

Russellstoll®

INSTRUCTION SHEET FOR PLUG/CONNECTOR WITH CONDUIT ADAPTER. 30 & 50 & 60 AMP DuraGard® Devices (Conduit Adapter Kit) (For use with metallic conduit only)



WARNING

Risk of electrical shock.
De-energize all power prior to installation or repair.



CAUTION

Use only copper or copper clad aluminum wire with box mounted outlet or inlet. Use of other wire may result in the connector failing in service.

APPLICATION

Thermoplastic DuraGard® plugs, receptacles and connectors are ideal for washdown duty, harsh environments and wet locations. They can be found in a broad range of industrial uses: from chemical and food processing to data processing, mining and in marine applications—both shipboard and dockside.

Pin and sleeve contact design allows DuraGard® devices to be tailored to specific industrial applications and special purpose work in accordance with the National Electrical Code and local codes.

The devices are rated and polarized for specific voltages and amperages to prevent dangerous mismatching of devices of different ratings.

PREPARATION

1) Recommended Tools:

Torque Wrench	Screw Drivers
Ohmmeter	Wire Strippers
Allen Wrench	3/16" Dia. Drive Pin (opt.)

2) Select cable size from table according to ampere rating of device.

Ampere Rating	30	50	60
Cable Size Awg.	8	6	
Cord Type	S, SJ	S, SJ	SC, SCE, SCT, PPE, G, G-GC, W

3) Establish a wiring pattern so the same colored wire is put in the same terminal on all plugs, receptacles and connectors in the system. DuraGard® devices are polarized so the plug will enter the receptacle or connector only one way.

4) Interior markings for wiring as follows:

2p 3w	3p 4w
X/L1,Y/L2,G/⊕	X/L1,Y/L2,Z/L3,G/⊕



WARNING

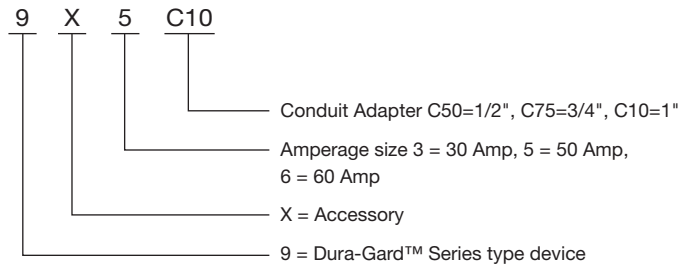
Equipment connected to circuits having different voltages, frequencies or type of current (AC or DC) must not have interchangeable attachment plugs per NEC Section 406.3 (F)

CATALOG NUMBER SYSTEM

For devices supplied with conduit adapter add suffix to catalog number as follows:

/C50 = 1/2" NPT
/C75 = 3/4" NPT
/C10 = 1" NPT

For "Field Modification Kit" order by Catalog Number as follows:

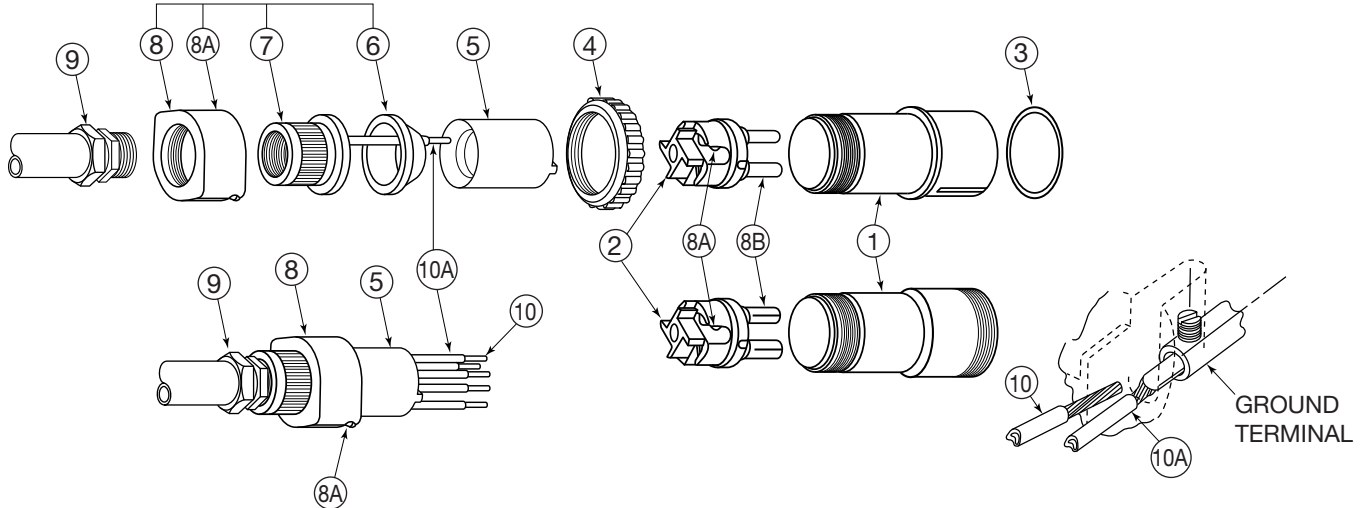


WARRANTY: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Thomas & Betts warrants that this product will be free from defects in materials and workmanship for a period of two (2) years following the date of purchase. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product or refund the purchase price. Proof of purchase is required. Misuse or unauthorized modification of the product voids all warranties.

Limitations and Exclusions: THE ABOVE WARRANTY IS THE SOLE WARRANTY CONCERNING THIS PRODUCT, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. LIABILITY FOR BREACH OF THE ABOVE WARRANTY IS LIMITED TO COST OF REPAIR OR REPLACEMENT OF THE PRODUCT, AND UNDER NO CIRCUMSTANCES WILL THOMAS & BETTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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FIELD MODIFICATION



- 5) **Turn power OFF.**
- 6) Disassemble device removing gland nut #8, seal #6, conduit adapter #7, liner #5 and interior #2.
NOTE: Interior for connectors is separated from housing by inserting a small screw driver or drive pin in current sleeve from the front and tapping lightly.
- 7) Place conduit adapter #7 into gland nut #8 and thread on to liquid tight conduit connector #9 (not supplied). Conduit adapter #7 is to be torqued tightly (50 IN/LB MIN) to conduit connector #9 using channel lock pliers.
- 8) Slide seal #6 and liner #5 over supply wires #10 (not supplied) and spaded conductor #10A (supplied). Allow 1-1/4 - 1-1/2 inch of wire to extend beyond edge of liner and strip wire 1/2 inch (30 & 50 AMP) or 3/4 inch (60 AMP). Loosen pressure screws #2A, insert stripped end of each conductor (including spaded conductor #10A with ground wire #10 nested on top) in contacts #2B in accordance with wiring pattern established in Preparation Step #3. Tighten pressure screws 2A to 20 IN/LB (30 & 50 AMP) or 25 IN/LB (60 AMP) of torque.



Green equipment ground conductor shall always be used with spaded conductor. Do not use spaded conductors as ground conductor.

- 9) Reassemble interior #2 in housing #1 by lining up 2 tabs in housing with 2 notches on interior. Push entire assembly into housing #1 being sure that top edge of liner #5 is flush with top edge of housing #1.
- 10) Thread gland nut #8 on to housing #1 being sure that only the gland nut #8 turns. This is important in that if the other components turn while tightening, the wires can be become twisted. Tighten gland nut #8 to (40-80 IN/LB). Tighten thread locking screw 8A to (2 IN/LB).

ELECTRICAL TESTING

Do not connect to power until the following electrical tests have been performed.

- 1) Make Continuity checks of wiring with Ohmmeter to verify correct phasing and grounding connections.
- 2) Check insulation resistance to be sure system does not have any short circuits or unwanted grounds.

Connect all devices in the system, turn the power on and test the system.

MAINTENANCE

Inspection of electrical equipment used in industrial and heavy use situations must be conducted regularly to ensure proper function and safety.

Check for the following items during inspection:

- 1) Unsecured contact wire terminals
- 2) Cracked or broken housings
- 3) An unfastened or loose ground conductor
- 4) Deteriorated or misplaced gaskets
- 5) Loose or missing screws



If any part of a new plug, receptacle or connector appears to be missing or damaged, DISCONTINUE USE IMMEDIATELY. Call factory for return. Use only new authorized Russellstoll® factory replacements for any any repairs.

MAINTENANCE MANGER: Please record the following information for your records.

COMPLETE CATALOG NO.
 (As shown on device label)

DATE OF INSULATION