

MENNEKES WIRING INSTRUCTIONS

60A & 100A PowerTop Xtra

Plugs, Connectors, Receptacles & Inlets

Color Coding: All device are color coded to easily identify voltage

GROUND SLEEVE POSITION				
RATED VOLTAGE	COLOR	3W	4W	5W
110V–125V	Yellow	4	-	-
220V- 250V	Blue	6	9	9
440V– 480V	Red	7	7	7
600V	Black	-	5	5
277V	Gray	5	-	-
125/250V	Orange	-	12	-
415V	Red	-	6	6

CATALOG NUMBERING SYSTEM					
ME	4	60	R	7	W
Mennekes	PIN CONFIGURATION	AMPERAGE	DEVICE TYPE	POLARIZATION	ENVIRONMENTAL RATING
	3-2 POLE + E 4-3 POLE + E 5-3 POLE + N + E	60 100	P-PLUG C-CONNECTOR R-RECEPTACLE B-INLET	CLOCK POSITION OF FEMALE SLEEVE (MALE PIN CORRESPONDS TO RESPECTED FEMALE POSITION)	W-WATERTIGHT (SCREW CAP & LOCKING RING)

WARNING: BE SURE THE POWER IS OFF BEFORE STARTING INSTALLATION. READ ENTIRE DIRECTIONS BEFORE STARTING INSTALLATION.

Caution: Check to see that the rating label on the device is correct for the installation.

Select cable/conductor of suitable ampacity, service and temperature. See TABLE I per NEC Article 400.

Notes: Watertight versions have locking rings and locking covers, weatherproof versions do not.

60 Amp and 100 Amp devices do not require use of wire ferrules.

The Following Tables are Referenced in Wiring Instructions for all Devices:

TABLE I	60Amp	100Amp	Pilot Contact
Wire Capacity	#8 to #4	#2 to #1/0	14 AWG
Terminal Torque IN-lb	18*	88.5*	7 in/lb.
Strip length jacket	3.15"	4.33"	3/10"
Strip length conductor ("hot", neutral)	0.67"	1.06"	
Strip length ground 0.60" (conn/recep)	0.67"	1.06"	
Cord Capacity Round 3W; 4W; 5W:	.60 to 1.45	.96 – 1.92	
Strain Relief Nut (4) Torque in lb.	66	66	
Cable Clamp Screw (11) Torque in lb.	18	35	
Trade Size Thread of Housing (NPT) 3W; 4W; 5W:	1 1/2"	2"	

*Each terminal should be torqued at full recommended value for 2 complete cycles: Tighten both screws of each terminal for one cycle and repeat the process again. 100A = #5 allen headscrew.

TABLE II	
TERMINAL IDENTIFICATION	USE
G, ≡ or Green	Equipment grounding conductor
W, White	System ground (neutral conductor)
L1, L2, L3 or X, Y, Z	Line ("hot" conductors)

PLUGS / CONNECTORS

60 + 100 AMP PLUGS

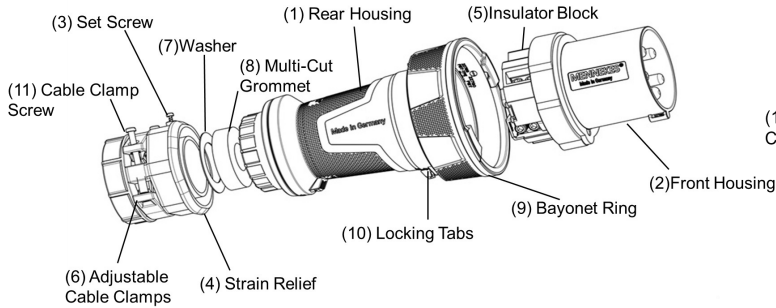


Figure 1

60 + 100 AMP CONNECTORS

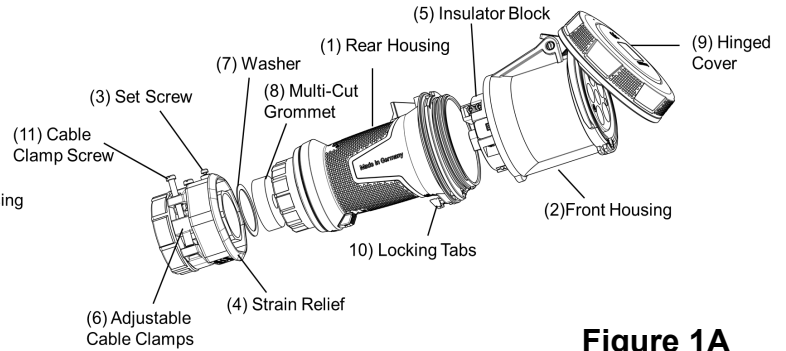
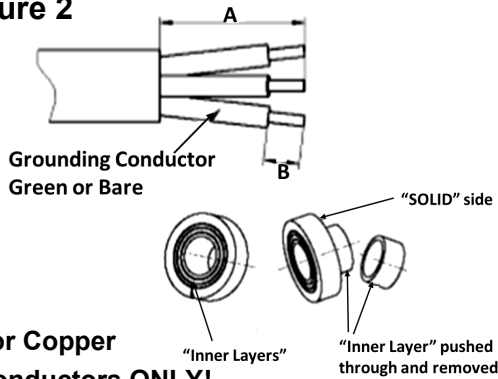


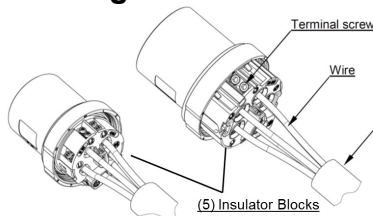
Figure 1A

Figure 2

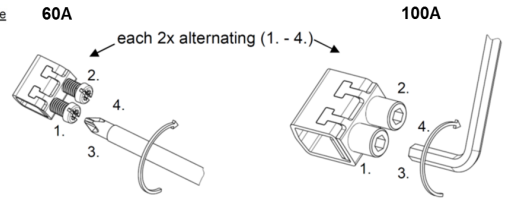


For Copper Conductors ONLY!

Figure 3



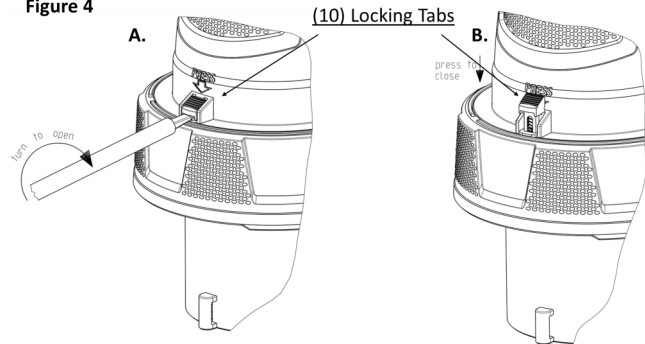
Current	60A	100A
Fastening Torque of Terminal Screw	18 in. lb	88.5 in. lb



#5 Allen Head screw

1. Choose the correct end of the cable for plug or connector so that conductor color coding corresponds to terminal location.
2. Disassemble device as shown in Figure 1A by unscrewing the rear housing (1) from the front housing (2), loosening set screw (3) and unscrewing strain relief (4). Do not attempt to disassemble the insulator block from the front housing. Note – If locking tab (10) is in “Closed’ position, open as shown in Figure 4.
3. Strip the cable jacket and individual conductors per TABLE I. As seen in Figure 2, select cable/conductor of suitable ampacity, service type and temperature.
4. Slide strain relief (4) with adjustable cable clamps (6) and washer (7) over prepared cable.
5. Remove "inner layers" from multi-cut grommet (8) until it slips over power cable. Be sure not to remove any more than necessary. Remove one layer at a time, by pushing through to solid side and tearing off. See Figure 2.
6. Slide cable through threaded opening of rear housing (1).

Figure 4



CAUTION Apply the next steps with care. Otherwise the device terminations and/or the cable grip will not be correct. Risk of serious/fatal injuries due to electrocution could occur if steps are not completed properly.

7. Insert wires into proper terminals of insulator block according to the established wiring pattern. See TABLE II. Conductors must bottom in contact terminal well. When stripped according to TABLE I, the uninsulated conductor will remain below the surface of insulator block (within the metal terminal cavity). Tighten terminal pressure screws to the torque value listed in TABLE I. See Figure 3.
8. Thread rear housing (1) into front housing and align locking tab (10) with receiving piece on front housing (2). Press Close tab (10) as arrow directs to secure rear and front housing together. See Figure 4A.
9. Slide multi-cut grommet (8) and washer (7) into threaded entry of rear housing (1) Screw strain relief (4) into rear housing (1) and torque per TABLE I. The torque value is also located on the strain relief (4). Secure set screw in place so strain relief cannot turn.
10. Tighten cable clamp screws (11) around power cable to the torque in TABLE I. Alternate tightening sequence from side to side as needed to prevent binding.

NOTES:

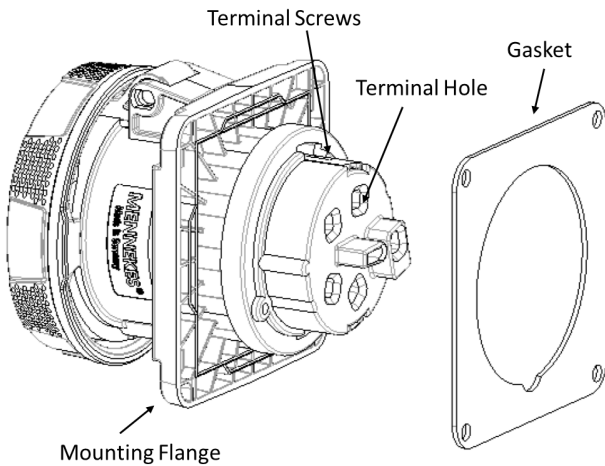
1. The devices will work with Hard Service, Junior Hard Service and Portable Power cable/cord per NEC 400 5(A)(1) or Canadian Electrical Code Table 12.
2. The respected cord diameter must be within the range specified in TABLE I.
3. The conductor size of the cord must be within the range specified in TABLE I.
4. The cable opening of the rear housings are NPT threaded. A UL Listed trade fitting with compatible threading can be utilized in place of the provided external strain relief fitting.

One ungrounded conductor over grounded conductor



RECEPTACLES

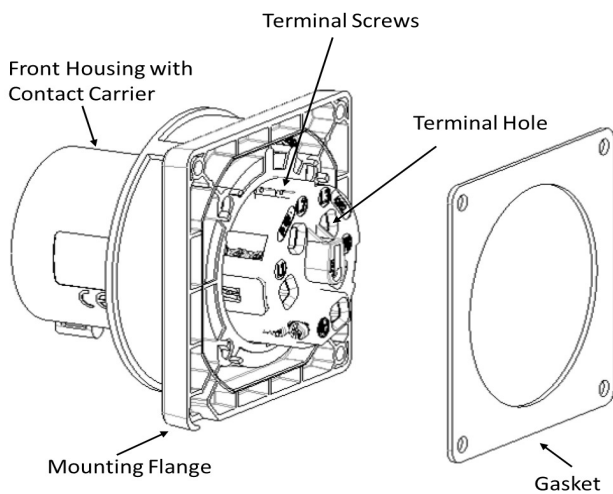
60 + 100 AMP RECEPTACLES



1. Select conductors having 90°C or higher rated insulation and sufficient ampacity in accordance with the 60°C column of the National Electrical Code ® Table 310.15(B) (16) or Canadian Electric Code Table 2.
2. Strip each conductor per TABLE I.
3. Back out each terminal screw far enough to completely clear the wire hole. Do **not** remove screws.
4. Insert conductors through gasket and into the marked terminal holes per TABLE II. Twisting the strands of each conductor may be necessary.
5. Torque terminal screw(s) per TABLE I.
6. Mount receptacle to appropriate backbox or mount to panel.

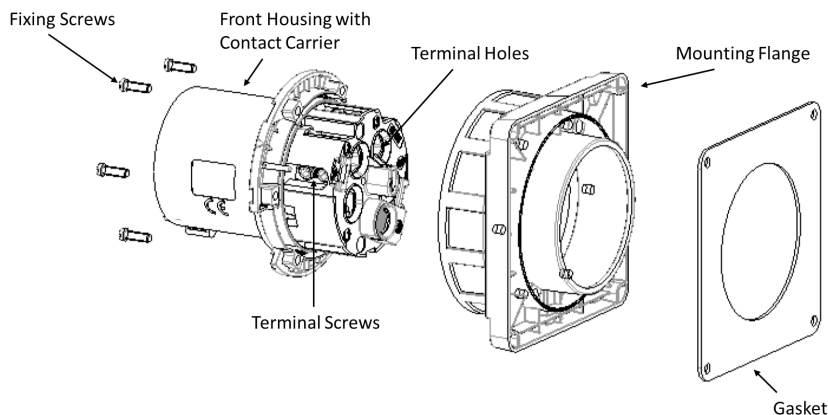
INLETS-PANEL MOUNT PLUGS

60 AMP INLET



1. Select conductors having 90°C or higher rated insulation and sufficient ampacity in accordance with the 60°C column of the National Electrical Code ® Table 310.15(B)(16) or Canadian Electric Code Table 2.
2. Strip each conductor per TABLE I.
3. Remove front housing/contact carrier from the flange by backing out the fixing screws. (100A only)
Fixing screw location: 100A - 6 screws on lip of housing.
3. Insert conductors through the gasket and flange (100 A only) into the marked terminal per TABLE II. Twisting the strands of each conductor may be necessary.
4. Torque terminal screw(s) per TABLE I.
5. For 100A: Place front housing/contact carrier in proper position of flange. Assemble with fixing screws and tighten.
6. Mount inlet to appropriate backbox or mount to panel.

100 AMP INLET



NOTICE: READ BEFORE INSTALLING THIS DEVICE

This pin-and-sleeve device conforms to **I**nternational **E**lectrotechnical **C**ommission Standards IEC 60309-1 and 60309-2. The arrangement of pins, sleeves and keys in this device is such that the device cannot be mated with an IEC 60309-2 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

WARNING

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 function safety. Check for the following 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

CLEANING TOOLS:

We recommend a regular maintenance cleaning program.
MENNEKES can supply a Cleaning Kit. Call for details.