BOILER ROOM COMPONENTS

0377EN October 2013

COMPACT SAFETY VALVE FOR SOLAR THERMAL HEATING R140C SERIES





Descrizione

The Giacomini R140C safety valves series are used in solar thermal systems using or glycol solutions (max. 50 %), with closed expansion tank, in order to guarantee that the pressure of the fluid of the circuits does not exceedthe project limits. In copliance with "PED" 97/23/CE, cat. IV directive.

Versions and product code

Series	Product code	Connections	Pressure [bar]	
R140C	R140CY006	1/2"F x 3/4"F	4 (green cap)	
R140C	R140CY009	1/2 F X 3/4 F	6 (yellow cap)	

Technical data

- Fluids: water and glycol solutions (max. 50 %)
- •Temperature range: 5÷160 °C
 - -20÷160 °C only with glycol solutions 50 %
- Nominal pressure: 10 bar
- Opening overpressure: 20 %
- Closure range 20 %
- PED cat.: IV

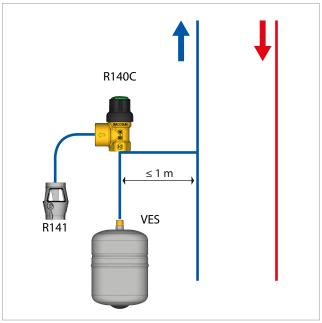
Materials

- Body in brass UNI EN 12165 CW617N
- Membrane in EPDM
- Separator in brass UNI EN 12164 CW614N
- Rod in brass UNI EN 12164 CW614N
- Gasket in synthetic fibre
- Spring in steel
- Spring presser in brass UNI EN 12164 CW614N
- Bonnet in IXEF
- Knob in POM
- Cap in ABS or MABS

Installation

Before installing any safety valve, it is necessary that the specialist technical personnel in charge of the system carries put the corrected sizing, in accordance with the local codes.

The R140C safety valves series must be mounted in vertical positions, in order to avid the deposit of the impurities contained in the system, and in line with the sense of fliw indicated from the arrow on the body. The safety valves, moreover, must be installed in the coldest part of the system (corresponding to the solar manifolds delivery, as showed in figure), cleary visible and easy controllable. The connecting pipework of the safety valve must be a maximum of 1 m long, without any restriction, and its diameter not lower than the one of the inlet connection. The discharge of the safety valve must be cleary visible and carried in pipework with diameter not lower than one of the outlet connection.





Warning

In order to avoid situations of danger for property and/or individuals, during the installation, commissioning and maintenance of the safety valves, it is important to respect all the technique norms and the indications contained in the present document.

Maintenance

The inspection of the valve must be carried out at least once per year, increasing the pressure of the system until the discarge. If this were not possible, the handle can be turned and the discharge controlled at sight. The eventual impurities formed on the seat can be removed by means of periodic cleaning.

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Prestations

				HEATING - HOT SANITARY WATER			WATER SYSTEMS	
Product code	Connections	Orifice diameter [mm]	Calibration pressure [bar]	Outflow coefficient K _d	Drainage capacity [kg/h]	Maximum generator potential [kW]	Outflow coefficient K _L	Drainage capacity [kg/h]
R140CY006	1/2"F x 3/4"F	13	4	- 0,60	376	218	- 0,39	5563
R140CY009			6		529	307		6814

Data calculated in accordance with UNI EN ISO 4126-1. Maximum generator power calculated as the product of the drainage capacity multiplied by the fluid vaporisation heat, at ambient pressure W = 1,013 bar

Dimensions

Series	Product code	Connections	Dimensions (LxHxP) [mm]	Relief funnel
R140C	R140CY006	1/2″5 2/4″5	F2 76 27	R141Y014
R140C	R140CY009	1/2"F x 3/4"F	53 x 76 x 37	K1411014

Accessories

It should channel the discharge of safety valves using the appropriate funnels exhaust R141 (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.

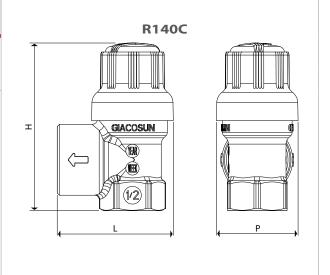
Normative references

"R" collection

INAIL (I.S.P.E.S.L.) "R" collection for boiler room safety, protection and checks: italian D.M. 1.12.75.

PED

European Pressure Equipment Directive (97/23/EC).



Additional information

For further information, visit the website www.giacomini.com or contact the technical service: 😤 +39 0322 923372 👢 +39 0322 923255 🖂 consulenza.prodotti@giacomini.com
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