

Abstract

Device for prevention against explosion of electrical transformers.

Device for prevention against explosion of an electrical transformer comprising an enclosure filled with combustible coolant, and a means for decompressing the enclosure of the transformer. The decompression means comprises a rupture element 1 with integrated explosion detector provided with a retention part 4 including first zones which have a reduced thickness in comparison with the rest of the retention part 4 and are capable of tearing without fragmenting when the said element 1 ruptures, and second zones which have reduced thickness in comparison with the rest of the retention part 4 and are capable of folding without tearing when the said element 1 ruptures. The said rupture element 1 is capable of breaking when the pressure inside the enclosure exceeds a predetermined ceiling.

The signal from an explosion detector integrated with the rupture disc triggers a cooling system and prevents oxygen from coming into contact with the explosive gases generated by the electric arc in contact with the oil.

Reference: Figure 1