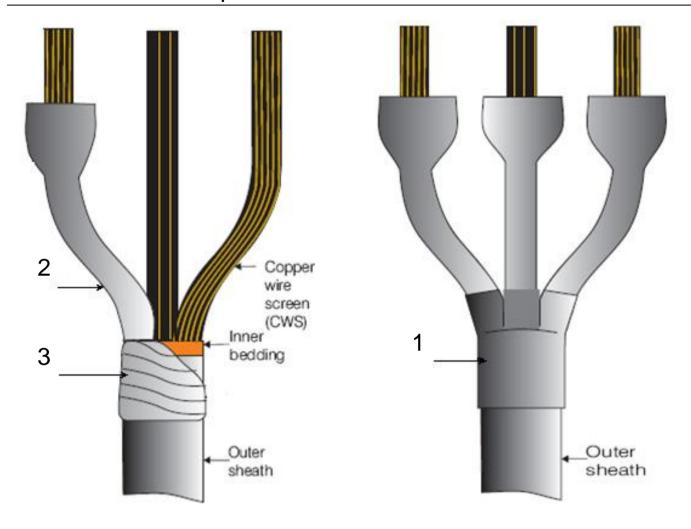


# **INSTALLATION INSTRUCTION**

HEAT SHRINKABLE 3 TO 1 CORE TRIFURCATION KIT 11-22kV, XLPE/PVC COPPER WIRE SCREEN UNARMOURED CABLE. INDOOR & OUTDOOR.

Cable size 25-150 & 95-400 sq. mm. 1.2 meter tail.



Item #	Description	Part #	Item #	Description	Part #
1	Breakout Glove	KEV3xx		INSTALLATION INSTRUCTION	PJT008-15A
2	Medium Wall Outer Sheath Tube (unlined)	SMDWxx/xx		BILL OF MATERIAL	
3	BLACK SEALING MASTIC	BSM			
	CLEANING TISSUE	CTISSUE			

POWER JOINT"	8 Distribution Place, Seven Hills, NSW, Australia Tel. Australia:1800 769 370, Tel. International: +61 2 967		
Date:	Prepared by:	Checked by :	Verifying Engineer:
19/03/2015	M Matulewicz	G Smith	S.HARRISON





## **General Tips and Instructions**

Power joint kits must be installed by a skilled and competent tradesperson.

Check the kit contents to ensure the termination will fit the cable to be terminated.

Check the kit contents against Bills of materials (BOM), to ensure that the kit is complete.

The heat shrink tubes should be smooth and free from wrinkles, scratches, jagged cuts and damage.

Read the instructions before commencing as procedures could change.

### **General Tips and Instructions**

Always keep the work area and cables clean.

When shrinking, always use a propane [preferred] or butane gas torch.

Apply heat circumferentially around and from center outwards on tubes ensuring correct heat application so that the tubes shrink evenly to the correct material wall thickness.

Only use the gas torch in a properly ventilated and safe environment.

Ensure that the shrunk tubing are free from wrinkles and air bubbles during and after heating

#### **Cable Preparation Tips**

Always keep the cable outer sheaths clean and free from dust, oil and mud.

Take extreme care not too cut or nick the cable insulation during preparation.

When sanding a XLPE cable, abrade circumferentially around the core insulation.

Only use presoaked cleaning tissue supplied with this kit to clean XLPE insulation and heat-shrink tubes

Clean and degrease all surfaces that will have mastic applied.

## **BOMs**

TRIKIT11-22-25-150 25 to 150 mm2	6 to 22 kV 25 to 150 mm2 tri kit 1.2 m tail cable dia:min 42 max 72 core dia: 13.8 min 25 max	
KEV335	3 way <b>BREAKOUT BOOT</b> \$80/38 & 35/11	x1
SMDW34/9U	Mediumwall heatshrink 1200mm long	х3
BSM	Black Sealing Mastic TAPE 1000mm	x1
CTISSUE	Cleaning Sachet	x3
	Instuctions (required)	x1
TRIKIT11-22-95-400 95 - 400	6 to 22 kV 95 to 500 mm2 tri kit 1.2 m tail cable dia:min 55 max 94 core dia:min 21 max 36	V4
KEV340	3 way BREAKOUT BOOT 110/50 46/17.5	X1
SMDW56/17U	Mediumwall heatshrink 1200mm long	Х3
BSM	Black Sealing Mastic TAPE 1000mm	X1
CTISSUE	Cleaning Sachet	Х3
	Instuctions (required)	X1

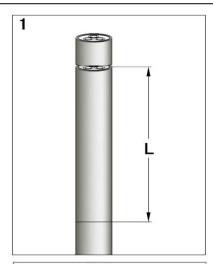
#### DISCLAIMER

The information provided in these instructions is for the use of competent trained installers. Legend Power System's has no control over environmental conditions and it is the installers responsibility to determine suitable conditions for the installation of this product. Legend Power Systems will not be liable for any incident indirectly, or damages arising for the miss use of this product. All the text and graphics in this instruction remain the intellectual property of legend Power Systems, and the reproduction of any part of this instruction is prohibited.





## INSTALLATION INSTRUCTION



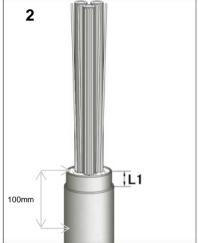
## **Cable Preparation**

1. Cut the cable to your desired length.

Clean the cable around the area intended for the outer sheath cut. Mark the cable outer sheath at desired length, or cut the cable to suit the geometry of the equipment.

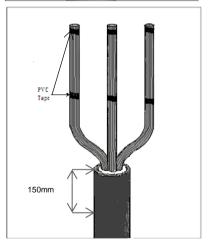
#### L = Tail length of the Trifurcation.

Remove the outer sheath up to this mark.



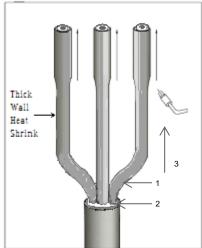
2. If the cable has a composite (inner bed) remove the inner bedding at dimension L1= 20 mm as shown in the picture. Leave the copper wire screens in their original position.

Clean and degrease cable for about 100mm below the sheath cut



3. Set cables into position and tape the ends of the cores and Copper Wire Screens (CWS) with PVC tape, every 500mm to secure them in their original position.

Abrade the HDPE outer sheath for approximately150mm.



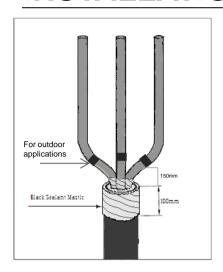
## Install heat shrink tubing

- 4. Slide the unlined Medium Wall [SMDW] re jacketing tubing over each core, Position the tubing as well down into the cable crutch area as possible. When heating follow the heating sequence below.
- (1) Heat tube 150 mm above the crotch and shrink down onto the cable.
- (2) Apply the heat circumferentially around all three cores first towards the crotch.
- (3) Heat outwards (3), until the tubes have fully recovered and achieved a uniform wall thickness.





## INSTALLATION INSTRUCTION



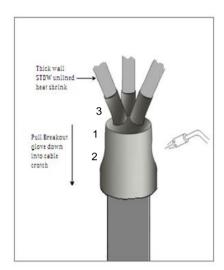
5. Remove release paper and apply 50% stretch and 50% overlapped of layer black sealant mastic [BSM] to the cable's inner bedding and outer sheath overlapping the cable's sheath by 100mm.

Separate the cores and apply a single wrap of mastic tape [BSM] to each core 50mm from the crutch of the cable.

Leave the backing paper in place until breakout boot is ready to be positioned in order to stop the cores sticking together.

#### FOR OURDOOR APPLICATIONS

For out door applications, remove release paper from black mastic [BSM] and apply on each core, 1x rap of mastic, about 150mm above the cutch section.



#### Install the Breakout Glove

6. Remove the release paper off the black mastic. Position the breakout glove [KEV] over the cable crotch and pull the breakout boot as far into the cable crotch as possible covering the black sealant mastic [BSM] applied to the cables outer sheath and the cores.

Following the heating sequence, shrink the glove into place by applying heat circumferentially, first to the shoulder (1) of the glove, (2) the skirt and finally the spouts (3) as shown.

Ensure that the glove is fully recovered onto the cables and it has achieved a uniform wall thickness. Continue to heat the boot until the glue is seen on from the bottom of the boot as well as the fingers onto the cable and heat-shrink..

## Allow to cool before proceeding with termination.

Trifurcation is complete

**Using Legend Power Products.** 





Please dispose of all waste