

R158A-1



Water
Management

Thermal balancing valve

Datasheet
1217EN 09/2026



The R158A-1 thermal balancing valve is designed for use in hot domestic water recirculation systems, where it ensures that the required temperature is maintained throughout the network.

The valve automatically regulates the flow rate according to the detected temperature, ensuring proper thermal balancing of the system.

The desired temperature can be easily set using the graduated adjustment knob, while the integrated thermometer allows quick and direct verification of the valve's operation.

➤ Versions and product codes

PRODUCT CODE	CONNECTIONS
R158AY013	G 1/2" F
R158AY014	G 3/4" F

➤ Technical data

Performance

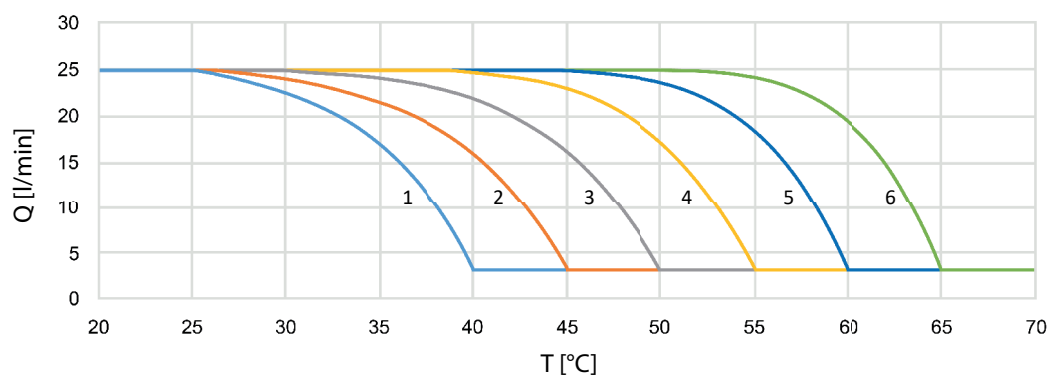
- Fluids of use: domestic water
- Max. inlet temperature: 90 °C
- Temperature setting range: 40÷65 °C
- Temperature stability: ±2 °C
- Max. working pressure: 16 bar
- Max. differential pressure: 2 bar
- Kv: 1,5
- Kv min: 0,15*

Materials

- Body: EN 12165 CW625N brass (Pb ≤ 1,6%, DZR)
- Spring: stainless steel
- Seals: EPDM
- Other internal components: EN 12164 CW625N brass, PSU

* The valve does not close completely, but always ensures that a minimum flow rate passes through.

Temperature adjustment curves



Installation



⚠ WARNING. Installation must be performed by qualified personnel in accordance with the instructions included in the packaging.

- The valve can be installed in any position, provided that the flow direction indicated by the arrow on the valve body is observed.
- Please check that all components are included in the package before installing the product.
- Before installing the R158A-1, ensure that the operating conditions fall within the thermostatic regulator's operating range. This includes, in example, checking the supply temperature, operating pressure, etc.
- The system in which the R158A-1 is to be installed must be flushed to remove any residues accumulated during installation.

Failure to remove dirt or debris may compromise the product's performance and void the manufacturer's warranty.

- Filters with an adequate filtration capacity must always be installed at the water supply inlet.
- In areas with particularly aggressive water, water treatment systems must be installed before the water comes into contact with the valve.
- The valve must be installed in accordance with these instructions and in compliance with all applicable regulations and standards in force at the installation site.
- It is essential that the valve remains fully accessible for periodic maintenance operations.
- The inlet and outlet pipes must not be used to support the weight of the valve.

► Commissioning

After installation, the valve must be tested and commissioned in accordance with the applicable regulations and standards:

- It is recommended that the temperature be set using a suitable calibrated digital thermometer. The valve must be commissioned by measuring the temperature of the water delivered at the point of use.
- The maximum outlet temperature of the valve must be set taking into account any variations due to simultaneous usage. It is essential that these conditions are stable before commissioning.
- Set the temperature using the adjustment knob on the valve.

► Operation

The integrated sensor features low thermal inertia, which enables the valve to respond quickly to changes in inlet conditions, ensuring fast response times.

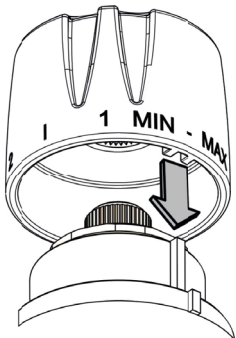
The thermal balancing function is performed by the thermostatic sensor, which automatically regulates the flow rate according to the detected temperature, helping to achieve the desired temperature in all branches of the recirculation network.

When the temperature in a branch is below the set value, the thermostatic element brings the valve to its fully open position, maximizing the recirculation flow rate in that section. Instead, when the set temperature is reached, the valve gradually closes, reducing the water flow rate to a minimum and promoting circulation through the other branches of the network.

To set the temperature, turn the adjustment knob until the indicator aligns with the desired value on the temperature scale.

If required, the valve can be locked at the preset temperature by proceeding as follows:

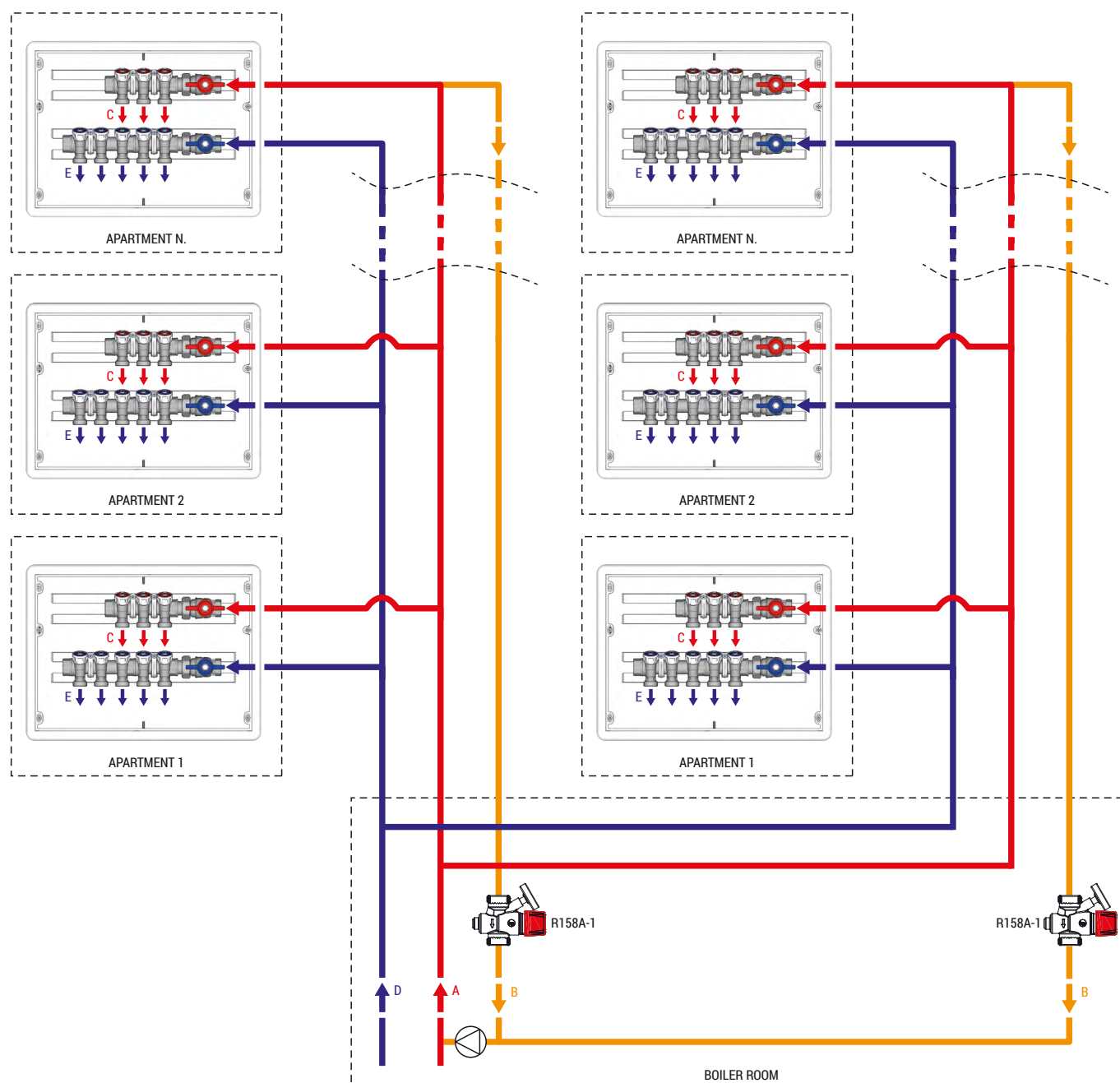
- 1) Unscrew the retaining screw.
- 2) Remove the knob by lifting it from the valve and reposition it on the splined shaft so that the internal notch is aligned with the position indicator on the valve body.
- 3) Reinstall and tighten the retaining screw.



► Maintenance

To ensure the continued efficiency of the device, its correct operation should be checked periodically, at least once every 12 months.

Example of application diagram



A Hot domestic water inlet

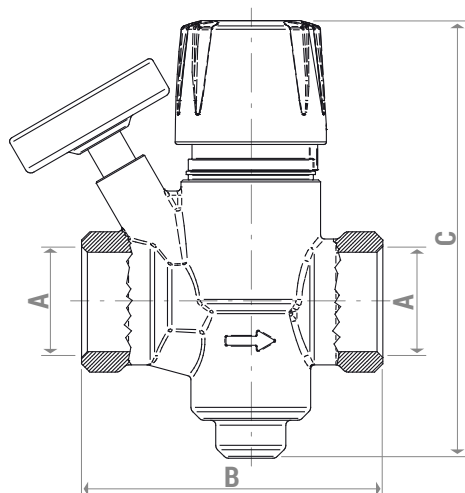
B Hot domestic water recirculation

C Hot domestic water outlet

D Cold domestic water inlet

E Cold domestic water outlet

➤ Dimensions



PRODUCT CODE	A	B [mm]	C [mm]
R158AY013	G 1/2"F	70	113
R158AY014	G 3/4"F	70	113

➤ Product specifications

R158A-1

Thermal balancing valve for automatic temperature control in the recirculation system. Fluids of use: domestic water. Max. inlet temperature: 90 °C. Temperature setting range: 40÷65 °C. Temperature stability: ±2 °C. Max. working pressure: 16 bar. Max. differential pressure: 2 bar. Kv: 1,5. Kv min: 0,15. Body: EN 12165 CW625N brass (Pb ≤ 1,6%, DZR). Spring: stainless steel. Seals: EPDM. Other internal components: EN 12164 CW625N brass, PSU

⚠ Safety Warning. Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

♻ Package Disposal. Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

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🗑 Product Disposal. Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.