Universal connection system for gas-insulated switchgear

The increasing popularity of gas-insulated switchgear called for the development of an appropriate connection to the bushing profile according to CENELEC HD 506S1, EN 50180 and EN 50181 type C (400/630A) and type A (250A).

For bushings to EN 50181 type C (400/630A):
The RICS and RCAB insulating adapter is compatible with all Raychem terminations and can thus be used to connect any type of cable, irrespective of whether it is paper or polymeric insulated or has one or three cores. For more details see below and on page 40.

The RSTI screened connection system is designed to connect polymeric insulated cables; details are given on page 42.

For bushings to EN 50181 type A (250A):
The RSES and RSSS screened connection system is a push-on termination for polymeric insulated cables, designed for the connection between the switchgear and the transformer; details are given on page 44.

Simplified installation
The compact design of the connection systems and their clear cut profiles simplify installation. Standard cabinets need no costly modifications to connect paper cables or surge arresters.

Reliability
With several decades of experience in the field of hermetically insulated termination systems for medium voltage applications, Raychem adapters are water tight and guarantee uninterrupted operation, even under extreme environmental conditions with severe pollution.

Tests
The adapters meet CENELEC HD 629.1 S2, IEC 540, VDE 0278 and ANSI IEEE 386 standards, as well as the Raychem specification PPS 3013, in addition they were type tested together with most switchgear. The test requirements and results are summarised in Raychem test reports, which are available on request.

Universal connection system for gas-insulated switchgear up to Um 24 kV

The insulated adapter termination system provides perfect sealing, electrical insulation and an electrical connection between Raychem terminations and gas-insulated switchgear up to 24 kV. It is designed to fit bushing profiles according to EN 50181 type C (400/630A). The insulating adapters are compatible with all Raychem terminations. The cable box of the switchgear must be provided with suitable protection against electro shock. This is usually achieved by self-locking metal covers the switchgear is generally equipped with. In addition it ensures that nobody can accidentally start working in an unearthed connection zone.

RICS – Insulated T-adapter with or without surge arrester
Thick walled insulator made of high quality elastomer with sealing face over the termination, bushing cone and plug. The electrical connection is made with a terminal stud and the cable lug of the termination. A special plug which allows cable testing without disconnecting the adapter is also offered. The design of the adapter for connecting the surge arrester is basically identical. The elastomer insulator has an additional lead-in duct for the surge arrester type RDA. Adapters for two cable connections are also available.

RCAB – Insulated straight adapter
A highly flexible insulator made of high quality elastomer provides a hermetic seal over the cone of the bushing and the termination. The cable lug of the termination is simply connected to a terminal stud with a screw and bolt. Even in confined spaces the adapter can be easily pulled down from the bushing giving access for e.g. cable testing. The high flexibility of the elastomer integrated in the design of the sealing interface allows to use the same product for all cable types and common cross sections.
Universal adapter system for all types of cables and your switchgear:

For technical information regarding connections to other switchgear please contact your local Tyco Electronics Raychem representative.