



Energy Division

# CSJT

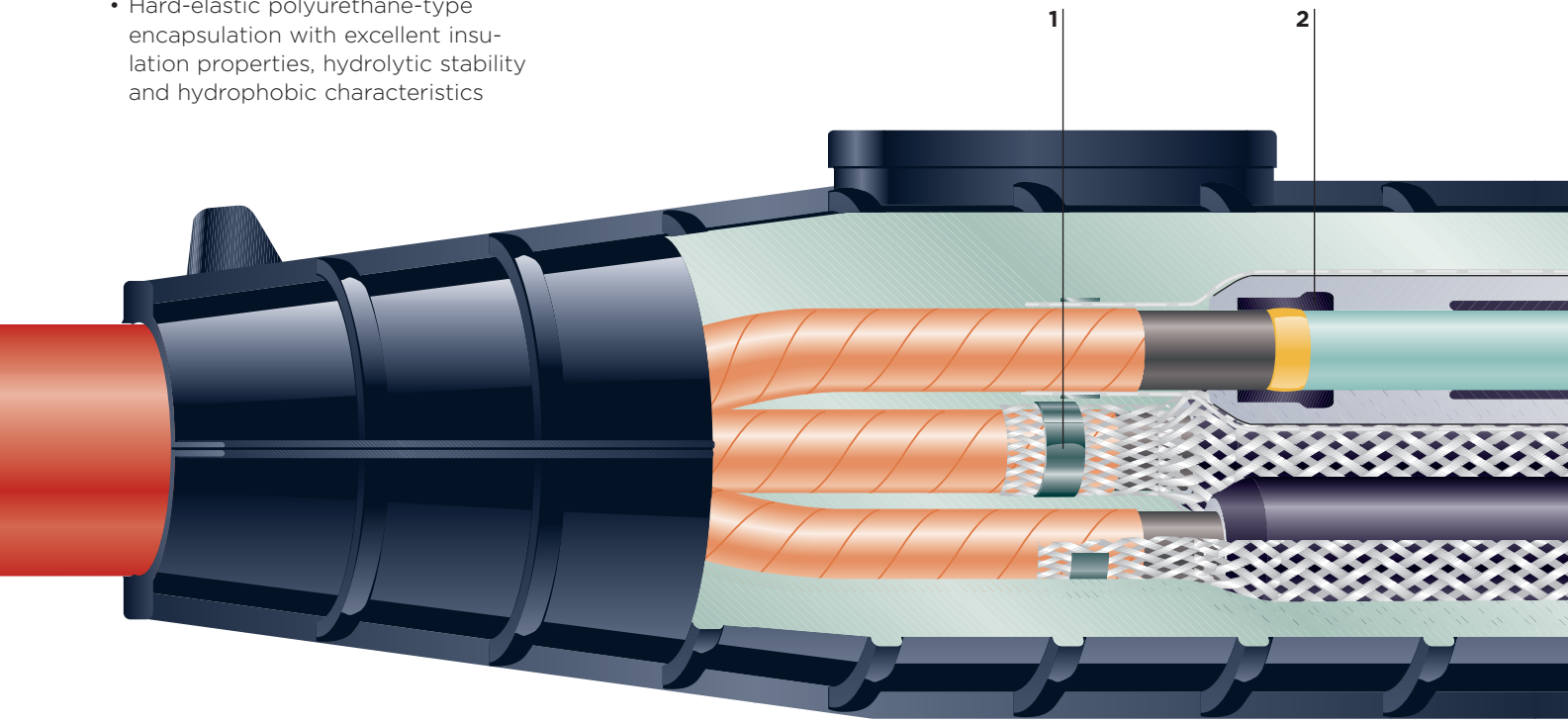
MV cold shrinkable joint  
for 3-core cables  
with resin encapsulation

## CSJT

## MV cold shrinkable joint for 3-core cables with resin encapsulation

### Features

- Pre-expanded, single piece silicone rubber joint body with high mechanical expansion properties allows a wide application range
- Electrical stress control of the screen cut area by integrated conductive geometrical stress cones
- Electrical stress control of the connector area by an integrated screened connection area (Faraday cage)
- Pre-expansion on a well-known and easily released holdout system
- Proven shield continuity concept
- Hard-elastic polyurethane-type encapsulation with excellent insulation properties, hydrolytic stability and hydrophobic characteristics
- Fast and easily filled resin outer sealing and protection system
- Easily installed joint system
- Exceeds CENELEC HD 629.1, requirements which include IEC, BS, VDE and other international specifications
- Mechanical shear bolt connectors with a wide application range or copper compression connectors according to IEC 61238-1 can be supplied with the kit



### General

CSJT offers a reliable and easy-to-install jointing system to assure and maintain high network reliability. A silicone rubber joint body with integrated geometrical stress cones and Faraday cage provides excellent electrical stress control. CSJT is designed to cover a wide range of applications and to accommodate the variety of cable and conductor types found in power distribution networks. Range-taking mechanical connectors or copper compression connectors ensuring reliable installation and service can be supplied with the kit. A hard-elastic polyurethane-type encapsulation as protection and sealing system provides an effective moisture seal and robust mechanical protection.

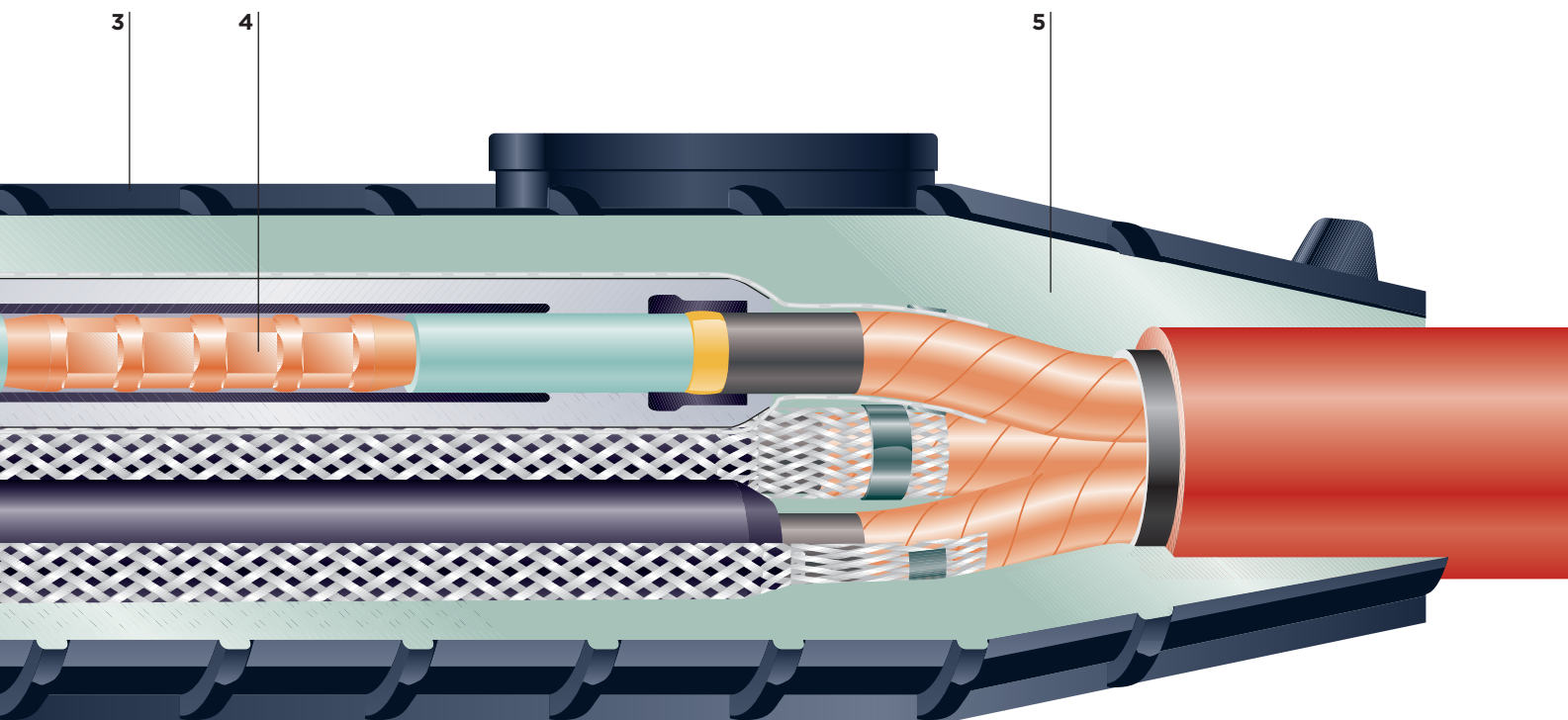
### Pre-expanded silicone joint body

The silicone rubber joint body is delivered in a pre-expanded condition on a spiral holdout system. Silicone materials with excellent mechanical properties allow high expansion ratios and therefore guarantee a wide application range. Integrated stress control mechanism and a conductive outer layer provide exceptional electrical performance. The joint body can be easily removed from the spiral holdout with low release forces, particularly designed for joint applications.

### Electrical stress control

Electrical stress control is fully integrated in the silicone joint body by well defined conductive areas. Conductive cones with an exactly defined geometrical design over the screen cut area provide excellent electrical stress control. The electrical stress control of the connector area is made with an integrated conductive screen performing as a Faraday cage. The coverage of voids and edges at the connection area with void fillers is not necessary and the radial electrical field can be controlled easily.

- 1 Shield connection
- 2 Silicone joint body with stress control
- 3 Half shells
- 4 Connector
- 5 Resin



### Shield continuity

The copper tape shield is connected to the copper braid by a double roll spring connection which provides the required contact force in order to ensure secure installation and reliable performance during load cycling in service as well as during short circuit conditions. Applied over the joint it provides shielding and protection.

### Outer sealing and protection

CSJT joints are available with a resin outer sealing and protection system. It provides a reliable moisture seal, corrosion prevention and robust mechanical protection. The high volume resin bags will be filled into pre-engineered half shells encapsulating the complete joint system.

### Resin

The outer sealing and protection system is based on a hardelastic polyurethane-type casting material with excellent insulation properties. The outstanding properties are the excellent hydrolytic stability and most impressive hydrophobic characteristics. These ensure that foaming problems during processing are avoided, even in a relatively high humidity environment and guarantee long-term stability under service conditions.



### Technical Data

Joints qualified in accordance with international test specifications CENELEC HD 629.1 and IEC 60502-4.

Excellent Partial Discharge performance proved at  $2 U_0$

### Order Information

#### CSJT - Cold Shrinkable Straight Joints for Polymeric Insulated Cables without connectors

Nominal voltage $U_0/U (U_m)$ (kV)	Cross section (mm <sup>2</sup> )	Ordering description	Diameter over core insulation		Diameter over conductor	
			min. (mm)	max. (mm)	min. (mm)	max. (mm)
6.35/11 (12)	95 - 240	CSJT-12B/3XU-3XU-MY01	18.9	28.4	11.0	19.2

#### CSJT - Cold Shrinkable Straight Joints for Polymeric Insulated Cables incl. mechanical connectors\*

Nominal voltage $U_0/U (U_m)$ (kV)	Cross section (mm <sup>2</sup> )	Ordering description	Diameter over core insulation		Diameter over conductor	
			min. (mm)	max. (mm)	min. (mm)	max. (mm)
6.35/11 (12)	95 - 240	CSJT-12B/3XU-3XU-MY02**	18.9	28.4	11.0	19.2
	185 - 300	CSJT-12C/3XU-3XU-MY02**	23.5	32.6	15.5	21.6

The application ranges given in the table above are based on polymeric insulated cables with stranded circular conductors. Due to different conductor dimensions and constructions the minimum and maximum application range may be extendable. The final application range is specified by the dimensions for core insulation given in the selection table.

\* These kits are delivered including Tyco BSM mechanical connectors for main conductor.

The application ranges given in the table above are valid for cables with stranded conductors.

\*\* Products available on request

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. Raychem, TE Logo and Tyco Electronics are trademarks.

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