

MENNEKES WIRING INSTRUCTIONS

Plugs, Connectors Receptacles & Inlets

COLOR CODING : All devices are color-coded to easily identify voltage ratings

RATED VOLTAGE	COLOR	GROUND SLEEVE POSITION		
		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	-

CATALOG NUMBERING SYSTEM

For Plugs, Connectors, Receptacles & Inlets

ME	4	60	R	7	W
Mennekes	PIN CONFIGURATION	AMPERAGE	DEVICE TYPE	POLARIZATION	ENVIROMENTAL RATING
	3 - 2 POLE + E 4 - 3 POLE + E 5 - 3 POLE + N + E	20 30 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.

Notes: Watertight versions have locking rings and locking covers, weatherproof versions do not.
60 Amp and 100Amp devices do not utilize wire ferrules.

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

TABLE I

	20 Amp	30Amp	60Amp	100Amp
Wire Capacity	#14 to #10	#12 to #8	#8 to #4	#3 to #1/0
Terminal Torque IN-lb	7	7	18*	35*
Strip length jacket	2"	2.75"	2.95"	4"
Strip length conductor ("Hot",neutral)	0.333"	0.60"	0.67"	1.06"
Strip length ground	0.60" (conn/recp).	0.33" (inlet/plug)	0.60"	0.67"
Cord Capacity Round 3W;4W:	.355 to .755	.433 to .944	.60 to 1.45	.96 - 1.92
5W:	.433 to .944	.433 to 1.12	.60 to 1.45	.96 - 1.92
Fixing Screw Torque IN-lb	7	7	12	18
Trade Size Thread 3W;4W:	3/4"	1"	1 1/2"	2"
of Housing (NPT) 5W:	1"	1 1/4"	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.

TABLE II

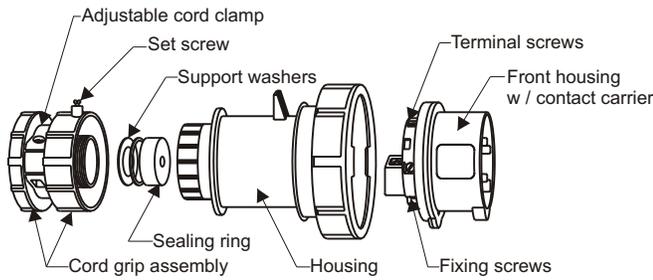
TERMINAL IDENTIFICATION	USE
G, \perp or Green	Equipment grounding conductor
W, White	System ground (neutral conductor)
L1, L2, L3 or X, Y, Z	Line ("Hot" Conductors)

TABLE III

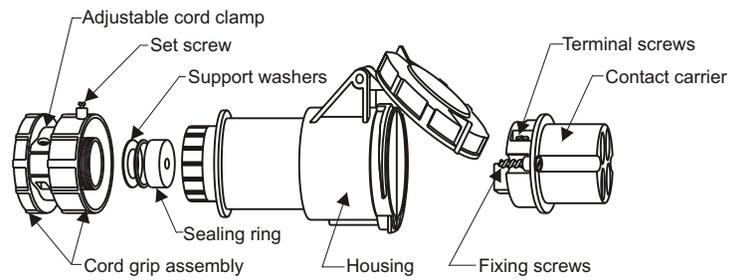
WIRE FERRULE SELECTION - 20A/30A Only				
Wire Size	14 AWG	12AWG	10AWG	8 AWG
For : 20A device	small ferrule	medium ferrule	not required	-
For : 30A device	-	medium ferrule	large ferrule	not required

PLUGS / CONNECTORS

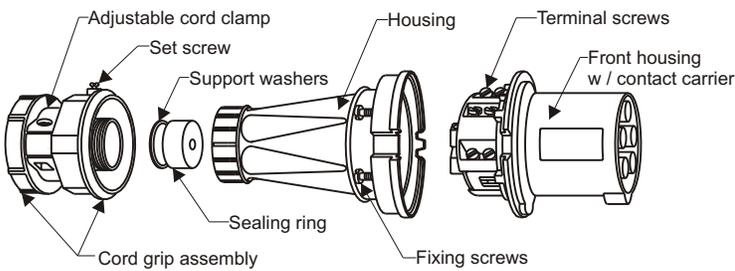
20 + 30 AMP PLUGS



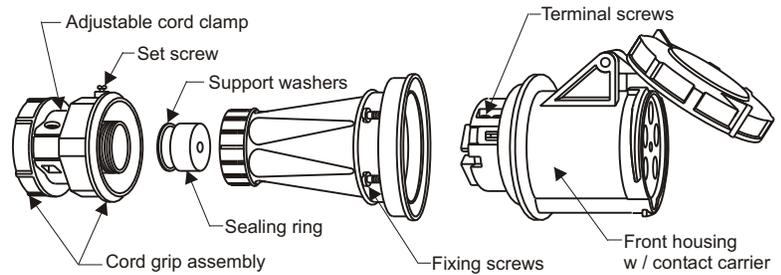
20 + 30 AMP CONNECTORS



60 + 100AMP PLUGS



60 + 100 AMP CONNECTORS



1. Choose the correct end of the cable for plug or connector so that conductor color coding corresponds to terminal location.
2. Shear the cable cleanly- Do **not** strip away jacket or conductor insulation at this time.
3. Remove external cord grip assembly, support washer(s) & sealing ring grommet from housing/kit bag.
4. Prepare inner sections of pre-cut sealing ring to fit the cable diameter. Be sure **not** to remove any more than necessary. The sealing ring should fit the cable tightly.
5. Slide cable through cord grip assembly, support washer and fitted sealing ring grommet. (Open clamp further for larger cable)
6. Back out fixing screws to remove front housing/contact carrier from rear housing. Fixing screw location:
20A/30A Plugs - 2 screws on face of insert; 60A - 4 screws on rear housing lip; 100A - 6 screws on rear housing lip.
20A/30A Connectors Only - Remove insert from housing via 2 fixing screws on face of insert.
7. Slide cable through threaded opening of rear housing. Strip cable jacket and each conductor per TABLE I.

NOTE: For 20A/30A only, use of wire ferrules (in bag) is recommended with stranded wire. When utilizing wire ferrules follow procedure 8b.

8. Insert wires into the marked terminal holes of contact carriers per TABLE II; twisting the strands of each conductor may be necessary.
- 8b. For 20A/30A only, select wire ferrule suitable for wire size (TABLE III) and fully insert wires into shoes. Gently crimp to hold. Insert wire with shoes into the marked terminal hole per TABLE II.
9. Torque the terminal screw(s) per TABLE I.
10. Place front housing/contact carrier in proper position of rear housing. Assemble w/fixing screws and tighten per TABLE I. (20/30A Connectors - Place insert in housing until properly seated. Assemble w/fixing screws and tighten per TABLE I).
11. Slide sealing ring, support washer and external cord grip down cable into rear housing. Hand tighten.
12. Tighten set screw on strain relief so nut cannot turn. Tighten cord clamp screws 10.5 LB-IN torque on 20A/30A devices and 17.5 LB-IN torque on 60A/100A devices.

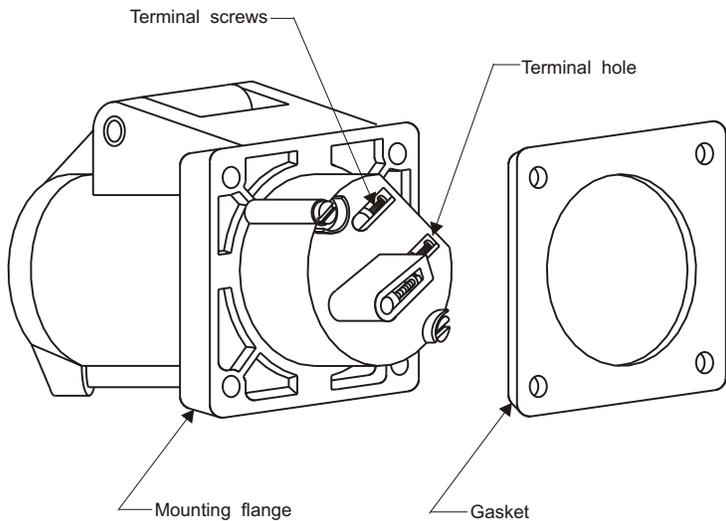
NOTES:

1. This device will work with Trade Name cable/cord: Hard Service, Junior Hard Service and Portable Power Per NEC 400.4
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



1. Strip each conductor per TABLE I.
2. Back out each terminal screw far enough to completely clear the wire hole. Do **not** remove screws.

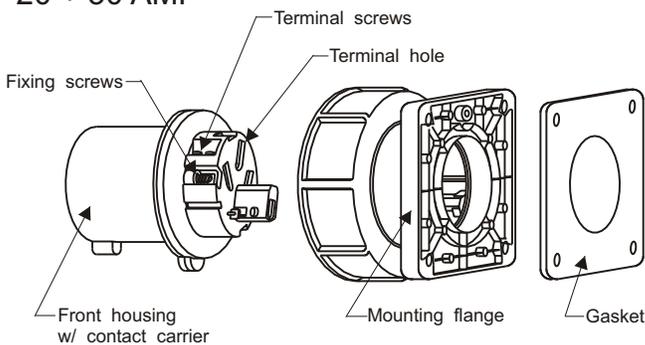
NOTE: For 20A/30A only, use of wire ferrules (provided in bag) is recommended with stranded wire.

When using ferrules follow procedures 3b and 4b, otherwise follow step 3 and 4.

3. Insert conductors through gasket.
- 3b. For 20A/30A only, insert the conductors through the gasket. Select wire ferrule suitable for wire size, (TABLE III) and fully insert wires into ferrule. Gently crimp to hold.
4. Insert the conductors into the marked terminal holes per TABLE II. Twisting the strands of each conductor may be necessary.
- 4b. For 20/30A only, insert wires with ferrules into the marked terminal holes per TABLE II.
5. Torque terminal screw(s) per TABLE I.
6. Mount outlet to appropriate backbox or mount to panel.

INLETS - PANEL MOUNT PLUGS

20 + 30 AMP

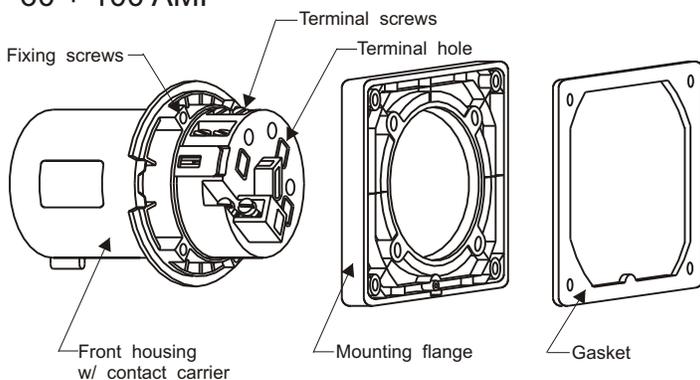


1. Strip each conductor per TABLE I.
2. Remove front housing/contact carrier from the flange by backing out the fixing screws. (Not applicable to 60A)
Fixing screw location: 20A/30A - 2 screws on face of insert; 100A - 6 screws on lip of housing.
3. For 20A/30A only, back out each terminal screw far enough to completely clear the wire hole. Do **not** remove screws.

NOTE: For 20A/30A only, use of wire ferrules (provided in bag) is recommended with stranded wire.

When using ferrules follow procedure 4b and 5b, otherwise follow steps 4 and 5.

60 + 100 AMP



4. Insert conductors through the gasket and flange.
- 4b. For 20A/30A only, insert the conductors through the gasket and flange. Select ferrule suitable for wire size (TABLE III) and fully insert wires into ferrule. Twisting the strands of each conductor may be necessary. Gently crimp to hold.
5. Insert the conductors into the marked terminal per TABLE II. Twisting the strands of each conductor may be necessary.
- 5b. For 20A/30A only, insert wires with ferrules into the marked terminal holes per TABLE II.
6. Torque terminal screw(s) per TABLE I.
7. For 20A/30A/100A; place front housing/contact carrier in proper position of flange. Assemble w/fixing screws and tighten per TABLE I.
8. Mount inlet to appropriate backbox or mount to panel.

NOTICE: READ BEFORE INSTALLING THIS DEVICE

This pin-and-sleeve device conforms to International Electrotechnical Commission Standards IEC 309-1 and 309-2. 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.

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.



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