ESBE SYSTEM UNITS ACCESSORIES

MANIFOLD BOX
SERIES GMB600

ESBE Series GMB600
Manifold for 2 or 3 units,with integrated hydraulic separator function in a box.

PRODUCT DESCRIPTION

ESBE Manifold Box Serie GMB600 is a distribution module for the management of two or three heating circuits, complemented with optional Circulation Units Serie GxA300, DN20, to suit the intended installation. Dimension of the Manifold Box allows both uninsulated as well as insulated Circulation Units to be installed.

ESBE Manifold Box consists of one box in white coloured sheet metal (E) and a pre-assembled three circuit distribution manifold (A). The Manifold Box has a separate, easy-to-hand hatch to facilitate assembly, and can be mounted on wall or recessed into the wall. A Connection box (B) that is included has two possible mounting positions, which are pre-drilled inside the box for easy installation.

When mounted inside the wall a Cover Strip (I) is available as an option to cover the transition between the box and the wall.

The manifold (A) is designed with a thermal separation between supply and return line and with integrated hydraulic separation, and the bypass function is easily controlled with an adjustment screw (F). It has two connection ports (left/right) for the supply line, and the Manifold Box is delivered with a cap (C) to use for plugging the unused connection port, to avoid unnecessary piping and speed up the installation. The manifold has a high class insulation shell according to EnEV2014 and is equipped with air vent valves which allows 360° mounting. The connections for the air vent valves can also be used for a temperature sensor. Two plugs (D) are included if only two Circulation Units are intended to be installed and the third circuits need to be plugged.

The Manifold Box is adapted so that there is room to install shut-off valves on the primary side inside the box. Shut-off valves (H) with colour coded thermometer are available as an option.

SERVICE AND MAINTENANCE

ESBE Manifold Box does not require any specific maintenance under normal conditions.

KEY BENEFITS

- Clean appearance
- Manifold with optional function for hydraulic separation easily set with a screw
- Two incoming ports for supply where 1 is plugged to avoid unnecessary piping
- Manual air-venting which allows 90/180/270/360° mounting of the unit
- Installation of temperature sensor in connection for air vent valve possible

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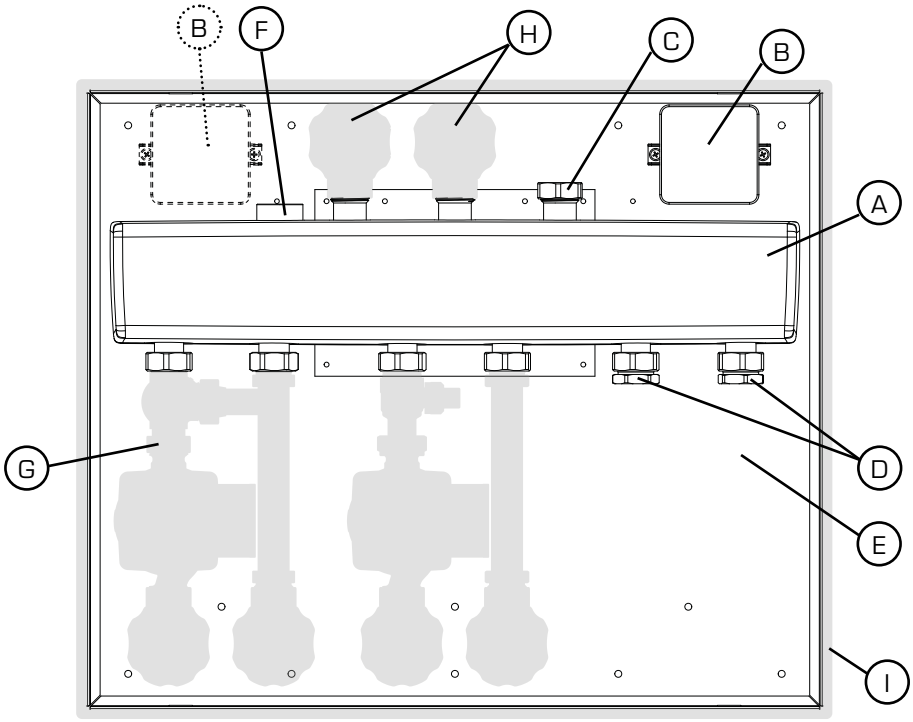

A) Distribution manifold (1pc)
B) Connection box (1pc)
C) Cap (1pc)
D) Plug (2pcs)
E) Metal box incl. hatch (1pc)
F) Adjustment screw (1pc)

Optional parts
G) Circulation unit (2 or 3pcs)
H) Shut-off valve with colour coded thermometer (2pcs)
I) Cover strip (1pc)

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OPTIONS

See separate data sheet for further detailed information about choice of Circulation unit. Each version of Circulation units can be delivered in two variants - with and without insulation shell.

Circulation units with insulation shell

Art. No.	
61003200	Circulation unit GDA311
61023200	Circulation unit GFA311
61043600	Circulation unit GRA311

Circulation units without insulation shell

Art. No.	
61005200	Circulation unit GDA394
61045800	Circulation unit GRA394
61025100	Circulation unit GFA394

Shut-off valve with colour coded thermometer

Art. No.	
66100600	Shut-off valve GOP810
66100700	Cover strip GOP820

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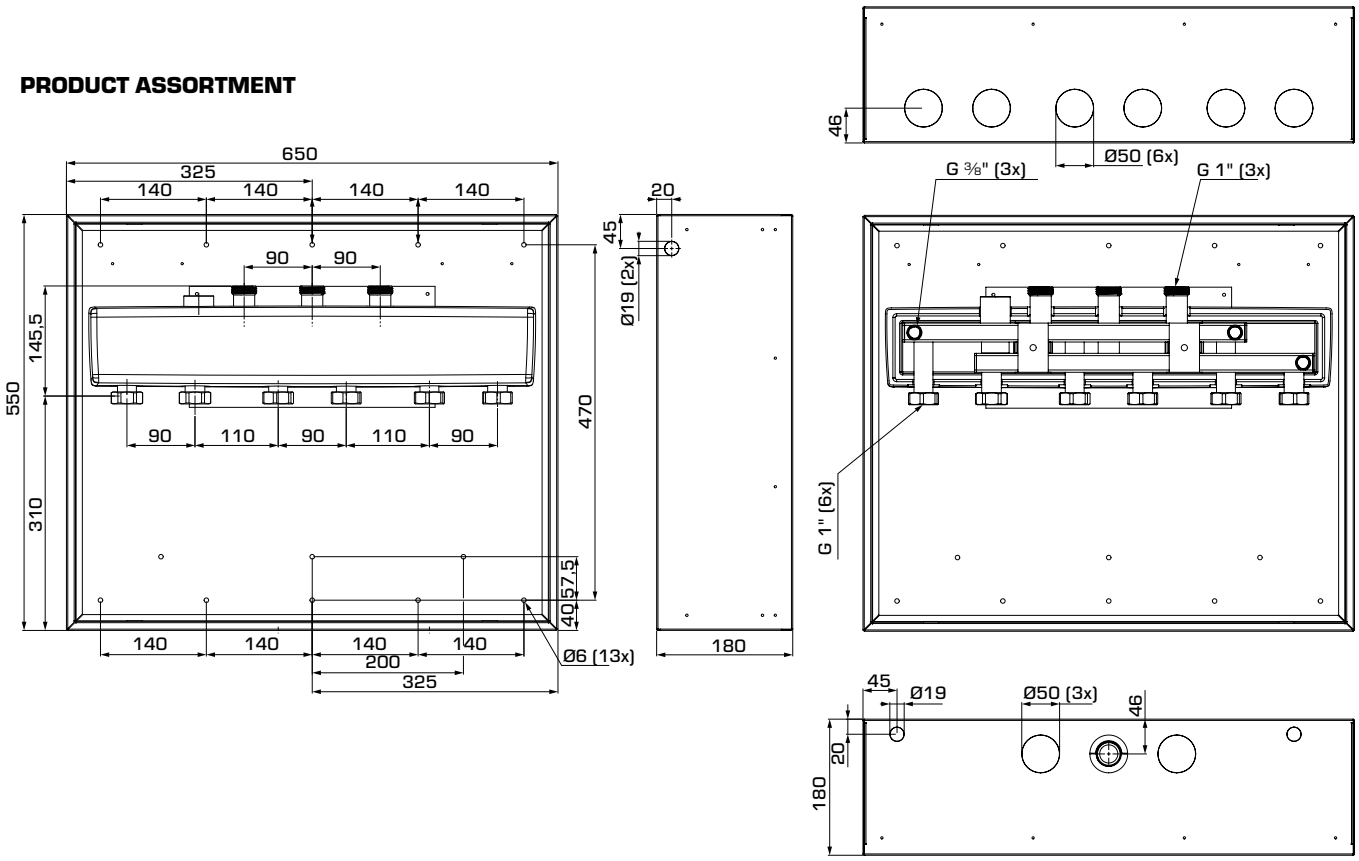
PRODUCT ASSORTMENT



GMB631

ESBE Manifold Box Series GMB600

Art. No.	Reference	No. of circulation units	Connections			With hydraulic separator	Weight [kg]
			To system	From Heat source	Air vent valves		
66000700	GMB631	2–3	G 1"	G 1"	G ⅜"	Yes	15,5

TECHNICAL DATA

Visit esbe.eu for further detailed information.

Technical data:

Pressure class: PN 6
Media temperature: max. +95°C
min. 0°C
Working pressure: 0,6 MPa (6 bar)
Standard outlet spacing: 90 mm
Flow rate at 10kPa: 3,0 m^3/h , see graph
Output: 70 kW at △t 20K

Box: white coloured sheet metal, RAL 9010

Material, in contact with water:

Components of: Black coated steel S235
Insulation: EPP λ 0,036 W/mK

PED 2014/68/EU, article 4.3 / SI 2016 No. 1105 (UK)

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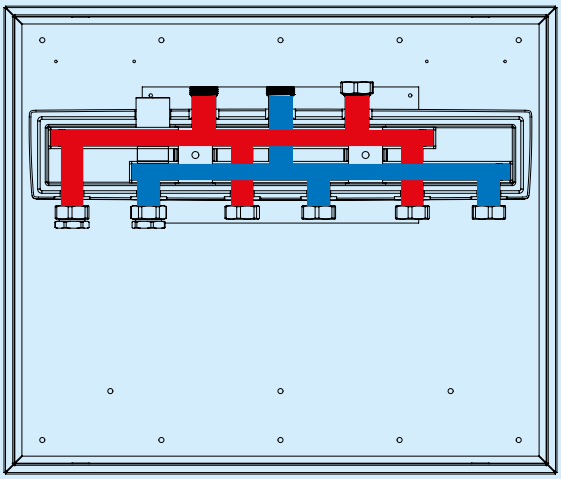
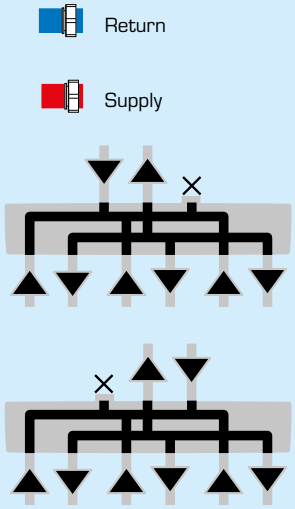
FLOW ILLUSTRATION



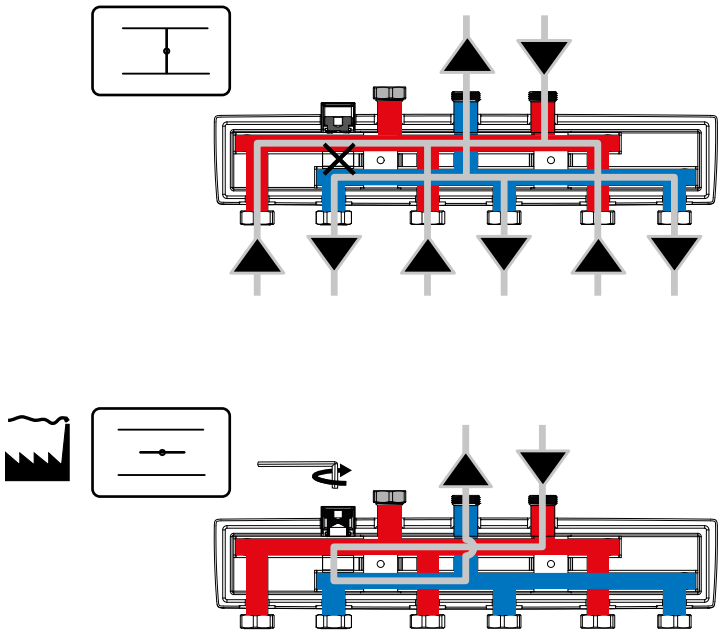


SETTING OF HYDRAULIC SEPARATION

Kv values for bypass can be set using separate adjustment screw.

Turn the screw clockwise (inwards) to its stop position, then open it a number of turns in order to achieve a specific Kv value.

Number of turns	Kvs [m³/h]	By-pass set
0	0	
1	2,8	
2	5,1	
3	6,5	
4	7,3	
5	7,7	
6	8,0	
7	8,1	
8	8,1	



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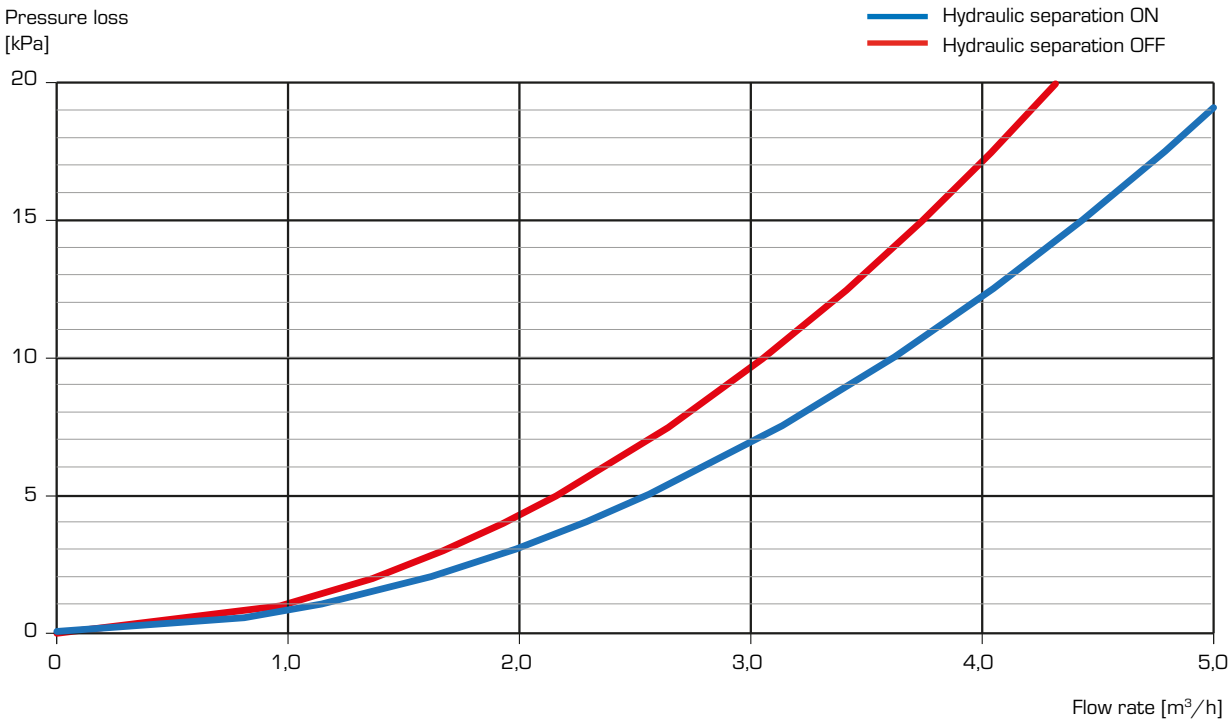
DIMENSIONING

GMB631 – Manifolds with integrated optional hydraulic separation (on/off).



MANIFOLD BOX
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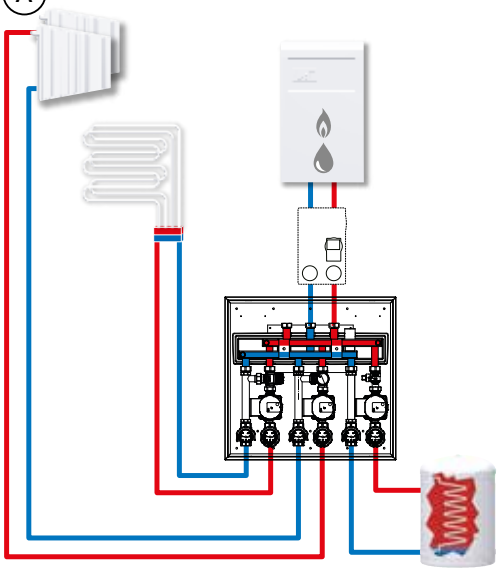
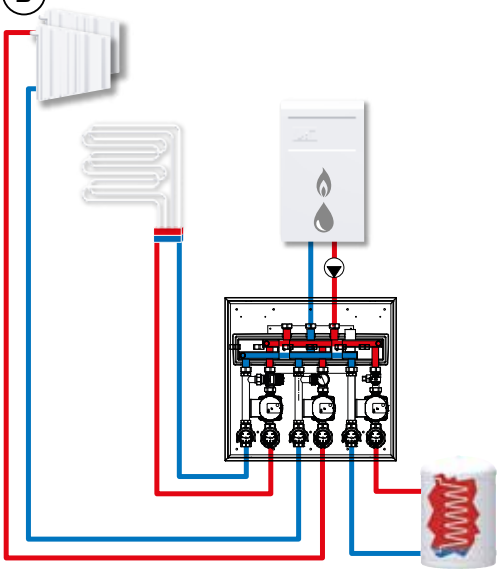
INSTALLATION EXAMPLES

A



B

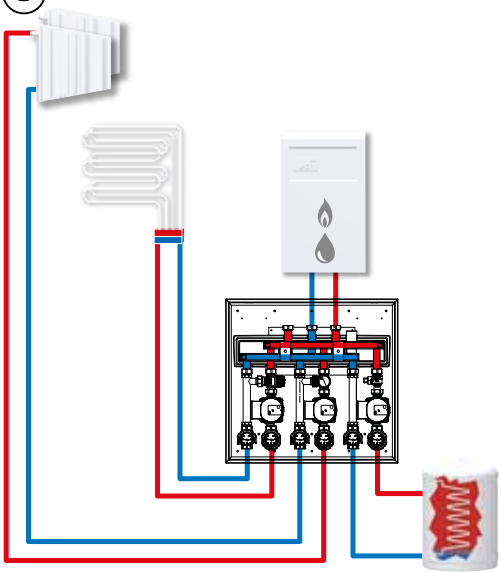


The integrated hydralic separation in the Manifold Box Series GMB631 is switched ON if the boiler does'nt include a circulation pump but the primary side is equipped with a Circulation unit, Direct supply Series GDA, as in example A and D, or with a circulation pump, as in example B and E.

The integrated hydralic separation in the Manifold Box Series GMB631 is switched ON if the boiler (example C and F) includes a circulation pump. The integrated hydraulic separation is switched OFF if the boiler does'nt include a circulation pump and the primary side isn´t equipped with a Circulation unit, Direct supply Series GDA, as in example A and D, or with a circulation pump, as in example B and E.

Following applications are different examples how to install ESBE Manifold Box Series GMB631 in combination with different heating sources.

C



MANIFOLD BOX
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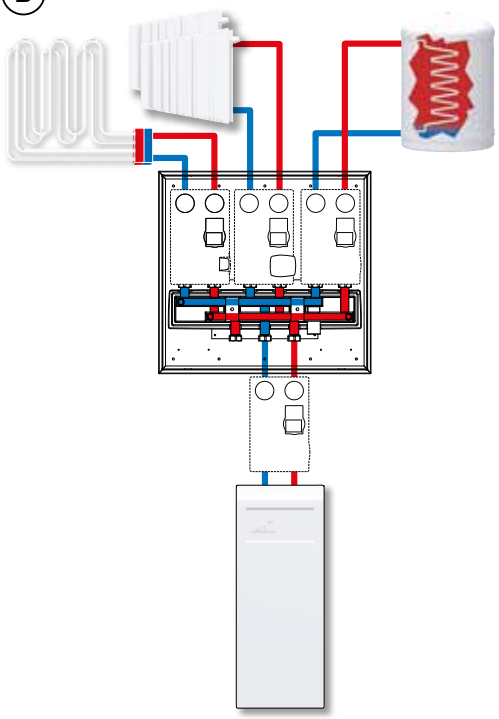
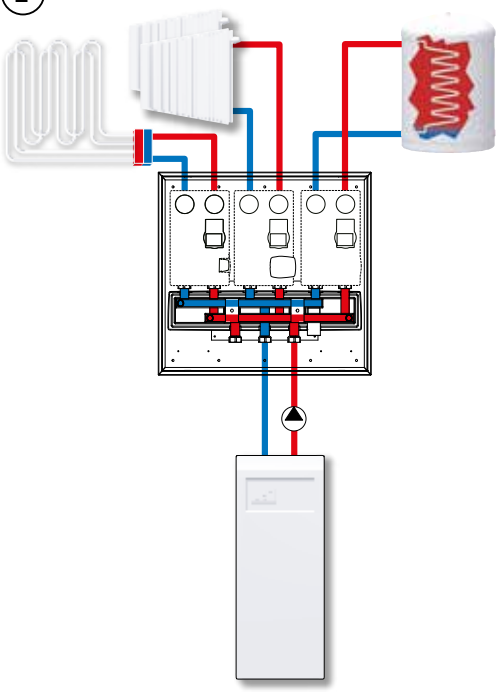
INSTALLATION EXAMPLES

D



E



F