

# IEC 309 Plugs, Connectors, Receptacles, and Inlets

NEMA 4X  
IP67  
Watertight / Splashproof

5P

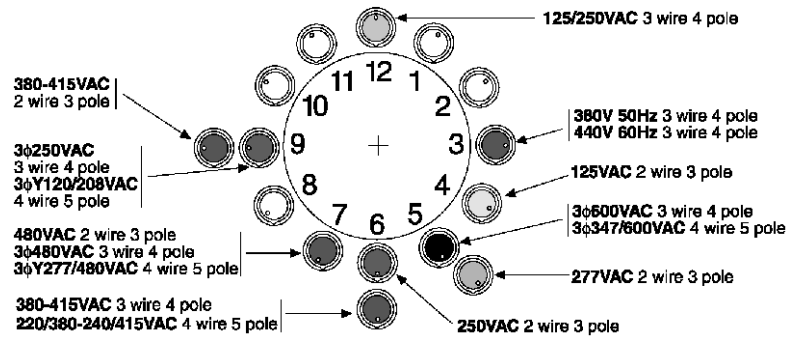
## Non-hazardous Light Industrial

### Applications:

- In indoor and outdoor environments
- In locations with splashing water (IP44) or hose down locations (IP67)
- Where lightweight, non-metallic devices are desirable
- Ideal for light industrial applications, such as: construction sites, light manufacturing, agriculture, food and beverage processing, computer/computer power equipment, restaurants/industrial kitchen equipment

### Making a Connection is Easy

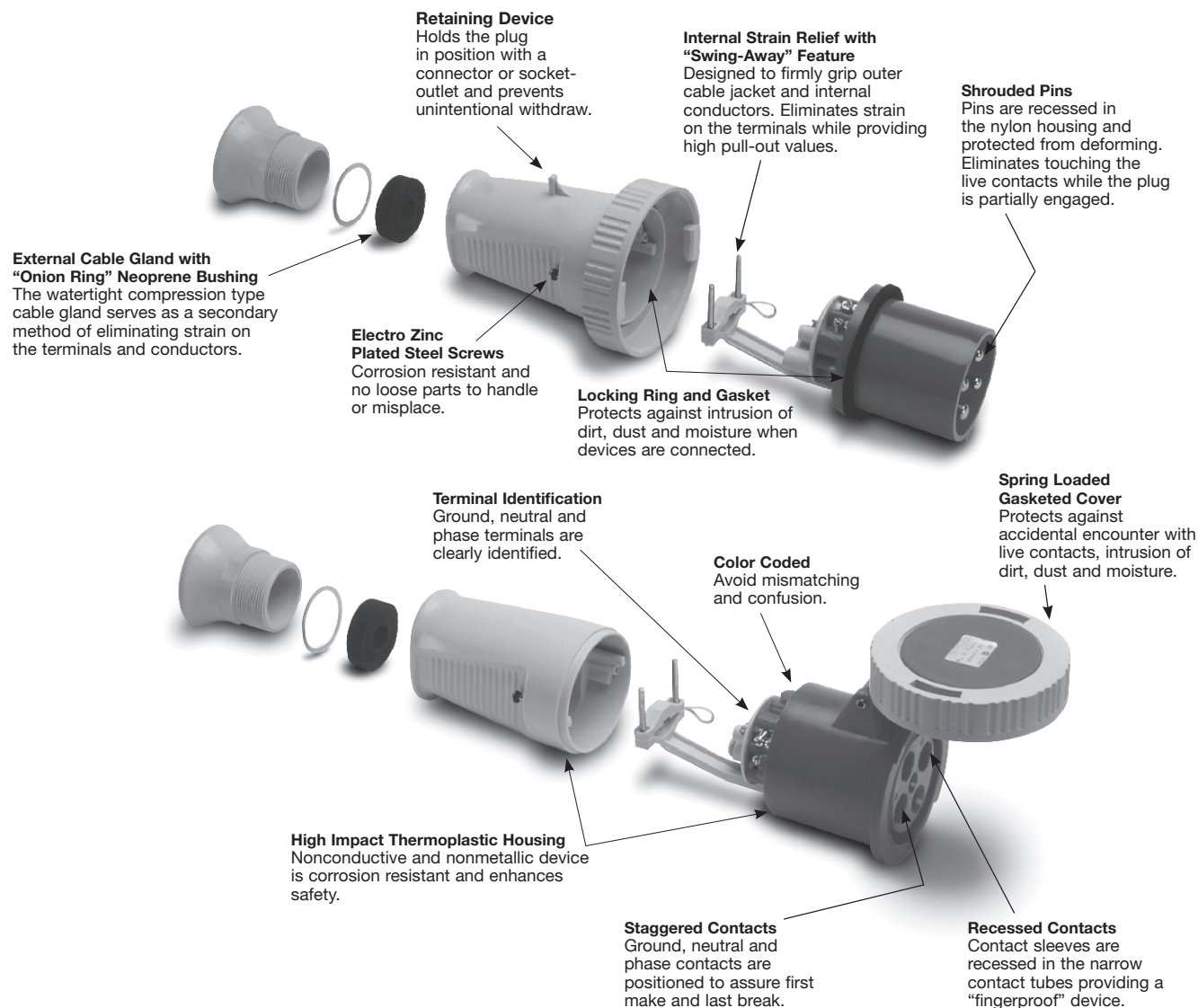
A clock face is used to represent the grounding contact position for all female connectors and receptacles. With the keyway at the bottom, the female grounding contact will appear to one of the twelve hour positions. To identify the system voltage, identify the housing color and hour location of the connector or receptacle grounding contact.



### Ordering is Easy

| CH<br>Prefix                              | 4<br>1st digit                         | 20<br>2nd-4th digit                                                                                                      | R<br>1st letter                                                                                                                                                                                                                   | 7<br>Last digit                            | W<br>Last letter                  |
|-------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------|
| CH = Cooper Crouse-Hinds Light Industrial | 3 = 3 pole<br>4 = 4 pole<br>5 = 5 pole | 16 = 16 Amp<br>20 = 20 Amp<br>30 = 30 Amp<br>32 = 32 Amp<br>60 = 60 Amp<br>63 = 63 Amp<br>100 = 100 Amp<br>125 = 125 Amp | P = Plug<br>C = Connector<br>R = Receptacle Straight<br>RA = Receptacle 15° Angled<br>RA80 = Receptacle 80° Angled<br>B = Inlet<br>MI = Mechanical Interlock<br>MIB = Circuit Breaker Interlock<br>SMR = Surface Mount Receptacle | Clock position of female grounding contact | W = Watertight<br>S = Splashproof |

5P



### Retaining Device

Cooper Crouse-Hinds pin & sleeve devices are provided with a mechanical arrangement which holds a plug or connector in position when it is in proper engagement, and prevents its unintentional withdraw.



### Double Terminal Screws

Maximum clamping pressure without damaging strands. Double terminal screws create a large area of safe and secure contact between conductor and terminal. Screws are captive, easily accessible and supplied in the open position.

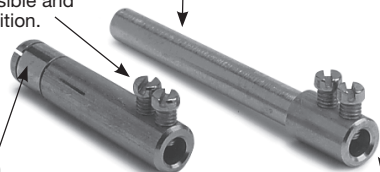
### Solid Brass Pins

Low contact resistance and high conductivity. Long lasting, reliable electrical contact.

### Split Contact Sleeve with Nickel Plated Steel Springs

Provides optimum insertion/withdraw force and constant contact pressure.

**Chamfered Terminals**  
Funnel Entry. Guides and captures all wire strands.



## Non-hazardous Light Industrial

**Compliance with OSHA Lockout Requirements**  
Cooper Crouse-Hinds Mechanical Interlock's bright red handle can be locked in the "OFF" position as a method of compliance with OSHA lockout requirements. The handle can accept up to a 5/16" padlock shaft.

**Watertight NEMA 4X, 12K Enclosure**  
Cooper Crouse-Hinds Mechanical Interlocks are gasketed and rated as a Watertight NEMA 4X, 12K enclosure. The nonmetallic enclosure, while abuse and corrosion resistant, is also nonconductive which enhances the safety of the product.

**Grounding Plate**  
Cooper Crouse-Hinds Mechanical Interlocks are supplied with a free floating grounding plate. Because of this unique method of grounding, conduit entry may be made from the top, bottom or side. No other brand offers this type of installation versatility.

**A Pre-Molded Offset Dimple**  
Cooper Crouse-Hinds does not install a hub at the top of our mechanical interlocks, rather a pre-molded offset dimple (drill point) is provided instead of a conduit entry hole. This allows the installer to choose the size of the conduit to be used, and the location where the conduit will be attached to the enclosure (top, bottom or side entry) without the use of knockout plugs and reducers. Arranging the conduit entry hole at the dimple location will prevent condensation from falling directly on the interior electrical components, such as the switch. It will also allow for more room to pull conductors when wiring. Approximately 40% of all entry is from the bottom.

**Swivel Mount Feet (135°)**  
Swivel mount feet can be used for installations where irregular or tight fit applications exist.

**Compact Size**  
All versions and sizes are designed to fit within the web of an 8" column. This compact size allows the use of columns as a mounting location.

**Easy Identification**  
Catalog number, rating and certifications are indicated on the label for easy identification of mating devices.

**Color Coded Receptacle Covers**  
Receptacle covers are color-coded by voltage in accordance with IEC 309 standard.

**Completely Compatible**  
Completely compatible with not only Cooper Crouse-Hinds IEC 309-1 and 309-2 plugs, but with any manufacturer's plugs that conform to the IEC 309 standards and color coding system anywhere in the world. When Cooper Crouse-Hinds IP67 plugs are used in conjunction with NEMA 4X rated Cooper Crouse-Hinds Mechanical Interlocks, both devices are NEMA 4X rated.

**Micro Switch**  
Available upon request. May be used to transmit signal when plug is inserted or when switch is turned to the "ON" position. May also be used for indicator light to display and confirm when switch is turned "ON" or "OFF". Consult technical service for price and delivery.

### Horsepower Ratings:

| Amperage   | Wires/Poles | 120VAC | Three Phase |        |        |
|------------|-------------|--------|-------------|--------|--------|
|            |             |        | 240VAC      | 480VAC | 600VAC |
| 20 and 30  | 2W, 3P      | 2      | 5           | 10     | -      |
| 20 and 30  | 3W, 4P      | 2      | 10          | 20     | 25     |
| 20 and 30  | 4W, 5P      | 10     | -           | 20     | 25     |
| 60 and 100 | 2W, 3P      | 3      | 7.5         | 15     | -      |
| 60 and 100 | 3W, 4P      | 3      | 15          | 25     | 30     |
| 60 and 100 | 4W, 5P      | 15     | -           | 25     | 30     |

# 5P IEC 309 Plugs, Connectors, Receptacles, Inlets, and Interlocks

NEMA 4X  
IP67  
Watertight / Splashproof

## Non-hazardous Light Industrial Ordering Information

### Pin and Sleeve Ordering Information:

20A and 30A  
North American Ratings Series 2  
16A and 32A  
International Ratings Series 1

### Watertight Devices\*



| Amps | Wires and Poles | Configuration Receptacle/ Plug/ Connector | Voltage           | Straight Receptacle | Angled 15° Receptacle† | Surface Mount Receptacle | Plug      | Connector | Inlet     | Interlock Unfused | Circuit Breaker Interlock |
|------|-----------------|-------------------------------------------|-------------------|---------------------|------------------------|--------------------------|-----------|-----------|-----------|-------------------|---------------------------|
| 16A  | 2W3P            |                                           | 110-130           | CH316R4W            | CH316RA4W              | CH316SMR4W               | CH316P4W  | CH316C4W  | CH316B4W  | CH316MI4W         | CH316MIB4W                |
|      | 2W3P            |                                           | 220-240           | CH316R6W            | CH316RA6W              | CH316SMR6W               | CH316P6W  | CH316C6W  | CH316B6W  | CH316MI6W         | CH316MIB6W                |
|      | 3W4P            |                                           | 380-400           | CH416R6W            | CH416RA6W              | CH416SMR6W               | CH416P6W  | CH416C6W  | CH416B6W  | CH416MI6W         | CH416MIB6W                |
|      | 4W5P            |                                           | 220-380 & 240-415 | CH516R6W            | CH516RA6W              | CH516SMR6W               | CH516P6W  | CH516C6W  | CH516B6W  | CH516MI6W         | CH516MIB6W                |
| 20A  | 2W3P            |                                           | 125               | CH320R4W            | CH320RA4W              | CH320SMR4W               | CH320P4W  | CH320C4W  | CH320B4W  | CH320MI4W         | CH320MIB4W                |
|      | 2W3P            |                                           | 250               | CH320R6W            | CH320RA6W              | CH320SMR6W               | CH320P6W  | CH320C6W  | CH320B6W  | CH320MI6W         | CH320MIB6W                |
|      | 2W3P            |                                           | 480               | CH320R7W            | CH320RA7W              | CH320SMR7W               | CH320P7W  | CH320C7W  | CH320B7W  | CH320MI7W         | CH320MIB7W                |
|      | 3W4P            |                                           | 125/250           | CH420R12W           | CH420RA12W             | CH420SMR12W              | CH420P12W | CH420C12W | CH420B12W | CH420MI12W        | CH420MIB12W               |
|      | 3W4P            |                                           | 3Ø250             | CH420R9W            | CH420RA9W              | CH420SMR9W               | CH420P9W  | CH420C9W  | CH420B9W  | CH420MI9W         | CH420MIB9W                |
|      | 3W4P            |                                           | 3Ø480             | CH420R7W            | CH420RA7W              | CH420SMR7W               | CH420P7W  | CH420C7W  | CH420B7W  | CH420MI7W         | CH420MIB7W                |
|      | 3W4P            |                                           | 3Ø600             | CH420R5W            | CH420RA5W              | CH420SMR5W               | CH420P5W  | CH420C5W  | CH420B5W  | CH420MI5W         | CH420MIB5W                |
|      | 4W5P            |                                           | 3ØY120/208        | CH520R9W            | CH520RA9W              | CH520SMR9W               | CH520P9W  | CH520C9W  | CH520B9W  | CH520MI9W         | CH520MIB9W                |
|      | 4W5P            |                                           | 3ØY277/480        | CH520R7W            | CH520RA7W              | CH520SMR7W               | CH520P7W  | CH520C7W  | CH520B7W  | CH520MI7W         | CH520MIB7W                |
|      | 4W5P            |                                           | 3ØY347/600        | CH520R5W            | CH520RA5W              | CH520SMR5W               | CH520P5W  | CH520C5W  | CH520B5W  | CH520MI5W         | CH520MIB5W                |
| 30A  | 2W3P            |                                           | 125               | CH330R4W            | CH330RA4W              | CH330SMR4W               | CH330P4W  | CH330C4W  | CH330B4W  | CH330MI4W         | CH330MIB4W                |
|      | 2W3P            |                                           | 250               | CH330R6W            | CH330RA6W              | CH330SMR6W               | CH330P6W  | CH330C6W  | CH330B6W  | CH330MI6W         | CH330MIB6W                |
|      | 2W3P            |                                           | 480               | CH330R7W            | CH330RA7W              | CH330SMR7W               | CH330P7W  | CH330C7W  | CH330B7W  | CH330MI7W         | CH330MIB7W                |
|      | 3W4P            |                                           | 125/250           | CH430R12W           | CH430RA12W             | CH430SMR12W              | CH430P12W | CH430C12W | CH430B12W | CH430MI12W        | CH430MIB12W               |
|      | 3W4P            |                                           | 3Ø250             | CH430R9W            | CH430RA9W              | CH430SMR9W               | CH430P9W  | CH430C9W  | CH430B9W  | CH430MI9W         | CH430MIB9W                |
|      | 3W4P            |                                           | 3Ø480             | CH430R7W            | CH430RA7W              | CH430SMR7W               | CH430P7W  | CH430C7W  | CH430B7W  | CH430MI7W         | CH430MIB7W                |
|      | 3W4P            |                                           | 3Ø600             | CH430R5W            | CH430RA5W              | CH430SMR5W               | CH430P5W  | CH430C5W  | CH430B5W  | CH430MI5W         | CH430MIB5W                |
|      | 4W5P            |                                           | 3ØY120/208        | CH530R9W            | CH530RA9W              | CH530SMR9W               | CH530P9W  | CH530C9W  | CH530B9W  | CH530MI9W         | CH530MIB9W                |
|      | 4W5P            |                                           | 3ØY277/480        | CH530R7W            | CH530RA7W              | CH530SMR7W               | CH530P7W  | CH530C7W  | CH530B7W  | CH530MI7W         | CH530MIB7W                |
|      | 4W5P            |                                           | 3ØY347/600        | CH530R5W            | CH530RA5W              | CH530SMR5W               | CH530P5W  | CH530C5W  | CH530B5W  | CH530MI5W         | CH530MIB5W                |
| 32A  | 2W3P            |                                           | 110-130           | CH332R4W            | CH332RA4W              | CH332SMR4W               | CH332P4W  | CH332C4W  | CH332B4W  | CH332MI4W         | CH332MIB4W                |
|      | 2W3P            |                                           | 220-240           | CH332R6W            | CH332RA6W              | CH332SMR6W               | CH332P6W  | CH332C6W  | CH332B6W  | CH332MI6W         | CH332MIB6W                |
|      | 3W4P            |                                           | 380-400           | CH432R6W            | -                      | CH432SMR6W               | CH432P6W  | CH432C6W  | CH432B6W  | CH432MI6W         | CH432MIB6W                |
|      | 4W5P            |                                           | 220-380 & 240-415 | CH532R6W            | CH532RA6W              | CH532SMR6W               | CH532P6W  | CH532C6W  | CH532B6W  | CH532MI6W         | CH532MIB6W                |

\*Splashproof IP44 products are also available - please contact factory.

†Angled 80° receptacles are also available. To order, add suffix "80" directly after "RA" in the angled 15° receptacle catalog number (Example: CH330RA804W).

250VDC and Barge Overflow products are also available - please contact factory.