Type EGA Voltage Range 145kV to 550kV
Condenser bushings for direct connection between metalclad SF₆ switchgear and outdoor equipment

Direct connection between metalclad SF₆ switchgear and outdoor equipment

The bushings in the EGA range are suitable for connecting outdoor equipment to SF₆ metalclad switchgear or ducting and may be mounted vertically, horizontally or at any angle between.

The primary insulation used in this range of bushings is condenser graded, epoxy resin impregnated paper – ERIP. The bushings are intended as alternatives to conventional gas-filled porcelain. Use of ERIP provides a compact bushing design which is completely free of oil. The lack of oil or pressurised gas in the bushing greatly minimises the risk of fire or explosion.

Used extensively for many years, ERIP has a proven reliability record in many applications and is virtually free of partial discharges at test voltages.

The cast epoxy insulation has inherent gas tight properties and combined with an effective sealing ring system provides security for the gas environment and a gas leakage rate of <10⁻⁴ torr litres per second is guaranteed. The design caters for the effect of differential expansion across the normal operating temperature range.

The connecting flange is impervious to gas and incorporates a self grounding test tapping for capacitance and tan delta measurement during periodical maintenance.

The bushing flange dimensions and design of the SF₆ terminal can be adapted to suit the specific requirements of the SF₆ equipment. The design of the outdoor terminal can also be adjusted to suit connections to the outdoor equipment or overhead lines.

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Terminal and flange dimensions may vary to suit requirements of both SF₆ and outdoor equipment.