

VACUUM SWITCHGEAR

ABSTRACT

The vacuum switchgear is composed of a metallic container (12) at a floating potential, two insulating bushings, and a pair of electrodes. A measuring terminal (50) for vacuum pressure diagnosis is installed opposite the metallic container (12), and the metallic container (12) and measuring terminal (50) are molded by an insulator (20) such as epoxy, and conductive paint (21) grounded is installed on the outer peripheral part of the insulator (20). The ground capacity of the metallic container (12) is increased by the conductive paint (21) grounded, so that the potential of the metallic container (12) during operation approaches the ground potential. When electricity is discharged between the main circuit and the metallic container when the vacuum pressure is deteriorated, the potential of the metallic container becomes equal to the system potential, so that by a potential rise at the system frequency generated in the metallic container (12), deterioration of the vacuum pressure can be detected.

Thereby, a signal processing circuit of a vacuum pressure diagnostic device for a vacuum switchgear is simplified and the cost of the vacuum switchgear is reduced.

Figure 1