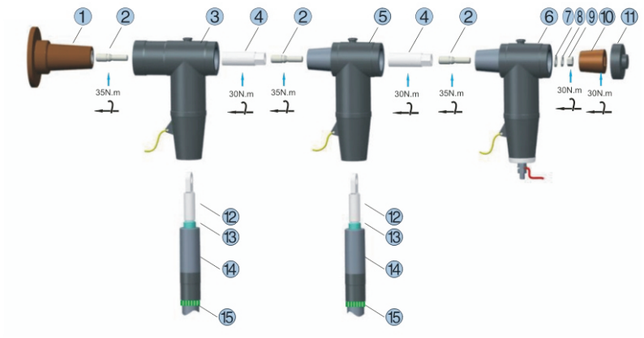
Front/Rear T–Body Connector Installation Instructions

Installation Diagram

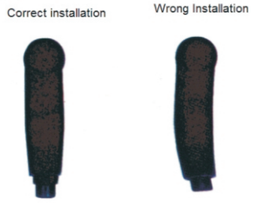


(图10)

1. Casing	5. Rear T-body Connector	9.Nuts	13. XLPE Cable
2. M16/M12 Adjustable Bolts	6. Rear Arrester	10.Insulating Plug	14. Stress Cone
3. Front T-body Connector	7. Flat Washer	11.Dust cover	15. Positioning Chain
4. Conducting Rod	8. Spring Washer	12.Crimp Terminals	

Considerations

1.Cable joint bending to cause partial discharge problem.
2.Insulator cut too much.
3.Crimp Terminals isn't compacted.
4.Ungrounded ground wire
5.Cable peristalsis is considered when the cable is fixed.
6.Need to lubricate the contact surface when install stress cone and plug.
7.If the angle of end insulator is not big enough. It will cause stress cone can't be installed.



Joint deformation

QJT-15/630Front T-body connector
HJT-15/630Rear T-body connector

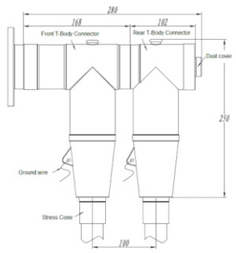
Introduction

The 12/20kV 630A front / rear T–body connectors are used to terminate polymeric cable to equipment, such as transformers, switchgear, motors etc. equipped with bushings meeting type C interface per EN 50181 and 50182.

The performance meets GB/T 12706 and JB/T 10739.

The relationship between the stress cone and the conductor cross section is as follows

Stress Cone	Bore	Conductor cross section (mm²)
TYPE01	Φ15	25 ~ 50
TYPE02	Φ19	70 ~ 95
TYPE03	Φ22	120 ~ 150
TYPE04	Φ25	185 ~ 240
TYPE05	Φ29	300 ~ 400



Schematic

Work Environment

The environmental temperature is –40~+60° C, operating temperature, overload temperature and short circuit temperature meet the requirements of its supporting cross–linked cables.

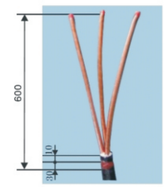
Product characteristics

- This product use SIR silicone rubber, with tear resistance, ozone resistance, corrosion resistance .
- This product use the international advanced three–layer injection process to avoid the gap and minimize the partial discharge.
- The inside/outside shielding electric field simulation design makes the field more optimized structure; the outer shielding layer uniform, grounding resistance is less than 5K.

Installation instructions

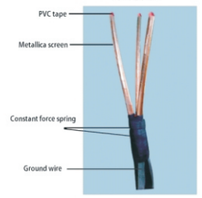
1. Install cold shrinkable power cable accessories

1.1 Put the cable in a predefined position and peel the outer sheath, steel armor and the undersheath. Keep 30mm steel armor and 10mm undersheath. And bind up each fracture of metallica screen by PVC tape. Then remove interior filling material.(Pic.1)



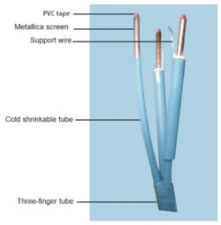
(Pic.1)

1.2 Fixed ground wire. Use constant force spring to tape the ground wire to the steel armor and wrap 2 layers of gum filler on the surface. Plug one ground wire into the three–core wire, insert the stress cone, fixed the ground wire to the metallica screen with a spring, and wrap the gum fillers. (Pic.2)



(Pic.2)

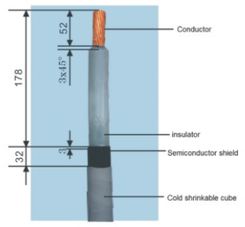
1.3 Install cold shrinkable three–finger tube. Place the three–finger tube on the root of the cable and pull out the support wire counterclockwise. Then tape the large ports with PVC tape. Put the cold shrinkable tube into the three–finger tube, and the overlap is at least 20mm. Finally pull out the support wire counterclockwise. (Pic.3)



(Pic.3)

2.Cut the cable

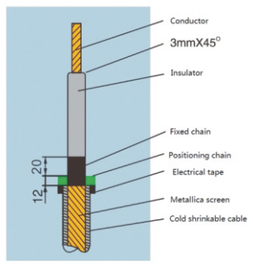
2.1 Cut and peel the cable according to the dimensions of Pic. 4, And don't scratch the insulator surface. Then polish the insulator surface with sandpaper and clean it with cleaning paper. Make 3mm cone between insulator and semiconductor shield. (Pic.4)



(Pic.4)

3. Install the fixed chain

3.1 In the fracture of cold shrinkable tube wind two layers of electrical tape, And the overage width of semiconductor shield does not exceed 12m. Then fix the fixed chain which should be docked with insulator.



(Pic.5)

4.Install stress cone

4.1 Clean and lubricate the surface of the insulation and stress cone. Then push the stress cone into the core wire r slowly until the black part of stress cone arrives the fixed chain. (Pic.6)

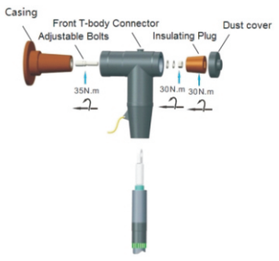
(Pic.6)

5. Install crimp terminals

5.1 Turn he terminal hole to the socket direction, and use crimping pliers to crimp the terminal to the cable conductor three times.

6. Install rear T–body connector

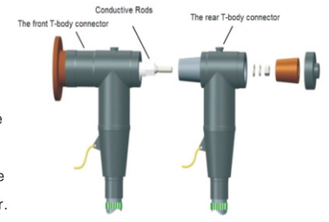
6.1 Screw M16/M12 adjustable bolts into the screw of casing and the depth is 25mm at least.
6.2 Clean casing, front T–body connector, insulating plug and dust cover. Then apply grease in the surface of them.
6.3 Push the cable into the connector slowly until seeing the complete screw hole of the terminal from the connector
6.4 Push the front T–body onto the casing. Make sure the adjustable bolts passes through the hole in spade of lug.
6.5 If the following need to install Rear T–body connector and arresters, turn to step 7.
6.6 Tighten the washer ,spring washer and hex nut with a Socket spanner.
6.7 Slide insulating plug down the front T–body connector,, Then place the dust cover over the insulating plug and push it until it snaps into place. (Pic.7)



(Pic.7)

7. Install rear T–body connector

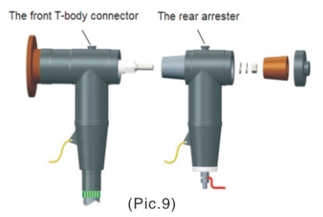
7.1 Attach the conductive rod to the bolt in the front T–body connector and tighten the M12 bolt.
7.2 Push the cables handled by installation steps 1 to 5 into the rear connector.
7.3 Slide the bolted companion rear T–body connector over the rod and stud assembly and into the front T–body connector. Make sure the bolt passes through the hole in spade of the connector, conductive and the rear T–body connector are flattened. (Pic.8)



(Pic.8)

8.Install arrester

8.1 Clean and lubricate the surface of the arrester.
8.2 Repeat step 7.1
8.3 Push the arrester into the front T–body connector (or the rear T–body connector).
8.4 Repeat step 6.6~6.7
8.5 Fixed the ground wire at the system ground.



(Pic.9)

ADD :Chongshi Industrial Zone,Panshi,Beibaixiang,Yueqing,Zhejiang,China,325603
TEL:0086-577-62836929 0086-577-62836927
Http://www.chinahaivo.com
http://www.haivocablekits.com
http:// www.haivofusecutout.com

HAIVOL ELECTRICAL Power the future

ZHEJIANG HAIVO ELECTRICAL CO.,LTD