Manifold up to 100kW
Technical Data for Installation and Operation

KE KELIT®
CLIMATE CONTROL SYSTEMS

Technische Änderungen vorbehalten

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meibes
Effiziente Energietechnik

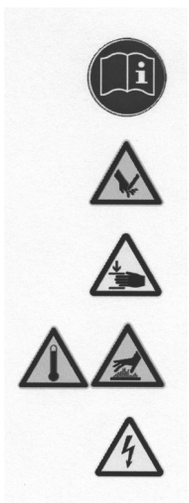
Content

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.

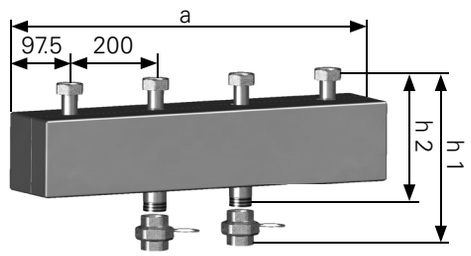
When working on the system (in general):
Disconnect the heating system from the mains and monitor it to ensure that no voltage is being supplied (e.g. at the separate cut-out or a main switch). Secure the system against being restarted. (With gas-fuelled systems, close the gas shut-off valve and secure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



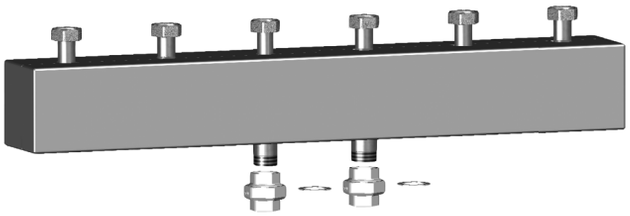
- **Read the installation instructions before use**
- **Risk of being cut**
- **Risk of crushing**
- **Risk of high temperatures**
- **Risk of electrical voltage**

2. Heating circuit distribution bar (steel)

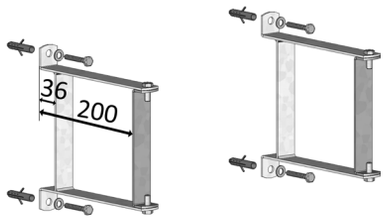
2.1 Heating circuit distribution bar (steel) up to 100kW



Art. 66301.80 (up to 2 heating circuits)



Art. 66301.81 (up to 3 heating circuits)



Art. 66337.10 (wall bracket)

2.2 Intended use

Distribution bar for use in heating systems to assemble up to 3 heating circuit pump units 1" or 1 1/4" Type V and a hydraulic separator (Art. No. 66394.1).
Including EPP insulation. Wall bracket (Art. No 66337.10) optional.

2.3 Connections

Heat consumer	: Union nut 1 1/2" internal thread
Heat generator	: Threaded joint 1 1/2" internal thread
Axial distance	: 200 mm
Output	: max. 100 kW, T= 20 K
Max. permissible temperature	: 110°C
Max. permissible pressure	: 6 bar

2.4 Dimensions

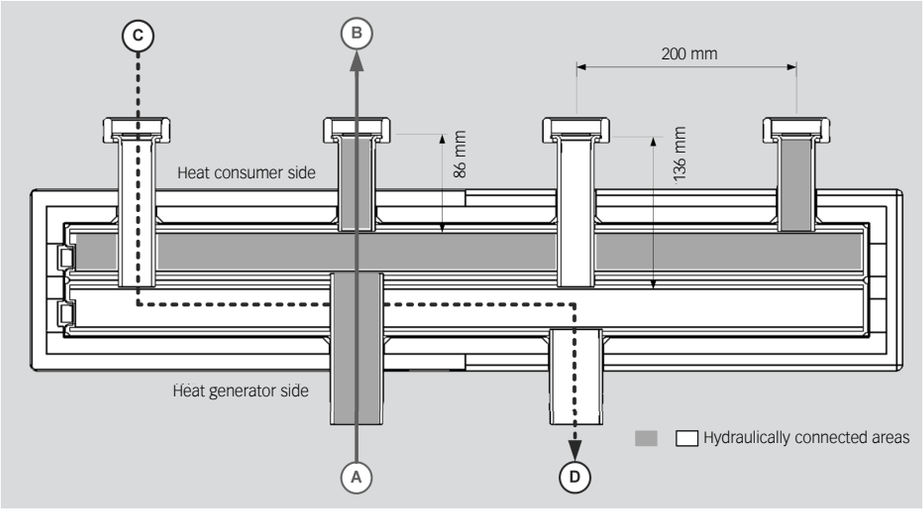
Model	Height h1 (flange/ flange)	Height h2 (flange/ pipe connection)	a = Width (including ISO)	Depth (including ISO)
Up to 2 heating circuits	345	260	795	165
Up to 3 heating circuits	345	260	1195	165

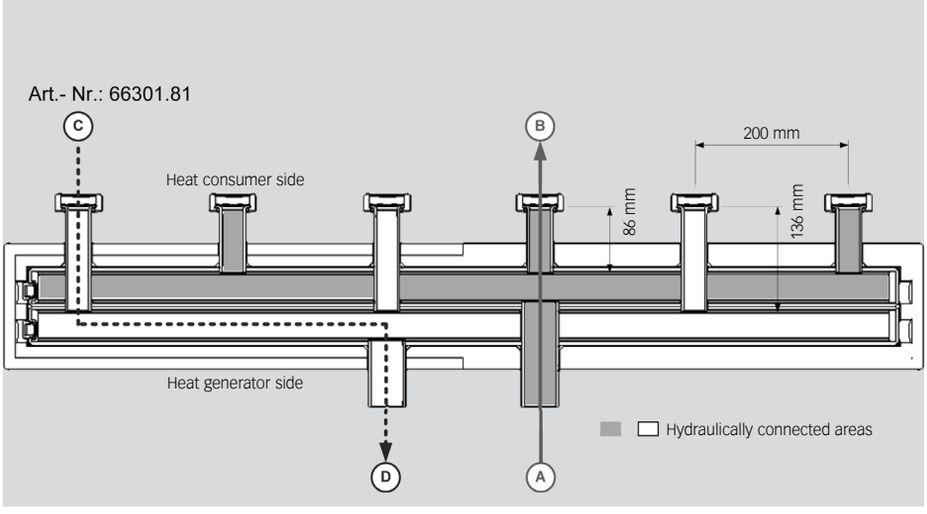
2. Heating circuit distribution bar (steel)

2.5 Pressure loss calculation

Art.No. 66301.2, 66301.3, 66301.4

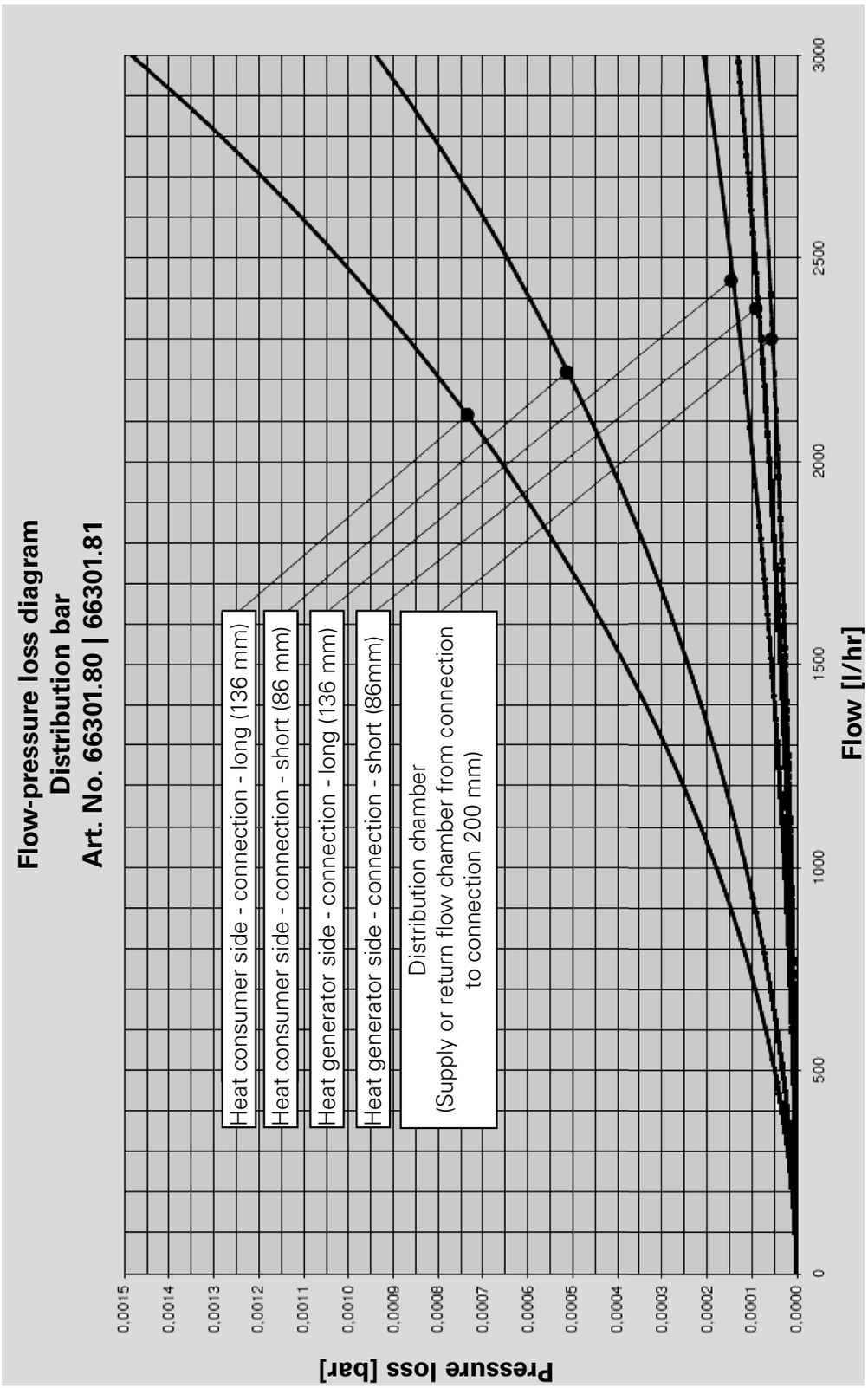
The pressure loss of the distribution bar is calculated from the flow of the heating circuit to be supplied and the sum of the pressure losses of the flows through the sections of the distribution bar (supply and return sections).
It is calculated separately for each heating circuit. If sections are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





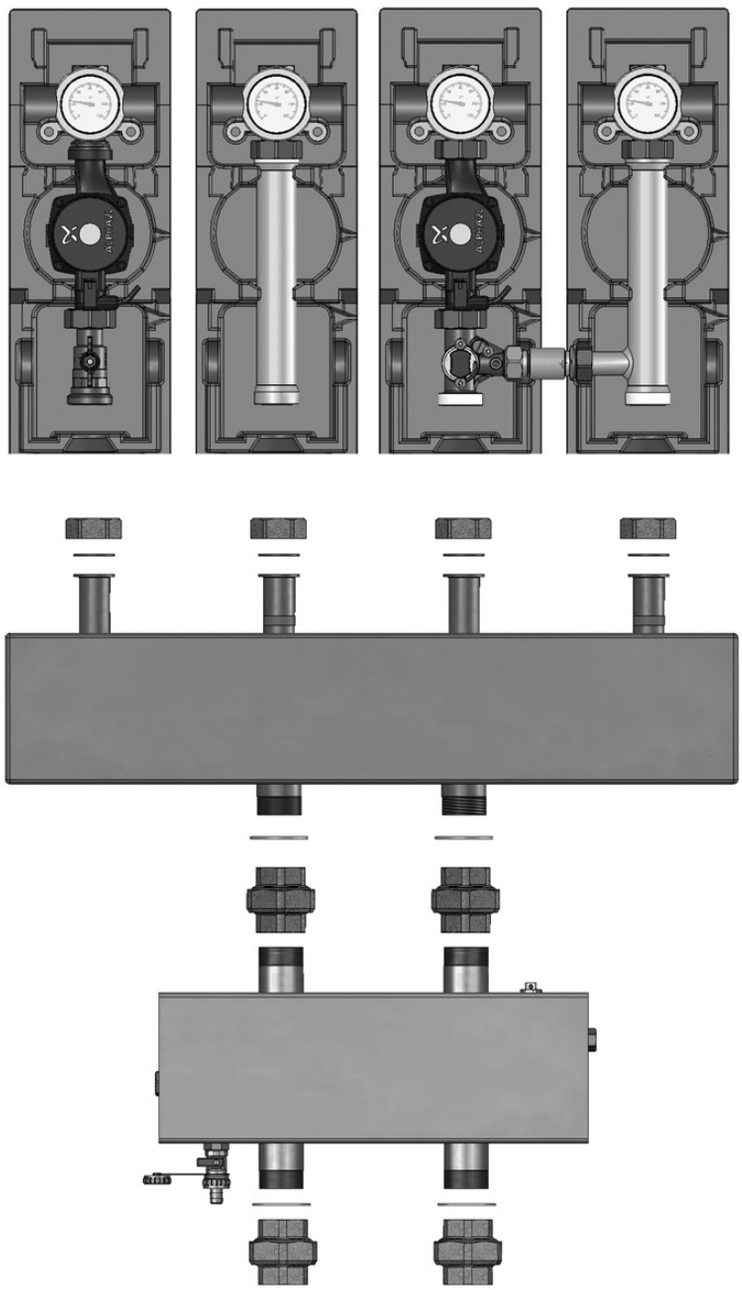
Example of a pressure loss calculation:
Sections A/B and C/D at 2000 l/h:
Pressure loss=A/B + C/D = (1 x 136 mm (heat generator side) + 1 x 86 mm (heat consumer side))
+ (1x 136 mm (heat consumer side) + 2 x 200 mm + 1x 86 mm (heat generator side))
= (1 x 0.0001 + 1 x 0.00042) + (1 x 0.00066 + 2 x 0.00004 + 1 x 0.00006) [bar]
= 0.00132 bar

2. Heating circuit distribution bar (steel)



3. Installation example with large distributor pump groups

Distribution bar of up to 2 large distributor pump groups (V-groups) and hydraulic separator.



4. Hydraulic separator and wall bracket

4.1 Accessories

Including air and dirt separator for horizontal or vertical assembly, with manual air bleed device (1), fill and drain ball valve with hose nozzle and cap (4), thermowell 3/8" internal thread (internal diameter 10 mm) (2) for supply temperature sensor, set of threaded joints 1 1/2 " internal thread (primary), complete with block insulation
Art. No.: 66394.1

Accessories / options:
Wall brackets (Fig. 2), distance from wall to insulation approx. 35 mm Art. No.: 66337.10
Magnetic separator, for assembly in position (3) Art. No.: 60364.503

Technical data:
Dimensions H/W/D in mm: 175 x 470 x 165
Connections (primary): Threaded joint 1 1/2" internal thread
Connections (secondary): 1 1/2“ external thread
Axial distances of the connections: 200 mm
Max. output at deltaT= 20K: 100 kW
Max. permissible operating pressure: 6 bar
Max. permissible operating temperature: 110 °C

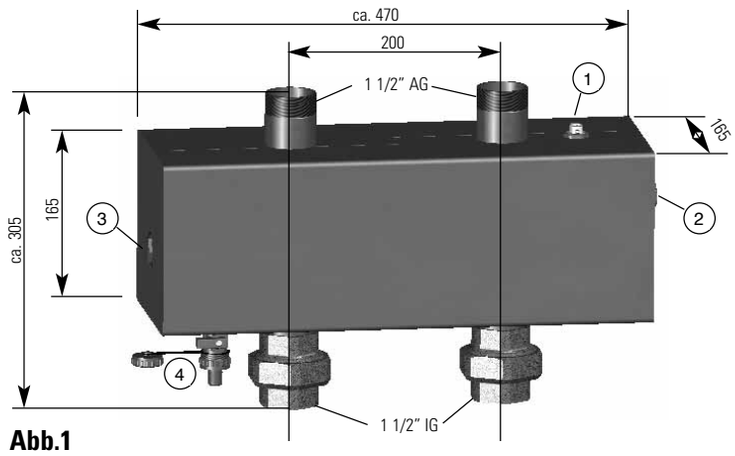
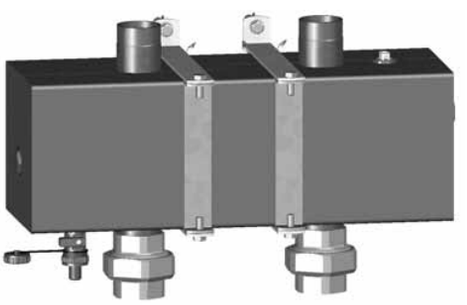


Abb.1
Fig. 1
Fig. 1

Abb. 2
Fig. 2
Fig. 2

Installation example:



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