INSTALLATION AND OPERATING MANUAL

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BBM 870 manifold for two circuits for BPS pump groups

NOTE!

The product may only be used if you have fully read and understood these operating instructions. The manual is also available on the AFRISO websites on the Internet.

WARNING!

The BBM 870 manifold must only be installed, commissioned, operated and dismantled by properly qualified and trained personnel.

Changes and modifications carried out by unauthorised persons may cause danger and are prohibited for safety reasons.

Risk of scalding from hot medium - maintenance work must only be carried out once the system has cooled down completely. Otherwise, there is a risk of scalding from the hot medium.

APPLICATION

The BBM 870 manifold is used in heating and cooling systems. It is installed between the heat/cooling source and the system or BPS pump groups. It connects two BPS pump groups to the heat/cooling source or buffer tank.

PREDICTABLE INCORRECT APPLICATION

The BBM 870 manifold is not intended for use in the following cases or with the following media:

- mixtures of water and glycol with a glycol concentration exceeding 50%, steam, oil, petrol or drinking water;
- for safety-related purposes;
- under conditions exceeding the maximum permissible pressure and temperature parameters for the medium.

DESCRIPTION AND SCOPE OF DELIVERY

The BBM manifold is constructed from a galvanised steel housing, allowing for the connection of two heating/cooling circuits. The connections on the source side are spaced to allow direct connection to ABT AFRISO buffer tanks. To connect the manifold directly to an ABT buffer tank, use a proper G1" F fitting (not included in the scope of delivery). In addition, the manifold is fitted with a manual air vent and a KFE drain valve. A wall holder is included with the manifold.

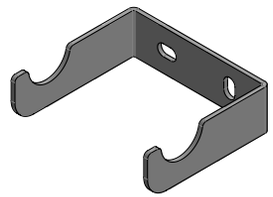
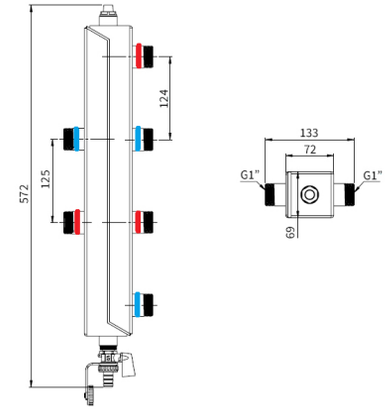


Fig. 1. Holder for the BBM 870 manifold

DIMENSIONS [mm]



MOUNTING

Before mounting the BBM manifold, the system must be thoroughly flushed, taking particular care to remove any residues from soldering, pipe cutting, etc. To provide protection against contamination and corrosion, it is recommended to install an ADS AFRISO magnetic dirt separator within the system and to use the BCI AFRISO corrosion inhibitor.

he BBM 870 can be installed either vertically or horizontally. For vertical installation, the manifold must be fitted so that the manual air vent is at the top and the drain valve at the bottom. In the case of horizontal installation, venting and draining of dirt from the manifold will not be effective. In this case, provision must be made for the installation of an additional air vent (e.g. Art. No. 77 735 10) and a mesh filter at another point in the system.

The manifold should be suspended using the wall holder supplied or mounted directly onto the ABT buffer tank. The holder must be fixed to the wall using proper fixing plugs, which are not included in the kit. The heat/cooling source must be connected to the manifold using G1" threads, taking care to match the thread markings. Connect the supply to the thread marked red, and the return from the system to the thread marked blue. Connect the individual circuits leading to the system to the connections on the other side of the manifold in accordance with the markings on the threads: red = supply, blue = return from the system (Fig. 2, Fig. 3).

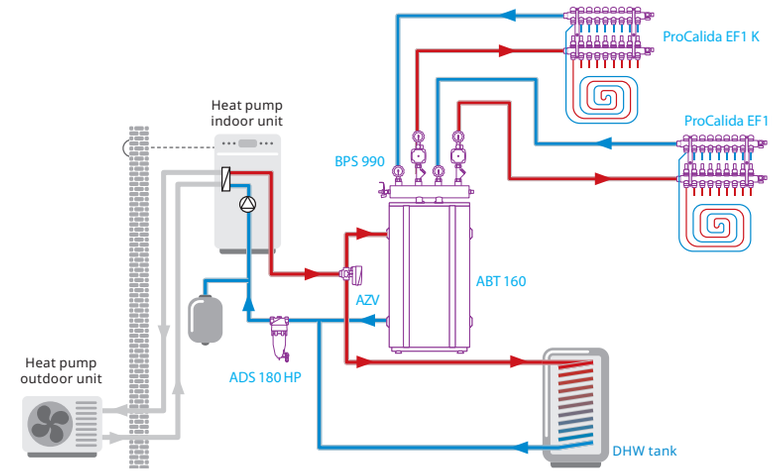


Fig. 2. Example connection diagram for the BBM 870 manifold with an ABT 160 buffer tank in a split-type heat pump system

MOUNTING

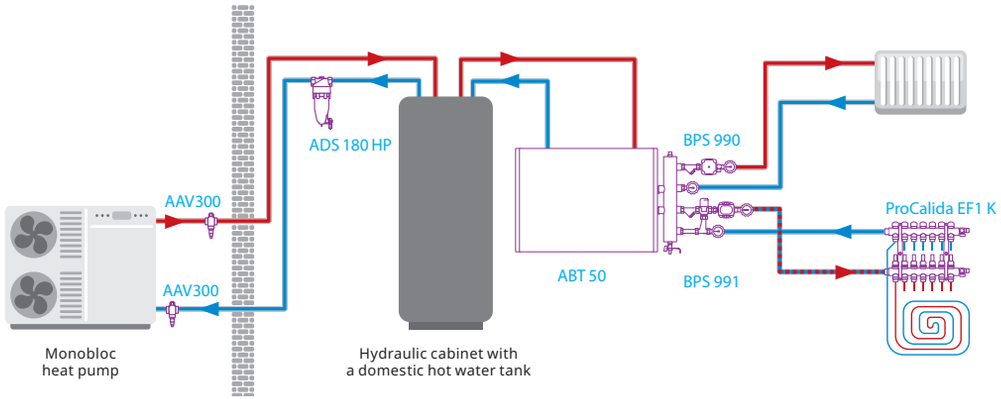


Fig. 3. Example connection diagram of the BBM 870 manifold with an ABT 50 buffer tank in a system with a monobloc heat pump

TECHNICAL DATA

Parameter / part	Value / material
Installation-side connections	G1”
Accessory connections	G½” F
Flow	max. 2,0 m^3/h
Power	max. 35 kW at ΔT = 15 K
Operating pressure	max. 6 bar
Operating temperature	max. 90°C
Glycol concentration	max. 50%
Manifold housing	galvanized steel
Manual air vent	G½”
KFE drain valve	nickel-plated, G½”

MAINTENANCE

The connections should be checked periodically for leaks. It is recommended that the KFE drain valve and the manual air vent be used at regular intervals to remove any accumulated air and dirt from the manifold.

APPROVALS AND CERTIFICATES

The BBM 870 manifold is subject to the Pressure Directive 2014/68/EU and is not CE marked in accordance with Article 4.3 (recognised engineering practice).

DECOMMISSIONING, DISPOSAL

1. Dismount the product.
2. Dispose of the product according to local directives and guidelines.

The product is built from recyclable materials. If you have any questions or problems with disposal, please contact the appropriate distributor or manufacturer’s point.

WARRANTY

Product guarantee in accordance with the general conditions of sale and delivery.

CUSTOMER SATISFACTION

For AFRISO customer satisfaction is paramount. If you have any questions, suggestions or product problems, please contact us.

ACCESSORIES

The two-piece insulation for the BBM 870 manifold, made from PPE, effectively reduces heat loss.

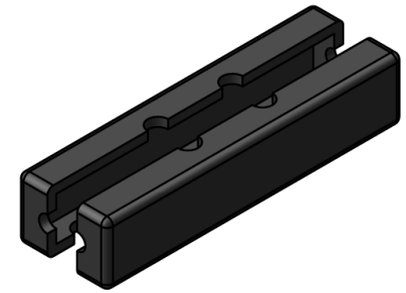


Fig. 4. Two-piece insulation for the BBM 870 manifold, Art. No. 90 800 09