**0870EN** October 2017

Boiler room manifold with hydraulic separator R586SEP







# Description

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

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

The R586SEP manifold allows for easy installation of two or three R586R distribution units, based on the version.

Its modular design enables to install two R586SEP manifolds in series and in turn up to six R586R distribution units, thus satisfying the requirements of large installations.

In addition, the R586SEP 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 side connections	Secondary side connections	Secondary side number of connections
R586SEY02	1 1/4"F ISO 228	1″M ISO 228	2
R586SEY03	1 1/4"F ISO 228	1"M ISO 228	3

### Optional



• R20DY016: brass 3-piece straight fitting, 1 1/4"M x 1 1/4"M



• R588SEY01: pair of wall-mount brackets

### **Completion codes**



• R252Y001: interception ball valve 1 "F x nut 1 1/2"F, for installation of R586R distribution unit on secondary side outputs



• R37KY005: pair of tail pieces 1"F x nut 1 1/2"F (without interception), for installation of R586R distribution unit on secondary side outputs



#### Note

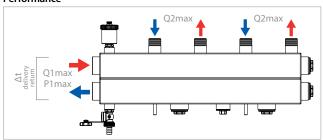
For the installation of R586R distribution unit on secondary side outputs you must order the R252 valves or R37K tail pieces.

Completion codes to be ordered depending on the R586SEP installed				
R586SEY02	N° 4 R252Y001	N° 2 R37KY005		
R586SEY03	N° 6 R252Y001	N° 3 R37KY005		

# Technical data

- $\bullet$  Operational fluid: water, glycol-based solutions (max. 50 % of glycol)
- •Temperature range: 5÷110 ℃
- Max. working pressure: 6 bar
- Centre distance of secondary side outputs: 125 mm (same centre distance of R586R units)
- Weight: 7,5 kg (R586SEY02); 13 kg (R586SEY03)

### Performance



Derivation	Max. flow [m³/h]	
Primary side Q1max	3,0	
Secondary side (single output) Q2max	2,0	



#### Note.

Use the hydraulic separator function to balance the flows.

Primary side max. flow Q1max [m³/h]	Primary side delivery-return Δt	Primary side max. power P1max [kW]
3,0	10	35
	15	52
	20	70
	25	87

#### Materials

- Manifold body: varnished steel
- · Air vent valve, caps, drain tap: CW617N brass
- Insulation: closed cell Pe-X foam

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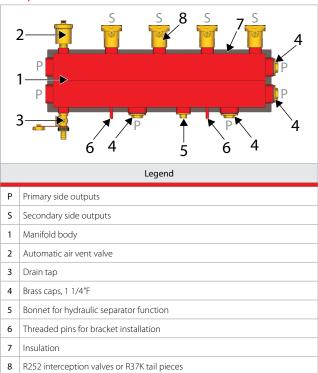
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## Components

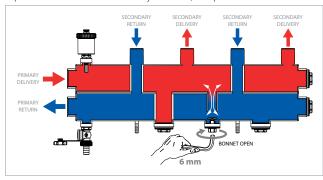


### Operation

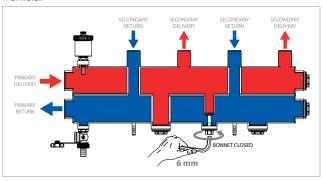
R586SEP can be used both as a basic boiler room manifold and hydraulic separator, based on the installation requirements.

On the manifold lower side is an adjustment bonnet (components - ref. 5) to mechanically activate or deactivate the hydraulic separator function.

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



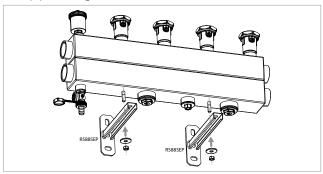
Close the bonnet completely to interrupt the communication path between delivery and return circuits and transform R586SEP back into a boiler room manifold.



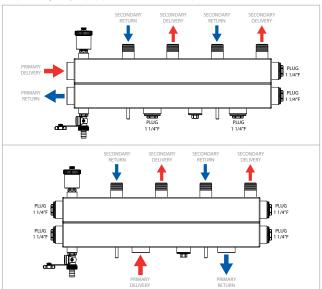
### Installation

R586SEP manifolds can be installed on the special 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.



One may choose the inlet direction of the primary side pipes, from left or right side of the manifold, but also from the lower side by using the two lower outputs originally equipped with a 1 1/4"M cap.

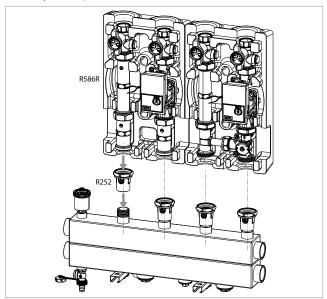




#### Note

The primary side lower outputs have the same centre distance (240 mm) of the R146l and R146lM hydraulic separators size 1 1/4''.

R252 ball valves, and then R586R distribution units, can be installed on the secondary side outputs.



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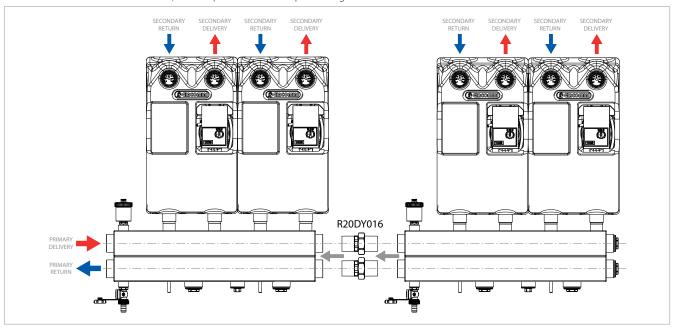
BOILER ROOM MANIFOLD
WITH HYDRAULIC SEPARATOR
R586SEP





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.

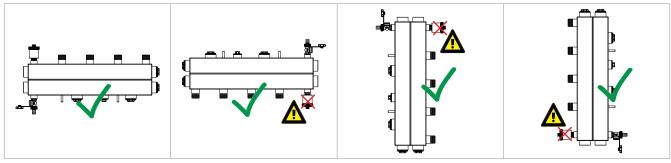




# Warning.

The power available on the primary side (P1 max) will be the same given in the "Performance" table, even when installing multiple R586SEP 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 cap if necessary.

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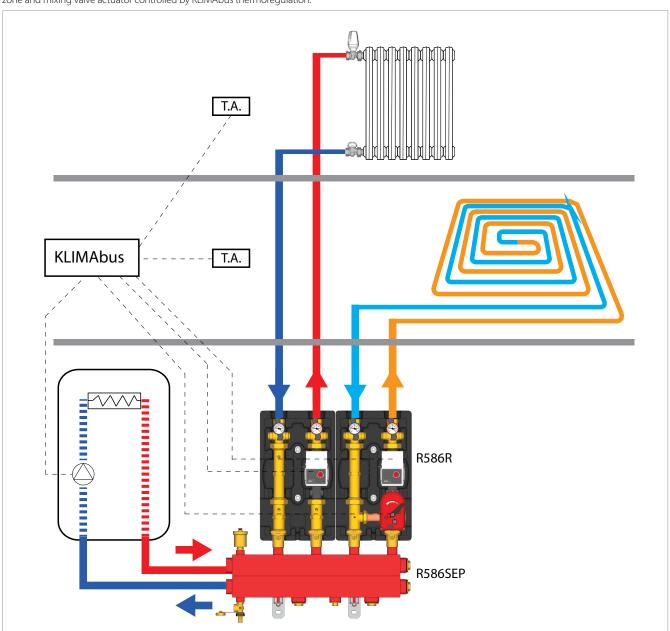
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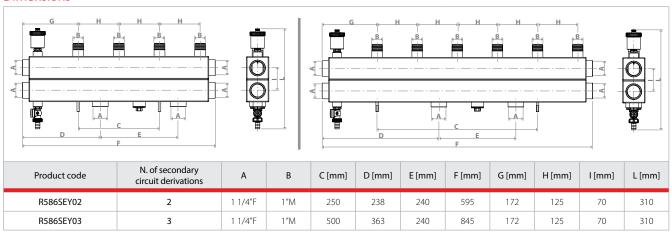


# Example of application diagram

Application diagram for heating-only system with R586SEP complete of R586RY101 for high-temperature radiator zone + R586RY102 for low-temperature radiant zone and mixing valve actuator controlled by KLIMAbus thermoregulation.



# **Dimensions**



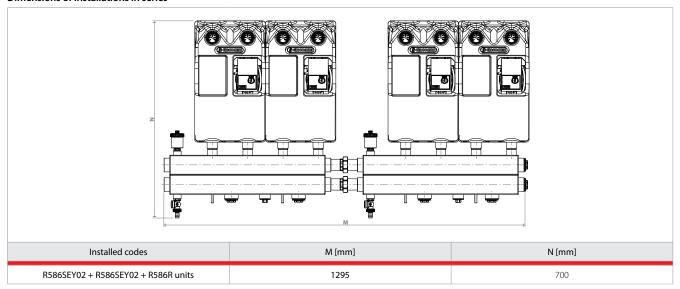
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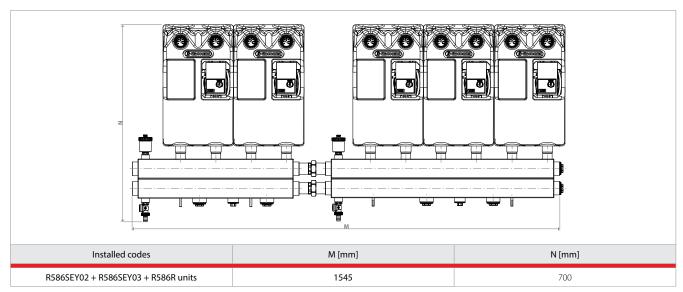
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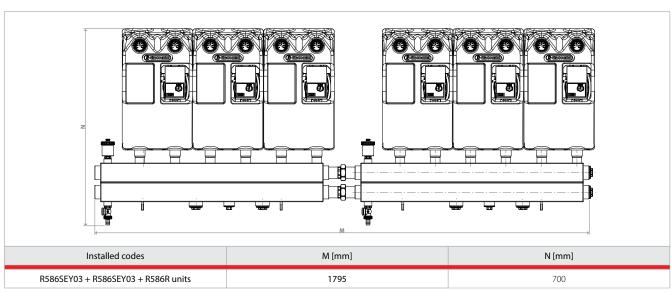




# Dimensions of installations in series







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### **Product specifications**

### R586SEY02

Boiler room steel multi-function manifold with connections for primary and secondary circuits (two derivations on secondary circuit), automatic air vent valve, drain tap and insulation shell. Generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones. Optional installation of two R586SEP manifolds to install up to six distribution units and meet the requirements of very large systems. Includes hydraulic separator function with mechanical activation. Operational 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.

#### R586SEY03

Boiler room steel multi-function manifold with connections for primary and secondary circuits (three derivations on secondary circuit), automatic air vent valve, drain tap and insulation shell. Generally used in boiler rooms of heating and cooling systems featuring multiple regulation zones. Optional installation of two R586SEP manifolds to install up to six distribution units and meet the requirements of very large systems. Includes hydraulic separator function with mechanical activation. Operational 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.