

**INSTALLATION INSTRUCTIONS FOR  
6.35/11kV THREE CORE POLYMERIC CABLE  
HEATSHRINK TERMINATIONS  
FOR CABLES WITH COPPER TAPE SCREENS  
OR COPPER WIRE SCREENS.  
FOR INDOOR USE.**

**SERIES: HIT-3X-11**

| <b>Kit No.</b> | <b>Conductor Cross section mm<sup>2</sup></b> |
|----------------|---|
| HIT-3X-A-11    | <b>16-25</b>                                  |
| HIT-3X-B-11    | <b>35-70</b>                                  |
| HIT-3X-C-11    | <b>95-240</b>                                 |
| HIT-3X-D-11    | <b>300-400</b>                                |

| <b>Issue</b> | <b>Date</b> | <b>Dr / Ec No.</b> | <b>Author</b> | <b>Approved</b> |
|--------------|-------------|--------------------|---------------|-----------------|
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**General Instructions:****VERY IMPORTANT - PLEASE READ BEFORE STARTING THE INSTALLATION.**

Before shrinking one tube onto another or onto polymeric insulation or before applying any mastic, clean and degrease the underlying surfaces. Where any of these surfaces are semi conducting or stress controlling take care not to drag any carbon particles onto any insulating components. Metal sheaths/armours of cables should always be scraped / abraded and degreased before applying any earth bonds or mastics.

When using heatshrink tubing;

- Use a propane (preferred) or butane gas torch.
- Use torch in a well-ventilated area.
- obtain soft blue flame with yellow tip. Pencil blue flames should not be used.
- Aim torch in direction of heatshrink to preheat material.
- Continuously move flame to avoid scorching.
- Any cut tubing should be smooth with no jagged edges.
- Recovered tubing should be smooth, wrinkle free with inner components defined.

**NOTES ON FITTING OF TERMINATION'S.**

Remember to fit any gland or non-splitable gland plates over the cable before starting the termination.

If possible lower the gland plate to ease installation.

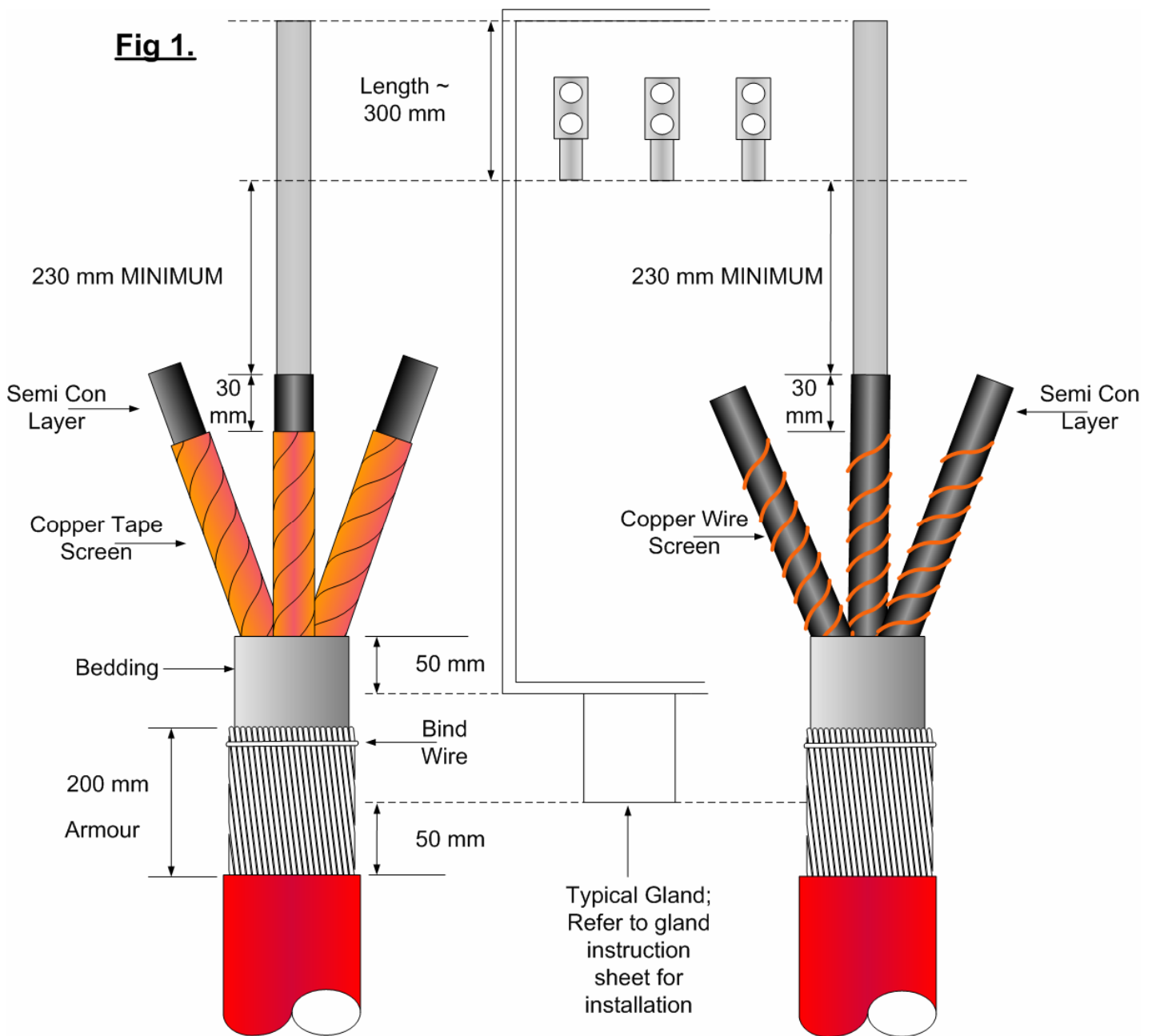
The terminations have been designed for use in a cable box with a minimum of 400 mm from the centre line of the bushing to the base of the cable box.

1. Check gland and box dimensions against drawing before stripping as dimensions may vary.
2. Strip the cable as shown in Fig. 1.
3. Remove any fillers to the level of the bedding cut.

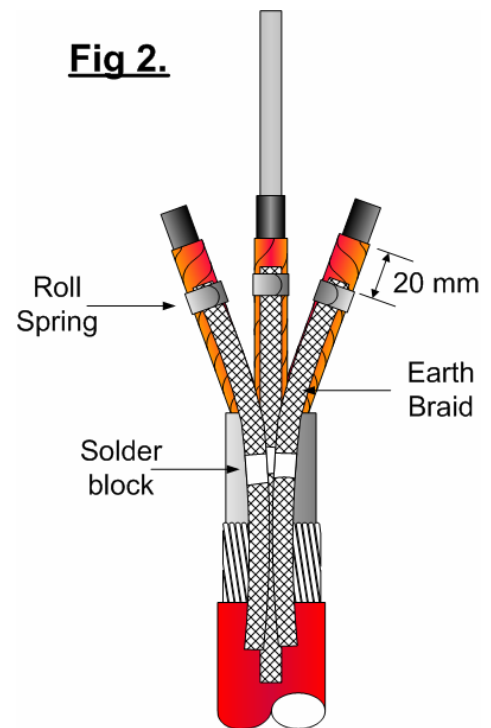
**Note:** Length of exposed armour is dependent on gland used.  
 Figures used in diagram are nominal length.

4. Secure the exposed armour wires with a temporary binder wire.
5. Clean and de-grease the exposed core and remaining Oversheath.
6. If a gland sleeve is to be used position over the prepared core and nest on the overshooth.

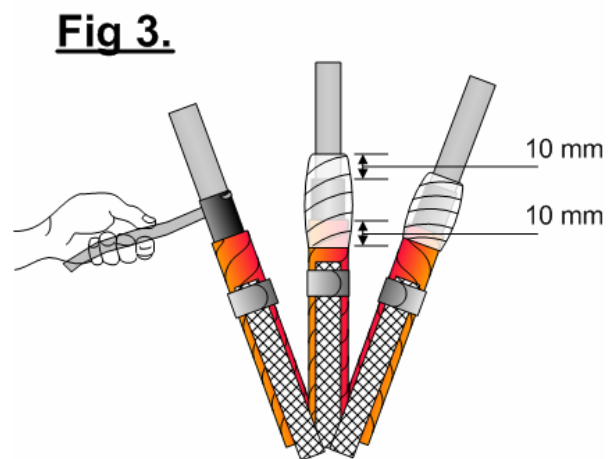
**Fig 1.**



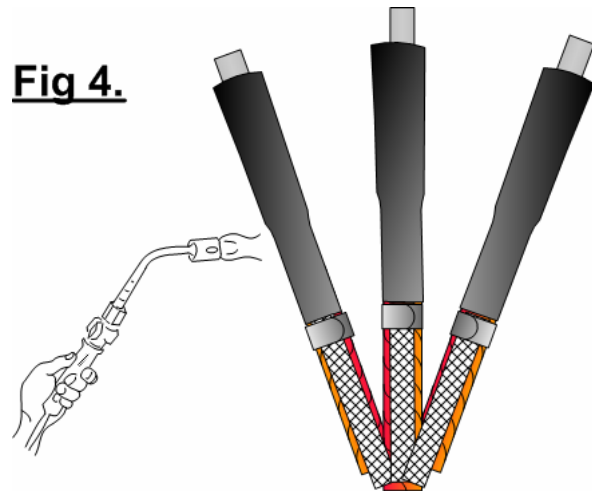
7. Fit the three earth braids to the copper tape using the roll springs around the braid and the copper tape screen (Fig. 2). Applying a twisting pressure to ensure a tight connection is made.



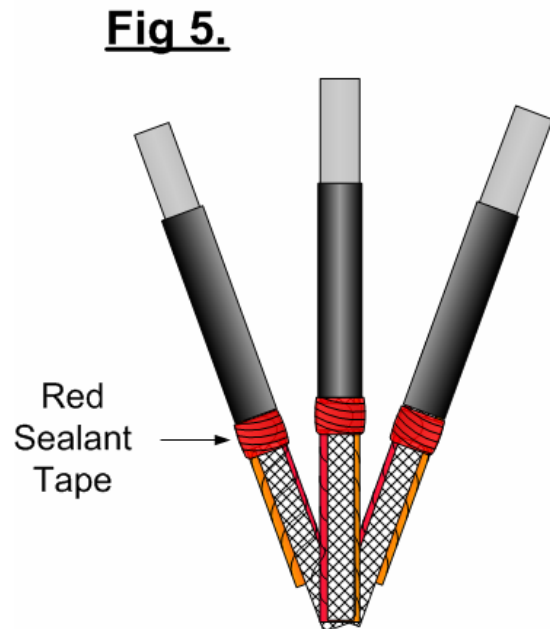
8. Using brown stress control mastic, place the point of the tape at the conductive screen cutback, stretch to  $\frac{1}{2}$  its original width & tightly wrap, with a 50% overlap, to fill the conductive screen step creating a smooth transition. Overlap the tape onto the insulation and tape screen by 10 mm. (Fig. 3)



9. Position Stress Control Sleeve over each core, 10mm below the end of the brown mastic, shrink using a soft yellow flame shrink from bottom, working upwards (Fig. 4).

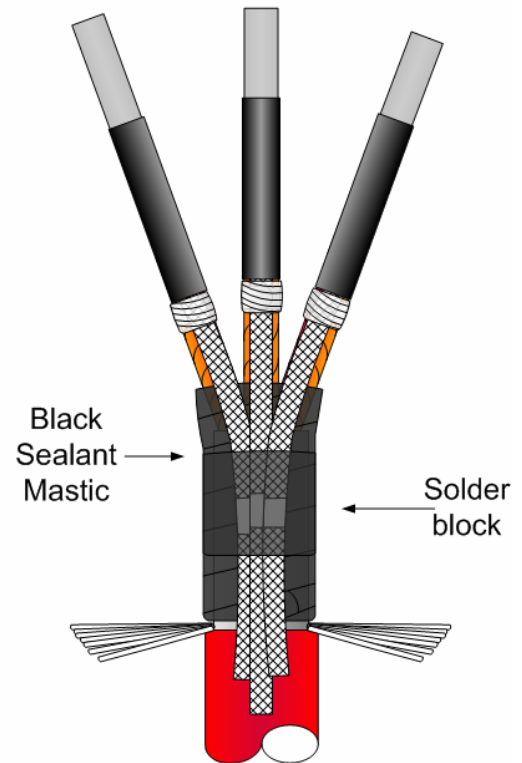


10. Using half a strip of red sealant tape stretch to  $\frac{1}{2}$  its original width & tightly wrap, with a 50% overlap, over each roll spring to create a smooth transition. (Fig. 5).



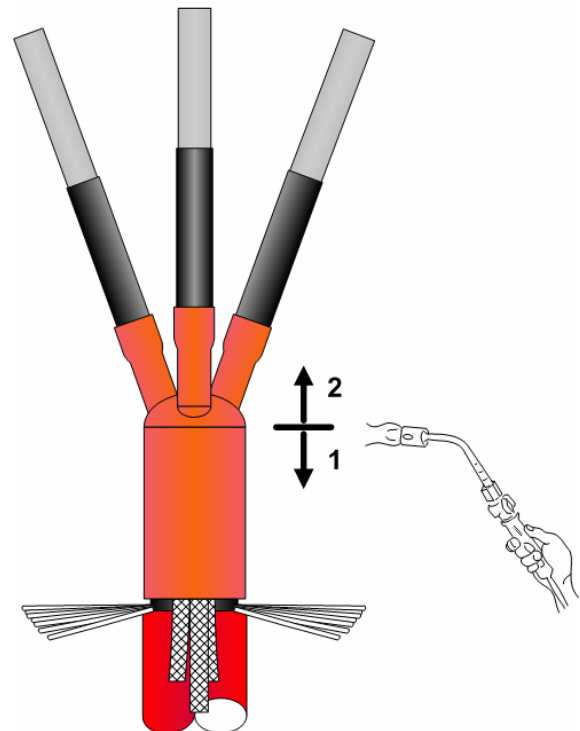
11. Bend back armour wires from termination area.
12. Lift the earth braids away from inner sheath.
13. Wrap one layer with 50% overlap of black sealant mastic over inner sheath.
14. Lay the earth braids into the sealant, ensuring that the solder water block is located centrally over the mastic, then apply black sealant mastic over the solder block. (Fig. 6).

**Fig 6.**



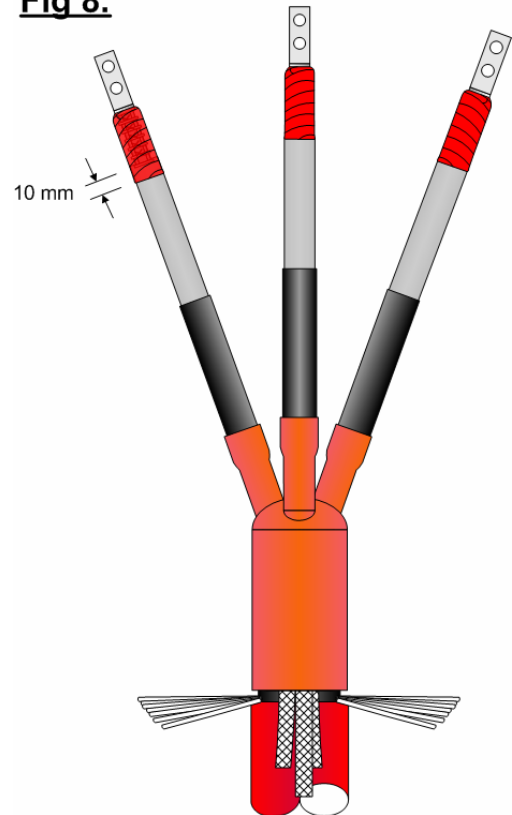
**Fig 7.**

16. Position breakout boot over the cores; Ensure that the breakout is seated well down into the crutch.
17. Using a soft yellow flame shrink from centre, working downwards (1), then and work upwards towards fingers (2). (Fig. 7).



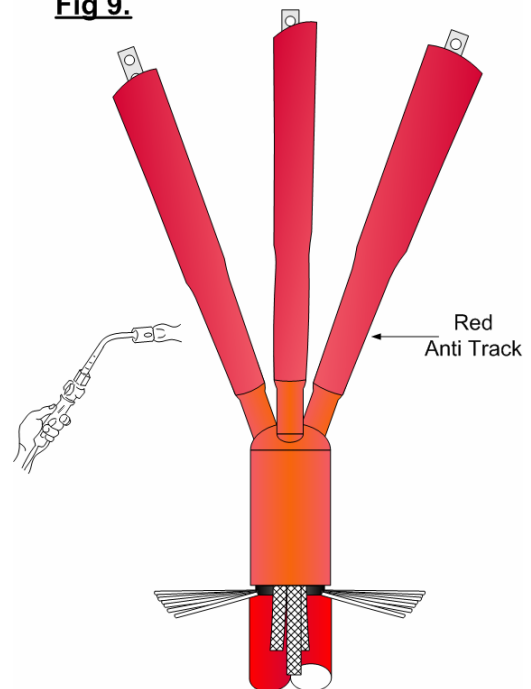
18. Offer the partially installed termination to the cable box; cut cores to length, taking note of any core crossing that may be required. Remove the insulation for the lug depth + 5 mm.
19. Fit the lug as per manufactures instructions.
20. Using the remaining red sealant tape, with a 50% overlap, wrap around lug barrel. Build up the tape diameter equal to the insulation. Overlap the core insulation by 10 mm. (Fig. 8).

**Fig 8.**



21. Fit the outer red anti-track tubes over the legs of the breakout, pushing well down into crutch. Shrink down using a soft yellow flame shrink in an upwards direction. (Fig. 9)
22. Cut the tubes so that it fits just onto the palm of the lug. Make sure that the tubes do not prevent good contact with the bushing.

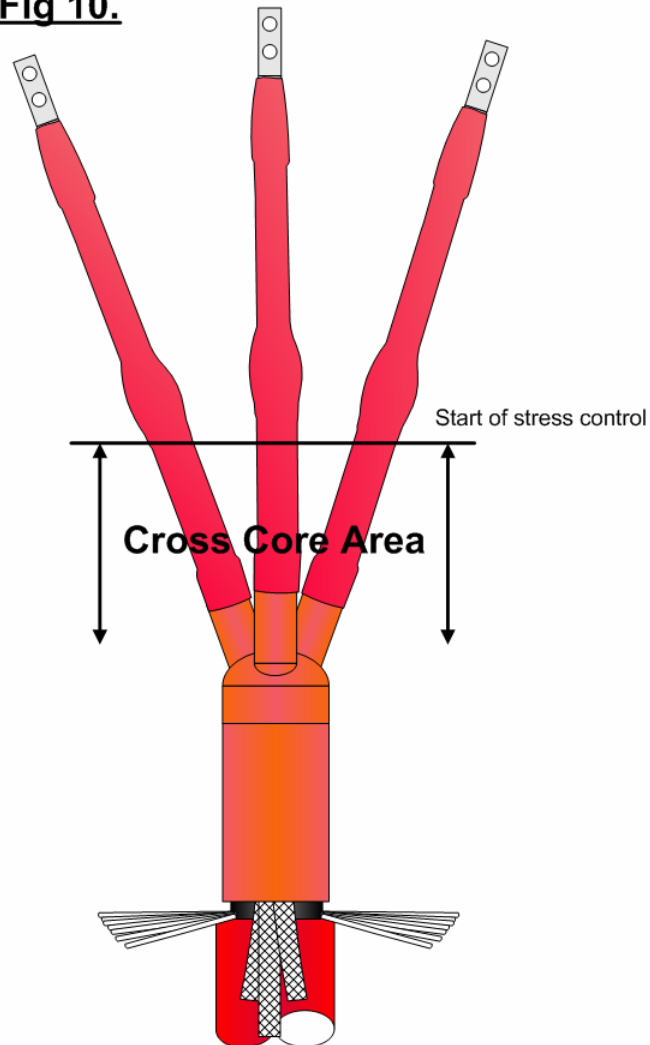
**Fig 9.**



**Completed termination**

23. The gland plate assembly should now be completed following the manufacturer's instructions. The terminations should be allowed to cool before moving or energising. (Fig. 10).

**Fig 10.**



**Important Notice To Users**

**DISCLAIMER**

1. The information contained in these installation instructions is intended to describe the correct method of installing cable accessories under normal conditions. Prysmian has no control over site conditions that may affect installation, and it is the responsibility of the installer to ensure the site is suitable.
2. Installation must always be carried out by a properly trained competent person.
3. Prysmian's liability in respect of all products supplied by it are set out in its Conditions of Sale, a copy of which is available on request.