

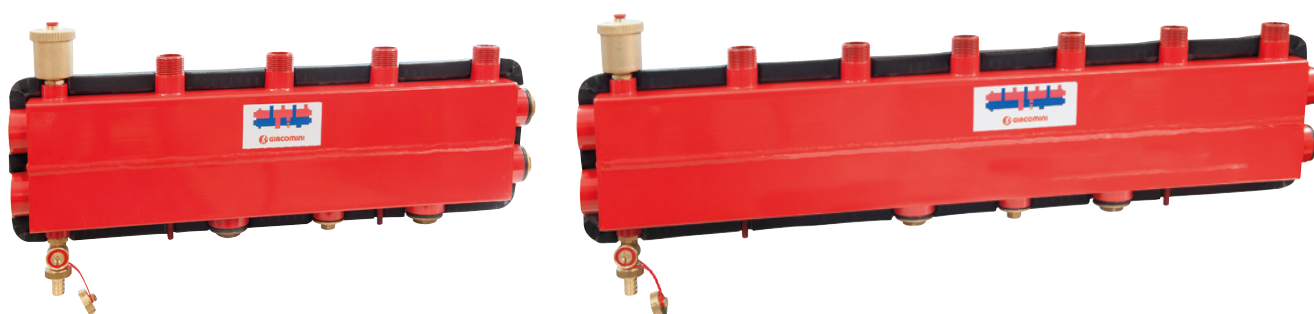
R586SEP



Energy
Management

Boiler room manifold with hydraulic separator function

Datasheet
0870EN  12/2023



The R586SEP boiler room manifold is a steel multi-function device including outlets for the primary and secondary circuits, automatic air vent valve, drain cock and insulation shell.

It is generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones.

The boiler room manifold allows for easy installation of two or three R586R distribution units, based on the version.

Its modular design enables to install two boiler room manifolds in series and in turn up to six R586R distribution units, thus satisfying the requirements of large installations.

In addition, the boiler room manifold includes an adjustable hydraulic separator function to easily control the flows of the primary and secondary circuits.

➤ Versions and product codes

PRODUCT CODE	PRIMARY CIRCUIT CONNECTIONS	SECONDARY CIRCUIT CONNECTIONS	INSTALLATION WITH R586R UNITS
R586SEY02	G 1-1/4"F	n.2 connections G 1"M	DN25
R586SEY03	G 1-1/4"F	n.3 connections G 1"M	
R586SEY12	G 1-1/2"F	n.2 connections G 1-1/4"M	DN32
R586SEY13	G 1-1/2"F	n.3 connections G 1-1/4"M	

Optionals

- **R20DY016**: 3-piece straight fitting, with self-sealing, G 1-1/4"M x G 1-1/4"M, for series connection of two R586SEY02/03 boiler room manifolds
- **R20SPY007**: 3-piece straight fitting, G 1-1/2"M x R 1-1/2", for series connection of two R586SEY12/13 boiler room manifolds
- **R588SEY01**: pair of wall-mount brackets for boiler room manifolds

Completion codes

- **R252Y001**: shut-off ball valve, G 1"F x nut G 1-1/2"F, for installation of R586R DN25 units on the boiler room manifold secondary circuit connections
- **R252Y002**: shut-off ball valve, G 1-1/4"F x nut G 2"F, for installation of R586R DN32 units on the boiler room manifold secondary circuit connections
- **R37KY005**: pair of tail pieces, G 1"F x nut G 1-1/2"F, without shut-off, for installation of R586R DN25 units on the boiler room manifold secondary circuit connections
- **R37KY006**: pair of tail pieces, G 1-1/4"F x nut G 2"F, without shut-off, for installation of R586R DN32 units on the boiler room manifold secondary circuit connections

🔗 **NOTE.** For the installation of R586R distribution unit on secondary circuits outlets it's mandatory to order the R252 valves or alternatively the R37K tail pieces.

COMPLETION CODES TO BE ORDERED ACCORDING TO THE R586SEP INSTALLED		
R586SEY02	n°4 R252Y001	n°2 R37KY005
R586SEY03	n°6 R252Y001	n°3 R37KY005
R586SEY12	n°4 R252Y002	n°2 R37KY006
R586SEY13	n°6 R252Y002	n°3 R37KY006

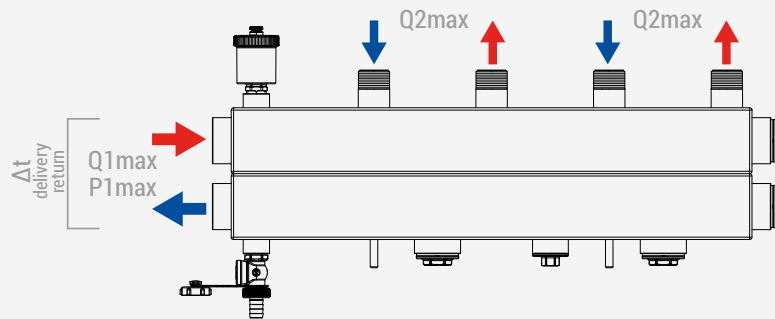
➤ Technical data

Main technical data

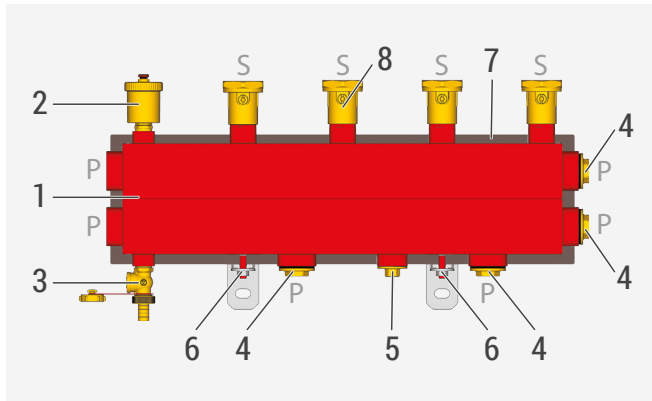
- Fluids: water, glycol-based solutions (max. 50 % of glycol)
- Temperature range: 5+110 °C
- Max. working pressure: 6 bar
- Max. flow rate as manifold:
DN25: 4500 L/h
DN32: 9500 L/h
- Max. flow rate as hydraulic separator*:
DN25: 4500 L/h
DN32: 9500 L/h
- * Limit to 3500 l/h the flow rate difference between primary and secondary circuits
- Centre distance of secondary circuit outlets: 125 mm
(same centre distance of R586R units)
- Weight: 7,5 kg (R586SEY02)
13 kg (R586SEY03)
11 kg (R586SEY12)
15 kg (R586SEY13)

Materials

- Manifold body: varnished steel
- Air vent valve, plugs, drain cock: CW617N brass
- Insulation: closed cell Pe-X foam



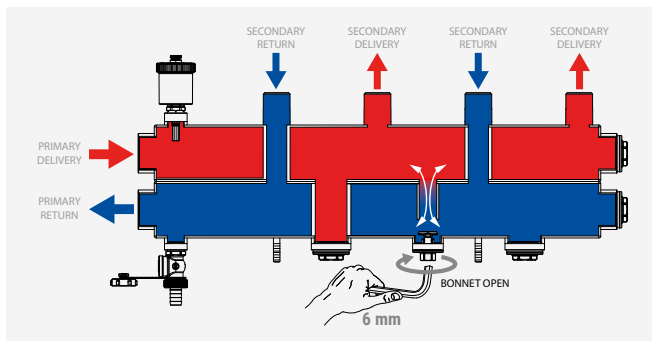
Components



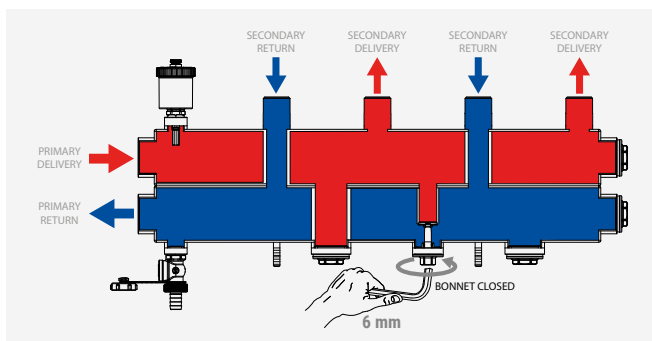
P	Primary circuit outlets
S	Secondary circuit outlets
1	Manifold body
2	Automatic air vent valve
3	Drain cock
4	Brass plugs
5	Bonnet for hydraulic separator function
6	Threaded pins for bracket installation
7	Insulation
8	R252 shut-off valves or R37K tail pieces

Operation

The device can be used both as a normal boiler room manifold and hydraulic separator, based on the installation requirements. On the manifold lower side there's an adjustment bonnet (Components - Ref. 5) to mechanically activate or deactivate the hydraulic separator function.

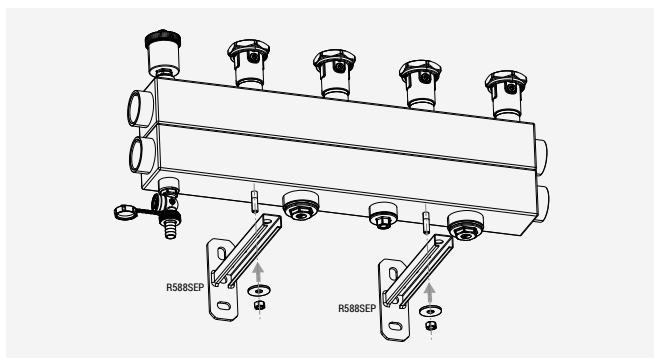


Open the bonnet completely with a 6 mm Allen key to put the supply and return circuits in communication and transform it into a hydraulic separator to balance the secondary side flow, if required.



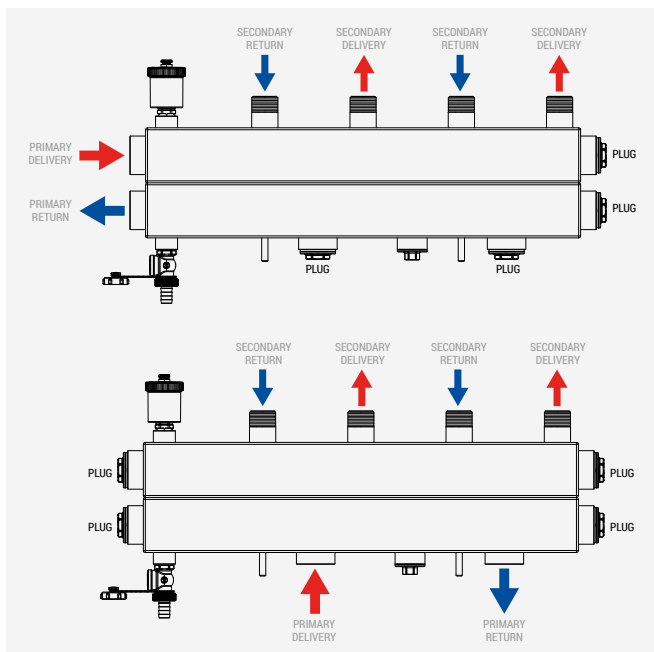
Close the bonnet completely to close the communication path between supply and return circuits and transform device back into a boiler room manifold.

Installation

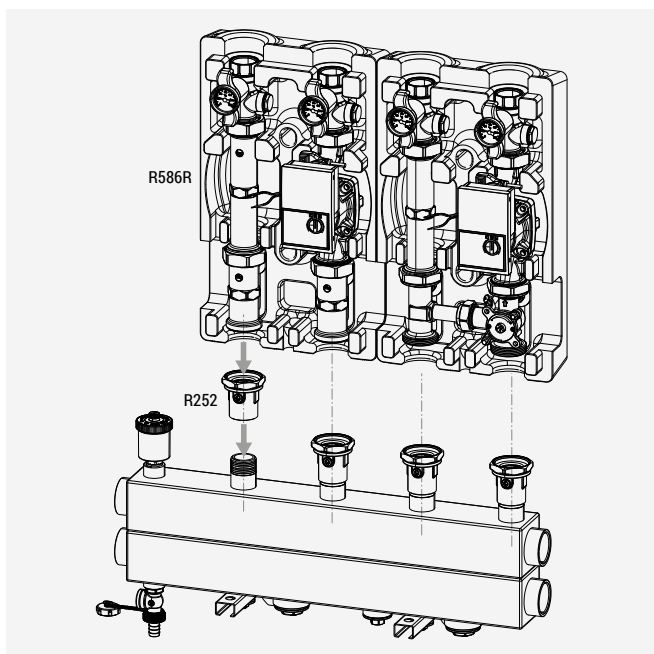


Boiler room manifolds can be installed on the special R588SEY01 wall-mount brackets using the two M8 threaded pins on the lower side.

To fit the brackets to the wall use screw anchors suitable for the type of wall and equipment weight.



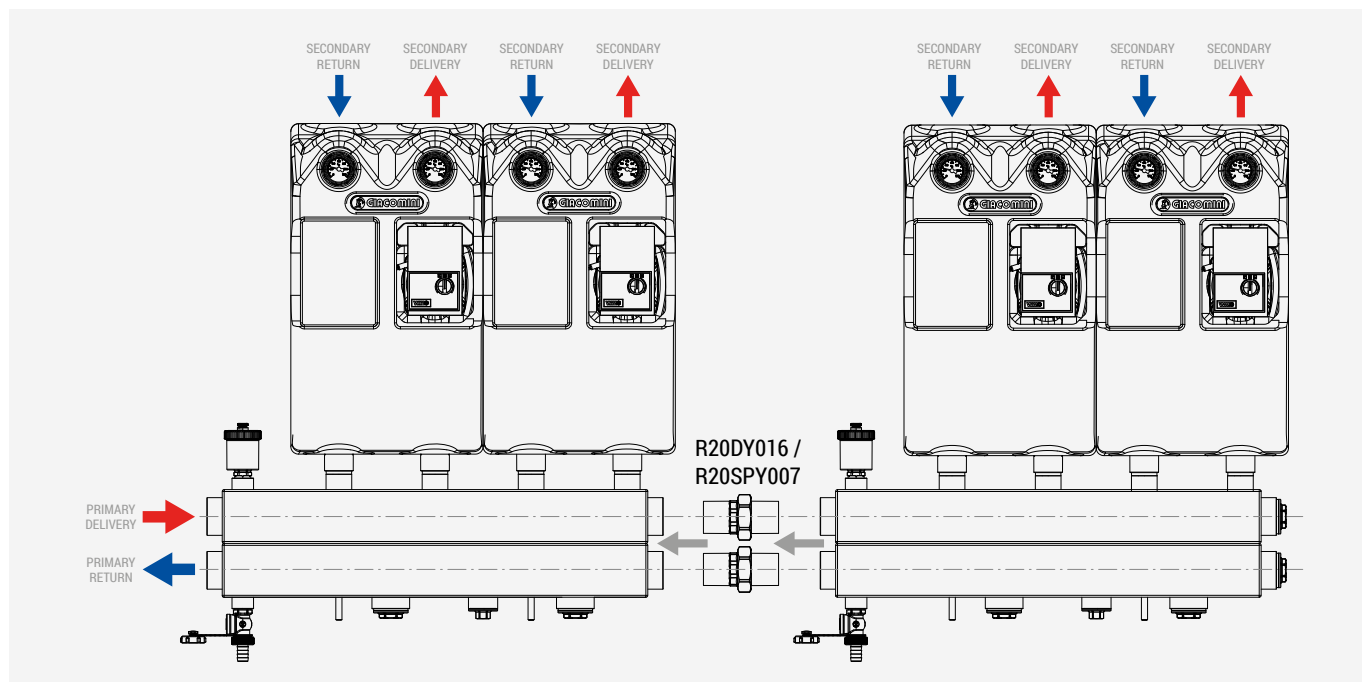
It's also possible to choose the inlet direction of the primary circuit pipes, from left or right side of the manifold, but also from the lower side by using the two lower outlets originally equipped with a plug.



R252 ball valves (or R37K tail pieces), and then R586R distribution units, can be installed on the secondary circuit outlets.

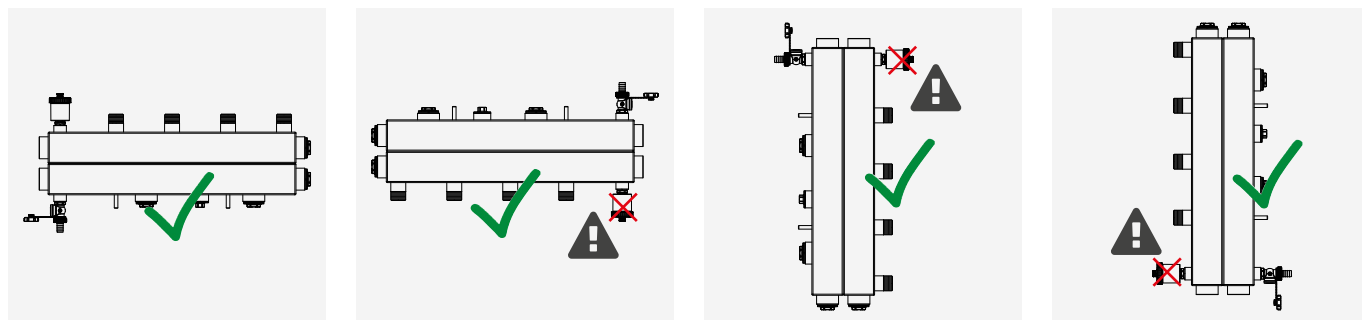
The modular design enables to install two R586SEP manifolds in series so that up to six R586R distribution units can be installed; this is the ideal solution for large installations with proper balancing.

To install the R586SEP manifolds in series, use the special R20DY016 3-piece fittings (for DN25) and R20SPY007 (for DN32).



⚠ WARNING. The power available on the primary circuit (P1max) will be the same given in the "Performance" table, even when installing multiple R586SEP boiler room manifolds in series.

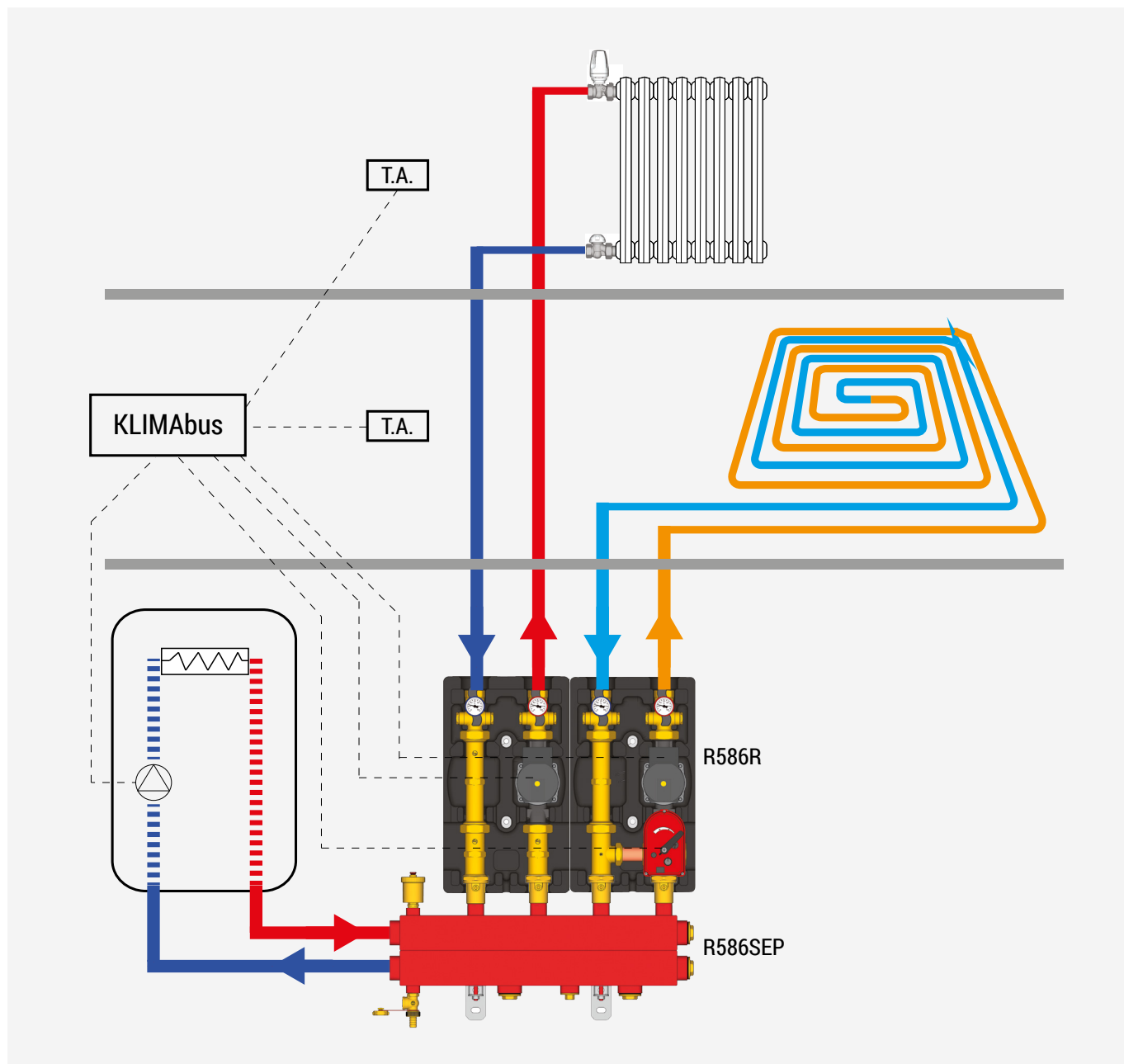
The R586SEP boiler room manifold can be installed in any position, both vertically and horizontally.



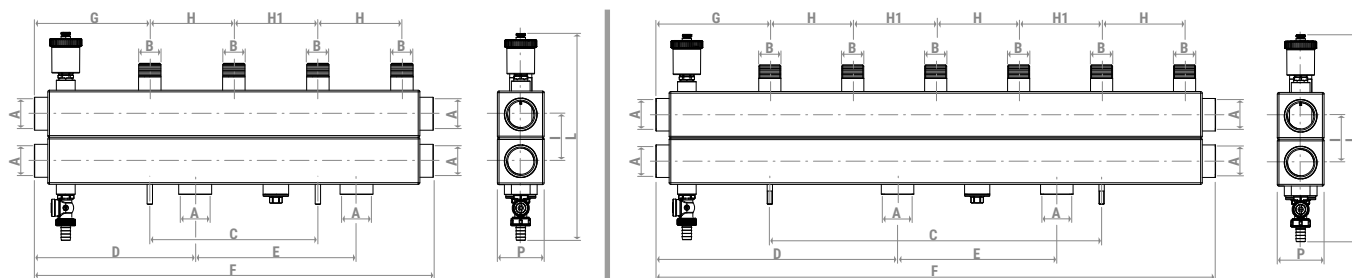
⚠ WARNING. For vertical or upside down installations, do not install the air vent valve; replace it with a 1/2" M plug if necessary.

➤ Example of application diagram

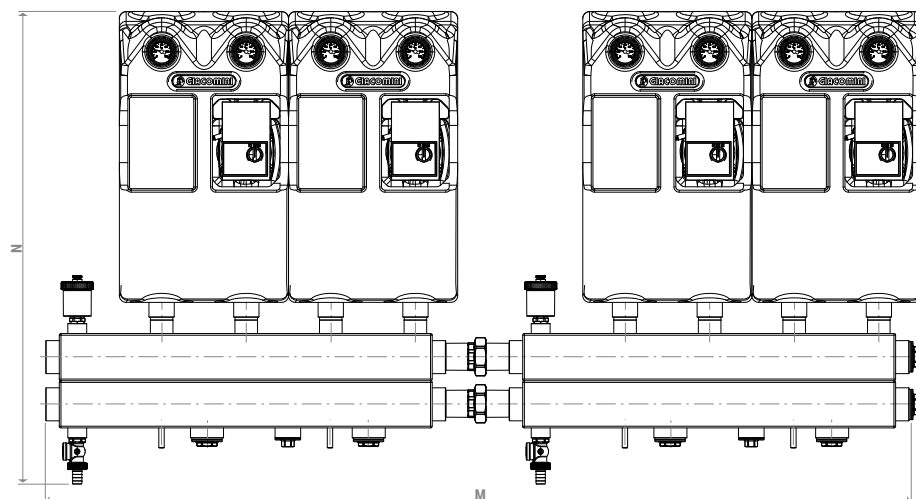
Application diagram for heating-only system with R586SEP complete of R586R without mixing for high-temperature radiator zone + R586R with mixing valve for low-temperature radiant zone and mixing valve actuator controlled by KLIMAbus thermoregulation.



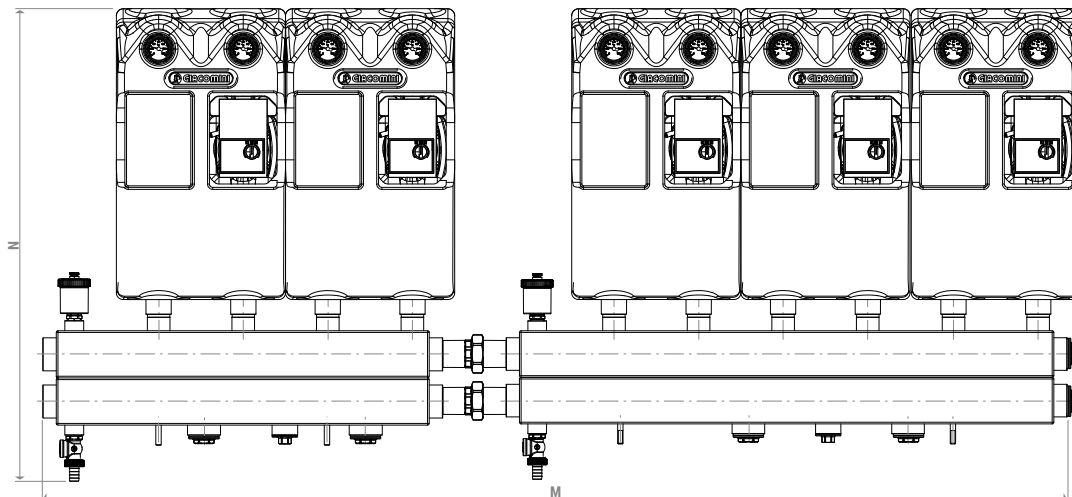
➤ Dimensions



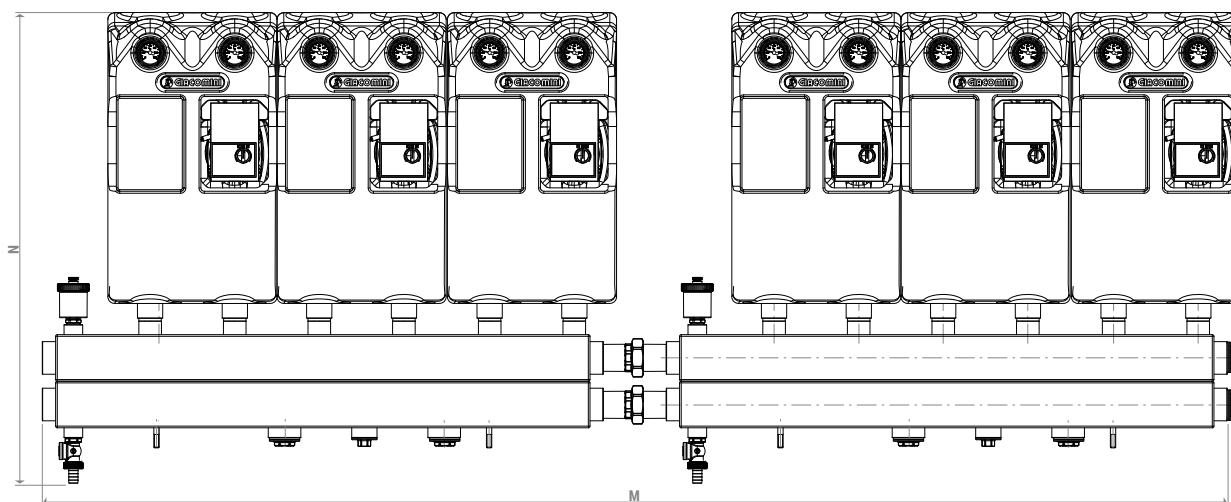
PRODUCT CODE	A [inch.]	B [inch.]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	H1 [mm]	I [mm]	L [mm]	P [mm]
R586SEY02	G 1-1/4" F	G 1" M	250	238	240	595	172	125	125	70	310	120
R586SEY03	G 1-1/4" F	G 1" M	500	363	240	845	172	125	125	70	310	120
R586SEY12	G 1-1/2" F	G 1-1/4" M	279	264	260	640	175	125	154	80	330	130
R586SEY13	G 1-1/2" F	G 1-1/4" M	558	382	260	919	175	125	154	80	330	130



PRODUCT CODE	M [mm]	N [mm]
R586SEY02 + R586SEY02 + R586R units	1295	700
R586SEY12 + R586SEY12 + R586R units	1330	750



PRODUCT CODE	M [mm]	N [mm]
R586SEY02 + R586SEY03 + R586R units	1545	700
R586SEY12 + R586SEY13 + R586R units	1610	750



PRODUCT CODE	M [mm]	N [mm]
R586SEY03 + R586SEY03 + R586R units	1795	700
R586SEY13 + R586SEY13 + R586R units	1890	750

➤ Product specifications

R586SEY02

Boiler room steel multi-function manifold with connections for primary (G 1-1/4" F) and secondary G 1" M) circuits (two outlets on secondary circuit), automatic air vent valve, drain cock and insulation shell. Generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones. Optional installation of two boiler room manifolds to install up to six distribution units and meet the requirements of very large systems. Includes hydraulic separator function with mechanical activation. Fluids: water, glycol-based solutions (max. 50 % of glycol). Temperature range: 5÷110 °C. Max. working pressure: 6 bar. Centre distance of secondary circuit outputs: 125 mm. Weight: 7,5 kg.

R586SEY03

Boiler room steel multi-function manifold with connections for primary (G 1-1/4" F) and secondary G 1" M) circuits (three outlets on secondary circuit), automatic air vent valve, drain cock and insulation shell. Generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones. Optional installation of two boiler room manifolds to install up to six distribution units and meet the requirements of very large systems. Includes hydraulic separator function with mechanical activation. Fluids: water, glycol-based solutions (max. 50 % of glycol). Temperature range: 5÷110 °C. Max. working pressure: 6 bar. Centre distance of secondary circuit outputs: 125 mm. Weight: 13 kg.

R586SEY12

Boiler room steel multi-function manifold with connections for primary (G 1-1/2" F) and secondary G 1-1/4" M) circuits (two outlets on secondary circuit), automatic air vent valve, drain cock and insulation shell. Generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones. Optional installation of two boiler room manifolds to install up to six distribution units and meet the requirements of very large systems. Includes hydraulic separator function with mechanical activation. Fluids: water, glycol-based solutions (max. 50 % of glycol). Temperature range: 5÷110 °C. Max. working pressure: 6 bar. Centre distance of secondary circuit outputs: 125 mm. Weight: 11 kg.

R586SEY13

Boiler room steel multi-function manifold with connections for primary (G 1-1/2" F) and secondary G 1-1/4" M) circuits (three outlets on secondary circuit), automatic air vent valve, drain cock and insulation shell. Generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones. Optional installation of two boiler room manifolds to install up to six distribution units and meet the requirements of very large systems. Includes hydraulic separator function with mechanical activation. Fluids: water, glycol-based solutions (max. 50 % of glycol). Temperature range: 5÷110 °C. Max. working pressure: 6 bar. Centre distance of secondary circuit outputs: 125 mm. Weight: 15 kg.

⚠ Safety Warning. Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

♻ Package Disposal. Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

ℹ Additional information. For more information, go to giacomini.com or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

♻ Product Disposal. Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.