

Technische Änderungen vorbehalten

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**Heating circuit distribution bar -
steel/stainless steel - up to 70 kW**

Technical data for installation and operation

GB

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1. Safety instructions

Please follow these safety instructions carefully to prevent hazards, injury to people and material damage.

The installation, initial start-up, inspection, maintenance and servicing may only be performed by an approved, specialist company. Before starting work please familiarise yourself with all the parts and their handling. Observe the applicable accident prevention regulations, environmental regulations and legislation for the assembly, installation and operation of the system. In addition, observe the applicable safety provisions of the DIN, EN, EVGW, VDI and VDE and all relevant country-specific standards, laws and guidelines.

When working on the system (in general):

Disconnect the heating system from the mains and monitor it to ensure that no voltage is being supplied (e.g. at the separate cut-out or a main switch). Secure the system against being restarted. (With gas-fuelled systems, close the gas shut-off valve and secure it to prevent it being opened accidentally.) Repairs to components with a safety function are not permitted.



- **Read the installation instructions before use**

- **Risk of being cut**

- **Risk of crushing**

- **Risk of high temperatures**

- **Risk of electrical voltage**

2. Heating circuit distribution bar (steel)

Product examples:



Art. 66301.2
(up to 3 heating circuits)



Art. 66301.3 (up to 5 heating circuits)



Art. 66301.4 (up to 7 heating circuits)



Art. 66337.3 (wall bracket)

2.1 Intended use

Distribution bar for use in heating systems to assemble up to 7 heating circuit pump groups 3/4", 1" or 1 1/4" and a Boiler Guard K including EPP insulation. Wall bracket (Art. No 66337.3) optional.

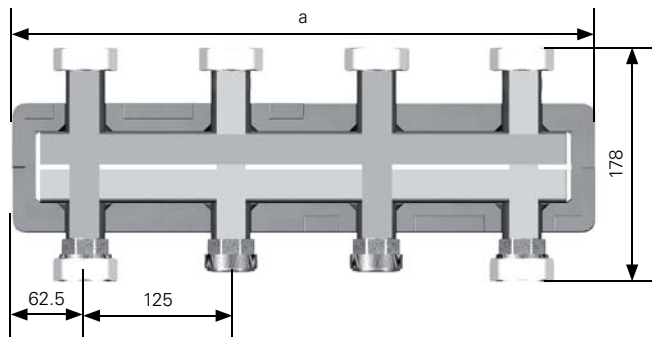
2.2 Connections

| | |
|------------------------|--|
| Heat generator (upper) | : Union nut 1 1/2" internal thread |
| Heat generator (lower) | : 2 x half-shell technology 1 1/2" external thread for boiler connection, other connections closed with caps |
| Axial distance | : 125 mm |

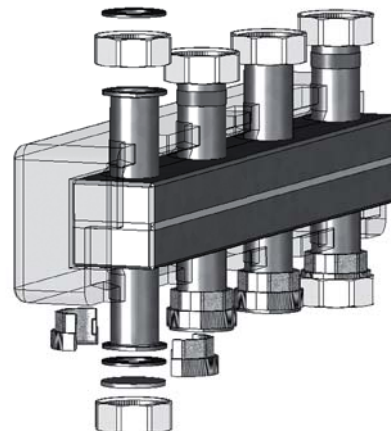
Please note:

The flange-/half-shell technology of the lower outlets makes a variety of connection configurations possible. They can be arranged either centrally or eccentrically. The free lower connections can be used for additional heating circuits (e.g. filling the tank).

Supply/return configuration: Always hydraulically connect the opposite pipe connections (upper/lower) to one another!



| | |
|-------------------------------------|-------------------------------|
| Output | : max. 70 kW. $\Delta T=20$ K |
| Max. permissible temperature | : 110°C |
| Max. permissible pressure | : 6 bar |



2. Heating circuit distribution bar (steel)

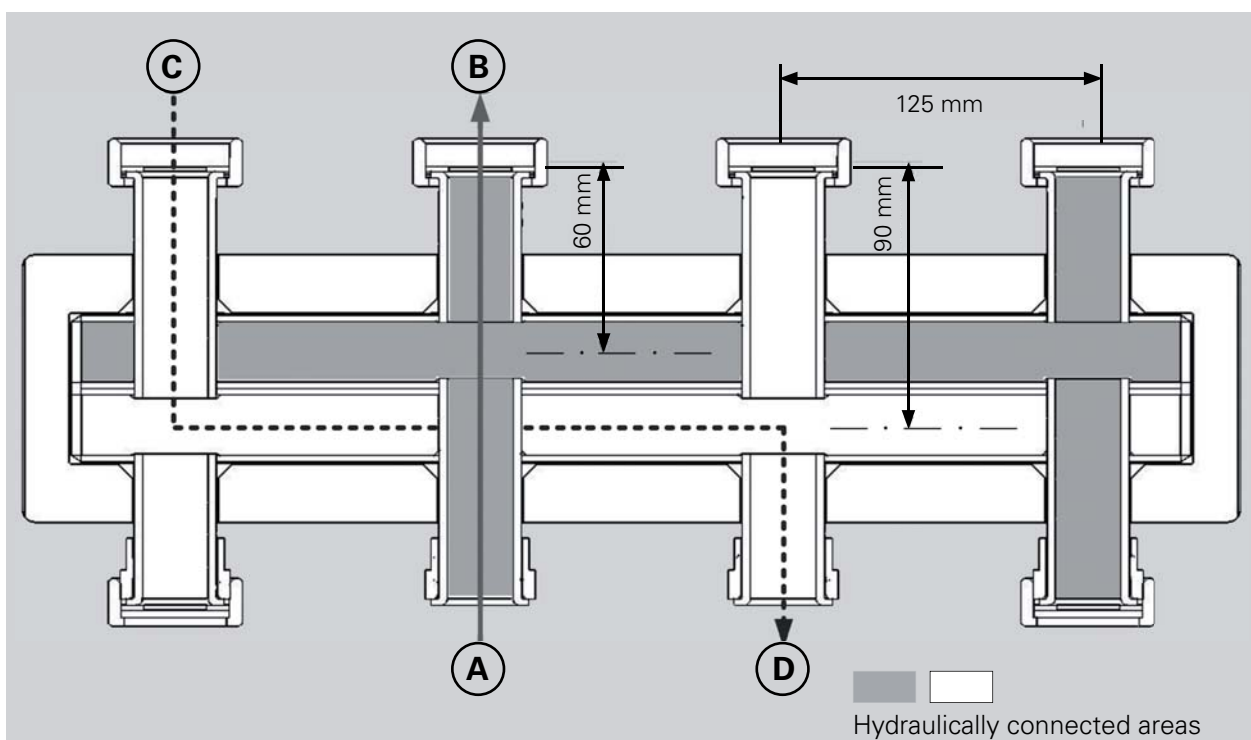
2.3 Dimensions (in mm)

| Model | Height (flange/flange) | a = Width (including ISO) | Depth (including ISO) |
|--------------------------|------------------------|---------------------------|-----------------------|
| Up to 3 heating circuits | 178 | 500 | 135 |
| Up to 5 heating circuits | 178 | 750 | 135 |
| Up to 7 heating circuits | 178 | 1000 | 135 |

2.4 Pressure loss calculation

Art. No. 66301.2, 66301.3, 66301.4

The pressure loss of the distribution bar is calculated from the flow of the heating circuit to be supplied and the sum of the pressure losses of the flows through the sections of the distribution bar (supply and return sections). It is calculated separately for each heating circuit. If sections are used by several heating circuits, the sum of the flows must be taken into account.



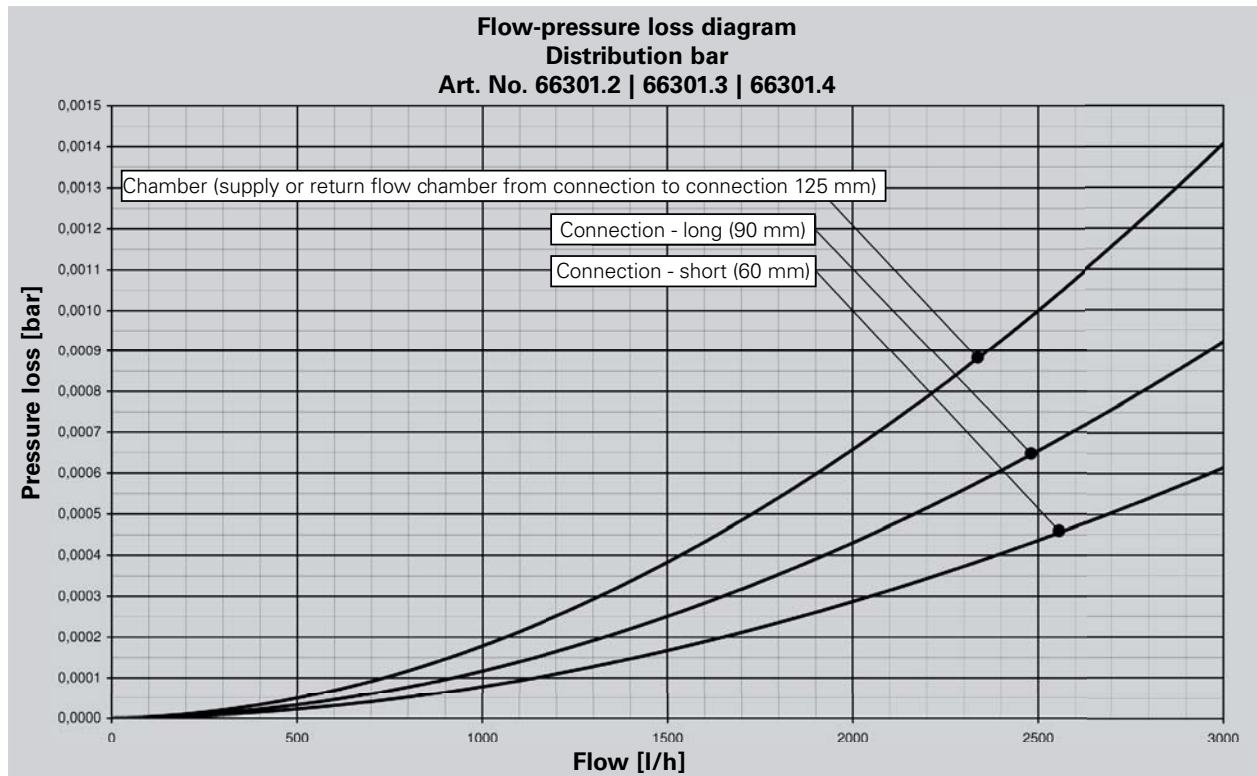
Example of a pressure loss calculation:

Sections =A/B and C/D at 2000 l/h:

Pressure loss=A/B + C/D

$$\begin{aligned}
 &= (1 \times 90 \text{ mm} + 1 \times 60 \text{ mm}) + (1 \times 90 \text{ mm} + 2 \times 125 \text{ mm} + 1 \times 60 \text{ mm}) \\
 &= (1 \times 0.00044 + 1 \times 0.00029) + (1 \times 0.00044 + 2 \times 0.00066 + 1 \times 0.00029) \text{ [bar]} \\
 &= 0.00278 \text{ bar}
 \end{aligned}$$

2. Heating circuit distribution bar (steel)



EN

2.5 Number of heating circuits

| Article number | All heating circuits | Heating circuits upward | Heating circuits downward |
|----------------|------------------------------|-------------------------|---------------------------|
| 66301.2 | For up to 3 heating circuits | 2 | 1 |
| 66301.3 | For up to 5 heating circuits | 3 | 2 |
| 66301.4 | For up to 7 heating circuits | 4 | 3 |

Note:

Depending on the connection configuration, it is possible to change the position of the supply and return flow.

3. Heating circuit distribution bar (stainless steel)

3.1 Intended use

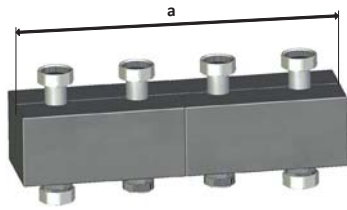
Thermally separated supply and return, complete with EPS insulation, with the necessary threaded joints and connectors, for outputs up to 70 kW (for $dT = 20$ K), max. permissible temperature: 110°C, max. permissible pressure: 6 bar

3.2 Connections

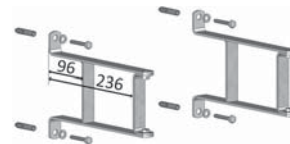
Heat generator (upper) : Union nut 1 1/2" internal thread
 Heat generator (lower) : 2 x half-shell technology 1 1/2" external thread for boiler connection, other connections closed with caps
 Axial distance : 125 mm
 Height of insulation : 110 mm

3.3 Dimensions

Art. 66306.1 D (shown) , Art. 66301.41 D



Art. 66337.3
 Wall bracket incl. fasteners

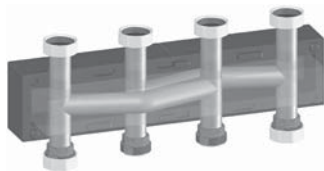


Dimensions (in mm)

| Model for up to 3 heating circuits | Height (flange/flange) | a = Width (including ISO) | Depth (including ISO) |
|------------------------------------|------------------------|---------------------------|-----------------------|
| | 185 | 500 | 135 |
| | 185 | 775 | 135 |

3.4 Pressure loss calculation

Cross-section illustrating the configuration of the hydraulic connections: each of the opposing pipes and every second pair of pipes are connected to one another.



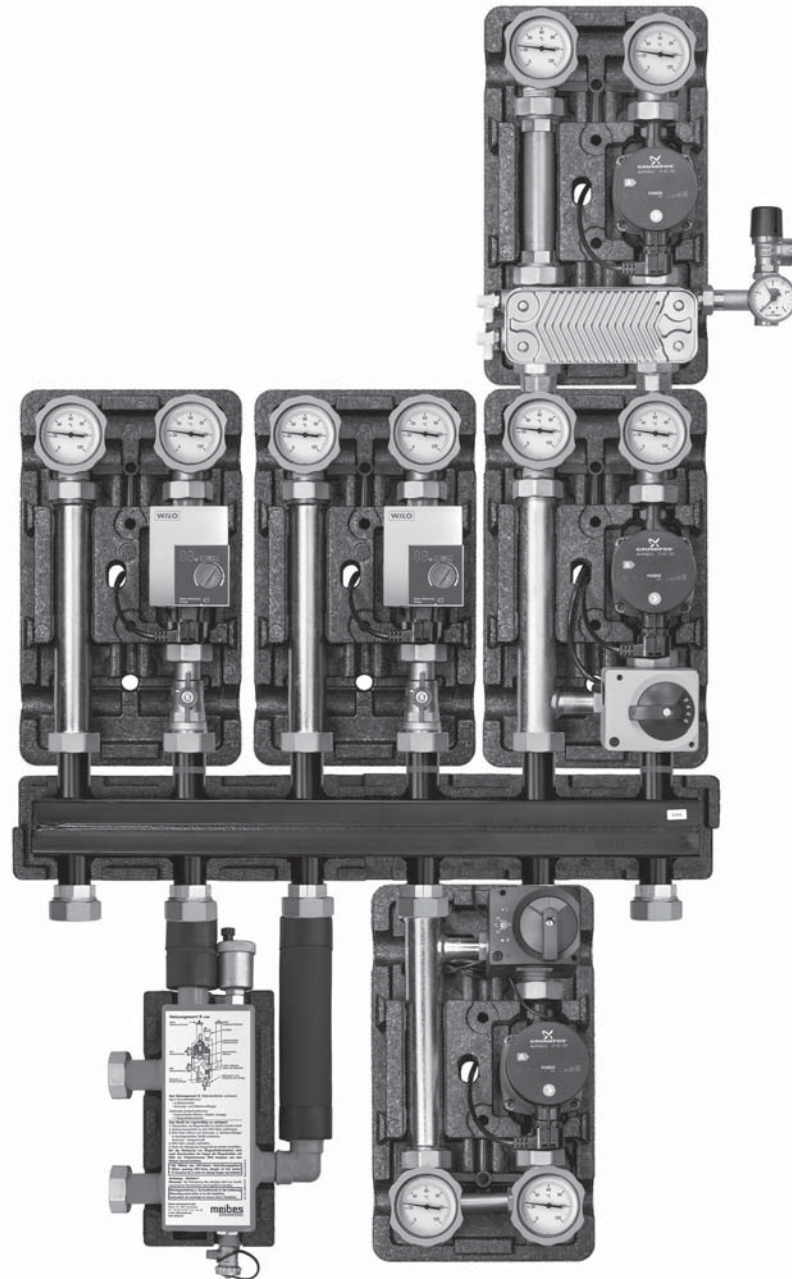
For an example of a pressure loss calculation, see chapter 2.4

3.5 Number of heating circuits

| Article number | All heating circuits | Heating circuits upward | Heating circuits downward |
|----------------|------------------------------|-------------------------|---------------------------|
| 66306.1 D | For up to 3 heating circuits | 2 | 1 |
| 66301.41 D | For up to 3 heating circuits | 3 | - |

4. Installation example with pump groups

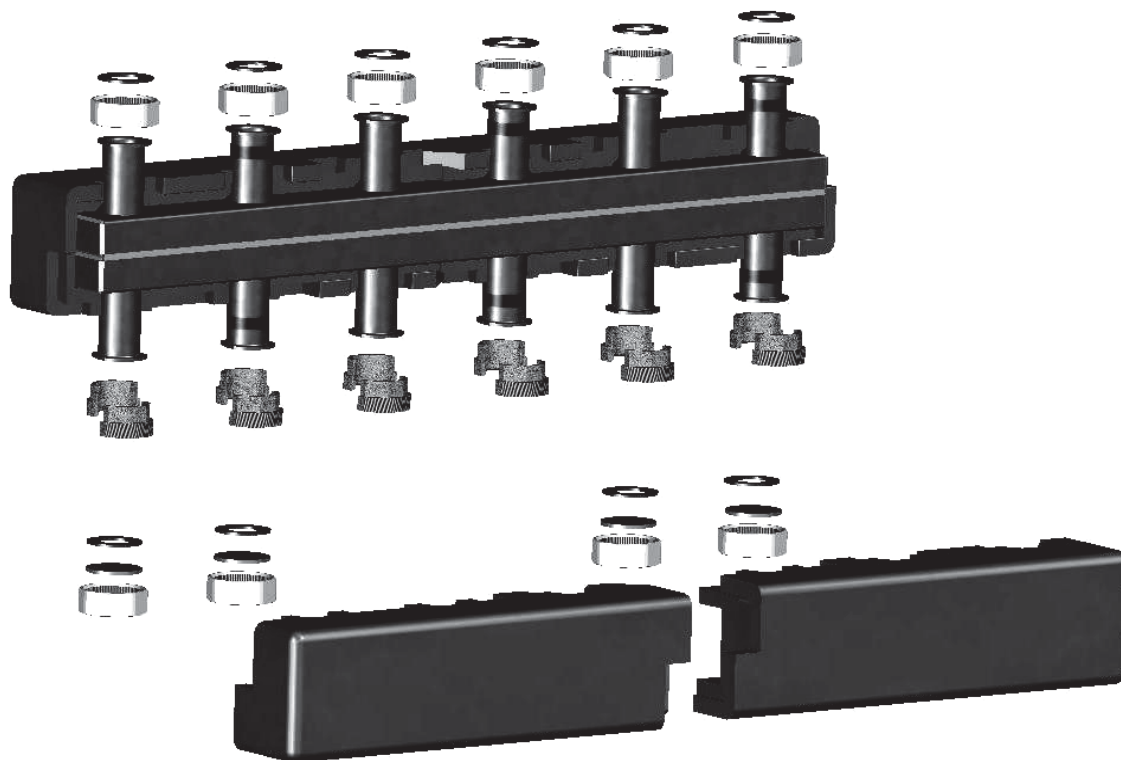
Heating circuit distribution bar (steel) with 3 heating circuits (a separation system), Boiler Guard K and return flow booster.



EN

Manifold Generation 7

Datasheet and installation instructions



1. Product purpose

1.1. Manifold Generation 7 are designed for the distribution of the coolant coming from the heater (boiler), between circuits. Without confusion between the feed lines and return lines.

1.2 There are modifications to the 2 (3), 3 (5), 4 (7) outputs to the contours of the consumers of black steel. And 2 (3) 3 consumer circuits stainless steel. In parentheses is the number of circuits involved in view of the lower connections.

2. Specifications

Distribution manifolds with full thermal-hydraulic separation of supply and return lines. From the black lacquered steel or stainless steel block a non-combustible insulation. Location axes flow and return pipes above and below the match.

Upper connection 1 1/2 "LH, a flat EPDM gasket for connecting the pump groups.

Lower central connection 1 1/2 "male thread for flat seal.

The remaining lower connection 1 1/2 "HP plugged 1 1/2" LH.

For heating systems, power up to 85 kW at delta T = 25 K.

Heating medium: water or propylene glycol to 40%

| Specifications | |
|---|----------------------------|
| Consumption | 3 m ³ / hour |
| Top. connection | NY 1 1/2 "flow Right |
| Underwear.connection | 1 1/2 "male (flat seal) |
| Wheelbase | 125 mm |
| Maximum temperature | 110 °C |
| pressure class | PN 6 |
| Calculated power at $\Delta T=25$ K $\Delta T=20$ K | 85kW 70kW |
| dimensions | See. Fig. 15 |
| installation | to the wall using brackets |
| arrangement | horizontally |

Overall dimensions of the distribution of black steel combs:

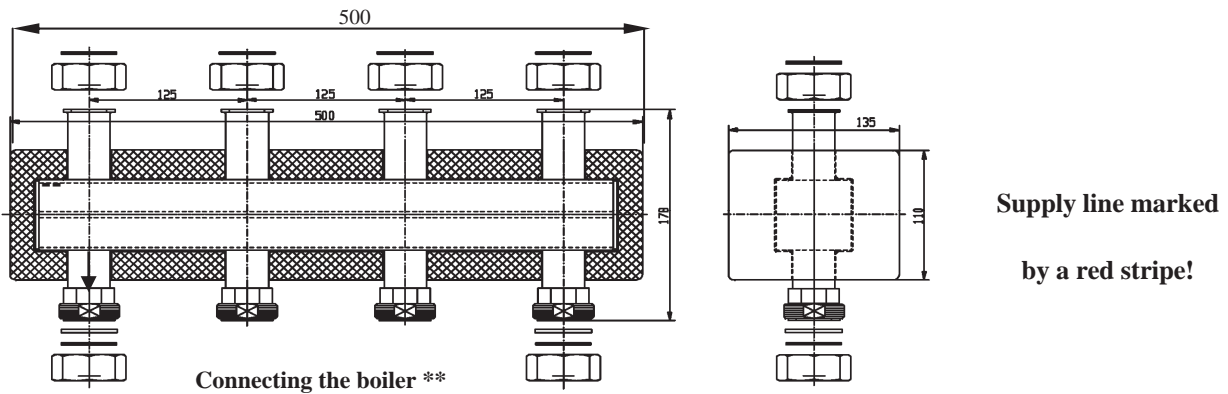


Figure 1 Collector 2 (3) * heating circuits. Art 66301.2

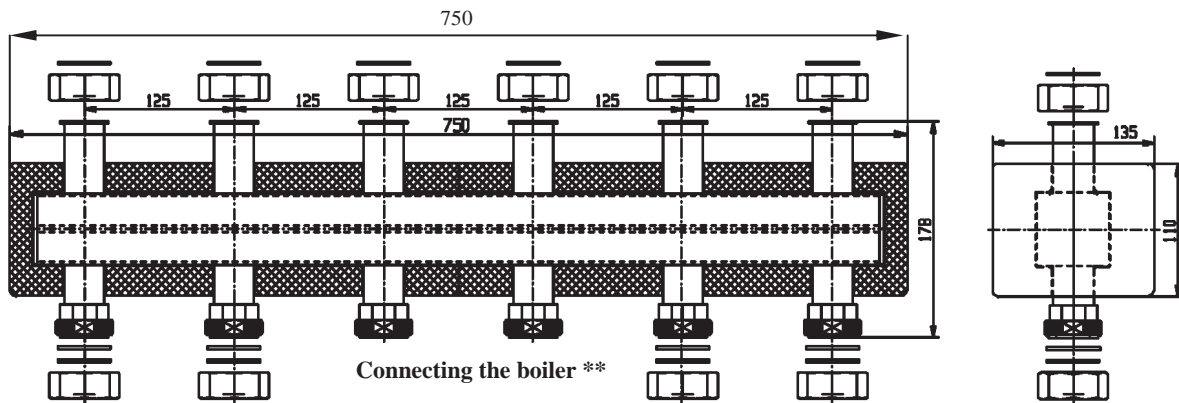


Figure 2 Collector 3 (5) * heating circuits .Art 66301.3

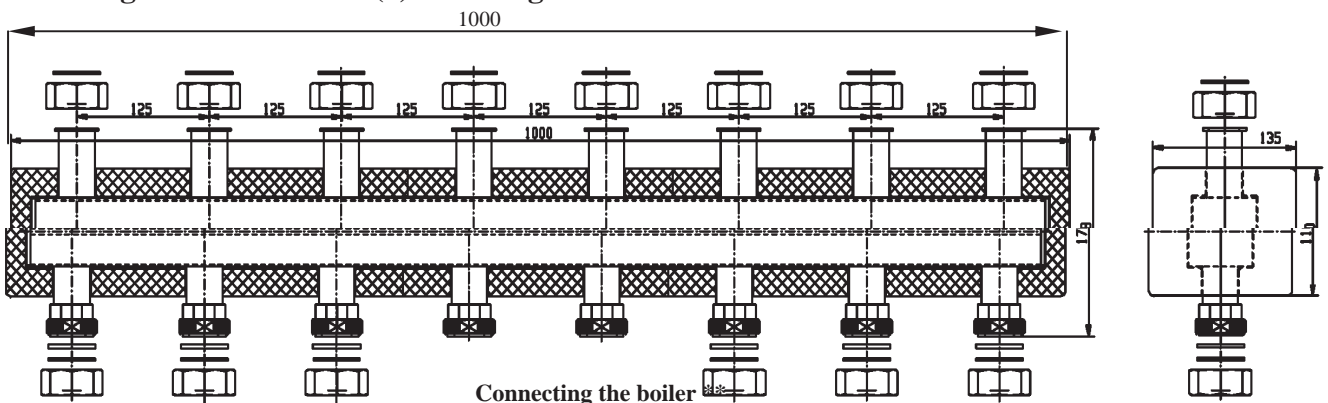


Figure 3. Collector to 4 (7) * heating circuits. Art 66301.4

* Specified amount of the upper contours maximum number in parentheses given lower Involved