

Title (en)

Single-piece multifunction valve for supplying and controlling a fluid intended for user appliances such as heating devices and the like

Title (de)

Einteiliges Multifunktionsventil zum Zuführen und Steuern einer Flüssigkeit für Benutzergeräte wie Heizvorrichtungen und dergleichen

Title (fr)

Soupape multifonction à pièce unique pour fournir et contrôler un fluide prévu pour les appareils d'utilisateur tels que les dispositifs de chauffage et similaires

Publication

EP 1895245 B1 20130814 (EN)

Application

EP 07075713 A 20070822

Priority

IT MI20061665 A 20060831

Abstract (en)

[origin: EP1895245A2] Single-piece multifunction valve for supplying and controlling hot water (C) supplied to user appliances (U) comprising a body (100) having formed inside it: a delivery branch (RM) for the hot fluid (C) substantially formed by an inlet aperture (101) and an outlet aperture (102) to the user appliances (U); a return branch (RR) for the cold fluid (F) from the user appliances (U), substantially formed by an inlet aperture (201) for the cold water (F); an outlet aperture (202) for return of the cold fluid to the boiler (CT); said delivery branch (RM) comprising at least a filtering chamber (110) terminating in an annular seat (111) for housing a filter (1000) and communicating with the exterior by means of an aperture (112) able to be closed/opened by means of an associated plug (113); a bypass chamber (120) communicating with the exterior by means of a substantially vertical aperture (121) able to house a bypass valve (2000) provided with an obturator (2001) able to come into contact with the seat (122a) of a first end of a vertical duct (122) suitable for connecting the delivery branch (RM) to the return branch (RR) of the valve; a temperature measuring chamber (130) which communicates with the exterior by means of a substantially vertical aperture (131) formed in the bottom side (100e) of the valve body and able to house a water temperature detection probe (3000) emitting a corresponding electric signal; and said return branch comprising at least a shut-off chamber (210) for the cold water (F) of the return branch (RR) communicating with the exterior by means of a substantially vertical aperture (212) and able to house a shut-off valve (4000) provided with an obturator (4001) which can be opened/closed by means of an associated actuator (4100) controlled by the control unit (5000) ; said shut-off chamber (210) being connected to the delivery branch (RM) by means of said vertical duct (122) of the bypass chamber (120) for recirculation of the fluid; a balancing chamber (220) communicating with the exterior by means of a substantially vertical aperture (221) formed in the upper side (100d) of the valve body and able to house a balancing valve (6000) provided with an obturator (6001) able to determine a greater/smaller flow of the cold return fluid.

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP2110620A1; CN107387375A; GB2553807A; ITBO20090616A1; EP2306097A3; DE202015006660U1; EP3147574A1; WO2014056228A1

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