# MENNEKES WIRING INSTRUCTIONS

## FOR 20A AND 30A

PLUGS, CONNECTORS, RECEPTACLES & INLETS

Color Coding: All devices are color-coded to easily identify voltage ratings

| | | 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
For Plugs, Connectors, Receptacles & Inlets

| ME | 4 | 30 | R | 7 | W |
|---|---|---|---|---|---|
| Mennekes | PIN CONFIGURATION | AMPERAGE | DEVICE TYPE | POLARIZATION | ENVIRONMENTAL RATING |
| | 3-2 POLE + E<br>4-3 POLE + E<br>5-3 POLE + N + E | 20 30 | P-PLUG<br>C-CONNECTOR<br>R-RECEPTACLE<br>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.

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

| **TABLE I** | **20Amp** | **30Amp** |
|---|---|---|
| **Wire Capacity** | #14 to #10 | #12 to #8 |
| **Terminal Torque IN-lb** | 7 | 7 |
| **Strip length jacket** | 2” | 2.75” |
| **Strip length conductor (“hot”, neutral)** | 0.333” | 0.60” |
| **Strip length ground** 0.60” (conn/recep) | 0.33” (inlet/plug) | 0.60” |
| **Cord Capacity Round 3W; 4W:** | .355 to .755 | .433 to .944 |
| **5W:** | .433 to .944 | .433 to 1.12 |
| **Fixing Screw Torque IN-lb** | 7 | 7 |
| **Trade Size Thread of Housing (NPT) 3W; 4W:** | 3/4” | 1” |
| **5W:** | 1” | 1 1/4” |

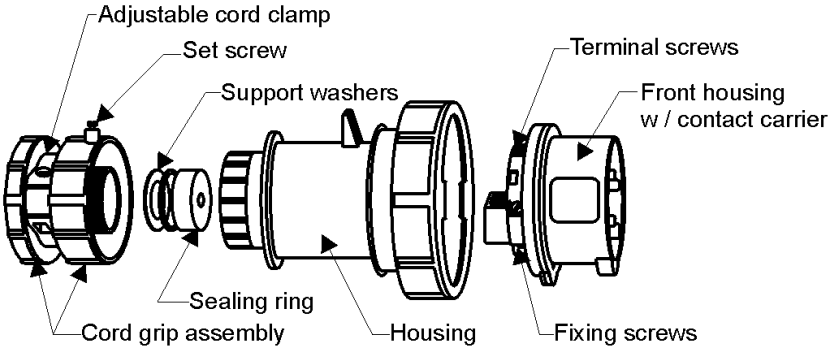
***Each terminal should be torqued at full recommended value for 2 complete cycles: Tighten both screws of each terminal for one cycle and repeat the process again.**

| **TABLE II** | |
|---|---|
| **TERMINAL IDENTIFICATION** | **USE** |
| G, ⏚ or Green | Equipment grounding conductor |
| W, White | System ground (neutral conductor) |
| L1, L2, L3 or X, Y, Z | Line (“hot” conductors) |

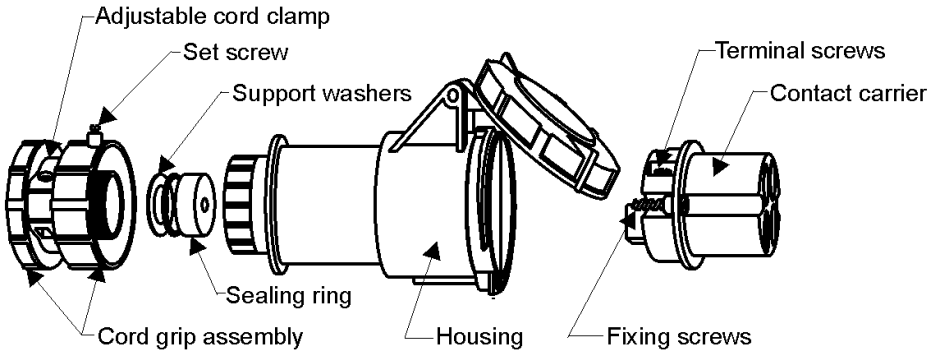
| **TABLE III** | **WIRE FERRULE SELECTION** | | | |
|---|---|---|---|---|
| Wire Size | 14 AWG | 12 AWG | 10 AWG | 8 AWG |
| For: 20A device | Small ferrule | Medium ferrule | Not required | - |
| For: 30A device | - | Medium ferrule | Large ferrule | Not required |

# PLUGS / CONNECTORS

## 20 + 30 AMP PLUGS




## 20 + 30 AMP CONNECTORS

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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. Remove 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: Plugs - 2 screws on face of insert. **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: Use of wire ferrules (in bag) is recommended with stranded wire.**

8. Select wire ferrule suitable for wire size (TABLE III) and fully insert wires into shoes. Gently crimp to hold. Insert wire 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. (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.

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**NOTES:**

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

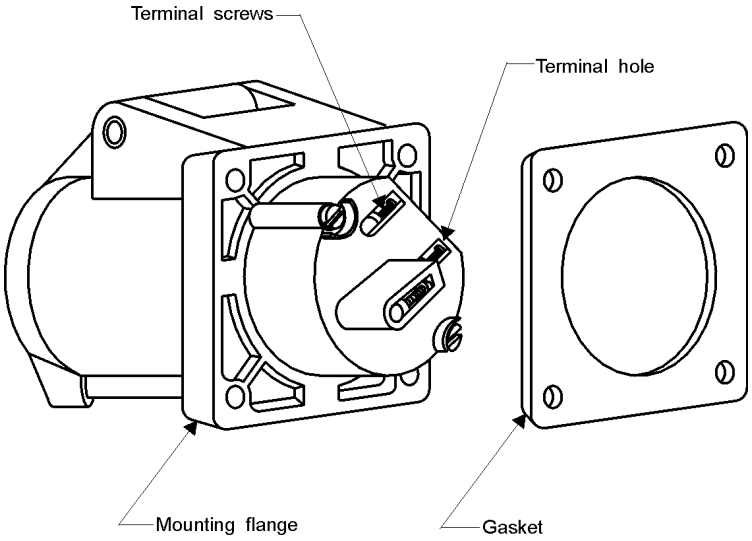
2.The respected cord diameter must be within the range specified in TABLE I.

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



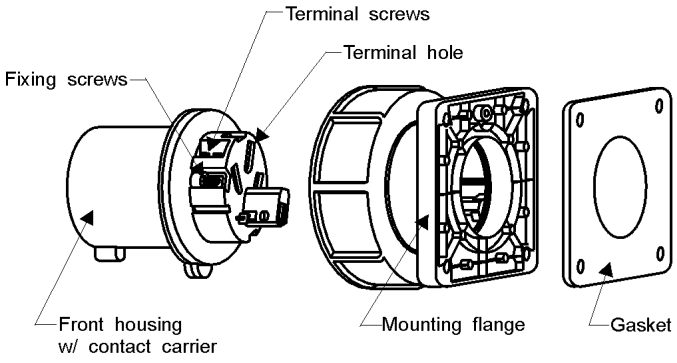

1. Strip each conductor per TABLE I.
2. Back out each terminal screw far enough to completely clear the wire hole. Do **not** remove screws.

****NOTE: Use of wire ferrules (provided in bag) is recommended with stranded wire.**

3. Insert the conductors through the gasket. Select wire ferrule suitable for wire size, (TABLE III) and fully insert wires into ferrule, twisting the strands. Gently crimp to hold.
4. 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.
   Fixing screw location: 2 screws on face of insert
3. Back out each terminal screw far enough to completely clear the wire hole. Do **not** remove screws.

****NOTE: Use of wire ferrules (provided in bag) is recommended with stranded wire.**

4. 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 wires into the marked terminal holes per TABLE II.
6. Torque terminal screw(s) per TABLE I.
7. 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 **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.



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