

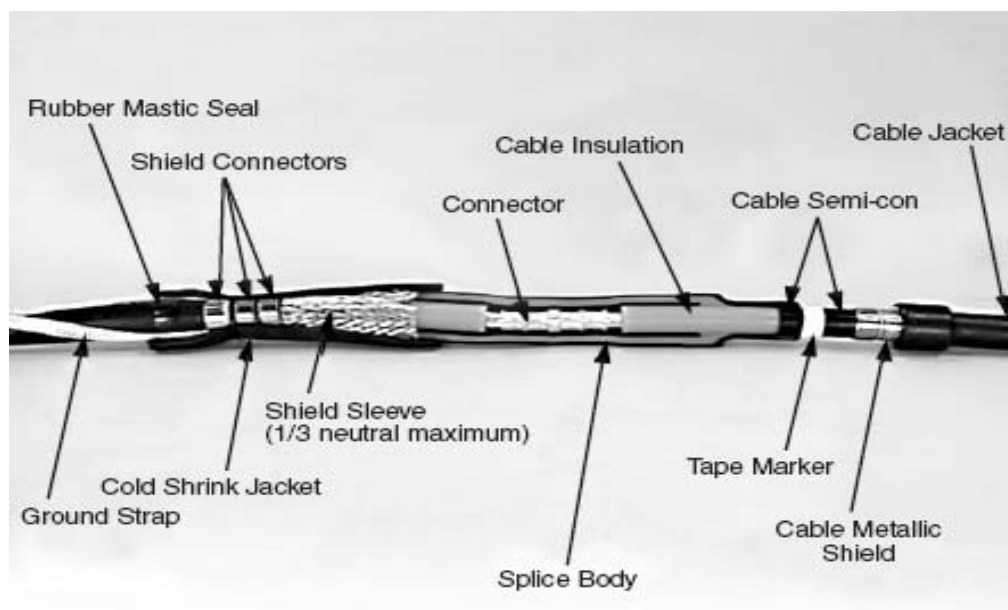
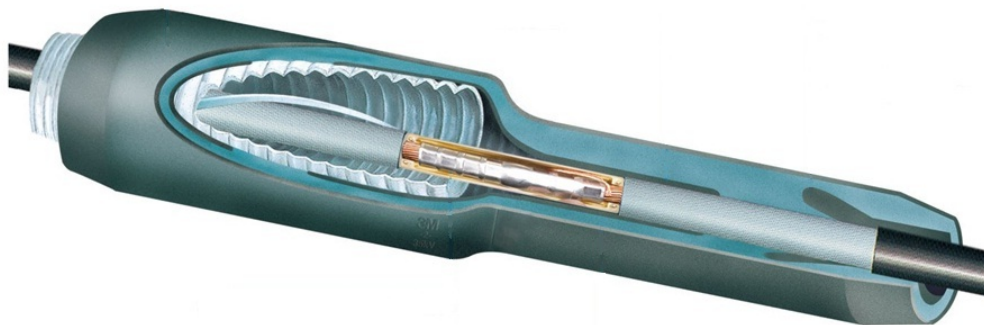


QSIII and QS3000

Cold-Shrink Inline Joint with Cold Shrink Re-Jacketing 96-Ax Series

Product Application

The 3M QSIII and QS3000 Cold Shrink Series Kits are designed for inline splicing up to 72.5kV Umax Voltage class, Single core polymeric power cable systems with copper wire screen according to IEC 60840



Kit Content

The 96-Ax Series Inline Joint Series includes the Cold Shrink QSIII or QS3000 Silicone splice body with integrated stress control device, conductive electrode, silicone elastomer insulation and outer semi-conductive layer. Also included are a Copper screen sleeve, Constant Force springs and thick walled EPDM rubber Cold Shrink outer tubes to re-build the cable outer jacket.

Performance Tests

The 3M QSIII / QS3000 Single Core Inline Joint Series meets and exceeds the requirements of IEC standard 60840. Test Reports: 2007-18, and 2009-55/3 (QSIII) and TR-004161 (QS3000)

Selection Table

Kit Reference	Cable Type	Application Range guide (mm ²) *	Diameter over primary insulation (mm) **
96-AD 630-1	CWS (+/- Alu sheath)	150 – 630	35.9 – 56.2
96-AC 643-1M	CWS	400 – 630	47.0 – 55.5
96-AC 643-1	CWS	630 – 1000	52.0 – 65.5
96-AD 632-1	Lead Sheath	150 – 400	35.9 – 56.2
96-AC 642-1M	Lead Sheath	400 – 630	47.0 – 55.5
96-AC 642-1	Lead Sheath	630 – 1000	52.0 – 65.5
96-AC 646-1S	CWS (+/- Alu sheath) Shield Break	240 – 500	39.3 – 48.5
96-AC 646-1M	CWS (+/- Alu sheath) Shield Break	400 – 630	47.0 – 55.5
96-AC 646-1	CWS (+/- Alu sheath) Shield Break	630 – 1000	52.0 – 65.5
96-AC 647-1S	Lead Sheath Shield Break	240 – 500	39.3 – 48.5
96-AC 647-1M	Lead Sheath Shield Break	400 – 630	47.0 – 55.5
96-AC 647-1	Lead Sheath Shield Break	630 – 1000	52.0 – 65.5

* Different cable constructions may change the actual application range. Diameter over the primary insulation is the final determining factor in selection.

** Primary Insulation Diameters take into consideration the application of the insulation adaptor tubes. As such, the thickness of these tubes is accounted for.

Product Features

- The versatile design of the prefabricated one-piece cold shrink splice body allows installation on a wide range of cable sizes and types and a fast and easy installation at temperatures ranging from - 20°C to + 50°C.
- No heat, flame, or special tools are needed during splice body installation.
- Accommodates crimp or mechanical connectors up to 79mm diameter and 230mm length (QSIII) or 56mm diameter and 230mm length (QS3000)
- Wide application range covering several cable cross sectional areas from 150mm² – 1000mm².
- Solderless earth connection by means of copper screen sleeve and constant force springs.
- Thick walled, EPDM rubber Cold Shrink outer re-jacketing tubes provide physical protection and moisture sealing of the completed Inline Splices.

Installation

The 3M Cold Shrink technology ensures quick, easy and safe installation of the QSIII and QS3000 Splice Body and outer protection tubes by pulling and unwinding the plastic support core in counter clockwise direction. The use of special tools is not necessary.

Detailed instructions for installing the 3M QSIII / QS3000 Series Joints are included in each kit.

Product Identification

The 3M QSIII / QS3000 Series Joint kits are marked with supplier name, cable cross section ranges, voltage classes and cable type, storage conditions and manufacturing codes for product traceability.

Storage Conditions

The shelf life of the 3M QSIII / QS3000 Series Joints is specified as 1 year (QSIII) or 3 years (QS3000) Temperature: -40°C to +50°C (short term peaks at 60°C max.)

Legal Requirements

The 3M QSIII / QS3000 Series Joints are not subject of the European WEEE and RoHS Directives but meet their requirements.

Physical and Electrical Properties

The 3M QSIII / QS3000 Kit can be used on cables with a rated operating temperature up to 105°C, and an emergency overload rating of 140°C. A splice constructed from this kit is rated for 69 kV and meets or exceeds the requirements of IEEE Std. 404. The current rating of the splice meets or exceeds the current rating for the cables on which it is installed. BIL rating is 350 kV.

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