

Title (en)

REGULATION APPARATUS FOR A GAS-FIRED WATER OR AIR HEATER WHICH IS CONTROLLABLE BY A TEMPERATURE SENSOR

Publication

EP 0036613 B1 19840606 (DE)

Application

EP 81101973 A 19810317

Priority

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- DE 3044678 A 19801127

Abstract (en)

[origin: EP0036613A1] 1. Regulating apparatus for a gas-fired water or air heater (51) which is controllable by a temperature sensor (11), comprising a control valve (1-5) for the supply of gas and a control member (31-39; 42, 43) controlled in the same sense for the supply of combustion air, characterized by the following features : a) a servo pressure regulator (10) compares the pressure at the outlet (5 or 39) of the gas control valve (1-5) or at the outlet of the air control member (31-39) with a set point value determined by the temperature sensor (11) and controls with its output pressure the actuator (2-4) of the gas control valve (1-5) as well as the actuator (31, 34, 35, 36; 43) of the air control member (31-36; 42, 43) ; b) the outlet (5) of the gas control valve (27) is connected to an injector nozzle (59) located opposite the inlet (58) of the burner (54) with said injector nozzle (59) simultaneously drawing off primary air for the burner ; c) the burner (54) and a heat exchanging surface (52) heated by the burner are surrounded by a closed housing (51) which includes a secondary air inlet (60) and a stack outlet (57) ; d) a second injector nozzle (61) is located opposite the secondary air inlet (60) and in operation draws off secondary air whereat a controllable source for air under pressure is connected as a control member to said second injector nozzle, with the control input (44; 45) of the air source being connected to the servo pressure regulator (10).

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