R140C-1

Energy Management

Compact safety valve for use in HVAC and domestic water systems

Datasheet
0505EN 11/2026



R140C-1

R140C-1 safety valves are used in hot and cold water distribution systems for domestic and/or heating/cooling applications. The valves comply with the "PED" Directive 2014/68/EU. The user must ensure that the safety valves are set to the calibration recommended by the manufacturer and indicated on the coloured cap, and must avoid any intervention that could compromise their operation.

CONFORMITY DECLARATION
Frame the QR code with your smartphone or tablet to view the conformity declaration.

Versions and product codes

SERIES	PRODUCT CODE	CONNECTIONS	FACTORY SETTING [bar]
R140C-1	R140CY002	G 1/2"F x G 3/4"F	2,5
	R140CY010	G 1/2"F x G 3/4"F	7
	R140CY011	G 1/2"F x G 3/4"F	8

Technical data

Performance
- Fluids of use: domestic water, water with glycol for HVAC systems
- Max. glycol percentage: 50%
- Temperature range: 5÷110 °C
- Max. working pressure: 10 bar
- Opening overpressure: 20 %
- Closure range: 20 %
- PED Cat.: IV

Materials
- Body: brass EN 12165 CW617N
- Membrane: EPDM
- Separator: brass EN 12164 CW617N
- Stem: brass EN 12164 CW617N
- Gasket: synthetic fibre
- Spring: steel
- Spring retainer: brass EN 12164 CW617N
- Bonnet: PARA
- Knob: POM

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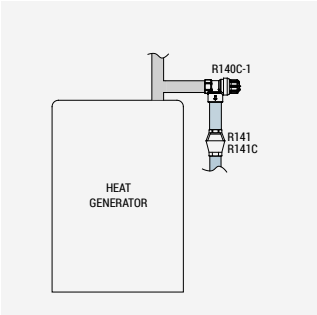
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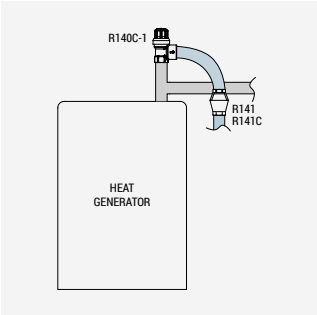
PRODUCT CODE	CONNECTIONS	Ø ORIFICE [mm]	NET CROSS SECTION [mm²]	CALIBRATION PRESSURE [bar]	OPENING OVERPRESSURE [bar]	CLOSING PRESSURE [bar]	HEATING - DOMESTIC WATER			
							OUTFLOW COEFFICIENT K_d	DISCHARGE CAPACITY [kg/h]	GENERATOR CAPACITY [kW]	GENERATOR CAPACITY [kcal/h]
R140CY002	G 1/2"F x G 3/4"F	13	132,665	2,5	3	2	0,395	138,62	80,4	69128
R140CY010				7	8,4	5,6		231,95	134,5	115674
R140CY011				8	9,6	6,4		247,96	143,8	123661

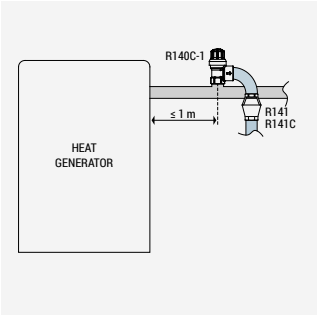
Installation

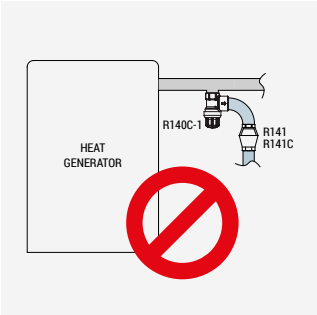
Before installing the R140C-1 safety valves, authorised personnel must ensure they are correctly sized in accordance with current regulations.
The safety valves must be installed at the highest point of the heat generator or on the supply pipe, at a distance of no more than 1 m, and must be clearly visible and easily accessible.
The pipe connecting the safety valve to the heat generator must be free of shut-off valves and have a diameter no smaller than that of the valve itself.
The safety valve's discharge must be clearly visible and channelled into a pipe with a diameter no smaller than that of the valve itself, using an R141 or R141C series collection funnel where necessary.

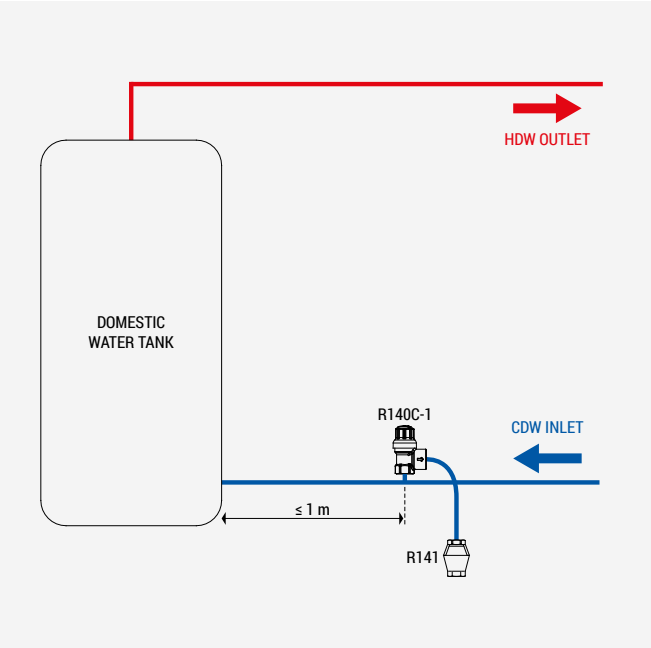
⚠ **WARNING.** The safety valves can be assembled vertically or horizontally, but not upside down (to prevent system impurities from settling); respect the flow direction indicated by the arrow on the body.











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Operation

When the thrust of the pressurised fluid overcomes the reaction of the counteracting spring acting on the stopper, the valve discharges a specific quantity of fluid, preventing the set pressure from being exceeded, and closes again within the permitted closing clearance.

Maintenance

The valve must be checked at least once a year by increasing the system pressure until it discharges. If this is not possible, the knob can be turned and the discharge checked visually. Any deposits that have formed on the seat can be removed by periodic flushing.

Relief funnels

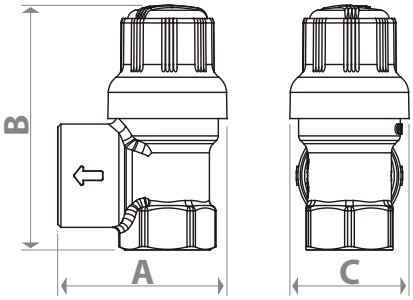
R141 SERIES	R141C SERIES	SAFETY VALVE DISCHARGE CONNECTION SIZE
		
R141Y014	R141CY004	3/4"

The discharge from the safety valves should be channelled using the dedicated R141 or R141C relief funnels (to be ordered separately).

NOTE. The use of the R141 relief funnels (plus curved couplings R19 and R189 if necessary) prevents any spray from reaching the electric components.

Dimensions

R140C-1



PRODUCT CODE	CONNECTIONS	DIMENSIONIS AxBxC [mm]
R140CY002	G 1/2"F x G 3/4"F	53 x 76 x 37
R140CY010		
R140CY011		

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Product specifications

R140C-1

Compact safety valve for use in hot and cold water distribution systems for domestic and/or heating/cooling applications. Available with female-female threaded connections G 1/2"F x G 3/4"F. Fluids of use: domestic water, water with glycol for HVAC systems. Max. glycol percentage: 50%. Temperature range: 5÷110 °C. Max. working pressure: 10 bar. Opening overpressure: 20 %. Closure range: 20 %. Complies with the "PED" Directive 2014/68/EU (Cat. IV). Body: brass EN 12165 CW617N. Membrane: EPDM. Separator: brass EN 12164 CW617N. Stem: brass EN 12164 CW617N. Gasket: synthetic fibre. Spring: steel. Spring retainer: brass EN 12164 CW617N. Bonnet: PARA. Knob: POM. Factory setting: 2,5 – 7 – 8 bar.

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.

Additional information. For more information, go to giacomini.com or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

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.

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