

3M

Cold Shrink High Voltage Splice Kit QS3000 AD-72

Cold Shrink Inline Joint



1. Product Description

The 3M QS 3000 AD Cold Shrink Series Kits are designed for polymeric insulated power cables up to 72.5kV U_{max} according to IEC 60840.

2. Applications

Cold Shrink joint with an application range from 150mm² up to 1600mm².
Applicable for various screen solutions of polymeric power cables up to 72.5kV U_{max} .

3. Typical Properties

3.1 Rated Voltage U_0/U

27/47kV and 39/69kV

3.2 Max. System Voltage U_{max}

72.5kV

3.3 Application Range Primary Insulation

AD-72-20-x-x 35.9 – 56.2mm

AD-72-25-x-x 40.0 – 56.2mm

AD-72-3x-x-x 54.0 – 74.0mm

3.4 Application Range Cross Section

AD-72-2x-x-x 150mm² - 630mm²

AD-72-3x-x-x 630mm² – 1600mm²

The application range can change depending on the cable insulation diameter, diameter over cable jacket and kit configuration.

3.5 Type Test

Type Test according to IEC 60840 completed successfully.

4. User Information

4.1 Selection Guide

Inline Jointing kits with Cold Shrink re-jacketing, screen cross section 50mm²

Kit Reference	Cable Dimensions for Polymeric Cable					Connector Dimensions	
	Type of Shielding	Max. Screen Cross Section (mm ²)	Diameter over Primary Insulation (mm)	Cross Section ¹ 66/69kV 72.5kV U _{max} (mm ²)	Diameter over Cable Jacket ² Max. (mm)	Diameter Min. – Max. (mm)	Length Max. (mm)
AD-72XA1-20-N-50C	Copper Wire Screen	50	35.9 – 56.2	150 – 630 (800 solid) ¹	65 ²	36.0 – 56.0	230
	Copper Wire Screen with Al-laminate						
AD-72XA1-30-N-50C	Lead Sheath Aluminium Tube Sheath	50	54 - 74	630 – 1600	100 ²	54 - 80	Cable Cross section ≤1200mm ² : 260 >1200mm ² : 220

Inline Jointing kits with Cold Shrink re-jacketing, screen cross section 150mm²

Kit Reference	Cable Dimensions for Polymeric Cable					Connector Dimensions	
	Type of Shielding	Max. Screen Cross Section (mm ²)	Diameter over Primary Insulation (mm)	Cross Section ¹ 66/69kV 72.5kV U _{max} (mm ²)	Diameter over Cable Jacket ² Max. (mm)	Diameter ⁴ Min. – Max. (mm)	Length Max. (mm)
AD-72XB1-20-N-150C	Copper Wire Screen	150	35.9 – 56.2	150 – 630 (800 solid) ¹	65 ²	36.0 – 56.0	230
	Copper Wire Screen with Al-laminate						
AD-72XB1-25-N-150C	Lead Sheath Aluminium Tube Sheath	150	40.0 – 56.2	150 – 630 (800 solid) ¹	73	40.0 – 56.0	230
AD-72XB1-30-N-150C	Copper Wire Screen with current carrying Al-laminate	150	54 - 74	630 – 1600	100 ²	54 - 80	Cable Cross section ≤1200mm ² : 260 >1200mm ² : 220

¹ The final application range is depending on the primary insulation diameter. Stated max. range must not be exceeded

² Maximum cable jacket diameters can change over depending on the screen cross section.

³ Refer to manufacturers' instruction for installation of the connector for final specification

⁴ Detailed specifications of the respectively allowed dimensions available.

Electrical Markets Division

Reference: AABDD78146_F

Issue date 30.06.2023
Supersedes 03.2023

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**Inline Jointing kits with conductor connector and Cold Shrink re-jacketing
screen cross section 50mm²**

Kit Reference	Cable Dimensions for Polymeric Cable					Connector Range
	Type of Shielding	Max. Screen Cross Section (mm ²)	Diameter over Primary Insulation (mm)	Cross Section ¹ 66/69kV 72.5kV U _{max} (mm ²)	Diameter over Cable Jacket ² Max. (mm)	Application Range ³ Cross Section (mm ²) Conductor diameter (mm)
AD-72XA1-20-SP1-50C	Copper Wire Screen	50	35.9 – 56.2	300 – 630 (800 solid) ¹	65 ²	RE / round solid ³ 300 - 800 (Ø 18,8-32,1) RMV / round stranded and compressed ³ 300 - 630 (Ø 19,7-32,5) RM / round stranded ³ 300 - 630 (Ø 21,6-33,2)
AD-72XA1-30-SP2-50C	Copper Wire Screen with Al-laminate Lead Sheath Aluminium Tube Sheath	50	54.0 – 66.0	630 – 800 ¹	100 ²	RE / Round solid ³ 630 - 1000 (Ø 27,3-36,0) RMV round stranded and compressed ³ 630 - 800 (Ø 28,7-36,2) RM / round stranded ³ 630 - 800 (Ø 31,2-37,6)
AD-72XA1-30-SP3-50C		50	54.0 – 71.0	800 – 1000 ¹	100 ²	800 - 1000 (Ø 32-41)
AD-72XA1-30-SP4-50C		50	60.0 – 72.0	1000 – 1200 ¹	100 ²	1000 - 1200 (Ø 39,5-45)

¹ The final application range is depending on the primary insulation diameter. Stated max. range must not be exceeded

² Maximum cable jacket diameters can change depending on the screen cross section.

³ Refer to manufacturers' instruction for installation of the connector for final specification

**Inline Jointing kits with conductor connector and Cold Shrink re-jacketing
screen cross section 150mm²**

Kit Reference	Cable Dimensions for Polymeric Cable					Connector Range
	Type of Shielding	Max. Screen Cross Section (mm ²)	Diameter over Primary Insulation (mm)	Cross Section ¹ 66/69kV 72.5kV U _{max} (mm ²)	Diameter over Cable Jacket ² Max. (mm)	Application Range ³ Cross Section (mm ²) Conductor diameter (mm)
AD-72XB1-20-SP1-150C	Copper Wire Screen	150	35.9 – 56.2	300 – 630 (800 solid) ¹	65 ²	RE / round solid ³ 300 - 800 (Ø 18,8-32,1)
	Copper Wire Screen with Al-laminate					RMV / round stranded and compressed ³ 300 - 630 (Ø 19,7-32,5)
AD-72XB1-30-SP2-150C	Lead Sheath	150	54.0 – 66.0	630 – 800 (1000 solid) ¹	100 ²	RE / round solid ³ 630 - 1000 (Ø 27,3-36,0)
	Aluminium Tube Sheath					RMV / round stranded and compressed ³ 630 - 800 (Ø 28,7-36,2)
AD-72XB1-30-SP3-150C	Copper Wire Screen with current carrying Al-laminate	150	54.0 – 71.0	800 – 1000 ¹	100 ²	RM / round stranded ³ 630 - 800 (Ø 31,2-37,6)
AD-72XB1-30-SP4-150C		150	60.0 – 72.0	1000 – 1200 ¹	100 ²	800 - 1000 (Ø 32-41)

¹ The final application range is depending on the primary insulation diameter. Stated max. range must not be exceeded

² Maximum cable jacket diameters can change depending on the screen cross section.

³ Refer to manufacturers' instruction for installation of the connector for final specification

Contact 3M for Inline Jointing kits with further kit configurations

ADD-On Kit - Supplementary Assembly for cables with Aluminium screen wires

Kit Reference	Screen Dimensions for Polymeric Cable		Cable Dimensions for Polymeric Cable
	Type of Shielding	Cross Section of AL wire screen	Diameter over Cable Jacket Max. (mm)
96-AD 63x-2	Aluminium Wire Screen	Max. 105 mm ²	74

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4.2 Regulatory

The joints AD-72-x-x-x and the Add-On Kit 96-AD 63x-2 are in compliance to EU regulation 1907/2006/EC (REACH).

4.2 Storage

All components of the AD-72-x-x-x kit are recommended to storage and stock rotation under temperature condition of -40°C up to 50°C.

4.3 Shelf Life

The shelf life is 36 month from the date stated on original box.

5. Additional Information

To request additional product information see address below.

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