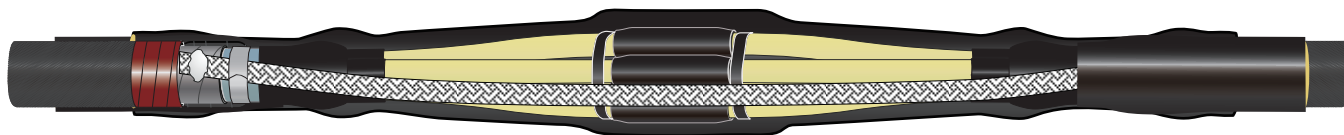


 嘉盟电力设备有限公司	包材印字图	物料代码	ZGSM-MDJK-4-01-P/872	文件编号	GSM-MDJK-4-01-P/872
		物料名称	1KV中间说明书PILC/872	配套包材图图号	T2GSM-Fxxx-01
				配套包材图编号	GSM-FD1A4S1
<p><b>印刷要求:</b></p> <ol style="list-style-type: none"> <li>印刷页面数: 5;</li> <li>印刷颜色: 彩色全部转为灰度;</li> <li>印字清晰完整。</li> </ol>					
B1	/	/	转批量生产	赵周薇2023/4/10	
A1	/	/	第一次发行	朱国梁2023/2/28	唐张杰2023/2/28
<b>版本</b>	<b>标记</b>	<b>处数</b>	<b>变更内容</b>	<b>变更人</b>	<b>审批</b>
编制	朱国梁	日期	2023/2/28	审批	唐张杰
				日期	2023/2/28

### Diagrammatic



No.	Description	No.	Description
1	HEAT SHRINKABLE TUBING	10	OIL RESISTANT MASTIC
2	HEAT SHRINKABLE TUBING	11	WATERPROOF SEALING MASTIC
3	HEAT SHRINKABLE OIL RESISTANT TUBING	12	PVC TAPE
4	HEAT SHRINKABLE INSULATION BREAKOUT	13	EMERY CLOTH
5	COPPER BRAID	14	CLEANING KIT
6	CONSTANT FORCE SPRING	15	CLEANING TISSUE
7	SOLDER WIRE	16	UNDERSHIRT CLOTH GLOVES
8	SOLDER FLUX	17	INSTALLATION INSTRUCTION
9	HEAT SHRINKABLE TUBING	18	PACKAGE LIST

### CAUTION:

1. Working around energized high voltage systems may cause serious injury or death.
2. Installation should be performed by personnel familiar with good safety practice in handling high voltage electrical equipment.
3. Deenergize and ground all electrical systems before installing this product.

Please dispose of all waste according to environmental regulations.

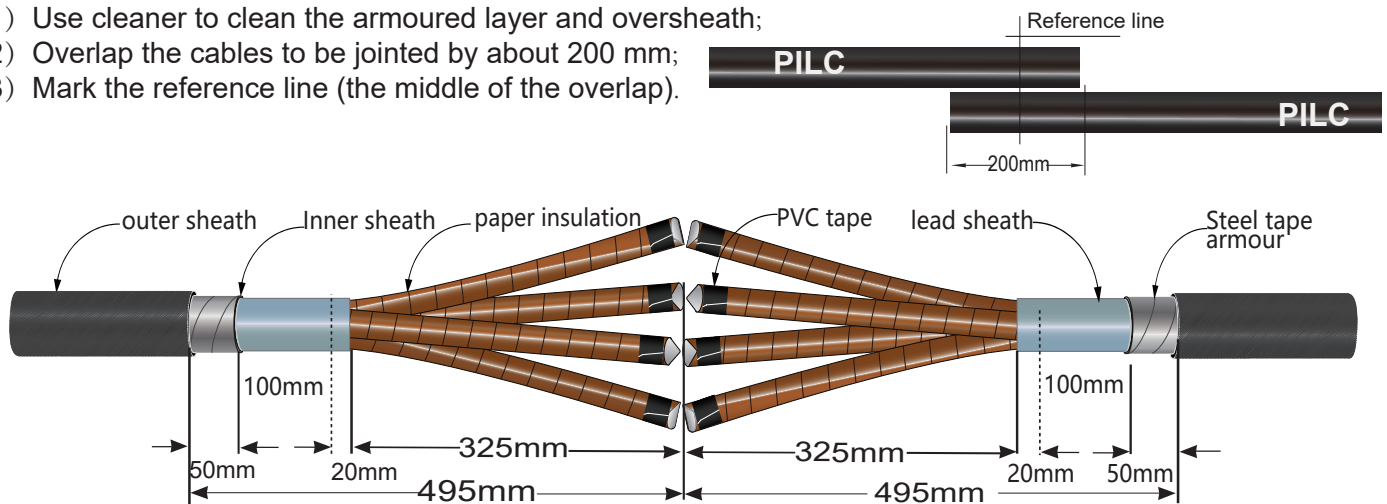


### A. General Instructions:

1. This product should be installed by competent personnel familiar with cables, accessories and safe operating practices. Parts contained in this kit should be installed in accordance with the following instructions. These instructions are intended to be a guideline for a proper installation and not a substitute for a adequate training and experience in good safety practices.
2. Check to ensure that the kit you are going to use is for the correct cable (refer to the kit label and the title of the installation instruction). Carefully read and follow the steps in the installation instruction.
3. Inspect cable for presence of water or moisture and ensure that the cable is in good condition for termination. Keep the cable outer sheath clean and free from dust, oil and mud.
4. Use a propane (preferred) or butane gas torch in a properly ventilated and safe environment.
5. Use the yellow portion of the flame for shrinking. Avoid pencil-like blue flames.
6. Direct the gas torch flame in the shrink direction.
7. Keep the flame moving continuously to avoid scorching the sleeves and other shrinkable parts.
8. Ensure that the heat shrinkable components are shrunk uniformly and free of wrinkles and air bubbles.
9. Allow shrunk components to cool before applying mechanical fixtures.

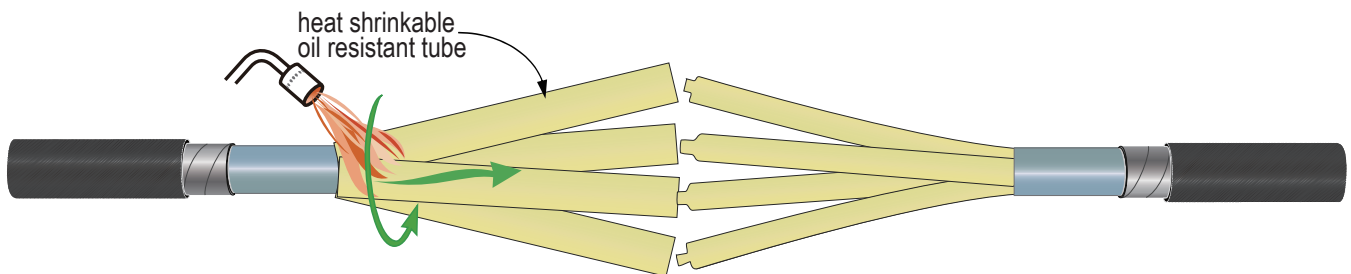
## B. Strip xlpe cable shield layer

- 1) Use cleaner to clean the armoured layer and overshooth;
- 2) Overlap the cables to be jointed by about 200 mm;
- 3) Mark the reference line (the middle of the overlap).



Remove cable jacket, armor, bedding (inner sheath) and core fillers according dimensions and equipment requirements. Secure paper insulation shield ends with a temporary band of Pvc tape.

## C. Install heat shrinkable oil resistant tube



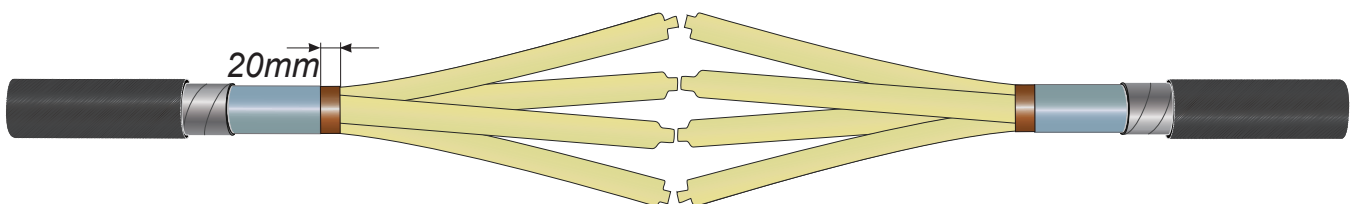
### Install heat shrinkable oil resistant tube

- 1) Place an heat shrinkable oil resistant Tube over each phase, butted to the lead sheath (or belt paper) cutback;
- 2) Shrink the three heat shrinkable oil resistant Tube in place starting at the lead sheath cutback

**PS:** To achieve a smooth, wrinklefree installation, use a reduced flame to install the thin-walled MOR

## D. Strip the lead sheath

As shown Strip the lead sheath for 25mm ;

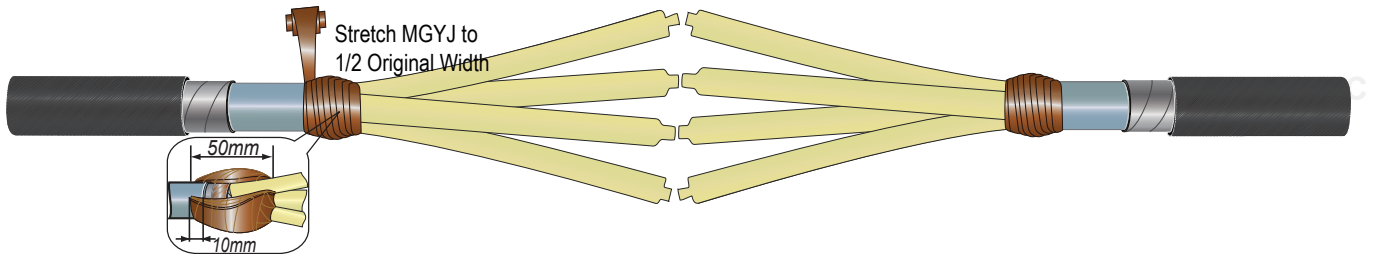


## E. Install oil resistant mastic

- 1) Spread the oil resistant mastic into the root of the cable as shown;
- 2) Trim MGYJ insert to extend 3mm beyond each phase;
- 3) Remove backing from one side of a long strip of MGYJ. Roll the MGYJ and remaining backing strip into a convenient size.  
Removing the remaining backing strip, tightly wrap the MGYJ from the mark on the lead sheath to the outer edge of the MGYJ insert. 2 to 3 strips of MGYJ should be used to build the MGYJ to the shape shown.

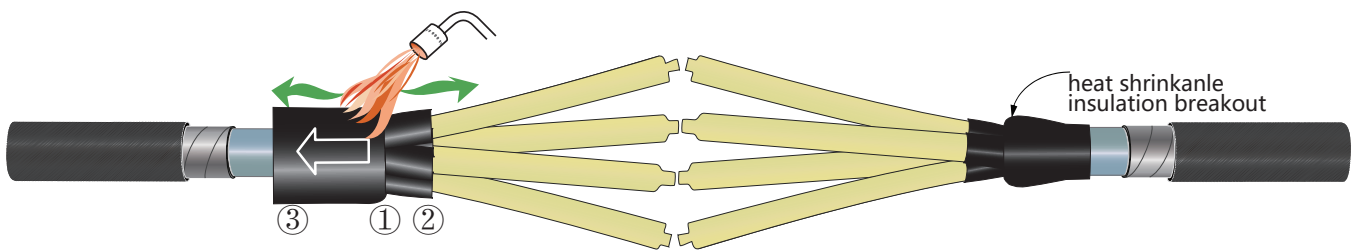
### Note:

Do not over apply. The finished MGYJ diameter should not exceed that of the breakout installed in the next step.



## F. Install Shrink heat shrinkable insulation breakout

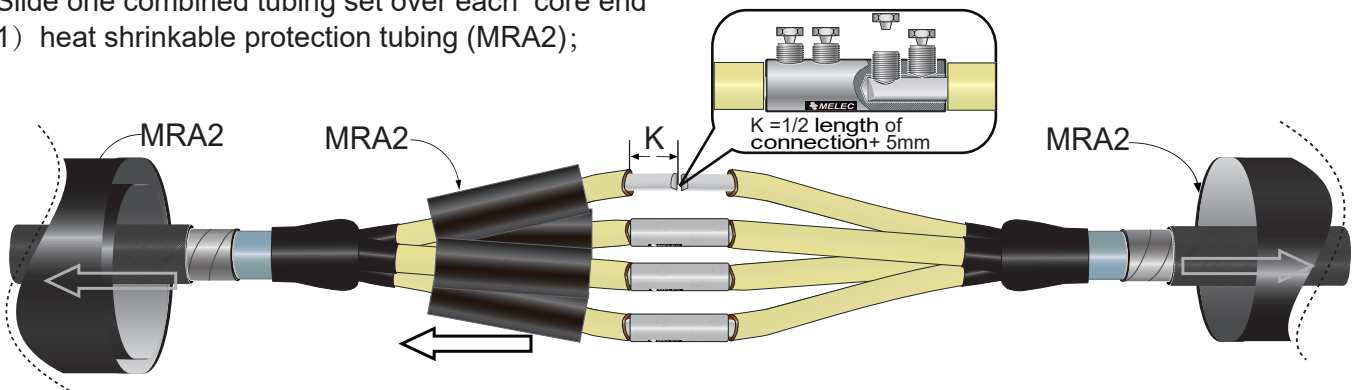
- 1) Put heat shrinkable insulation breakout MIB well down into the cable crutch;
- 2) Shrink it in the order of 1,2,3.



## G. Position the tubing and installation connectors

Slide one combined tubing set over each core end

- 1) heat shrinkable protection tubing (MRA2);



### Installation connectors

- 1) Remove the oxide layer on the conductor surface with a brush;
- 2) Select suitable tool to install metal connectors according to the process requirements (The sequence of screwing off the bolts should be in accordance with the installation instructions of connectors);
- 3) After installing, smooth the sharp edges with a file, then remove the polished metal powder with cleaning kits;
- 4) Clean connectors and insulation.

## H、 Shrink the heat shrinkable tubing by heating

### Installation sequence of heat-shrinkable tubing

#### Installation method

Position tubing centrally over the connectors. Start shrinking in the centre working towards the ends;

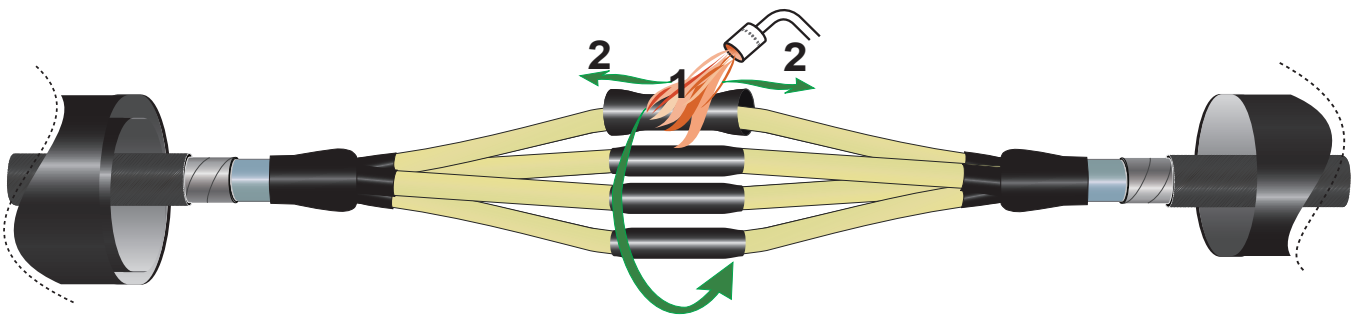
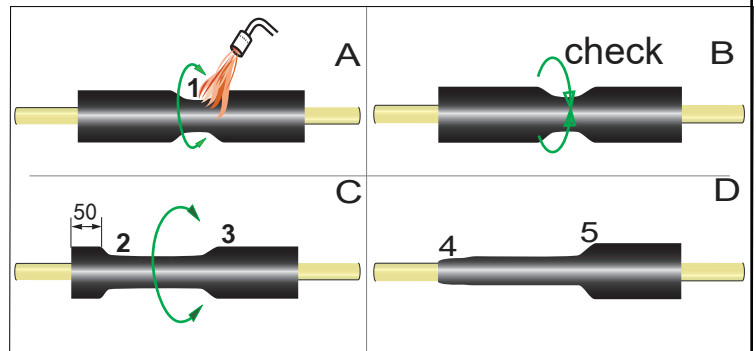
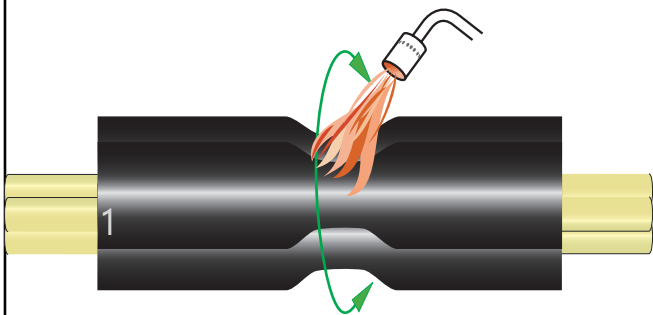
#### Note:

Continue with the next step while the tubing are still hot.

- A) Start shrinking the sleeves in the centre (1);
  - B) Check if fully shrunk by twisting the end. The sleeves should not move from its position;
  - C) Continue shrinking by working towards one side (2), stopping 50 mm from the end;
  - D) Shrink down the first end (4) and finally the second (5)
- The sleeves should be fully shrunk without leaving ridges

### Shrinkage instructions:

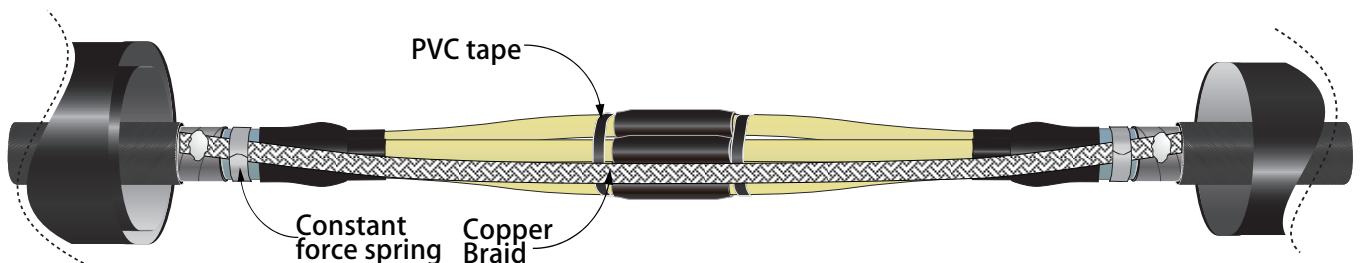
- 1) Adjust the voltage regulator and combustor properly, Use the outer yellow flame for heating, Keep the area for installation ventilated in order to avoid the influence of smog;
- 2) Use outer flame to heat the heat shrinkable products. The height of the flame should be 100-300 mm;
- 3) Unless otherwise stated, keep the flame move around the tubing evenly and with rotation;
- 4) Do not keep the flame at the same spot for over 3 seconds. It will burn the heat shrinkable products occasionally Instructions for combustor .



## I、 Install Copper braid

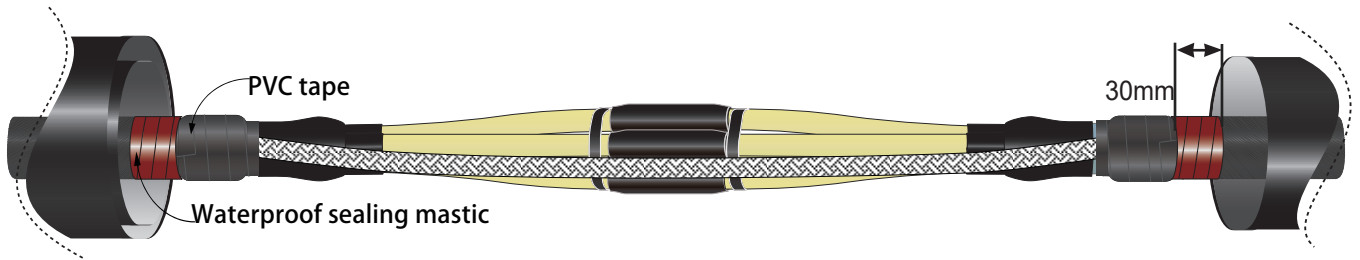
1) Bind the wires with PVC tape;

2) As shown in the figure, the in-plated copper braid is fixed on the lead cladding with a constant force spring ring, and the tin-plated copper braid is welded on the steel armor.

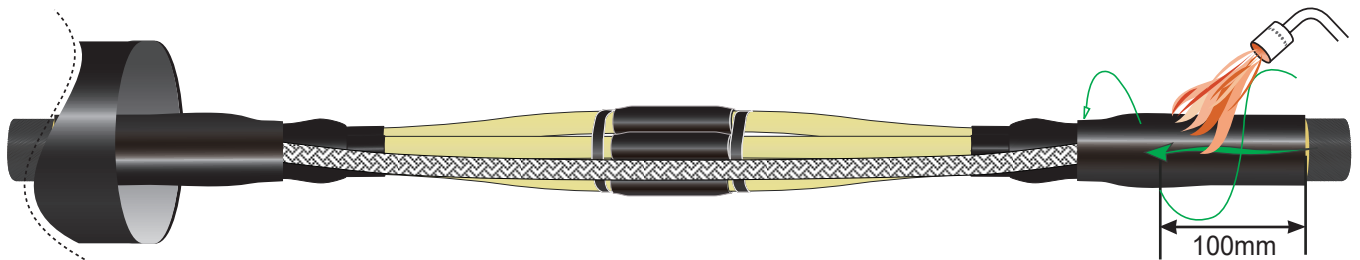


## J、 Install heat shrinkable tubing

- 1) As shown, Wrap PVC tape in constant force spring.
- 2) As shown, Wrap waterproof sealing mastic tape MMFJ in both end of outer sheath .

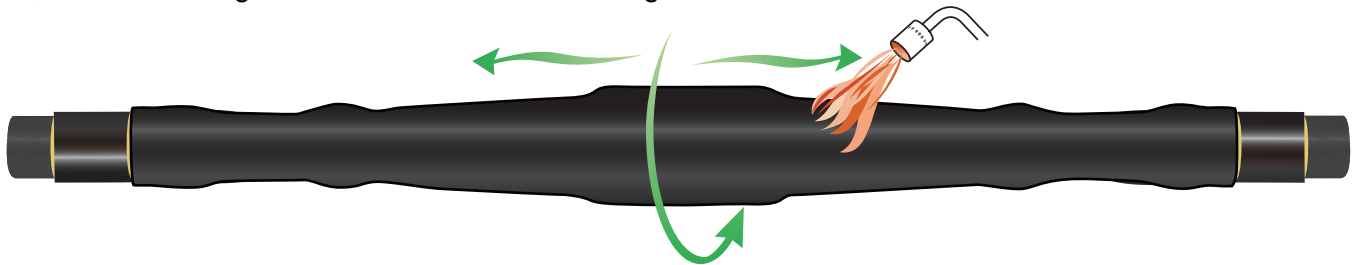


- 3) As shown, Install the shrink heat shrink tube.



## K、 Install heat shrinkable tubing MRA2 for outer sheath

- 1) Clean and degrease the ends of the overshath for a length of about 150 mm ;
- 2) Position the longer sleeve over the short core end so that it overlaps the end of the overshath by about 120 mm ;
- 3) Start shrinking at the overshath end, working towards the connector area



- 4) Position the second sealing sleeve so that it overlaps the other end of the overshath by 120 mm ;
- 5) Start shrinking at the overshath end, working towards the connector area.

## L、 Joint completed

Allow the joint to cool before applying any mechanical strain

