83S™ NON-FUSED Y CONNECTOR KIT

THIS KIT CONTAINS:
1 Line Side 'Y' insert assembly
1 Load Side housing
1 Line Side housing
1 Pin contact (dummy fuse)
1 Packet of lubricant

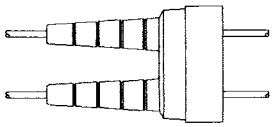
⚠ **WARNING:** Improper use or installation of this product may cause fire, electrocution, serious personal injury or death. Shut off power to the circuit or remove fuse before using this product. Use only connector properly sized to the wiring being used. Consult local building codes for installation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

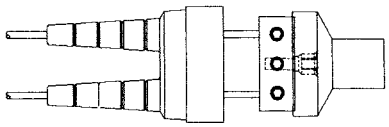
INSTALLATION INSTRUCTIONS

CAUTION: Identify LINE and LOAD sides of wiring with correct molded connector bodies before installing. MAXIMUM 75°C (167°F) OPERATING TEMP. 600V LINE SIDE-70AMP LOAD SIDE 30-AMP Cu or Al CONDUCTORS

LINE SIDE

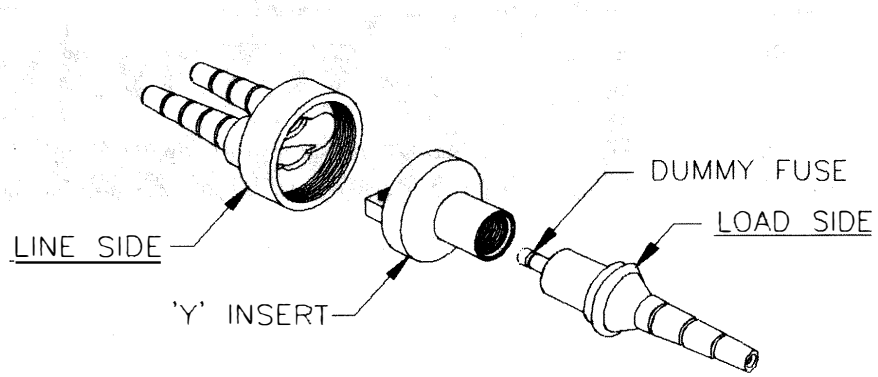
1. Measure or determine the outside diameter of the wire on the Line Side, and from CHART A, select the correct size for the molded sleeve and cut off to the size required.
2. Thoroughly clean approximately 6" of the insulation at the end of the Line Side wires and apply a light coating of lubricant (do not substitute) to the cleaned insulation and the small holes in the Line Side housing. Push the line side wires into the Line Side housing as shown in Step 1.
3. Strip the Line Side wires approximately 5/8". An application of oxidation inhibitor such as Noalox® is required on properly cleaned aluminum conductors. Tighten set screws on both conductors, as illustrated in Step 2, with a 5/32" hex key.
4. Tighten center set screw on insert contact if it is not already tight, this assembly should look like Step 3. Plug 'Y' insert into Line Side housing.


STEP 1


STEP 2

LOAD SIDE

1. Measure or determine the outside diameter of the wire on the Load Side, and from CHART B, select the correct size for the molded sleeve and cut off to the size required. Example: If cable O.D. is 0.27", it falls within the "C" range-cut off between "B" and "C".
2. Thoroughly clean approximately 8" of the Load Side wire insulation and apply a light coating of lubricant to the cleaned wire insulation and the small hole in the Load Side housing.
3. Insert the wire through the small hole in the housing, and push through sufficiently to allow for stripping insulation.
4. For wire sizes 14 AWG through 10 AWG strip wire 3/4". For wire sizes 8 AWG through 2 AWG strip 3/8" (DO NOT PENCIL INSULATION). An application of oxidation inhibitor such as Noalox® is required to properly cleaned aluminum conductors. Crimp on the Load Side in pin contact. (Refer to chart C for correct tool & die).
5. For ease of assembly, first apply a small amount of lubricant to the opening in the housing for the pin contact. Place the free end of the Pin Contact against a firm surface and push the housing forward until the pin contact snaps into a locked position. Wipe off any excess lubricant. NOTE WHEN PROPERLY SEATED, THE PIN CONTACT SHOULD EXTEND APPROXIMATELY 9/16" BEYOND THE LOAD SIDE HOUSING.
6. Plug Load Side housing into Line Side assembly. If less breakaway force is desired, lubricate mating housings with grease supplied. **CAUTION: WHEN PROPERLY MATED, THE SEAM BETWEEN THE HOUSINGS SHOULD NOT EXCEED 1/32".**



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

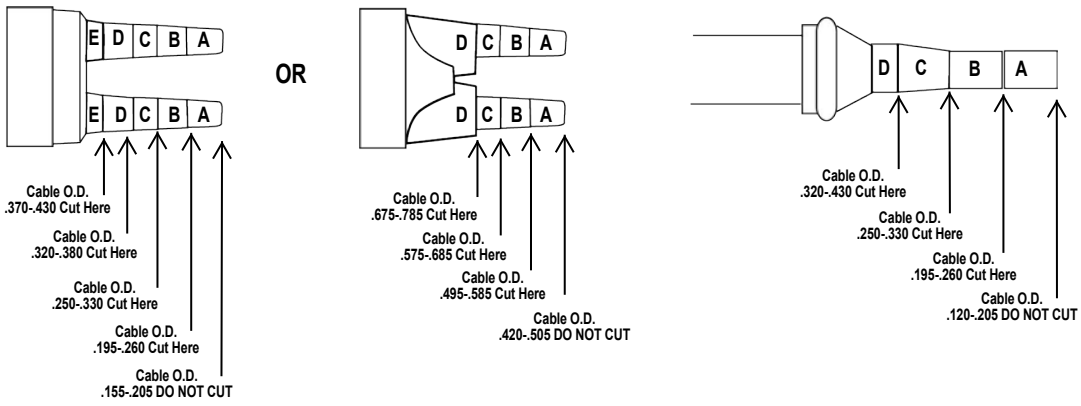
Approx. Diameter in Inches for Insulation							Approx. Diameter in Inches for Compact Al Conductors		
Size in AWG	RH	RHH, RHW, RHW-2	THW, THW-2, THHW	TW	THHN, THWN, THWN-2	XHHW, XHHW-2	THW, THHW	THHN	XHHW
14	.163	.193	.163	.133	.111	.133	–	–	–
12	.182	.212	.182	.152	.130	.152	–	–	–
10	.236	.236	.206	.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
1	.582	.582	.492	.492	.446	.442	.465	.415	.415
1/0	.622	.622	.532	.532	.486	.482	.500	.450	.450

CHART A - LINE SIDE HOUSING (inches)

CABLE O.D. (inch) or CABLE O.D. (inch)			
A	.155-.205	A	.420-.505
B	.195-.260	B	.495-.585
C	.250-.330	C	.575-.685
D	.320-.380	D	.675-.785
E	.370-.430		

CHART B - LOAD SIDE HOUSING (inches)

CABLE O.D. (inch) or CABLE O.D. (inch)	
A	.120-.205
B	.195-.260
C	.250-.330
D	.320-.430



LINE SIDE LOAD SIDE

ASSEMBLED KIT

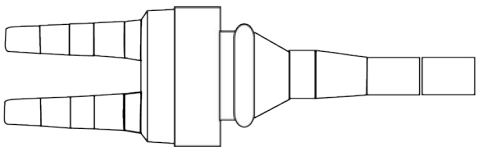
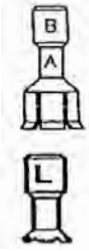


CHART C



UNIVERAL CONTACT C OR A			
CRIMP AREA	CONDUCTOR SIZE IN AWG SOLID	CONDUCTOR SIZE IN AWG STRANDED	RECOMMENDED CRIMP TOOLS & DIES OR DIMENSIONAL EQUIVALENT
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.