

**Installation Instruction
EPP-1578-AU-5/09**

**11kV Trifurcation for
Screened 3 Core XLPE
Insulated Cables
with Composite Sheath**

95-240mm²

**For Screened Separable
Connectors**

ENDORSED BY	SIGNATURE	DATE
Wilfred Leung Principal Engineer—Mains RailCorp	<i>W. Leung</i>	22. 6. 2009

APPROVED BY	SIGNATURE	DATE
Neal Hook Chief Engineer - Electrical Systems RailCorp	<i>N Hook</i>	30/6/2009

APPROVED BY	SIGNATURE	DATE
Andrew Thompson Product Manager Tyco Electronics	<i>A. Thompson</i>	20/8/09

Before Starting

Check to ensure that the kit you are going to use fits the cable.

Refer to the kit label and the title of the installation instruction.

Components or working steps may have been improved since you last installed this product.

Carefully read and follow the steps in the installation instruction.

General Instructions

Use a propane (preferred) or butane gas torch.

Ensure the torch is always used in a well-ventilated environment.

Adjust the torch to obtain a soft blue flame with a yellow tip.

Pencil-like blue flames should be avoided.

Keep the torch aimed in the shrink direction to preheat the material.

Keep the flame moving continuously to avoid scorching the material.

Clean and degrease all parts that will come into contact with adhesive.

If a solvent is used follow the manufacturer's handling instructions.

Tubing should be cut smoothly with a sharp knife leaving no jagged edges.

Start shrinking the tubing at the position recommended in the instruction.

Ensure that the tubing is shrunk smoothly all around before continuing along the cable.

Tubing should be smooth and wrinkle free with inner components clearly defined.

The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. Raychem, TE Logo und Tyco Electronics are trade marks.

SMOE-RCP03

Qty: 1

Kit Contents

1	x	EPPA-202-2	PVC Tape 10 Metre x 15Mm Wide
2	x	S1085-3-400	Low Temp Sealant-Red-400Lg (For Breakout)
6	x	S1085-1-100	Low Temp Sealant-Red-100Lg
3	x	EPPA-004	Cleaning Tissue
3	x	MWTM-35/12-1000/U	Medium Wall Tubing Uncoated 1000mm
1	x	402W526/S	Breakout Low Voltage
1	x	EPP-1578-AU-4/09	Installation Instruction
1	x	ESD-1573-AU	Check List

Tyco Electronics
Energy Division
Dulmison Pty Ltd
ABN 56 000 129 573
Unit 2, No 3 Corella Close
Berkeley Vale NSW 2261

02 4389 6000 tel
02 4389 6061 fax
www.tycoelectronics.com

Date: 26/05/2009
ESD-1573-AU
Page : 1 of 1

Energy Division

 **Tyco Electronics**

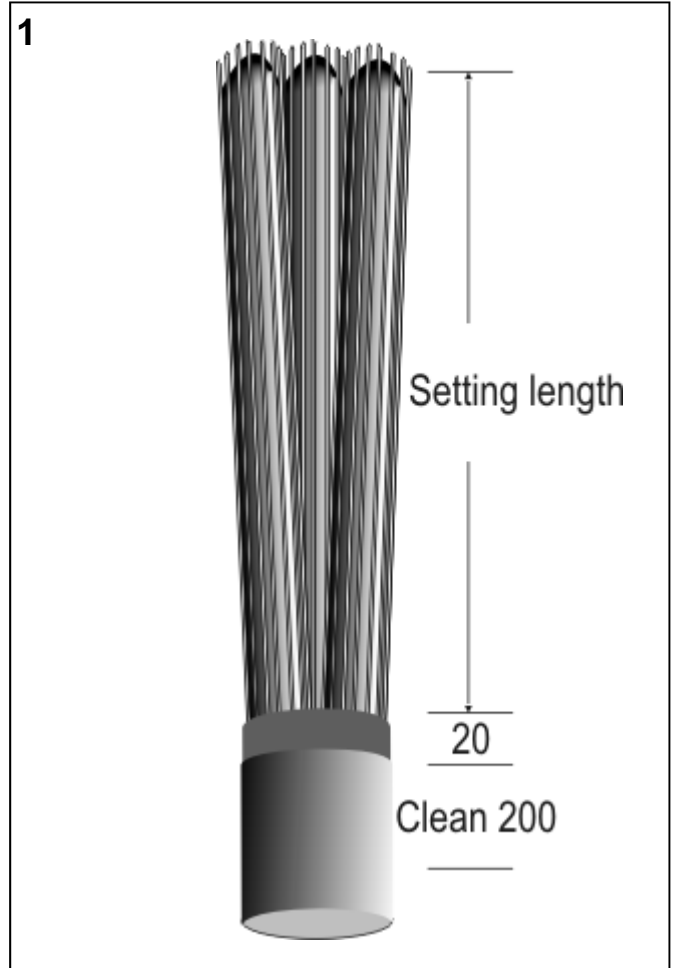
The setting length is determined by the overall geometry of the equipment, giving consideration to the available length of re-jacketing tube in the kit and the minimum internal, set in position, bending radius of the cable. Allow 10% longitudinal shrinkage of the supplied re-jacketing tube. Determine the setting length.

Ensure sufficient cable is cut to allow for the setting of the cores and for the screen wires to reach the earth bar. Remove the outer layer of the composite oversheath to the setting length plus 20mm.

Remove the inner layer of composite sheath to the setting length.

Remove the fillers level with the oversheath.

Abrade, clean and degrease the oversheath for a distance of 200 mm using the cleaning tissue provided in the kit.

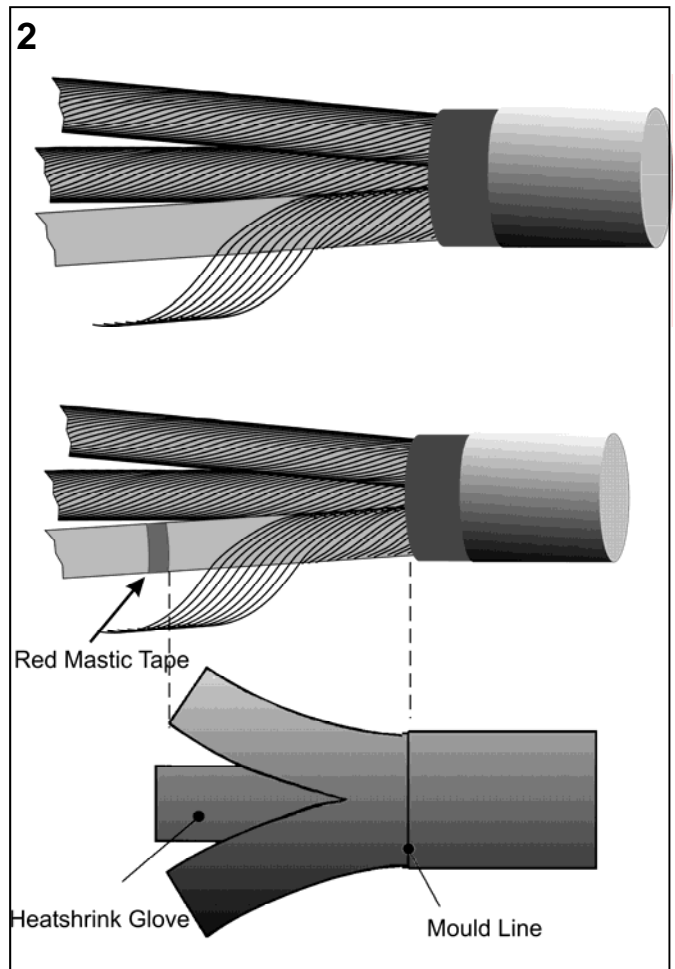


For Cables without Water Swellable Tapes Only:

- i. Starting with one core at a time, unwind the screen wires from the core. Do not bend them into position at this stage.

- ii. Position the glove along side the cable so that the mould line of the glove is level with the end of the inner layer of the composite sheath.

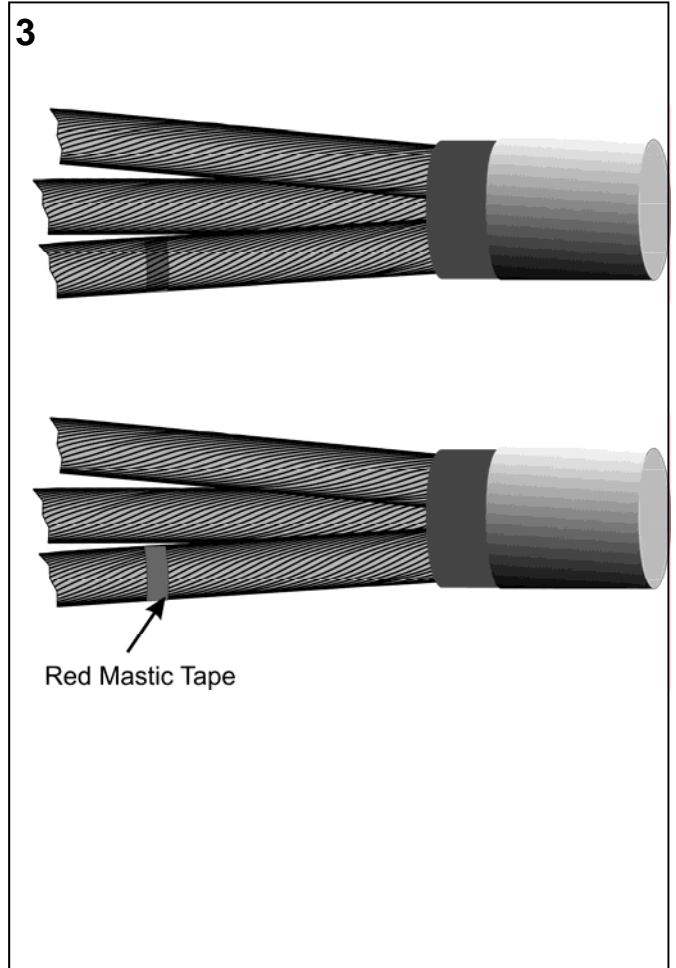
Apply one layer of red mastic tape (20mm wide) over the insulation screen, level with the end of the glove fingers



- iii. Wind the screen wires back over the insulation screen. Avoid crossing the individual screen wires.

For cables with and without Water Swellable Tapes:

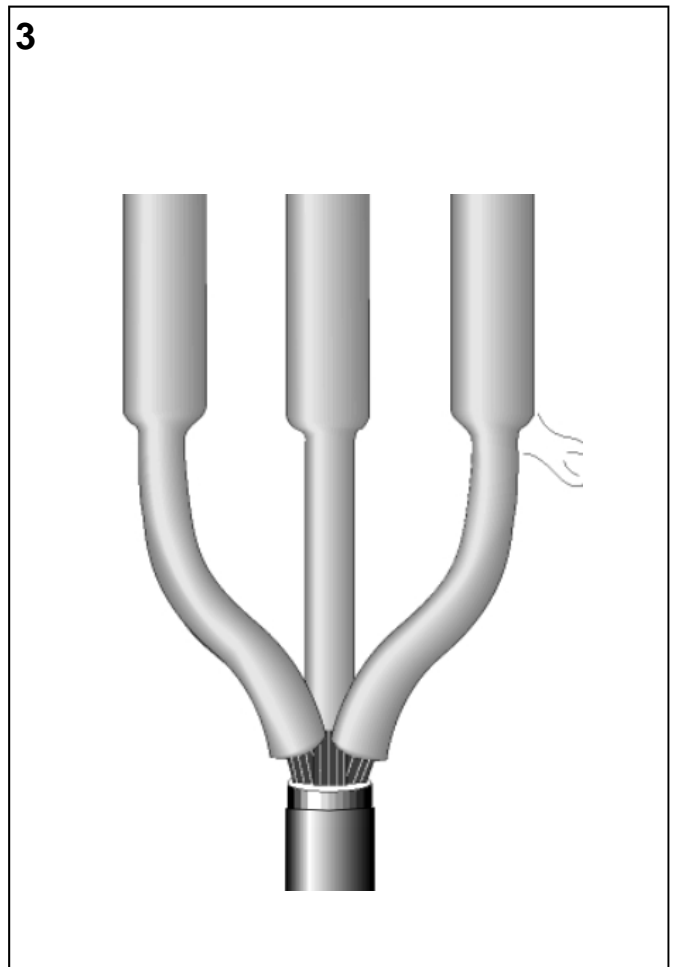
- iv. Apply one layer of red mastic tape (20mm wide) over the screen wires at the same location the mastic was applied in Step (ii), (i.e. over the mastic applied in Step (ii)).
- v. Repeat Steps (i)-(iv) for the other cores.
- vi. Apply 2 full turns of PVC tape over the screen wires at the end of the core to facilitate easy installation of the glove.



Slide the re-jacketing tube over the previously applied mastic, continuing the re-jacketing tube installation as far as possible to the crutch of the cable.

Starting at the cable crutch shrink the re-jacketing tube over each core. Ensure that the heat is applied evenly around all of the three cores. This is necessary to ensure the tubing recovers, maintaining an even wall thickness.

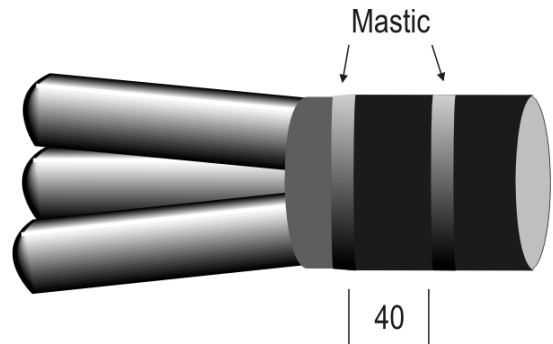
While shrinking the tubes be mindful that the finishing point of the shrunk re-jacketing tubes will be the oversheath removal point for the termination. Avoid shrinking excess tube onto the cores.



Apply one layer of red mastic (50mm wide) half overlapping the inner layer and outer layer of the composite overshooth.

Apply one layer of red mastic (50mm wide) over the outer layer of composite overshooth 40mm from the edge of the outer sheath cutback.

4



Slide the glove as far down the crotch as possible. Shrink the glove into place starting at the centre. Work first towards the lower end and then shrink the fingers onto the cores.

Trifurcation of the 3 core cable to 3 Single core cables complete.

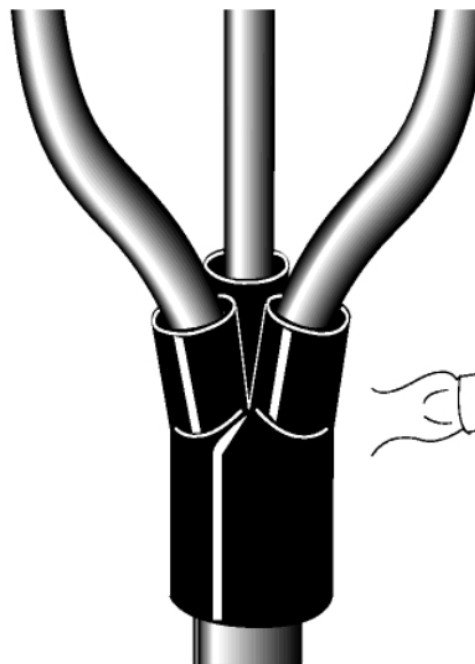
Installation of Screened Separable Connectors

Prepare the cable & install the components as per the installation instruction supplied with the screened separable connectors.

Please dispose of all waste according to environmental regulations.



5



Tyco Electronics Raychem GmbH
Energy Division

Finsinger Feld 1
85521 Ottobrunn/Germany
0049-89-6089-0 tel
0049-89-6089-345 fax
<http://energy.tycoelectronics.com>