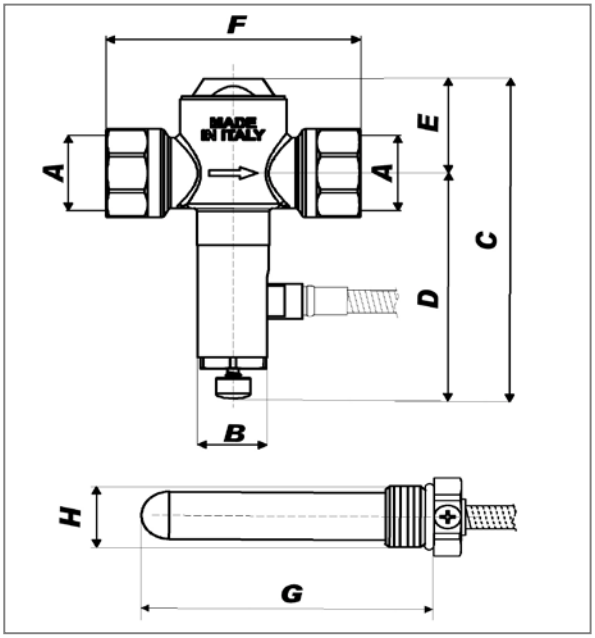
ART. 608 - HEAT RELEASE SAFETY VALVE

TECHNICAL DATA SHEET 09/2017 - ENG

FUNCTION

A heat release safety valve is a device which limits the temperature of water in boilers fitted with a hot water tank or a heat exchanger.
When the water temperature, where the safety valve sensing element is immersed, reaches 95°C (±2°C) the valve gradually opens, releasing hot water from the boiler or heat exchanger to which it is connected to, and letting (where applicable with specific equipment) cold water flow into the system to bring the temperature within safe limits.
The device complies with En14597 and may be used in systems which comply with En12828 concerning boilers with power less than 100Kw.

PRODUCT & DIMENSIONS



TECHNICAL FEATURES

CONNECTIONS

Body:	Female G 3/4”
Trap:	Male G 1/2”
Capillary length:	1300 mm

MATERIALS USED

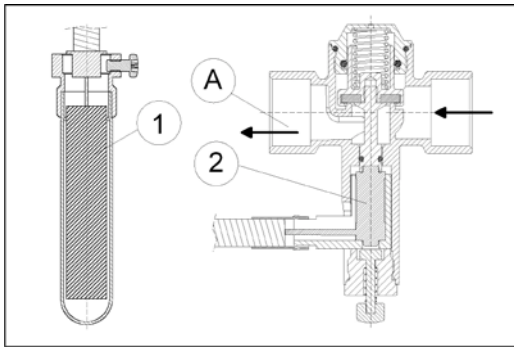
Body:	Brass CW617N - UNI 12165
Control rod:	Brass CW614N - UNI 12164
Shutter seal:	EPDM
O-Ring:	EPDM
Spring:	Carbon steel C70
Bellow support:	Grivory 40% Fiberglass
Reset button:	Nylon Pa66

PERFORMANCES

Max operating pressure:	10 bar
Discharge temperature:	95°C (±2°C)
Max sensor temperature:	122°C
Allowed fluid:	Water and glycol solutions
Max glycol percentage:	50%
Release flow:	2.28 m³/h (Δp= 1bar - 110°C)
Ambient temperature range:	0÷80°C

Code	A	B	C	D	E	F	G	H	Weight (Kg)
90608AE05	¾”	Ø21	109	77	32	74	85	½”	0.660

OPERATING PRINCIPLE



When the temperature of the water in the circuit increases, a liquid-gas conversion occurs inside the sensitive element (point 1 in the figure), resulting in increased volume inside the capillary and thus dilatation of the bellow (point 2), which presses against the shutter and opens passageway "A".

A red button on the lower part of the valve can be used to empty the system manually at any time.

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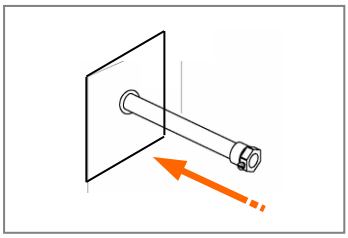
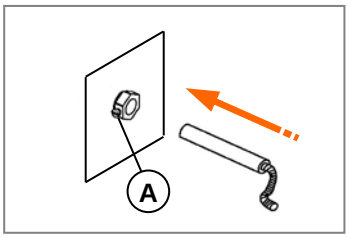
INSTALLATION

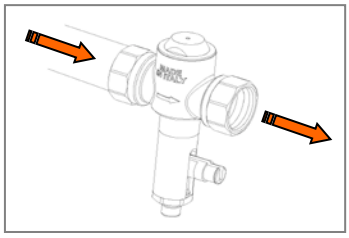
Before installing the safety valve please check that the system does not contain any impurities which might damage or obstruct the valve release seat. An inspectable filter should be mounted on the incoming cold water line. It is recommended that a pressure reducer be installed on the incoming cold water line, calibrated to the system operating pressure.
Check that the valve release capacity is compatible with the values specified by the boiler manufacturer.
The device must be installed by qualified technicians.



Mount the sensor holding trap on the upper part of the boiler or on the outgoing line, so that it comes before all on/off controls.

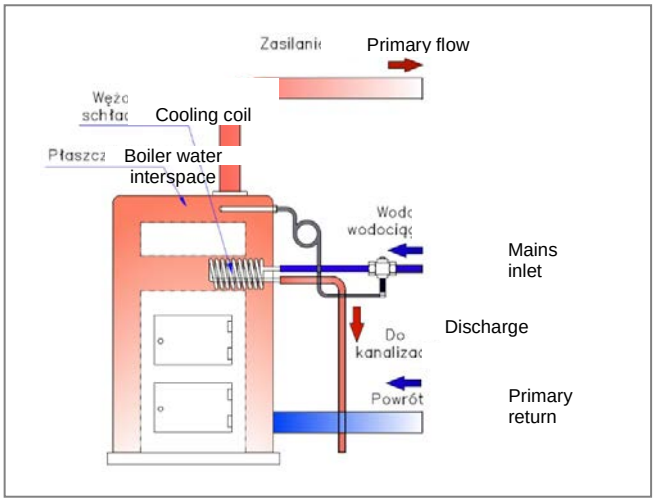


Insert the capillary in its trap and lock it with a screw (A).

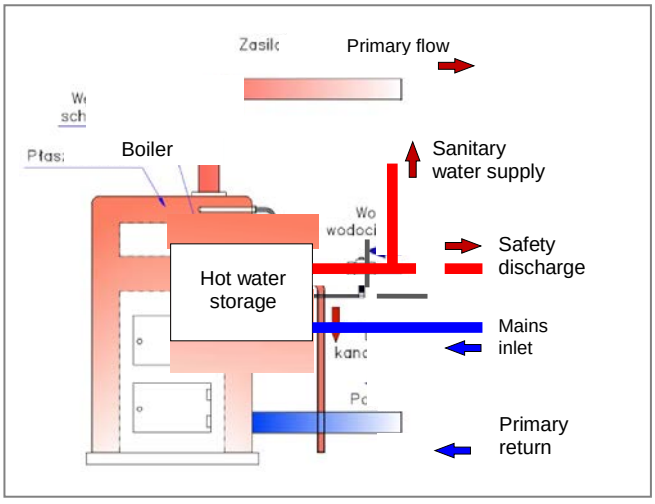


Mount the valve on the pipe according to the flow direction shown by an “ARROW” on the body.

INSTALLATION DIAGRAM



Installation in boilers fitted with emergency heat



Installation in boilers fitted with built-in heater

CONNECTIONS AND MAINTENANCE

To ensure correct use of the heat release safety valve, connect up the outlet with an outlet diameter the same as the diameter of the valve (do not connect with a reducing fitting).
The maximum distance from the heat generator must not exceed 2 metres and there must be no more than 2 curves in the pipe section.
There must not be upward sections in the drain pipe.
There is a red button in the lower part of the valve (see picture aside) which releases water manually when pressed.
It is recommended to repeat this operation regularly (at least every time the system is started up again) to check that the device is working properly.