250A 17.5 AND 24kV CLASS DEADBREAK STRAIGHT CONNECTOR

INSTALLATION & OPERATING INSTRUCTIONS

DESCRIPTION

The CHARDON deadbreak straight connector is a fully screened for connecting underground cable to transformers, switching cabinets equipped with a bushings having interface A per CENELEC EN50180 and EN50181. The deadbreak straight connector meets the requirements of IEC 60502-4 and CENELEC HD629.1 as defined below:

- 24-CL250 250A 17.5 kV and 24kV Class

KIT CONTENT:

- Straight Body with Test Point
- Compression Connector
- Lubricant
- Paper Towel
- Bail Assembly
- Installation Instructions

TOOL NEEDED:

- Tape Measure
- Wire Brush
- Knife
- Cable Stripping Tool
- Crimping Tool
- Cable Cleaner
- Cable Cutters
- Emery Cloth

CAUTION: All associated apparatus must be de-energized during installation and/or maintenance.

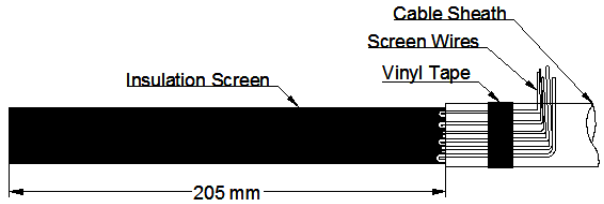
DANGER: Do not touch or move energized product by hand. Failure to follow this instruction may result in serious or fatal injury, as well as damage to the equipment.

SAFETY INFORMATION

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians, who are familiar with this equipment should install, operate and service it.

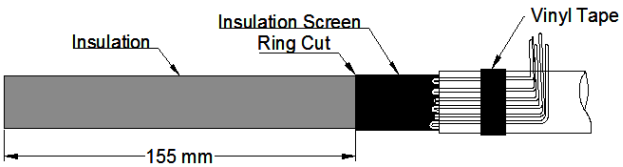
INSTALL PROCEDURE

STEP 1



a) Measure down from top of the cable 205 mm. Remove the cable sheath.
b) Fold the screen wires back over the sheath and secure them with two layers of vinyl tape (if screen wires is used to grounding, provide sufficient length of screen wires for grounding after installation).

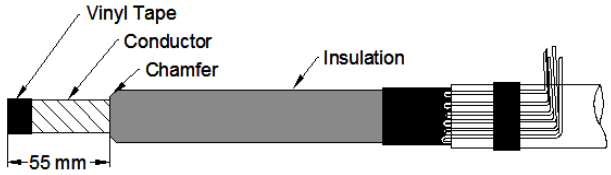
STEP 2



Measure down from the top of the cable 155 mm. Remove the insulation shield.

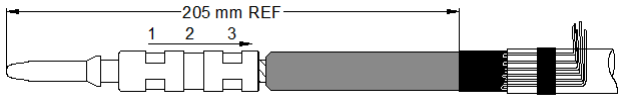
Note: Take care to prevent damage to the insulation. If the insulation is damaged during scoring or ring cut, the cable must be re-terminated. If the insulation requires sanding. Only a 120# or finer aluminum-oxide (emery cloth) should be used. Do not use any other abrasives.

STEP 3



a) Measure down from the top of the cable L mm (see table1). Remove the insulation to expose the bare conductor. Take care not to damage the conductor.
b) Apply two layers of vinyl tape.
c) Chamfer the edge of the insulation no more than 5 mm at 45 degrees to ease installation.

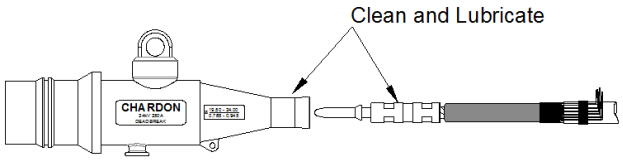
STEP 4



a) Remove vinyl tape before installing connector and clean the exposed conductor using a wire brush.
b) See Table1 for recommended crimp tools and dies
c) Place the connector on the conductor. Make sure the threaded hole in connector faces the apparatus bushing.
d) Crimp the connector starting at the shoulder and rotate the crimping tool 90 degrees between each successive crimp to prevent connector distortion.
e) Re-align the connector with the cable to eliminate any bends caused by crimping
f) Clean excess grease from connector by wiping toward threaded eye
g) Remove any sharp edges after crimping.

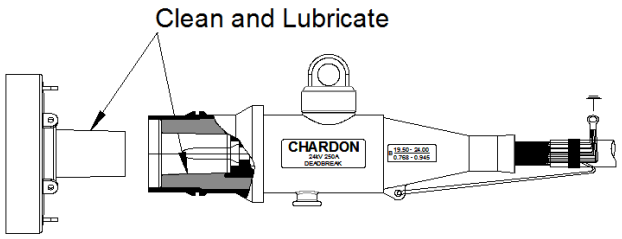
NOTE: If a cold shrink tubing or heat shrink tubing is to be used. Please install it before step 5.

STEP 5



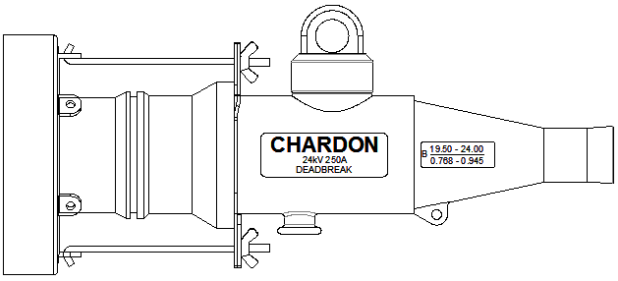
a) Clean the cable insulation and the straight connector with a paper towel and a suitable cleaner.
b) Apply a thin layer of lubricant to the insulation of the cable and the interior of the cable end of the elbow housing
c) Slide the straight connector onto the cable, using a back and forth twisting motion.

STEP 6



a) Clean the bushing and connector interfaces and apply a thin layer of lubricant to them
b) Push the elbow onto the bushing until it is fully seated.

STEP 7



Insert the bail rods into the bushing tabs. Slide the bail plates around the connector and insert the threaded ends of the rods through the holes in the plates. Engage and tighten the knurled nuts

CAUTION:

The apparatus bushing and elbow connector should not support the weight of the cable

FOR FURTHER INFORMATION WRITE TO

Tabae1 Crimp Chart

Connector Diameter	Conductor Size	Burndy			Thomas and Betts		Kearney		ACA Conductor Accessories		Anderson Tool	Edison Electic Institute Rederence
		Tool	Die		Tool	Die	Tool	Die	Tool	Die		
5/8"	NO.4 THRU 2/0 STRANDED	Y34	A243 (2)	A25AR (2)	UT-3	5/8" (4)	O	5/8" NOSE (4)	12A	B24 EA(2)	VC-5 VC-6	8A
		Y35 OR Y39	U243 (2)	U25ART (2)	UT-5	TV (4)		9/16"(3)				
			UBG (2)	U687 (2)			WH2, WH3, WH4, BH14, PH2, PH3	9/16"(2)				
		MD6	W243 (2)	BG(3) NOSE	UT-15	54H (2)		572(2)				
			WBG (2)	W687 (2)								
3/4"	3/0-4/0 STRANDED	Y34	U247 (2)	A27AR (2)	UT-5	TV (4)	O	737(3)	12A	B39 EA (2)	VC-5 VC-6	8A
		Y35 OR Y39	U247 (2)	A27 ART (1)				747(2)				
			U467 (2)		UT-15	66 (2)	WH2, WH3, WH4, BH14, PH2, PH3	737(3)				
		MD6	W247 (2)					747(2)				

These instructions do not purport to cover all details or variations in equipment, not to provide for every possible contingency, to be met in connection with installation, operation or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently, please contact the Chardon Group