

Title (en)
Monitoring device for overheating of a hot water heater with a pierced diaphragm

Title (de)
Überhitzungs-Überwachungsvorrichtung eines Heisswassererzeugers mit einer durchbohrte Membran

Title (fr)
Dispositif de contrôle de la surchauffe d'un générateur d'eau chaude à membrane déplaçable percée

Publication
EP 0990849 B1 20020403 (FR)

Application
EP 99402391 A 19990930

Priority
FR 9812371 A 19981002

Abstract (en)
[origin: EP0990849A1] The water heater (1) has a cold water input pipe (2) connected to a cold water circuit (3) and a hot water output pipe (4) connected to a hot water circuit (5). The overheating controller (30) has an enclosure (31) divided by a deformable membrane (34) in a cold chamber (32) and in a hot chamber (33). The membrane (34) has a first face (37) and a second face (38) respectively turned towards the hot (33) and the cold (32) chambers. The cold chamber (32) is at a pressure of that in the cold water circuit (3) and the hot chamber (33) is at the pressure of the hot water circuit (5), so that the membrane (34) is displaced due to the pressure difference between the chambers (32,33). The controller (30) has means (45), for limiting the temperature rise of the water contained in the cold chamber (32), which is supported on the membrane (34). The temperature limiter (45) includes a passage (46) through the membrane (34) so that the cold water in the chamber (32) can flow towards the hot chamber (33). The passage (46) has two orifices ending in the faces (37,38) of the membrane (34) the transversal section of each orifice (47,48) is greater than the transversal section of the passage (46).

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F23N 1/08; F24H 9/20

IPC 8 full level
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