



RICS 3133

Application

Insulated T-adapter up to 12kV for S₆-insulated switchgear with bushings according to EN 50181 type C

This insulated adapter provides perfect sealing, electrical insulation and an electrical connection between terminations and SF₆-insulated switchgear up to 12 kV. It is designed to fit bushing profiles according to EN 50181 type C.

Design

Elastomeric RICS adapters are moulded parts which fit over the connection between the cable lug and the right-angled bushing of a gas insulated switchgear, where the air clearances are insufficient for normal operation.

The non-tracking elastomeric housing has excellent erosion resistance, dielectric properties and environmental resistance, giving superb performance in areas of high humidity and electrical stress.

RICS adapters are quick and easy to install and work in combination with all termination product lines. The adapter can easily be removed and reinstalled without the need for additional material or tooling, allowing access to the bushing connection for test purposes.

Features

- Non tracking elastomeric housing
- Erosion resistant
- Superb performance in areas of high humidity and electrical stress
- Quick and easy assembly
- Usable for various types of cable lugs (screwed, hexagonal and deep indent pressing).
- Cable sheath testing without dismantling the connector
- Only 1 size covering the complete application range from 70mm² up to 300mm² 12 kV.



TECHNICAL INFORMATION

Installation

The elastomeric body is simply pulled over a termination, even with bulky mechanical lugs, and covers a wide cross section range of 70-300 mm². A terminal stud with nut connects the cable lug of the termination with the bushing. The back end of the adapter is reliably sealed by a easy-to-remove, snap-in elastomeric cap.

Performance Tests

The RICS adapter is tested to CENELEC HD 629.1 S2:2006 and GOST requirements, including tests like AC, DC (60kV), BIL (95kV), longterm loadcycling at AC voltage 16kV phase/ground (2.5*U₀). All voltage tests were performed in confined metallic enclosures to generate highest electrical stresses. To test for electrical and moisture sealing in worst possible condition, even load-cycling under water with a test voltage of 16 kV phase/ground (2.5*U₀) was successfully passed.

RICS adapter selection table with most common Raychem terminations

Cross section (mm ²)	Ordering description T-Adapter	Termination for polymeric cables incl. Mechanical lugs
70 - 150	RICS-3133	IXSU-F3131-ML-2-17
95 - 240	RICS-3133	IXSU-F3131-ML-4-17
120 - 300	RICS-3133	IXSU-F3131-ML-5-17

Packaging

The insulating body, fixing bolts, terminal stud and cap are supplied in a 3-phase set complete with installation instruction. Cable terminations with lugs for M16 studs have to be ordered separately.

Adapters for other types of bushing and for other cable are available on request.

If required, a separate test rod is available to apply test voltage directly onto the cable stud inside the RICS adapter. Ordering descriptions are RICS-5002-50-24 for a 290 mm version and RICS-5002-50-25 for the long 390 mm version (2 normal, 1 long version needed for 3 phase testing).