

United Electric

Installation Instruction

GCA CBZ20-250A

250A Screened Straight connector for 1-coreXLPE cable up to 24kV, copper wire screened, without armored



Generals

- Check and ensure the cable against any damage, water or moisture corrosion.
- The cable must be fixed right under the bushing without any distortion.
- Carefully read and follow the steps in the installation instruction. We are not responsible for any fault from incorrect installation.
- Do not nick the connector body during all the procedure of operation.

United Electric Co., Ltd

702, North Jinke Building, No. 8 Qionyu Road,
Hi-tech Industry Park, Nanshan district,
Shenzhen 518057, P.R. China

Tel: 0086-755-26419390/26419370/26406630

Fax: 0086-755-26414580

E-mail: export@ueaccessory.com

Web: www.ueaccessory.com

CBZ20-250 is a screened straight connector made of silicone rubber, designed to be connect with the type A bushing in accordance with the standard of EN50181. The outer diameter of the contact pin is $\varnothing 8\text{mm}$, which is directly connect with the bushing installed in the European style switchgear.

The instruction is suitable for the installation of CBZ20-250 over 1-core XLPE cable, copper wire screen, without armour, suitable cable cross section 50sq.mm.

The CBZ20-250 installation should be made by the person who has been trained and get the qualified certificate. Carefully read and follow the steps in the installation instruction before installing the product.

1. Check the cable and installation site installation.

- Check the outer diameter of cable insulation before installation, which should be 17~22mm.
- The installation site should be clean, the relative humidity should not exceed 75%, the ambient temperature should be higher than 5°C.

2. Cable preparation

- Clean and remove the cable outer sheath for the length of 500-800mm as request on site. (Figure 1)



Figure 1

- Bend the copper wires back onto the cable sheath evenly.
- Fix the copper wire to outer cable sheath by semi-conductive tape.
- Knit the copper wires to form an earth lead. Cut the end of earth lead to get a flat cross-section.
- Measure 155mm from the cut end of outer cable sheath, mark a reference line over the cable insulation screen. Cut the cable at the reference line.



Figure 2

- Remove the cable insulation screen to 25mm above the end of wrapped semi-conductive tape.
Note: Do not nick the cable insulation.
- The cable screen cut should be smooth transition, without any turnout and sharp-angle.
- Check again of the insulation diameter, which should be 17~22mm.

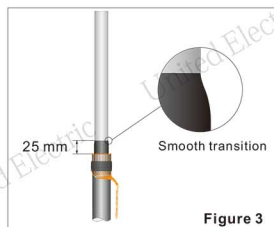


Figure 3

- Remove the cable insulation for 35mm measure from cut end of cable conductor, keep the insulation for 95[±]mm.
- Wrap PVC tape over the cable conductor temporarily.
- Chamfer the cable insulation cut end to 1×45°.

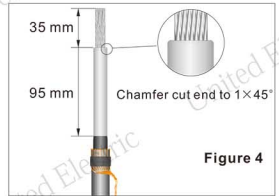


Figure 4

- Compress the earthing lug over the end of the earth lead by compression tool, remove any sharp edges and flashing.
- Place and shrink heat shrink tubing over the earth lead, cut the excess tubing to expose the palm of earthing lug.
- Polish the cable insulation by abrasive tape to get a smooth surface, then clean the cable from cable insulation to insulation screen. The cable insulation surface should be smooth and free from all traces of conductive material.
- Half-overlapping wrap two layers of semi-conductive tape cover the copper wires for 60mm start from 20mm away from the cut end of insulation screen.



Figure 5

3. Complete Installation

- Place the holding bail over the cable. Remove the PVC tape from cable conductor. Clean the cable conductor, thoroughly remove the oil stain and oxide film of the cable conductor surface.
- Place cable lug onto cable conductor, compress the lug with compress tool. Remove any sharp edges and flashing.
Note: Do not nick the cable insulation.
- Clean the compressed lug and cable insulation as shown in figure 6, do not reuse the cleaning tissue.



Figure 6

- Coat silicone grease onto the surface of cable insulation .
- Coat silicone grease onto the inner surface of straight body by plastic rod. (figure 7)



Figure 7

- Align straight body eye with cable insulation. Slip on the straight body over cable insulation, until cable insulation screen cover by straight connector, and the thread of contact pin is exposed.

Note: The straight connector body should be keeping straight after pushing onto the cable insulation, without distortion.

- Place the nut into the socket wrench, screw it over the thread of contact pin by turning the socket wrench at clockwise.

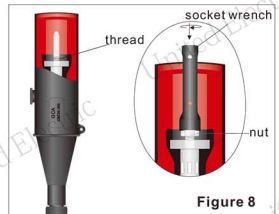
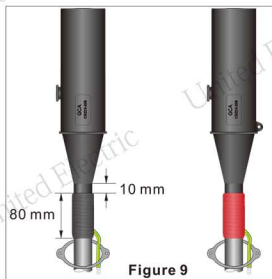
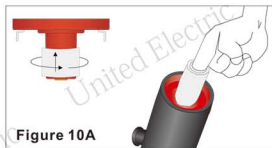


Figure 8

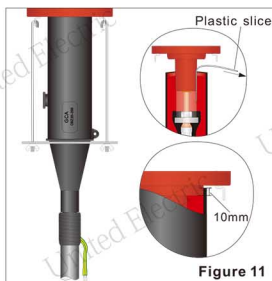
- Half-overlapping wrap around semi-conductive tape with half stretching over the tail of straight connector, and fill the gap between the tail of straight body and cable outer sheath as shown in figure 9.
- Wrap around PVC tape cover the semi-conductive tape.
Note: Use the red, blue, yellow PVC tape to mark different phases.



- Clean inner surface of the straight body eye with cleaning tissue. (figure 10A)
- Clean outer surface of connecting bushing with cleaning tissue. (figure 10A)
- Coat silicone grease into the surface of the straight body eye. (figure 10B)
- Coat silicone grease onto the outer surface of connected bushing. (figure 10B)



- Place a plastic slice into the entry of straight connector body, align the contact pin with connecting bushing, push straight body onto connecting bushing. Pull out the plastic slice while push the connector body onto the bushing, to release air pressure inside the connector body. (figure 11)
Note: The straight body should be keep straight after finishing pushing onto the bushing, without distortion.



- Fix the fixing hook to the bushing. Make sure that the straight body is installed well onto the bushing. After fixing the hooks, the straight body should cover the step of the bushing for 10mm.
- Connect earth lead and earthing wire to the earthing point. (figure 12)
- Finish the installation of the other two phase and fix the cable. Installation complete.

