

# Installation instructions for Boiler Safety Units DN15 - DN20



- ❶ Flow arrow
- ❷ Shut-off valve
- ❸ Test plug
- ❹ Relief valve
- ❺ 360° Rotatable funnel
- ❻ Adapter flexible hose

# DUCO

## General

- Water heaters (electric, gas or indirectly fuelled appliances) must have a boiler safety unit. The purpose of the use of this safety unit is
  - 1) supply of water
  - 2) being able to shut off the supply line
  - 3) protecting against overpressure of the water heater
  - 4) preventing warm water from flowing back into the cold water supply line.
- All DUCO boiler safety units DN15 and DN20 meet the European Standard EN1488 and the quality system meets NEN-EN-ISO 9001.

## Application

- The DUCO boiler safety units DN15 and DN20 can be mounted on aforementioned water heaters with a capacity of max. 75 kW (DN15 boiler safety unit) or 150 kW (DN20 boiler safety unit). While heating the water, the volume and pressure increase. This is when the relief valve comes into play (valve opens and drains (expansion) water through the funnel to the drain).
- Continuous operating temperature max. 65 °C/peak load max. 90 °C (1 hour)

## Safety

- Only install (and store) the DUCO boiler safety units in a dry, frost-free and easily accessible environment.
- No valves may be installed between the water heater and the boiler safety unit.
- Installation and maintenance must be carried out by qualified technical personnel in compliance with local regulations.
- The max. capacity of the water heater, including the pressure (bar) is indicated on the valve cap of the boiler safety unit.
- If the pipe pressure is too high, a pressure-reducing valve must be installed for the boiler safety unit. With a 6 bar boiler safety unit, the pipe pressure may not exceed 3.75 bar. With an 8 bar boiler safety unit, the pipe pressure may not exceed 5.25 bar.

## Installation

The following points are important for the correct operation of the boiler safety unit and the safety of the system:

- Assembly and disassembly must always be carried out on a cold or pressureless system.
- Flush the pipes thoroughly before installing the boiler safety unit.
- The boiler safety unit must be mounted on the cold water (supply) line of the water heater.
- **Pay close attention to:** the flow arrow indicated on the boiler safety unit.
- The funnel of the boiler safety unit is rotatable 360 degrees; this way, the boiler safety unit can be installed in any desired position while maintaining the correct position of the relief valve.
- **Note:** always place the funnel vertically downward.
- The drain pipe can be connected directly to the funnel of the boiler safety unit.

## Commissioning

- Vent the pipes and then close all hot water taps.
- Open the valve of the boiler safety unit.
- By manually lifting the relief valve (turn the valve knob to the left), water and air can be discharged (until no more air is discharged).
- While the water heater is warming up, water drips into the funnel. For safety reasons, this must not be interrupted.

## Maintenance and service

- The built-in check valve (KIWA) prevents water from flowing back into the cold (drinking) water pipe. The check valve must be annually checked (VEWIN): close the valve and carefully open the test plug; no water may continue to flow from it. After checking, carefully reinstall the test plug and open the valve again.
- also visually check the relief valve, the 2 compression connections on the cold water (supply) line and the funnel (drain) connections. The funnel must never be obstructed.
- The DUCO boiler safety unit is a safety product; we therefore recommend replacing it within 10 years.

## Disassembly

**Advice:** due to the risk of hot system water flowing out, always depressurise the system first. Then disassemble the boiler safety unit.



# PUCO

PenTec bv  
Edisonweg 7  
3442 AC Woerden  
The Netherlands

Tel. +31 (0)182 503 100  
E-mail [info@pentecbv.nl](mailto:info@pentecbv.nl)  
Internet [www.duco.nl](http://www.duco.nl)  
[www.pentecbv.nl](http://www.pentecbv.nl)