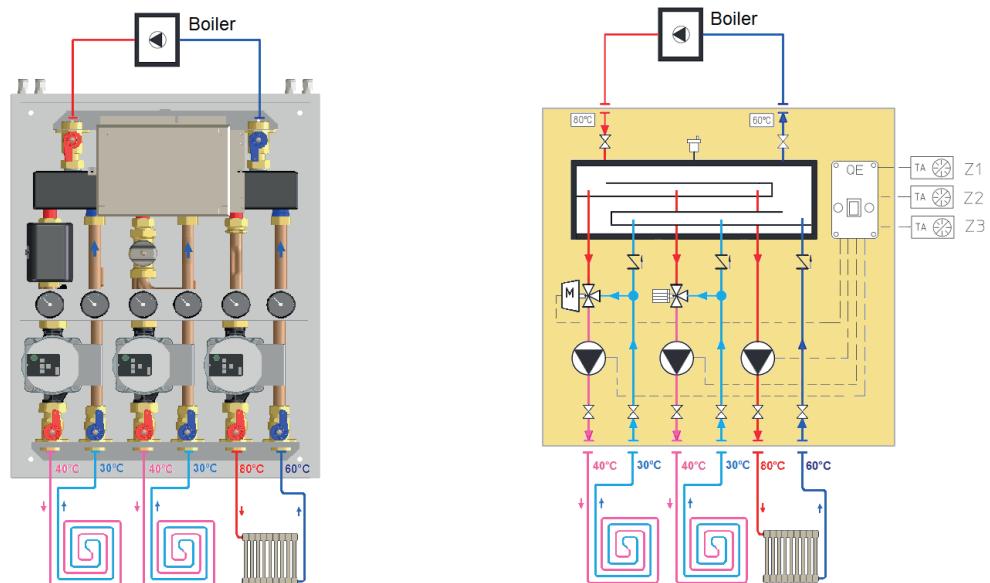
- 1 High temperature zone
- 2 Low temperature zones

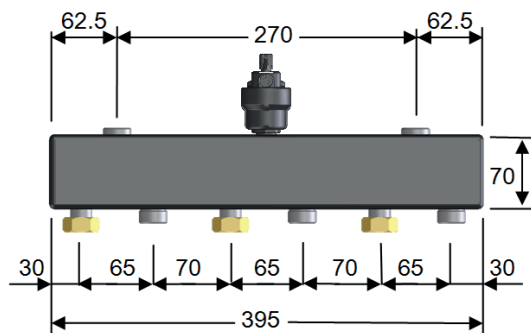
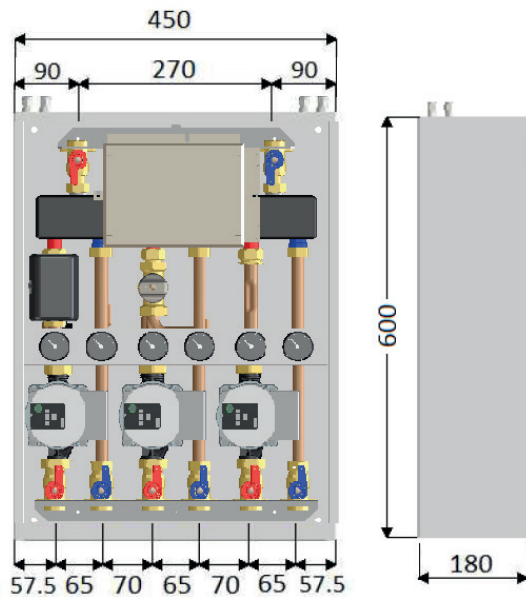
The multi-zone hydraulic separator SIM is a hydraulic module which is designed for individual housing and allows to split the heating system in different zones with independent temperature control.

Each zone is independent for temperature control of the circulating flow rate. It is possible to have both low temperature zones, for example floor heating, and high temperature zones equipped with traditional radiators.



/ hydraulic scheme





/ technical data

Max thermal power: **35 kW**

Max pressure: **6 bar**

Max temperature: **95 °C**

Max temperature of low temperature zones: **55 °C**

The special OTMA collector (patented) is equipped with a "V" shaped cross section that allows to obtain a delivery chamber (high temperature) and a return chamber (low temperature) which extend along the entire length of manifold, this allows the delivery and return pipes of each zone to be placed side by side, obtaining a rational layout with straight tubes and a modular arrangement of the zones, with advantages also in terms of compactness and reduced dimensions.

The module is fully customizable, with a choice of motors for zone circulators and the possibility of having either thermostatic mixing valves or electronically controlled valves.

/ thermostatic mixing valves



/ thermostatic mixing valve technical data

Max working pressure: **10 bar**

Min working pressure: **0,5 bar**

Flow rate at 3 bar: **25 l/min**

Drop pressure (flow rate 1000 l/h): **0.35 bar**

Thermostatic regulation range: **30-56 °C**

Thermal stability: **+/- 1 °C**

Cartridge preset: **40 °C**

Shut-off: **anti-scald safety** (60 °C)

Standard compliance: **NF EN 1111 and ASSE 1016**

Anti Legionella *

Anti-limescale adherence

Preset thermostatic cartridge replacement kit

* Legionella (Gram Negative bacterium)

Bacterium survival limit temperature: **57-63 °C**

Disinfection range temperature: **> 70 °C**

/ motorized mixing valves



/ motorized Honeywell valve technical data

Supply Voltage

24 V, 50-60 Hz Class 2 circuit

30 V, 50-60 Hz

Power Consumption

4 W max at nominal voltage (during valve position change)

Note: use 24 V Class 2 transformer and provide 6 VA
for connection wire sizing

Nominal Timing

Valve opens in 2 minutes at 60 Hz

Actual full stroke timing: **140 s**

Note: timing is approx. 20% longer at 50 Hz

Temperature

Operating ambient temperature: **0 - 65 °C**

Min/Max fluid temperature: **1 - 95 °C**

Shipping and Storage temperature: **-40 - 65 °C**

Pressure

Operating differential pressure: **max 4 bar**

Pressure rating: **static 20 bar, burst 100 bar**

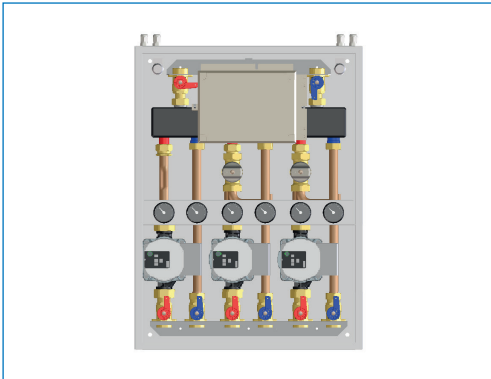
Colour coded label

Blue

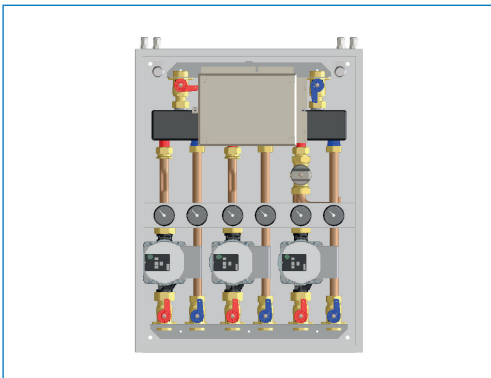
Red

/ thermostatic mixing valves

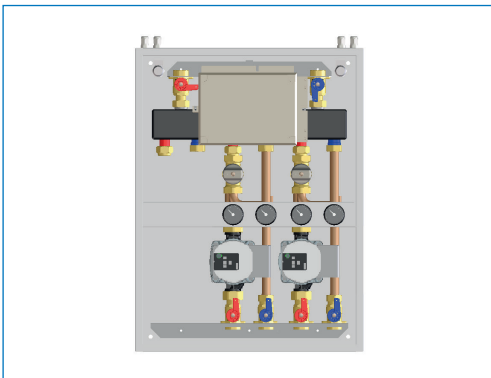
/ motorized mixing valves



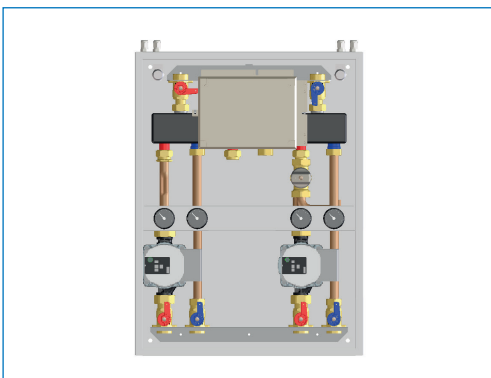
1 high temperature zone
2 low temperature zones



2 high temperature zones
1 low temperature zone



2 low temperature zones



1 high temperature zone
1 low temperature zone

