

20™ NON-FUSED CONNECTOR KIT

THIS KIT CONTAINS: 1 Line side housing with white (neutral) marking band
1 Load side housing with white (neutral) marking band
1 Socket contact
1 Packet of lubricant
1 Pin Contact (dummy fuse)
1 Assembly dowel

WARNING: Improper use or installation of this product may cause fire, electrocution, serious personal injury or death. Shut off power to the circuit or remove fuse before using this product. Use only connector properly sized to the wiring being used. Consult local building codes for installation requirements.

INSTALLATION INSTRUCTIONS

CAUTION - Identify LINE and LOAD sides of wiring with correct molded connector bodies before installing. (Line Side has double ridge, Load Side has single ridge, see below). Use type U or LC contacts on copper wire only, type UA or LA contacts on aluminum wire only. MAXIMUM 75°C (167°F) OPERATING TEMP. 600 VOLT 30 AMP

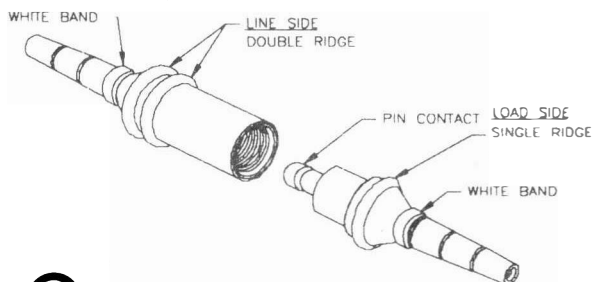
1. Measure or determine the overall diameter of cable insulation, and from diagram on other side, select corresponding section on molded sleeve. Cut off remaining sections of housing to size required. Example: If cable O.D is 0.270", it falls within the "C" range - cut off at notch between "B" and "C" as shown in cutaway view of assembled kit.
2. **Thoroughly clean** approximately 8" of Line Side cable to be inserted. Apply 1/4 of lubricant packet (do not substitute) to cable and small hole in the Line Side receptacle housing.
3. Insert cable through small hole in housing and push through sufficiently to allow for stripping of insulation.
4. Strip wires 3/4 inch for wire sizes 14 AWG through 10 AWG, 3/8 inch for wire sizes 8 AWG through 2 AWG (DO NOT PENCIL INSULATION). Application of oxidation inhibitor such as Noalox® required on properly cleaned aluminum conductors. Crimp on the line side socket contact. Make sure the stripped wire does not go beyond the end of the crimp barrel and enter the fuse socket contact. (Refer to the table below for correct tool & die.)

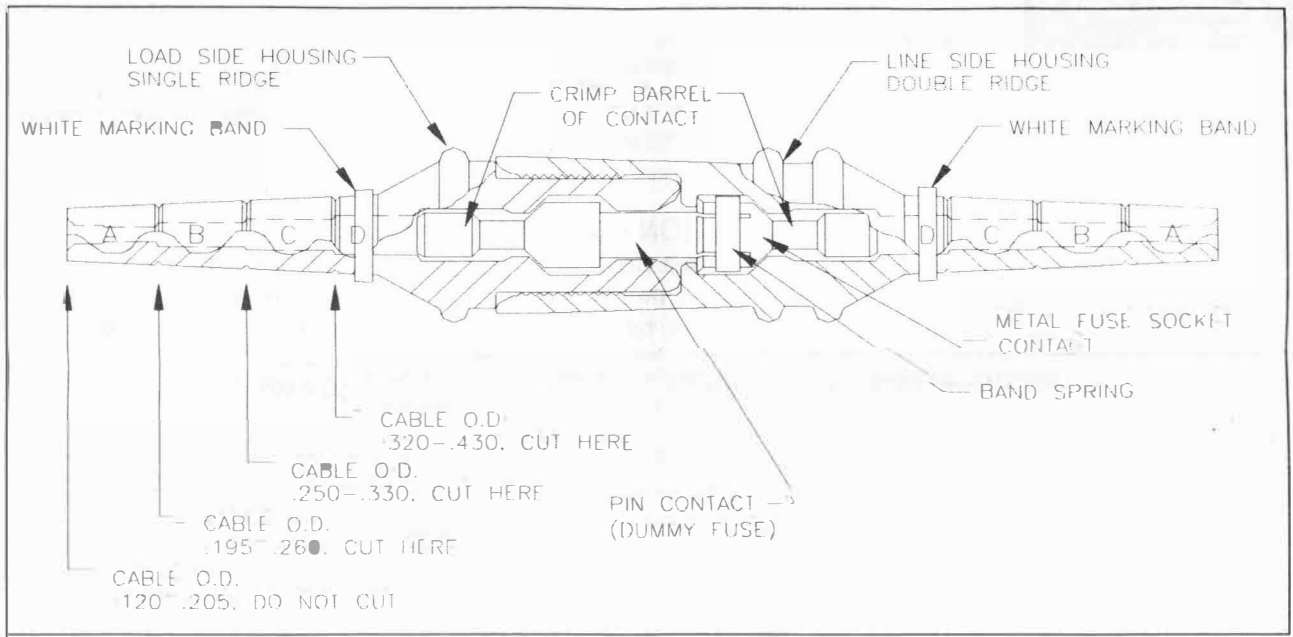


| UNIVERSAL CONTACT U or UA | | | |
|---------------------------|-----------------------|--------------|--|
| CRIMP AREA | CONDUCTOR SIZE IN AWG | | RECOMMENDED CRIMP TOOLS & DIES OR DIMENSIONAL EQUIVALENT |
| | SOLID | STRANDED | |
| A | 14, 12 10, 8 | 14, 12 10 | IDEAL No. 30-429 "BARE" IDEAL No. 30-429 "BARE" |
| B | 6 4 | 8 6 | IDEAL No. 30-425 large crimp area IDEAL No. 30-425 large crimp area |
| LARGE CONTACT LC OR LA | | | |
| L | 2 - | 4 2 | IDEAL No. 30-425 large crimp area IDEAL No. 30-425 large crimp area |

NOTE: ALUMINUM PARTS HAVE A SCRIBED LINE ON BARREL DIAMETER - OXIDATION INHIBITOR REQD.

5. Place wood dowel in socket. Place free end of dowel against firm surface and push housing forward until contact snaps into locked position in the housing. Wipe off any excess lubricant.
6. Repeat above steps with Load Side housing using the metal pin contact (dowel not required). For ease of assembly, first apply a small amount of lubricant to the opening in the housing for the pin contact. NOTE WHEN PROPERLY SEATED, THE PIN CONTACT SHOULD EXTEND APPROXIMATELY 9/16" BEYOND THE RUBBER LOAD SIDE HOUSING.
7. Plug the Load Side and line side housings together. If less breakaway force is desired, lubricate mating rubber surfaces with grease supplied **CAUTION: WHEN PROPERLY MATED, THE SEAM BETWEEN THE HOUSINGS SHOULD NOT EXCEED 1/32 INCH.**





**EXCERPTS OF 1996 US NEC TABLES 5 & 5A
DIMENSIONS OF INSULATED CONDUCTORS**

| Size in AWG | Approx. Diameter in Inches for Insulation | | | | | | Approx. Diameter in Inches for Compact AI Conductors | | |
|-------------|---|-----------------|------------------|------|--------------------|--------------|--|------|------|
| | RH | RHH, RHW, RHW-2 | THW, THW-2, THHW | TW | THHN, THWN, THWN-2 | XHHW, XHHW-2 | THW, THHW | THHN | XHHW |
| 14 | .163 | .193 | .163 | .133 | .111 | .133 | - | - | - |
| 12 | .182 | .212 | .182 | .152 | .130 | .152 | - | - | - |
| 10 | .236 | .236 | .206 | .176 | .164 | .176 | - | - | - |
| 8 | .326 | .326 | .266 | .236 | .216 | .236 | .255 | - | .224 |
| 6 | .364 | .364 | .304 | .304 | .254 | .274 | .290 | .240 | .260 |
| 4 | .412 | .412 | .352 | .352 | .324 | .322 | .335 | .305 | .305 |
| 3 | .440 | .440 | .380 | .380 | .352 | .350 | - | - | - |
| 2 | .472 | .472 | .412 | .412 | .384 | .382 | .390 | .360 | .360 |

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WARRANTY: One-year limited warranty. See www.idealind.com or call Customer Assistance for warranty details.

WARNING: Cancer - www.P65Warnings.ca.gov.

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BUCHANAN

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