

Title (en)

EXCESS AIR VALVES FOR PRESSURE CONTROL

Title (de)

LUFTÜBERSCHUSSVENTILE ZUR DRUCKREGELUNG

Title (fr)

SOUPAPES ATMOSPHÉRIQUES DE SURPLUS POUR LA RÉGULATION DE PRESSION

Publication

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Application

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Abstract (en)

[origin: WO2016150459A1] The present invention describes a system (100) for storing thermal energy and a method for operating such a system (100). The system (100) comprises a thermal storage device (150) comprising heat storage elements, a heater device (130) for heating the working fluid, a steam generation device (110) for heating a steam turbine working fluid of a steam turbine system (120), a thermal excess storage device (180) for storing thermal energy, and an excess valve device (181) for controlling a flow of the working fluid between the thermal storage device (150) and a thermal excess storage device (180). If a working pressure of the working fluid in the thermal storage device (150) exceeds a predetermined set point pressure, an excess portion of the working fluid streams from the thermal storage device (150) into the thermal excess storage device (180). If a working pressure of the working fluid in the thermal storage device (150) falls below a predetermined set point pressure, a filling portion of the working fluid streams from the thermal excess storage device (180) to the steam generation device (110).

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