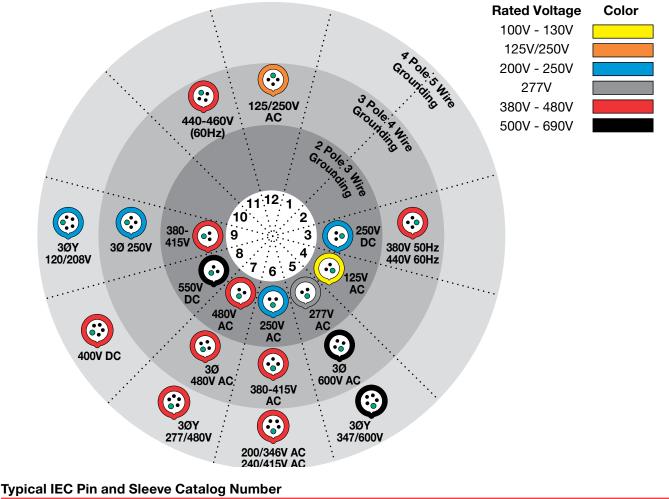
# **IEC Configurations Chart**

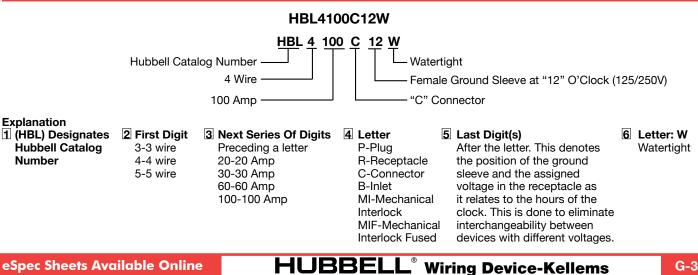
# Singly Rated Configurations

Hubbell Pin and Sleeve products are designed and manufactured to meet the International Standard IEC 60309-1 and IEC 60309-2. This device standard calls out a singly rated, non-interchangeable configuration for every voltage and type of service throughout the world. Pin and sleeve device housings are color coded by voltage rating.

## Voltage

The voltage is determined by the location of the female ground contact relative to the housing keyway. Simply by manufacturing the device with a ground contact in a certain "clock" position, the device will be rated for a particular voltage system. The diagram shows the keying position and the color coding that is associated with each voltage.





# **Pin and Sleeve Devices/Mechanical Interlocks**

# **Features and Benefits**

IP67

# Watertight Devices

Hubbell's IEC 60309 Pin and Sleeve plugs, connectors, inlets and receptacles are the highest performing products available. The HBL® series of IEC pin and sleeve were designed for the demanding North American market. Hubbell was the first and is still only manufacturer of IEC 60309 devices in the USA and have a full list of innovative features.





## Housing Design

- Insulated non-metallic housing, super tough, non-conductive and chemical resistant for heavy duty industrial environments
- IEC pin and sleeve devices are color coded by voltage for easy identification
- Self-closing gasketed cover, detents into position to fully close automatically



## Powerful Mechanical Cord Grip

- Hubbell's design incorporates two molded-in teeth to securely grip the outer cable jacket, and internal conductors to prevent slippage and strain on terminations
- Captive barrel nuts ease assembly and allow higher tightening torque for maximum cord retention



### Watertight Cord Entrance

- The tapered bore entrance creates high compression forces on sealing gland, providing a watertight seal around cord
- Individual solid neoprene glands are supplied to match a full range of cord sizes and assure watertight performance





• Machined aluminum adapters are available to provide a means for attaching flexible liquidtight metal conduit to rear of Hubbell Pin and Sleeve plug or connector



### Sequential Contact Engagement

- Ground makes first and breaks last. Neutral makes second and breaks second (to prevent a momentary over-voltage on components connected phase to neutral)
- Phase contacts make last and break first



### Multi-Contact Spring

- (60/63 and 100/125 Amp) Recessed within the female sleeve, provides and maintains high unit pressure on mating pins to minimize temperature rise
- Broaches oxide film to achieve low resistance contact for cooler operation

# **Pin and Sleeve Devices/Mechanical Interlocks**

## Features and Benefits



### Watertight Devices

The IEC line of plugs and connectors are made with a rugged super tough, one-piece housing. The thermoset polyester contact carrier provides a high resistance to electrical tracking. They withstand higher temperatures which may result from overload or arcing. The heavy-duty, external cord grip provides superior strain relief on the conductors. Hubbell's horsepower rated plugs and receptacles meet NEC 430.109(F) requirements and recognizes as an approved disconnecting/"line of sight" disconnecting means.



## Housing Design

- Rugged one-piece housing, thick wall construction protects internal components, eliminates joints preventing infiltration of contaminants
- Amperage/voltage rating and catalog number molded in housing for easy identification



#### Shrouded Pins

- Super tough plug shroud protects pins from deforming from physical abuse
- Protects the user from the possibility of touching live contacts during insertion and withdrawal of mating parts
- Solid one-piece pins, machined from solid brass for longer life and reliable electrical contact



### Safety

Lockout/Tagout, tapered opening on plug shroud accommodates up to % inch (9.7mm) lock shackle diameter



### Thermoset Polyester Contact Carrier

- Molded thermoset polyester provides high resistance to electrical tracking
- Withstands higher temperatures which may result from overload or arcing
- Thermoset properties provide dimensional stability for this critical assembly



#### Cord Grips

 Heavy duty external cord grips provide maximum cord retention to maintain secure terminations



#### Swivel Pressure Pads

 16/20 and 30/32 Amp devices feature patented swiveling pressure pad terminal screws and prevent damage to conductor strands. 60/63 and 100/125 Amp devices feature large hex-head stainless steel screws which provide higher torque levels for secure terminations

# Pin and Sleeve Devices/Mechanical Interlocks

Rating Watertight Devices Accessories **Replacement Interiors** Configuration Poles Recep./ Back Boxes Plua/ Closure Recep./ Plua/ and Amps Wires Conn Inlet AC Voltage Receptacle Plug Connector Inlet Non-Metallic Metallic<sup>3</sup> Caps Conn Inlet BB201W 16  $\odot$ ١ HBL316P4W HBL316C4W HBL316B4W<sup>†</sup> BB2030N PC320 IN320BF IN320BM 2P 3W 100-130V HBL316R4W BB301W  $\odot$ BB201W 220-240V HBL316R6W HBL316P6W HBL316C6W HBL316B6W BB2030N PC320 IN320BF IN320BM 2P 3W BB301W **BB201W**  $\odot$ BB2030N IN420DF IN420DM 380-415V HBL416R6W HBL416P6W HBL416C6W HBL416B6W PC420 3P 4W **BB301W BB201W**  $\odot$ 220/380V HBL516R6W HBL516P6W HBL516C6W **HBL516B6W** BB2030N PC520 IN520EF<sup>†</sup> IN520EM 4P 5W 240/415V **BB301W** 20  $\odot$ BB201W PC320 2P 3W 125V HBL320R4W HBL320P4W HBL320C4W HBL320B4W BB2030N IN320AF IN320AM BB301W BB201W  $\odot$ 250V HBL320R6W HBL320P6W HBL320C6W HBL320B6W BB2030N PC320 IN320BF IN320BM 2P 3W BB301W **BB201W**  $\bigcirc$  $\odot$ HBL320P7W BB2030N PC320 IN320BF IN320BM 480V HBL320R7W HBL320C7W HBL320B7W 2P 3W **BB301W BB201W**  $\odot$ 3P 4W 125/250V HBL420R12W HBL420P12W HBL420C12W HBL420B12W BB2030N PC420 IN420CF IN420CM **BB301W BB201W**  $\odot$ ()3P 4W 3Ø 250V HBL420R9W HBL420P9W HBL420C9W HBL420B9W BB2030N PC420 IN420DF IN420DM BB301W  $\odot$ BB201W 3Ø 480V BB2030N PC420 IN420DF IN420DM 3P 4W HBL420R7W HBL420P7W HBL420C7W HBL420B7W **BB301W BB201W**  $\odot$  $(\bigcirc)$ 3Ø 600V HBL420R5W HBL420B5W BB2030N PC420 IN420DF IN420DM 3P 4W HBL420P5W HBL420C5W BB301W BB201W  $\odot$ 3ØY 4P 5W HBL520R9W HBL520P9W HBL520C9W HBL520B9W BB2030N PC520 IN520EF<sup>†</sup> IN520EM 120/208V **BB301W BB201W**  $\odot$ 3ØY 4P 5W HBL520R7W HBL520P7W HBL520C7W HBL520B7W BB2030N PC520 IN520EF<sup>†</sup> IN520EM 277/480V **BB301W BB201W**  $\odot$ 3ØY 347/600V HBL520R5W HBL520P5W HBL520C5W HBL520B5W BB2030N PC520 IN520EF<sup>†</sup> IN520EM 4P 5W **BB301W** BB201W 30  $\odot$ (PC3430 2P 3W 125V HBL330R4W HBL330P4W HBL330C4W HBL330B4W BB2030N IN330AF IN330AM<sup>†</sup> **BB301W BB201W**  $\odot$ 250V HBL330R6W HBL330P6W HBL330C6W HBL330B6W BB2030N PC3430 IN330BF IN330BM 2P 3W BB301W  $\odot$ BB201W  $\bigcirc$ 480V HBL330R7W HBL330P7W HBL330C7W HBL330B7W BB2030N PC3430 IN330BF IN330BM 2P 3W **BB301W BB201W** ٢  $\odot$ PC3430 3P 4W 125/250V HBL430R12W HBL430P12W HBL430C12W HBL430B12W BB2030N IN430CF IN430CM **BB301W BB201W** ۲  $\odot$ 3P 4W 3Ø 250V HBL430R9W HBL430P9W HBL430C9W HBL430B9W BB2030N PC3430 IN430DF IN430DM **BB301W BB201W**  $\odot$ 3Ø 480V HBL430R7W HBL430P7W HBL430C7W HBL430B7W BB2030N PC3430 IN430DF IN430DM 3P 4W BB301W BB201W  $\odot$ 3Ø 600V PC3430 IN430DF 3P 4W HBL430R5W HBL430P5W HBL430C5W HBL430B5W BB2030N IN430DM **BB301W BB201W**  $\odot$ 3ØY HBL530R9W HBL530P9W HBL530C9W HBL530B9W BB2030N PC530 IN530EF IN530EM 4P 5W 120/208V **BB301W** 3ØY BB201W  $\odot$ ٢ HBL530R7W HBL530P7W HBL530C7W HBL530B7W BB2030N PC530 IN530EF IN530EM 4P 5W 277/480V BB301W BB201W  $\odot$ 3ØY 4P 5W HBL530R5W HBL530P5W HBL530C5W HBL530B5W BB2030N PC530 IN530EF IN530EM 347/600V **BB301W BB201W** 32  $\odot$ 100-130V HBL332R4W<sup>†</sup> HBL332P4W<sup>†</sup> HBL332C4W<sup>†</sup> HBL332B4W<sup>†</sup> BB2030N PC3430 IN330BF IN330BM 2P 3W (**BB301W** BB201W  $\odot$ 220-240V HBL332R6W HBL332P6W HBL332C6W HBL332B6W BB2030N PC3430 IN330BF IN330BM 2P 3W **BB301W** ۲ **BB201W**  $\odot$ IN430DF 3P 4W 380-415V HBL432R6W HBL432P6W HBL432C6W HBL432B6W BB2030N PC3430 IN430DM BB301W BB201W  $\odot$ 380V 50Hz HBL432R3W BB2030N IN430DF 3P 4W HBL432P3W HBL432C3W HBL432B3W<sup>†</sup> PC3430 IN430DM 440V 60Hz BB301W  $\bigcirc$ 220/380V BB201W 4P 5W 3 HBL532R6W HBL532P6W HBL532C6W HBL532B6W BB2030N PC530 IN530EF IN530EM 240/415V **BB301W** 

Note: See page G-12 and G-13 for back boxes and accessories, G-14 and G-15 for product dimensions, G-16 and G-17 for product specifications and HP ratings. See page G-13 for closure caps, purchased separately. PC320, PC420, PC520, PC3430, PC530 are not UL or CSA. \*These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.

†Consult factory.

<u>IP67</u>

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