

IEC 309 100 AMP PLUGS, CONNECTORS, RECEPTACLES, AND INLETS

Installation & Maintenance Information

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

This pin and sleeve device conforms to International Electrical Commission Standards IEC 309-1 and 309-2 Series II. The arrangement of pins, sleeves, and keys in this device is such that the device cannot be mated with an IEC 309-2 device of a different voltage, current or system rating.

Pin and sleeve devices **not** made to IEC standards are made to standards established by individual companies. It is therefore possible that a non-IEC device can be improperly mated with an IEC device of a different voltage, current, or system rating. To assure safety in the use of pin and sleeve devices, **DO NOT USE** non-IEC devices in the same premises as IEC devices, unless it has been determined beforehand that no mating is possible which can create an electrical situation which is hazardous to life or property.

These pin and sleeve devices meet the requirements of the following standards: UL1682, UL1686, and CSA C22.2 No 182.1

WARNING / ADVERTISSEMENT

Do not alter this product in any way. Doing so may lead to serious injury or death.

*On ne doit en **aucun cas** modifier ce produit. Sinon, on s'expose à des blessures graves ou mortelles.*

CAUTION / ATTENTION

Read these instructions completely, all sheets, before wiring and use.

Lire attentivement toutes les instructions avant le câblage et l'utilisation.

WARNING / ADVERTISSEMENT

To avoid dangerous overheating, do not use aluminum wiring. Use copper wire only.

Pour éviter toute surchauffe dangereuse, ne pas utiliser de fil aluminium. Utiliser seulement un fil en cuivre.

WARNING / ADVERTISSEMENT

To avoid electrical shock electrical power must be **off** before and during installation, inspection, and maintenance.

Couper le courant avant et pendant l'installation, l'inspection et l'entretien pour éviter le risque de chocs électriques.

CAUTION / ATTENTION

To avoid excessive strain on wire terminations which could lead to electrical shock DO NOT disconnect Plugs or Connectors by pulling on cord. Always disconnect by pulling on Plug or Connector.

*Pour éviter toute tension excessive sur les branchements de conducteurs qui risquerait de causer un choc électrique, **NE PAS** tirer sur le cordon pour débrancher les fils ou les connecteurs. Toujours tirer sur la fiche ou le connecteur pour débrancher.*

- Notice:**
- 1.) For installation only by a qualified electrician in accordance with the National Electric Code, Canadian Electric Code, applicable local codes, and these instructions.
 - 2.) These pin and sleeve devices are tested according to UL 1682 Full Load Endurance Test. However, it is NOT recommended that these devices be disconnected underload. Doing so may lead to arcing, fire, or equipment failure.
 - 3.) Select round cord size and type for proper load and application. Refer to National Electric Code, Article 400, for cord information.

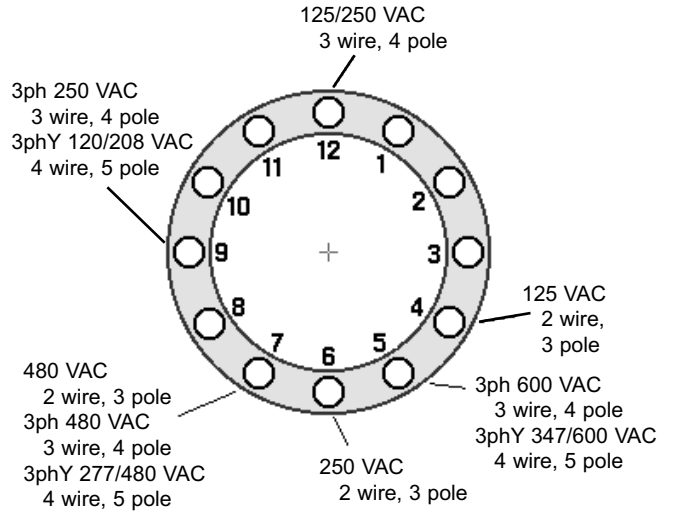
Check to see that the rating label on the device is correct for the installation. See color coding table on next page.

COLOR CODING: All devices are color coded for easy identification of voltage ratings				
RATED VOLTAGE	EXTERIOR COLOR	Grounding contact position in receptacle or connector - viewed as a clock face		
		3W	4W	5W
125V	Yellow	4	-	-
250V	Blue	6	9	-
480V	Red	7	7	-
600V	Black	-	5	-
277V / 480V	Red	-	-	7
125V / 250V	Orange	-	12	-
120V / 208V	Blue	-	-	9
347V / 600V	Black	-	-	5

The following tables are referenced under "Wiring Instructions" below:

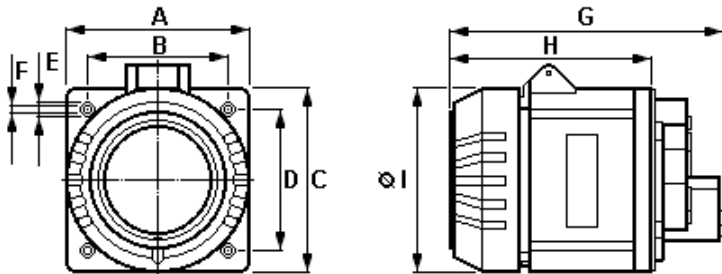
TABLE I	100 AMP
Wire Capacity - Receptacle & Connector	#4 to 2/0
Wire Capacity - Inlet & Plug	#10 - #2
Terminal Torque	39 lb./in.
Strip Length Conductor ("Hot", neutral)	0.512
Strip Length Ground	0.512
Cord Capacity Round	3P: .827 - 1.89
	4P: .827 - 2.28
	5P: 1.22 - 2.28
Assembly Screw Torque	18 lb./in. (2.0 Nm)

TABLE II	
TERMINAL IDENTIFICATION	USE
(Green)	Equipment Grounding Conductor
N (White)	System Ground (neutral conductor)
L1, L2, L3 or X, Y, Z	Line ("hot" conductors)



RECEPTACLES

RECEPTACLE DIMENSIONS:



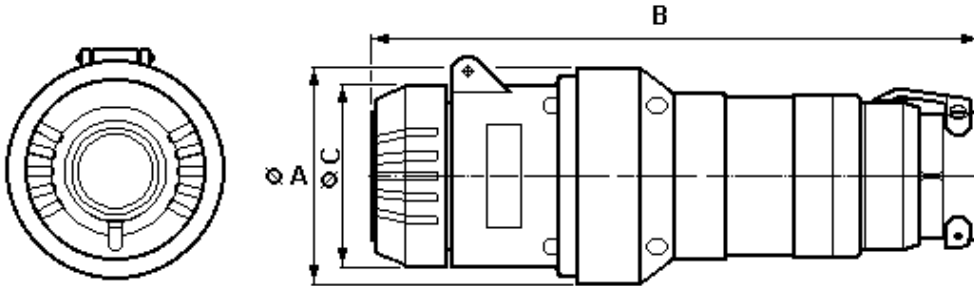
		A	B	C	D	E	F	G	H	I
100A	3P	5.32	4.09	5.12	4.09	0.39	0.25	6.56	4.81	4.80
	4P	5.32	4.09	5.12	4.09	0.39	0.25	6.56	4.81	4.80
	5P	5.32	4.09	5.12	4.09	0.39	0.25	6.56	4.81	4.80

WIRING INSTRUCTIONS:

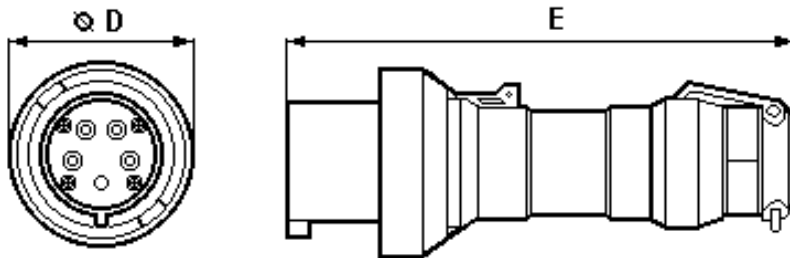
- Strip each conductor per TABLE I.
- Back out each terminal screw far enough to completely clear the wire hole. Do **not** remove screws.
- Insert conductors through the gasket.
- Insert the conductors into the marked terminal holes per TABLE II. Twisting the strands of each conductor may be necessary.
- Torque terminal screws per TABLE I.
- Mount receptacle to appropriate backbox or mount to panel.

PLUGS / CONNECTORS

CONNECTOR DIMENSIONS:



PLUG DIMENSIONS:



		A	B	C	D	E
100A	3P	5.20	13.40	5.32	5.16	12.32
	4P	5.20	13.40	5.32	5.16	12.32
	5P	5.20	13.40	5.32	5.16	12.32

WIRING INSTRUCTIONS:

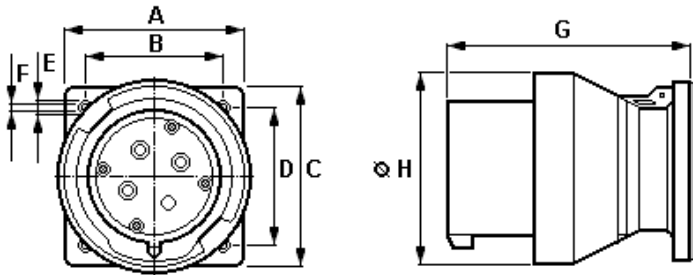
1. Choose the correct end of the cable for plug or connector so that conductor coding corresponds to terminal location.
2. Shear the cable cleanly - Do **not** strip away jacket or conductor insulation at this time.
3. Remove cord grip assembly by first backing out (not removing) the cord clamp screws. One clamp has a locking finger which needs to be withdrawn from the cord grip assembly before the cord grip assembly will twist off.
4. The sealing grommets provided fit the smallest required cord diameter. Remove the inner grommets to accommodate larger cord diameters. Use the combination that provides a snug fit to the cable.
5. Slide the cable through the cord grip assembly and the fitted sealing grommet. Open the clamp further for larger cable.
6. Back out assembly screws to remove front contact carrier from the housing.
7. Slide the cable through threaded opening of rear housing. Strip cable jacket and each conductor per TABLE I.
8. Insert wires into the marked terminal holes of contact carriers per TABLE II; twisting the strands of each conductor may be necessary.
9. Torque the terminal screw(s) per TABLE I.
10. Place the front contact carrier assembly in proper position in the rear housing by aligning key and keyway. Tighten assembly screws per TABLE I.
11. Slide sealing grommet and external cord grip down cable into rear housing. Hand tighten firmly.
12. Tighten cord clamp screws 28 #/in torque on 100A devices.

NOTE:

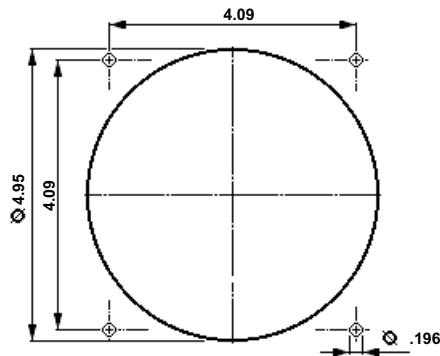
1. The cord diameter must be within the range specified in TABLE I.
2. The conductor size of the cord must be within the range specified in TABLE I.

INLETS - PANEL MOUNT PLUGS

INLET DIMENSIONS:



		A	B	C	D	E	F	G	H
100A	3P	5.32	4.09	5.12	4.09	0.39	0.25	5.48	5.20
	4P	5.32	4.09	5.12	4.09	0.39	0.25	5.48	5.20
	5P	5.32	4.09	5.12	4.09	0.39	0.25	5.48	5.20



PANEL MOUNTING DIMENSIONS

WIRING INSTRUCTIONS:

1. Strip each conductor per TABLE I.
2. Remove the front contact carrier from the flange housing by backing out the two assembly screws.
3. Back out each contact terminal screw far enough to completely clear the wire hole. Do **not** remove screws.
4. Insert conductors through the gasket and flange.
5. Insert the conductors into the marked terminal per TABLE II. Twisting the strands of each conductor may be necessary.
6. Torque terminal screws per TABLE I.
7. Place the front contact carrier in proper position in flange housing. Tighten two assembly screws per TABLE I.
8. Mount inlet to appropriate backbox or mount to panel.

NOTICE !

If any part of this wiring device appears to be missing or damaged -
DISCONTINUE USE IMMEDIATELY
 Consult factory for replacement.

MAINTENANCE

Inspection of electrical equipment used in industrial and heavy use situations must be conducted regularly to ensure proper and safe function. Refer to the National Fire Protection Association bulletin 70B and 73. Check for the following during inspection:

1. Unsecured contact wire terminals
2. Cracked or broken housings
3. Unfastened or loose conductors
4. Deteriorated or misplaced gaskets
5. Loose or missing screws

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds "Terms and Conditions of Sale", and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.