

### 42kV Indoor Cold Shrinkable Termination (Single-Core)

#### Installation Instructions

#### Important:

- 1. Please cut off the power of the system before installation, maintenance, and disassembly, and make sure that the product rating (42kV and below) is consistent with the application.
- 2. Check all spare parts specifications, verify the quantity is as listed, and ensure that it matches the cable or product.
- This product must be installed and operated by well-trained electricians, and the installation should comply with "Installation regulations for cold-shrinkable cable accessories with rated voltage 35kV and below".
- 4. Read the installation manual carefully before installation, prepare the tools required for installation, and keep them clean throughout the installation process.

**Required installation tools:** Cable stripping tools, terminal crimping tools.

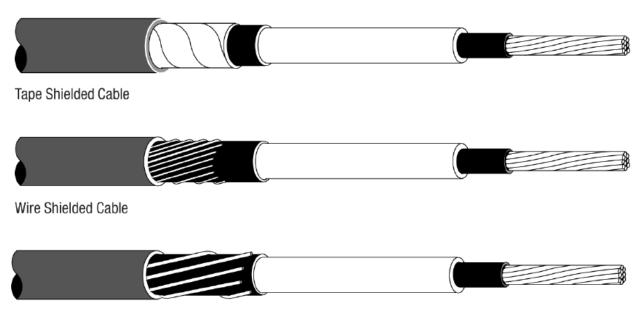
#### **Part Description:**

		Cable
Voltage Rating	Part Number	Insulation
		O.D. Range(mm)
	42-CSTI-A	31.0-36.0
42kV	42-CSTI-B	35.0-41.0
	42-CSTI-C	39.0-48.0
	42-CSTI-D	48.0-57.0

#### **Product accessories list:**

42kV Indoor Cold Shrink Termination (Single-Core)					
No.	Description		No.	Description	
1	Cold Shrink Termination		8	Silicone lubricant	
2	Cold Shrink Jacket Seal Tube		9	Paper towel	
3	Silicone Tape		10	Installation instructions	
4	PVC Tape (Black)		11	Packing List	
5	Sealing Tape		12	Cable lug (Optional)	
6	Sandpaper belt		13	Grounding kit	
7	Gloves		14	Connecting pipe (Optional)	

# Chardon Cold Shrinkable Termination for Single Conductor Tape Shielded , Wire Shielded or Jacketed Concentric Neutral (JCN) Cable



Jacketed Concentric Neutral (JCN) Cable

If the cable to be installed does not belong to one of the above three types, this installation instruction is not applicable. Please contact us in time.

#### A. Prepare Cable

# Tape Shielded Cable (The cable will use the grounding kit.)

#### STEP 1

Prepare cable using dimensions as shown in Fig.1 .

NOTE: Ensure that all parts of the cable are not damaged. If there is any irreparable damage, a new cable needs to be made. If there is any impurity or slight damage on the surface of the insulation, it can be polished with fine sandpaper.

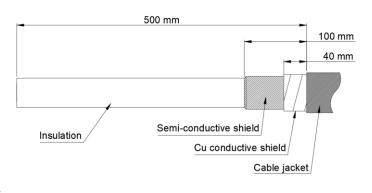
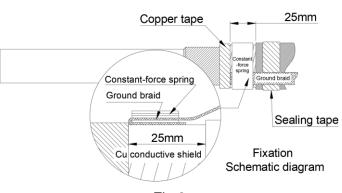


Fig.1

#### STEP 2

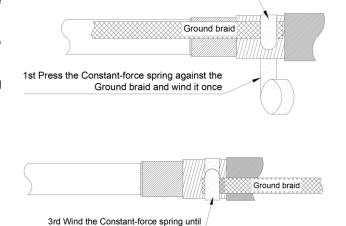
- Sand off the sharp corners of the Cu conductive shield with coarse sandpaper and secure with copper tape.
- Use coarse sandpaper to grind the cable jacket about 30mm to rough the surface.
- Clean cable jacket and Wrap 1 circle of sealing tape in the polished area of the cable sheath.
- Measure down 25mm from top of the cable jacket use constant-force spring to fix ground braid onto Cu conductive shield.



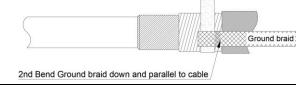
#### Fig.2

#### **Constant-force spring installation instructions**

- 1st Press the Constant-force spring against the Ground braid and wind it once.
- 2<sup>nd</sup> Bend Ground braid down and parallel to cable.
- 3<sup>rd</sup> Wind the remaining Constant-force spring until the installation is complete

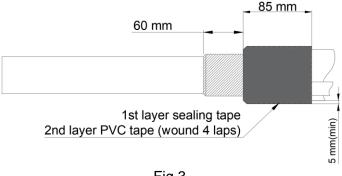


Constant-force spring



#### STEP 3

- Wrap the sealing tape onto the ground braid at 85mm lengths starting 60mm from the semi-conductive shield.
- The height of the tape is 5mm (min) higher than that of the cable jacket.
- Wrap the PVC tape on top of it by 4 laps.



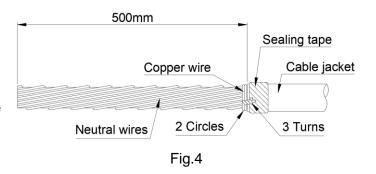
the installation is complete

Fig.3

#### Proceed to step B.

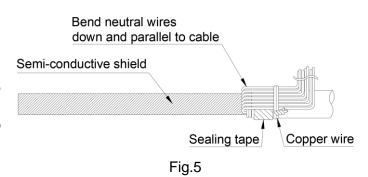
# Wire Shielded Cable / JNC Cable STEP 1

- Measure down from top of the cable as shown in Fig.4. Remove cable jacket to expose neutral wires.
- Use copper wire to lash the neutral wires. Use coarse sandpaper to grind the cable jacket about 30mm to rough the surface.
- Clean cable jacket and Neutral wires.
- Wrap 1 circle of sealing tape in the polished area of the cable sheath.



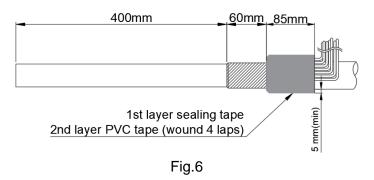
#### STEP 2

- Bend neutral wires down and parallel to cable.
- Use copper wire to secure neutral wires to cable jacket as shown in Fig.5.



#### STEP 3

- Measure down 400mm semi-conductive shield and remove it.
- Wrap the sealing tape at 85mm lengths starting 60mm from the semi-conductive shield.
- The height of the tape is 5mm (min) higher than that of the cable jacket.
- Wrap the PVC tape on top of it by 4 laps.



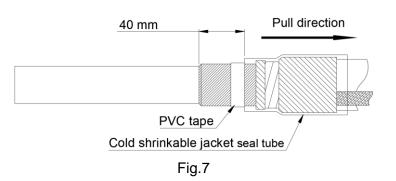
#### Proceed to step B.

NOTE: Ensure that all parts of the cable are not damaged. If there is any irreparable damage, a new cable needs to be made .If there is any impurity or slight damage on the surface of the insulation, it can be polished with fine sandpaper.

#### **B.** Install Termination

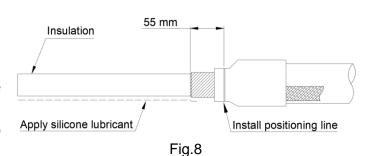
#### STEP 1

- Mark semi-conductive shield for 40mm on the PVC tape as shown in Fig.7.
- Place the Cold Shrinkable Jacket Seal Tube onto the cable, aligning the mark with the end of the hold out tube. Take out hold out tube to complete the installation.



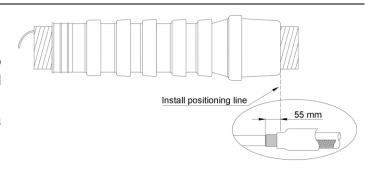
#### STEP 2

- Polish and clean thoroughly the insulation by using fine sandpaper belt and paper towel then apply the silicone lubricant around the dotted line area.
- Measure down 55mm from the top of the semi-conductive shield. Mark this position. (Fig.8)



#### STEP 3

- Place the cold shrink termination onto the cable, aligning the mark with the end of the termination as shown in Fig.9.
- Pull out the plastic tube wire at a constant speed, in a clockwise direction.
- Pay attention to the termination positioning during operation.



#### STEP 4

 Complete the shrinkage of the product, as shown in Fig.10.



Fig.9

Fig.10

#### C. Install Terminal Lug STEP 1

- Keep the "L+10mm" insulation and remove the excess part.
- Remove the insulation to expose the bare conductor according to lug depth "L" as shown in Fig.11.

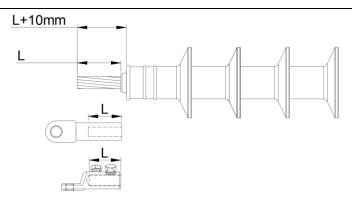


Fig.11

#### STEP 2

- Clean the conductors and terminal lugs to remove any oxide layer or impurities.
- Install the crimp terminal with specialized crimping pliers , and Install the shear bolt terminal as per the installation manual of the terminal. (Fig.12)

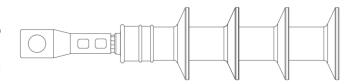
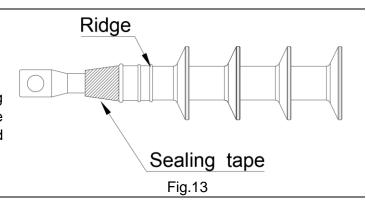


Fig.12

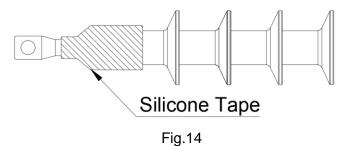
#### STEP 3

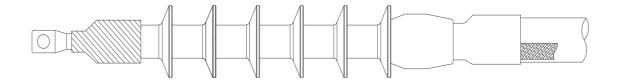
● Wrap sealing tape from the crimping position (or first bolt) of the terminal to the port of the cold shrink product in a tapered shape, creating a smooth transition. (Fig.13)



#### STEP 4

● Install the Silicone Tape to completely cover the terminal tube body to the area of the sealing ridge of the cold shrink product. (Fig.14)





The waste generated during the installation, use and replacement of this product should be sorted and should not be discarded at will.

This installation manual cannot cover all the instruction details, nor can it completely solve various problems encountered during the installation process, so when encountering difficulties or special problems during the specific installation process, please contact us in time.

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