

### Inline and Shield-Break Splice from 123 kV up to 170 kV EHVS

#### Application

The joint is a pre-fabricated three-piece design for voltage classes up to 170kV. Polymer-insulated cables of various designs can be adopted with respect to shielding and metal sheath. Cross sections up to 2500 mm<sup>2</sup> are applicable.

#### Features

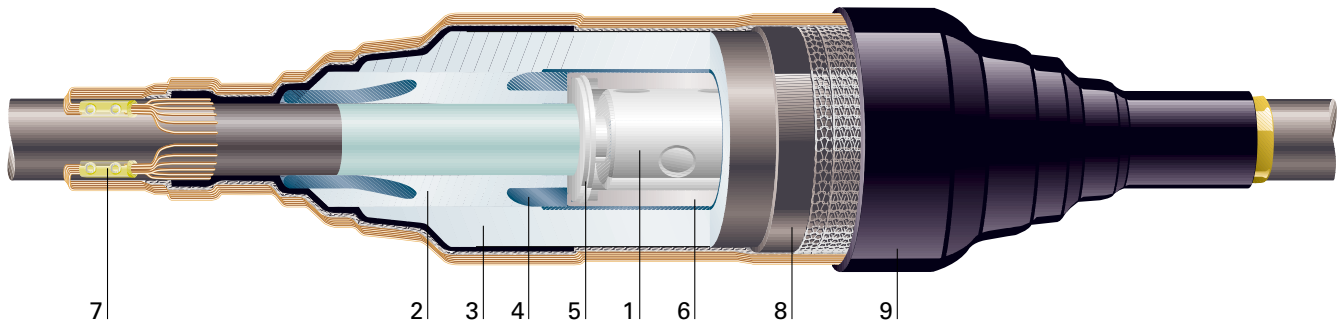
- Pre-fabricated three-piece splice design
- Using torque-controlled conductor sleeves
- Short cut-back dimensions
- Integrated moisture barrier using H/S components
- Can adapt shield-break applications
- Pre-fabricated and tested Si-rubber
- Type tested according to IEC 60840 and IEEE 404 standards



**Inline and Shield-Break Splice from 123 kV up to 170 kV**

- 1 Mechanical connector
- 2 Adaptor
- 3 Main body
- 4 HV electrodes
- 5 Fixing ring
- 6 Metal shielding clamp
- 7 Solderless shield connection
- 8 Conductive tubing
- 9 Outer sealing sleeve

	Dimensions			
Max. voltage	kV	123	145	170
Base impulse level	kV	550	650	750
Conductor size	mm <sup>2</sup> (Cu/Al)	1600	1600	1400
Max. outer diameter of the insulation screen	mm	≤ 92		
Length	mm	1200	1200	1200
Weight complete	kg	60	60	60



**Major Design Elements**

The splice consists of connector (1), cable adaptors (2) – including stress cones and main splice body (3) – containing Faraday cage (4) and outer serving by heat-shrink technology. The conductors of the cable are connected by a mechanical connector sleeve (1) using torque-controlled shear-off bolts. A metal shielding clamp (6) on top of the connector provides a smooth interface fit. A metal shielding clamp on top of this connector ensures perfect heat transmission. The fixing rings (5) keep the cable dielectric in position.

The Si-rubber cable adaptors (2), accommodating the various cable insulation diameters, will build up the connection area to an almost constant diameter. This makes it possible to cover four cross-section ranges with just one main insulation splice body (3). Cross-section transitions are feasible without any extra components. No extra tooling is needed to push-on the Si-rubber cable adaptors (2) and the Si-rubber splice main body (3) due to its excellent elasticity.

Mechanical solderless connector technologies (7) are used to connect metal shields – copper wires, metal sheath and CAS.

Heat-shrink technologies (8,9) replace the cable serving and the moisture barrier.

The joint concept is similar for the shield-break splices, despite the shield continuity. Special sealant components make it possible to use coaxial or double-insulated ground leads, and thereby to utilise the proven heat-shrink technology.

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale.

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