

Title (en)
EXPLOSION-PROOF APPARATUS WITH A FLAMEPROOF GAS FLOW PATH AND HEAT SINK

Title (de)
EXPLOSIONSGESCHÜTZTE VORRICHTUNG MIT ZÜND DURCHSCHLAGSICHEREM GASSTRÖMUNGSPFAD UND KÜHLKÖRPER

Title (fr)
DISPOSITIF ANTI-EXPLOSION COMPORTANT UN CHEMIN D'ÉCOULEMENT DE GAZ ANTI-DÉCHARGE D'ÉTINCELLE ET DISSIPATEUR THERMIQUE

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Application
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Abstract (en)
[origin: WO2020156848A1] The invention relates to an explosion-proof apparatus (20) with an explosion-proof housing (21) and a cooling device (43). The explosion-proof housing (21) has a plurality of outer walls (25-29) which enclose a housing interior (22) in an explosion-proof manner with respect to a surrounding area (23). A pressure-relief arrangement (32) of the cooling device (43) has at least one pressure-relief opening (33) with at least one gas-permeable, flameproof pressure-relief body (34). The at least one pressure-relief opening (33) passes through at least one of the outer walls (25-29). Thus, a flameproof gas flow path is formed between the housing interior (22) and the surrounding area (23). The cooling device (43) also has at least one heat sink (44) which forms at least one heat sink wall part (47) of one the outer walls (25, 26, 27, 28, 29) and which, as a heat sink wall part (47) of this outer wall (25, 26, 27, 28, 29), directly borders, on its outer face, the surrounding area (23) and directly borders, on its inner face, the housing interior (22). As a result of the explosion-pressure limiting action of the pressure-relief arrangement (32), a standard heat sink can be used to form the heat-sink wall part (47), which heat sink is formed, for example, by an extruded profile part.

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