

Safety units for hot water storage heaters

5261 series



01019/23 EN

replaces 01019/10 GB



Function

Safety units are used to protect hot water storage heaters in domestic water systems.

They are composed of various components that perform the following functions:

- safety, to prevent the pressure of the medium in the storage heaters from reaching dangerous limits
- anti-pollution, to prevent hot water from flowing back into the cold water supply system
- shut-off, to isolate the mains system for maintenance and checks on the boiler circuit.

The safety units, installation of which is compulsory according to current regulations, **are certified as meeting the requirements of European standard EN 1487.**



Product range

Code 526142/50/52 Safety unit for hot water storage heaters sizes DN 15 (1/2") and DN 20 (3/4")
 Code 526151/53/63 Safety unit for hot water storage heaters, horizontal installation DN size 20 (3/4") and DN 25 (1")
 Code 319601 U trap for safety unit size 1" F x Ø 32/25 mm

Technical specifications

Materials

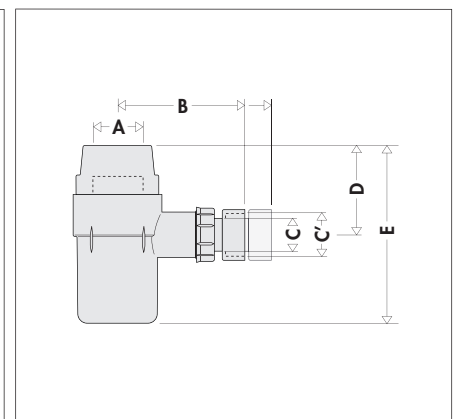
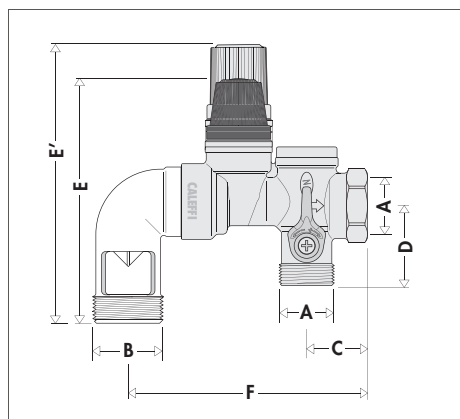
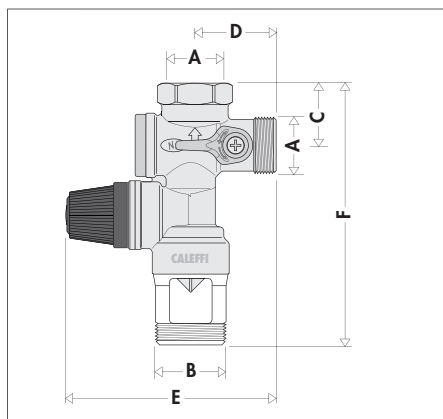
Body: - DN 15 and DN 20: brass EN 12165 CW617N chrome plated
 - DN 25: brass EN 12165 CW617N
 Ball valve: brass EN 12164 CW614N
 Check valve: brass EN 12164 CW614N
 Safety relief valve obturator: EPDM
 Safety relief valve seat:
 - 526150/51: brass EN 12165 CW617N
 - 526142/52/53/63: stainless steel EN 10088-3 (AISI 303)
 Hydraulic seals: EPDM
 Safety relief valve spring: stainless steel EN 10270-1
 Check valve spring: stainless steel EN 10270-3 (AISI 302)

Performance

Medium: water
 Maximum working temperature: 120 °C
 Maximum working pressure: 10 bar
 Safety relief valve setting pressure: 7 bar

Threaded connections:
 inlet 1/2"– 1" M (ISO 228-1)
 outlet 1/2"– 1" F (ISO 228-1)
 drain 1" M (ISO 228-1)

Dimensions



Code	DN	A	B	C	D	E	F	Mass (kg)
526142	15	1/2"	1"	29	38	98,5	122	0,46
526150	20	3/4"	1"	29	38	98,5	122	0,45
526152	20	3/4"	1"	29	38	98,5	122	0,45

Code	DN	A	B	C	D	E	E'	F	Mass (kg)
526151	20	3/4"	1"	29	38	114	-	116,5	0,49
526153	20	3/4"	1"	29	38	114	-	116,5	0,49
526163	25	1"	1"	29	38	-	134	116,5	0,49

Code	DN	A	B	C	C'	D	E	Mass (kg)
319601	25	1"	83-100	Ø25	Ø32	55	117	0,08

Discharge flow rate at 8.4 bar (+20 % Po):

- with water: > 325 l/h (DN 15); > 650 l/h (DN 20); 1,300 l/h (DN 25)
- with vapour: > 100 kg/h (DN 15); > 225 kg/h (DN 20); 325 kg/h (DN 25)

Safety unit size	Heater maximum power output ----- for direct heater EN 1487	Heater maximum power output ----- for indirect heater EN 1488	Maximum heater volume EN 1488
DN 15	4 kW	75 kW	200 l
DN 20	10 kW	150 kW	1000 l
DN 25	18 kW	250 kW	5000 l

For more details see EN 1487 - par. 12

Normative references

Decree dated 22 January 2008, no. 37. Regulation concerning provisions for system installation activities.

- Article 6 of the Decree "Creation and installation of systems" obliges installer companies to create systems according to the highest standards, in compliance with current legislation. Systems created in compliance with current legislation and with EN and CEI standards are considered to be implemented according to the highest standards.

EN 806-2:2008 standard

This standard provides recommendations and specifies the requirements for designing potable water systems in buildings.

- In point 10.2.3 "Temperature and hydraulic control units", the standard requires hydraulic control units to comply with EN 1487.

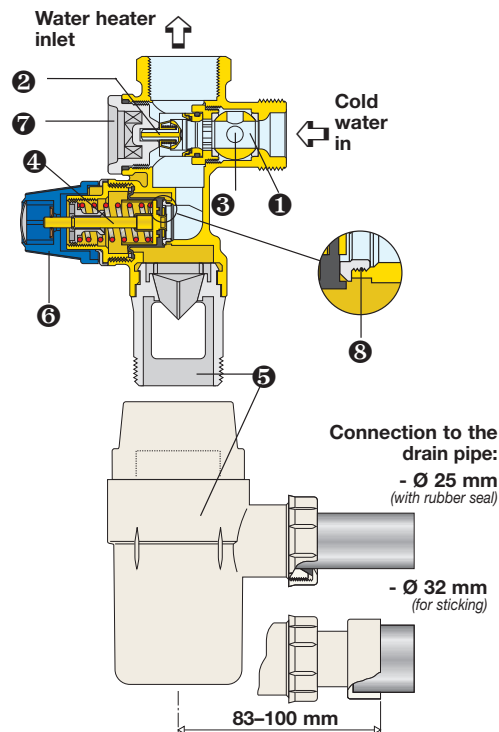
Product certified in accordance with the EN 1487 European standard.

European Standard EN 1487:2014, under the heading "Building valves - Hydraulic safety groups - Tests and requirements", describes build and performance specifications of safety units for hot water storage heaters.

Caleffi 5261 series safety units are certified by the CSTB and Belgaqua Certifying Authorities as compliant with the requirements of European Standard EN 1487.

Characteristic components

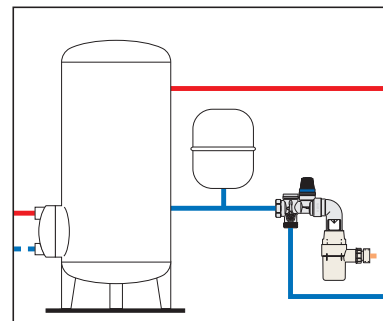
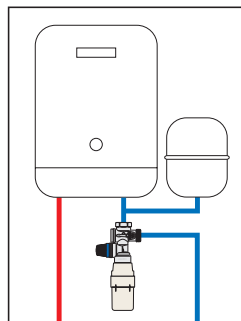
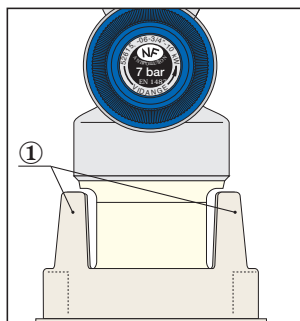
- ① Shut-off cock
- ② Check valve, EA type
- ③ Hole for checking that the check valve is working
- ④ Safety relief valve
- ⑤ U trap and backflow prevention air ports
- ⑥ Manual discharge knob
- ⑦ Plug for replacing the check valve
- ⑧ Stainless steel seat



Application diagrams

U trap

The U trap, positioned at the safety relief valve outlet, must conform to the size requirements specified by standard EN 1487 and drainage must take place without water leaks occurring. For this reason, 319 series U traps have special **side dividers** ① which collect sprays of water during safety relief valve drainage and channel them to the sewerage system.



SPECIFICATION SUMMARY

Code 526142/50/52

Safety unit for water heaters. Certified to EN standard 1487. Brass body. With shut-off valve and EA type controllable check valve. Safety relief valve seat in stainless steel (526142/52) and in brass (526150). DN size 15 (DN 15 and DN 20). Water heater connection 1/2" (3/4") F (ISO 228-1). Drain connection 1" M (ISO 228-1). Chrome plated. EPDM seals. Maximum working temperature 120 °C. Maximum working pressure 10 bar. Safety relief valve setting pressure 7 bar.

Code 526151/53/63

Safety unit for water heaters, horizontal installation. Certified to EN standard 1487. Brass body. With shut-off valve and EA type controllable check valve. Safety relief valve seat in stainless steel (526153/63) and in brass (526151). DN size 20 (DN 20 and DN 25). Water heater connection 3/4" F (ISO 228-1). Drain connection 1" M (ISO 228-1). Chrome plated (526151/53). EPDM seals. Maximum working temperature 120 °C. Maximum working pressure 10 bar. Safety relief valve setting pressure 7 bar.

Code 319601

U trap for water heater safety unit as specified in standard EN 1487. Connection 1" F (ISO 228-1). In plastic.

We reserve the right to make changes and improvements to our products and the related technical data in this publication, at any time and without prior notice. The website www.caleffi.com always has the most up-to-date version of the document, which should be used for technical verifications.