Connecting an electric boiler :

Check-list

1 The Safety Unit :

Main safety unit,
its installation is mandatory
(NF D 36 401 standard).

This appliance performs 4 functions :

✔ Protecting the hot water tank from excess pressure :

As the water temperature increases, the pressure also increases inside the water tank (dilation of the water).

For safety reasons, this pressure must be restricted to a value lower than the tank's safety pressure.
This function is carried out by the safety valve which is set at 7 bars.

✔ Isolating the hot water tank from the cold water supply :
This function is carried out by the stop valve (also part of the Safety Unit).

✔ Preventing a backflow of cold water into the cold water supply system :
A check valve prevents any backflow of hot water (which is under pressure in the tank) into the cold water supply system, as soon as the pressure in the tank becomes higher than that of the cold water supply.

✔ Draining the tank :
The tank is drained using the safety valve which can be activated manually, and once opened, the water held under pressure in the tank is drained out.
(Caution : make sure that the electrical connection of the tank has been previously disconnected. In addition, take precautions against burns during hot water drainage).

The drainage outlet on the Safety Unit, which comprises an air gap preventing any backflow of the drained water, should be connected to the drainage system.

2 Pressure reducing valves :

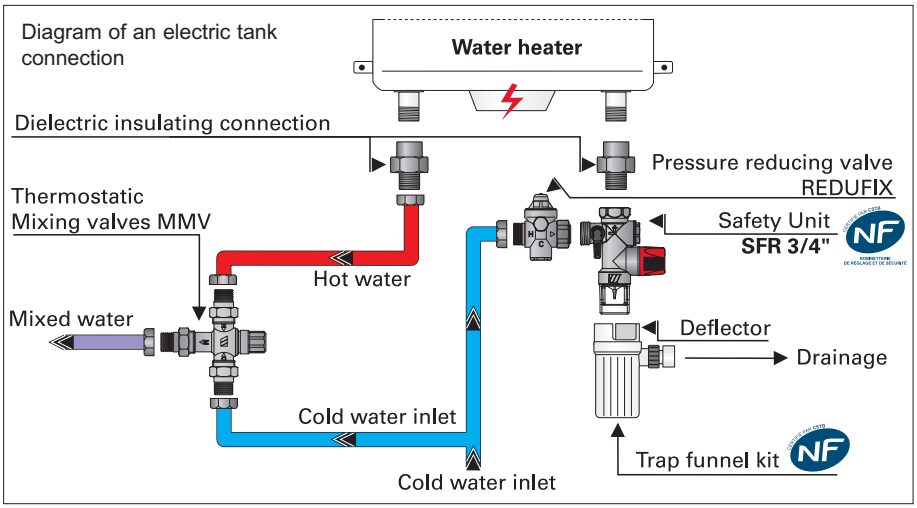
This reduces the pressure of the water that crosses it and provides an outlet preset and constant value.
The REDUFIX model protects, in particular, the electric tank and it is factory preset. During the night, when the pressure of the water distribution system increases (at night the pressure of the water distribution system increases with the reduction in the number of water consumers), the pressure reducer protects the tank against excess pressure, as well as prevents the opening of the Safety Unit valve.

4 The trap funnel kit :

As indicated by its name this part works as a trap : the screwing part is placed directly under the Safety Unit at the threaded male discharge in 1" (26x34).

The smooth part, to be glued, is connected to the drainage.

This trap complies with the requirements of the NF standard, with a sufficiently sized air gap and water gap, protecting the bad odours from evaporation



3 Dielectric insulating connection :

Two different metals, copper and steel (for example), coming in contact in an equipment results in corrosion risk. Copper and its alloys (such as brass) are cathodic, which associated with other metals foster "battery" phenomena and, as a result, cause faster corrosion and circulation of stray currents. The dielectric insulating connections provide connection of cold water tubulature (made of steel) of the Safety Unit tank (made of brass) without creating a "battery" phenomenon. This union fitting is removable, which facilitates installation.

We also recommend that the hot water outlet of the tank is protected with a dielectric insulating connection.
The Watts Industries dielectric insulating connections meet the requirements of the D.T.U. in the framework of the implementation of protection against the corrosion of some pipes including steel and copper components; in particular, this is the D.T.U 60.1 regarding sanitary plumbing in buildings.

5 The thermostatic mixing valves MMV :

This unit automatically mixes the hot water in the tank with the cold water in the water supply system.

It provides several functions :

- Safety : it automatically provides and stabilizes mixed water at the selected temperature.

- Saves hot water : the hot water pipe lines are only filled with mixed water.
A large supply of hot water is still available. The pipes and taps are highly protected against lime scale.

- Scald protection : rapid failsafe if cold water supply is interrupted.

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