

IEC Pin & Sleeve Devices

What are IEC pin & sleeve devices?

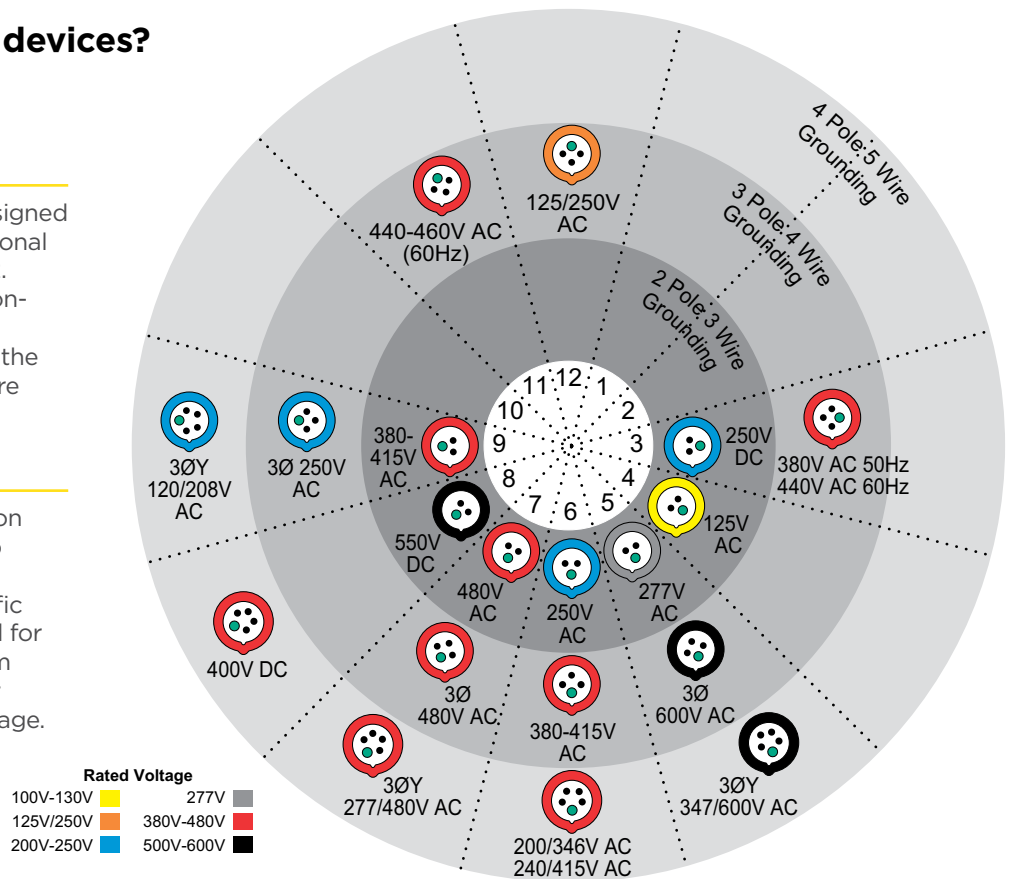
IEC Configurations

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 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. Manufacturing the device with a ground contact in a specific “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.



Safety by Design



Housing Design

Insulated non-metallic housing is super tough, non-conductive and chemical resistant for heavy duty industrial environments

Color coded by voltage for easy identification

Self-closing gasketed cover detents into position to fully close automatically



Shrouded Pins

Super tough plug with 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



OSHA Compliant

Lockout/Tagout—tapered opening on plug shroud accommodates up to 3/8 inch (9.7mm) lock shackle diameter



Sequential Contact Engagement

Ground makes first, breaks last

Neutral makes second and breaks second (to prevent a momentary over-voltage on components connected phase to neutral)

Phase contacts make last, break first

Hubbell IEC pin & sleeve devices—the best just got better!

More than 30 years ago, Hubbell pioneered IEC 60309 pin and sleeve connections in North America, promoting the great safety & performance benefits of the Hubbell design. Hubbell's redesigned IEC 60309 pin & sleeve devices boast even more features, functions and benefits.

US Manufacturing

Only IEC 60309 pin & sleeve manufacturer in North America

Thermoset Contact Carrier

High resistance to tracking and higher temperatures

Multi-Contact Spring

Superior conductivity provides long term reliable connections

Cover Arm

Compact & shrouded cover arm improves durability

Improved Horsepower Ratings

Industry leading ratings covering all devices increase applications

Locking Ring

Wing tabs assist user's ability to tighten for a reliable seal

Swivel Pressure Pads Screw

High torque without damaging stranded wire (20A & 30A devices)

Strain Relief

Pocketed recessed screws on same side provide assembly efficiencies

Non-Metallic Liquidtight Adapter

Provides means for attaching flexible conduit

Improved Ratings

Hubbell pin and sleeve devices carry an IP69k rating, the most aggressive and highest rank on the ingress protection rating scale. These devices provide superior water ingress protection uniquely designed for the most extreme washdown procedures, withstanding hot and high pressure water and excessively dusty environments.



Water & Dust Ingress Protection Tests:

IP69k Water Test

Extremely Hot (176°) and High Pressure Water (1450 psi) sprayed from various angles.

IP69k Dust Test

Sealed device is placed in a dust chamber with varying sized circulating particles. Vacuum is affixed to cord end of the device attempts to pull in dust through the gasket end of the device. At the end of 8 hours of testing no dust can be present within the device.

Where are IEC pin & sleeve devices used?



Also ideal for:

- Washdown Environments
- Entertainment
- Convention Center
- Government & Military
- Beverage & Bottling
- Agriculture & Dairy
- Water Treatment & Processing
- Food Preparation
- Shipyard

IEC Watertight Devices

Designed for the demanding North American market, Hubbell's IEC 60309 pin and sleeve devices are the highest performing products available, with numerous innovative features. Hubbell was the first, and is still the only, manufacturer of IEC 60309 devices in the United States.



Hubbell's IEC connectors, receptacles, plugs and inlets are designed to be safe, easy to use and reliable in virtually any environment - with performance and features to match the demands of your application.



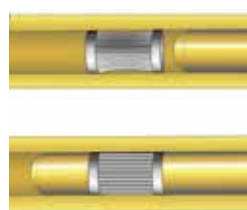
IEC 60309 Singalarly Rated Device
Mates with existing installed base of IEC 60309-2 pin and sleeve devices. Color coded by voltage for easy identification of mating devices.

Superior Water Ingress Protection
UL witnessed IP69k and UL Type 4X and 12. Built to withstand wet and harsh environments.

Quality by Design



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
Individual solid neoprene glands are supplied to match a full range of cord sizes and assure watertight performance



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

Improved Features, Functions and Benefits

Superior Performance

Environmental Ratings

UL witnessed IP69k and UL Type 4X, 12

Horsepower Ratings

Market leading UL witnessed HP ratings available on all amperages

Flammability Rating

All devices feature a V-0 flammability rating

Improved Design and Durability

Locking Ring

Torque tabs for a reliable seal for maximum environmental protection

Shrouded Cover Arm

Compact internal swing arm is fully shrouded, improving durability

Assembly Safety

Pocketed recessed screws prevent slippage of the screwdriver

Increased Installation Efficiency

Shipped Installation Ready

Cable end components are shipped unattached in a bag

Strain Relief

Screws on same side provide assembly efficiencies



Continuous Ground Engagement

Ground pin is first-to-make and last-to-break followed by switched neutral and phase contact(s).



Permanent Labelless Markings

Product ratings are molded into the device and will not wash off for clear permanent identification.



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



Swivel Pressure Pads

16/20 and 30/32 Amp devices: patented swiveling pressure pad terminal screws and prevent damage to conductor strands

60/63 and 100/125 Amp devices: large hex-head stainless steel screws, providing higher torque levels for secure terminations

Ordering Information

Rating					Watertight Devices				Accessories			Replacement Interiors									
Amps	Poles/ Wires	Configuration		AC Voltage	Receptacle	Plug	Connector	Inlet	Back Boxes		Closure Caps	Recep./ Conn.	Plug/Inlet								
		Recep./ Conn.	Plug/ Inlet						Non-Metallic	Metallic*											
16	2P 3W			100–130V	HBL316R4W	HBL316P4W	HBL316C4W	HBL316B4W†	BB2030N	BB201W BB301W	PC320	IN320BF	IN320BM								
20	2P 3W			125V	HBL320R4W	HBL320P4W	HBL320C4W	HBL320B4W				IN320AF	IN320AM								
16/20	2P 3W			250V	HBL320R6W	HBL320P6W	HBL320C6W	HBL320B6W				IN320BF	IN320BM								
20	2P 3W			480V	HBL320R7W	HBL320P7W	HBL320C7W	HBL320B7W			BB2030N	BB201W BB301W	PC420	IN420CF	IN420CM						
	3P 4W			125/250V	HBL420R12W	HBL420P12W	HBL420C12W	HBL420B12W													
16/20	3P 4W			380–415V	HBL420R6W	HBL420P6W	HBL420C6W	HBL420B6W								PC420	IN420DF	IN420DM			
	3P 4W			3Ø 250V	HBL420R9W	HBL420P9W	HBL420C9W	HBL420B9W													
20	3P 4W			3Ø 480V	HBL420R7W	HBL420P7W	HBL420C7W	HBL420B7W											PC520	IN520EF†	IN520EM
	3P 4W			3Ø 600V	HBL420R5W	HBL420P5W	HBL420C5W	HBL420B5W													
16/20	4P 5W			220/380V 240/415V	HBL520R6W	HBL516P6W	HBL516C6W	HBL516B6W					PC520	IN520EF†	IN520EM						
	4P 5W			3ØY 120/208V	HBL520R9W	HBL520P9W	HBL520C9W	HBL520B9W													
20	4P 5W			3ØY 277/480V	HBL520R7W	HBL520P7W	HBL520C7W	HBL520B7W								PC520	IN520EF†	IN520EM			
	4P 5W			3ØY 347/600V	HBL520R5W	HBL520P5W	HBL520C5W	HBL520B5W													
30	2P 3W			125V	HBL330R4W	HBL330P4W	HBL330C4W	HBL330B4W	BB2030N	BB201W BB301W									PC3430	IN330AF	IN330AM†
30/32	2P 3W			250V	HBL330R6W	HBL330P6W	HBL330C6W	HBL330B6W												IN330BF	IN330BM
30	2P 3W			480V	HBL330R7W	HBL330P7W	HBL330C7W	HBL330B7W			PC3430	IN430CF	IN430CM								
	3P 4W			125/250V	HBL430R12W	HBL430P12W	HBL430C12W	HBL430B12W													
30/32	3P 4W			380–415V	HBL430R6W	HBL430P6W	HBL430C6W	HBL430B6W						PC3430	IN430DF	IN430DM					
	3P 4W			3Ø 250V	HBL430R9W	HBL430P9W	HBL430C9W	HBL430B9W													
30	3P 4W			3Ø 480V	HBL430R7W	HBL430P7W	HBL430C7W	HBL430B7W									PC530	IN530EF	IN530EM		
	3P 4W			3Ø 600V	HBL430R5W	HBL430P5W	HBL430C5W	HBL430B5W													
30/32	4P 5W			220/380V 240/415V	HBL530R6W	HBL530P6W	HBL530C6W	HBL530B6W			PC530	IN530EF	IN530EM								
	4P 5W			3ØY 120/208V	HBL530R9W	HBL530P9W	HBL530C9W	HBL530B9W													
30	4P 5W			3ØY 277/480V	HBL530R7W	HBL530P7W	HBL530C7W	HBL530B7W						PC530	IN530EF	IN530EM					
	4P 5W			3ØY 347/600V	HBL530R5W	HBL530P5W	HBL530C5W	HBL530B5W													
32	2P 3W			100–130V	HBL332R4W†	HBL332P4W†	HBL332C4W†	HBL332B4W†	PC3430	IN330BF							IN330BM				
	3P 4W			380V 50Hz 440V 60Hz	HBL432R3W	HBL432P3W	HBL432C3W	HBL432B3W†													



receptacle



plug



connector



inlet

Note: *These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint. | †Consult factory.

Rating					Watertight Devices				Accessories			Replacement Interiors							
Amps	Poles/ Wires	Configuration		AC Voltage	Receptacle	Plug	Connector	Inlet	Back Boxes		Closure Caps	Recep./ Conn.	Plug/ Inlet						
		Recep./ Conn.	Plug/ Inlet						Non-Metallic	Metallic*									
60	2P 3W			125V	HBL360R4W	HBL360P4W	HBL360C4W	HBL360B4W	BB60N	BB601W BB602W	PC60	IN360AF	IN360AM						
60/63	2P 3W			250V	HBL360R6W	HBL360P6W	HBL360C6W	HBL360B6W				IN360BF	IN360BM†						
60	2P 3W			480V	HBL360R7W	HBL360P7W	HBL360C7W	HBL360B7W				IN460CF	IN460CM						
	3P 4W			125/250V	HBL460R12W	HBL460P12W	HBL460C12W	HBL460B12W				IN460DFS	IN460DMS						
60/63	3P 4W			380–415V	HBL460R6W	HBL460P6W	HBL460C6W	HBL460B6W				IN460DF	IN460DM						
60/63	3P 4W			3Ø 250V	HBL460R9W	HBL460P9W	HBL460C9W	HBL460B9W											
60	3P 4W			3Ø 480V	HBL460R7W	HBL460P7W	HBL460C7W	HBL460B7W				BB100N	BB1001W BB1002W	PC100	IN560EFS†	IN560EMS			
	60/63	3P 4W		3Ø 250V	HBL460R9W	HBL460P9W	HBL460C9W	HBL460B9W											
60	4P 5W			220/380V 240/415V	HBL560R6W	HBL560P6W	HBL560C6W	HBL560B6W							IN560EF	IN560EM†			
	60/63	4P 5W		3ØY 120/208V	HBL560R9W	HBL560P9W	HBL560C9W	HBL560B9W											
60	4P 5W			3ØY 277/480V	HBL560R7W	HBL560P7W	HBL560C7W	HBL560B7W							BB100N	BB1001W BB1002W	PC100	IN5100EFS	IN5100EMS
	60/63	4P 5W		3ØY 120/208V	HBL560R9W	HBL560P9W**	HBL560C9W	HBL560B9W											
100	2P 3W			125V	HBL3100R4W	HBL3100P4W	HBL3100C4W	HBL3100B4W										IN3100AF	IN3100AM
	100	2P 3W		250V	HBL3100R6W	HBL3100P6W	HBL3100C6W	HBL3100B6W											
100	2P 3W			480V	HBL3100R7W	HBL3100P7W	HBL3100C7W	HBL3100B7W	IN4100CF†	IN4100CM									
	100/125	3P 4W		125/250V	HBL4100R12W	HBL4100P12W	HBL4100C12W	HBL4100B12W			IN4100DFS							IN4100DMS	
100/125	3P 4W			380–415V	HBL4100R6W	HBL4100P6W	HBL4100C6W	HBL4100B6W	IN4100DF	IN4100DM									
	100/125	3P 4W		3Ø 250V	HBL4100R9W	HBL4100P9W	HBL4100C9W	HBL4100B9W											
100	3P 4W			3Ø 480V	HBL4100R7W	HBL4100P7W	HBL4100C7W	HBL4100B7W	IN5100EF	IN5100EM									
	100	3P 4W		3Ø 600V	HBL4100R5W	HBL4100P5W	HBL4100C5W	HBL4100B5W											
100/125	4P 5W			220/380V 240/415V	HBL5100R6W	HBL5100P6W	HBL5100C6W	HBL5100B6W	IN5100EF	IN5100EM									
	100/125	4P 5W		3ØY 120/208V	HBL5100R9W	HBL5100P9W**	HBL5100C9W	HBL5100B9W											
100	4P 5W			3ØY 277/480V	HBL5100R7W	HBL5100P7W	HBL5100C7W	HBL5100B7W	IN5100EF	IN5100EM									
	100	4P 5W		3ØY 347/600V	HBL5100R5W	HBL5100P5W	HBL5100C5W	HBL5100B5W											

Note: For 60/63A and 100/125A application requiring a pilot pin, add a "P" suffix to end of standard catalog number. | *These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint. | **Short housing plug HBL5100P9WSH. IP22 suitability. | †Consult factory.

See 20, 30, 60 & 100 amp offering for additional dual rated devices for use at either 16A or 20A, 30A or 32A, 60A or 63A and 100A or 125A.

Circuit-Lock® Pin & Sleeve Mechanical Interlocks

Hubbell Circuit-Lock® mechanical interlocks incorporate a disconnect switch and receptacle in one compact, non-metallic and economical unit. All Circuit-Lock® mechanical interlocks can be locked to comply with the OSHA Lockout/Tagout regulation. Removing the plug and locking it out provides a visual means of verifying that the equipment has been disconnected.

The switch cannot be turned ON until the plug is completely engaged, and the plug cannot be removed unless the switch is turned OFF. This eliminates the possibility of making or breaking the circuit under load, or making a casual or “lazy” connection. The non-metallic enclosure can be connected to metallic conduit without interfering with the ground continuity.

Compatible with IEC 60309-2 plugs, Circuit-Lock® units are available in 20, 30, 60 and 100 amp models with 3, 4 and 5 wire configurations designed to IEC 60309-1 and 60309-2 standards.

Hubbell Unfused Circuit-Lock® mechanical interlocks are also available in “reverse service” versions incorporating a disconnect switch and reverse service receptacle (inlet). Reverse service units are available in 30, 60 and 100A models with 4 wire configurations.



unfused

fused

Quality by Design



Contact Carrier

Thermoset polyester contact carrier provides resistance to electrical tracking and withstands higher temperatures

Provides excellent dimensional stability, low moisture absorption and superior dielectric strength



Installation

Three molded-in conduit drill points are located on the top, bottom and back surface of enclosure. Conduit hub provided: 30A 1 in. NPT, 60A 1¼ in. NPT

Conduit hub and adjustable mounting feet (4) are included. Adjustable mounting feet are 40% stronger to prevent nuisance breakage.



Unfused Safety

Lockable high visibility handle meets OSHA Lockout/Tagout regulations

Two-stage interlocking mechanism to help defeat tampering

Watertight conduit hub and grounding plate for use on metallic conduit (IP67 suitability)

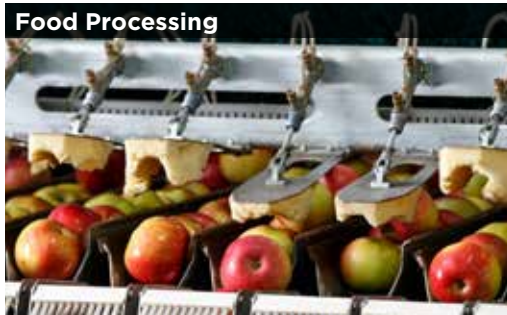


Fused Safety

High visibility red handle can be locked to comply with OSHA Lockout/Tagout regulations; accepts up to a 5/16 inch padlock shackle

Spring-loaded receptacle liftcover with gasket ensures dust tight rating; provides watertight seal when turned and locked

NEC® is a registered trademark of the National Fire Protection Association (NFPA).



Ideal for:

- Food Processing
- Factory
- Water Treatment
- Temporary Power/Lighting
- Washdown
- Agriculture
- Outdoor Entertainment
- Welding
- Manufacturing

Safety

Switch cannot be turned ON until properly mating IEC 60309 plug is completely engaged
 Plug cannot be removed until the switch is turned OFF
 Eliminates 'lazy' connections

Compliance

Meets NEC® requirement for disconnecting means within sight of all motor loads
 IEC 60309 receptacle or inlet
 Horsepower rated
 IP67 water ingress protection

Flexibility

Available in 20, 30, 60 and 100A
 Fused and unfused versions available
 Reverse service versions available
 Fused versions accept class J fuses



Unfused Interior Design

Large enclosed gears assembled on one plane to eliminate possible gear jumping
 Horsepower rated disconnect switch handles large motor loads
 DIN rail mounted switch for easy installation and replacement



Unfused Housing Design

Insulated non-metallic housing is 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



Fused Interior Design

Compact Fused Disconnect Switch accepts Class "J" fuses. Fuse holders are top mounted for easy access
 The UL 98 switch accepts auxiliary contacts for control circuit applications including the ON/OFF control of remote pilot lights or signal for programmable controllers



Fused Housing Design

Non-metallic enclosure meets UL 50E Type 4X (watertight), 12 (dust-tight) and IP66 suitability requirements. Enclosure is molded of rugged thermoplastic PBT to resist abuse, corrosion and enhance safety.
 IEC pin and sleeve devices are color coded by voltage for easy identification

Ordering Information

Amps	Rating			Unfused Circuit-Lock® Devices		Reverse Service		Fused Circuit-Lock® Devices		
	Poles/ Wires	Configuration Recep.	Plug	AC Voltage	Mechanical Interlock	Mating Plug	Mechanical Interlock	Mating Plug	Mechanical Interlock	Mating Plug
20	3P 4W			120/240V	HBL420MI12W	HBL420P12W	—	—	—	—
	3P 4W			3Ø 240V	HBL420MI9W	HBL420P9W	—	—	—	—
	3P 4W			3Ø 480V	HBL420MI7W	HBL420P7W	—	—	—	—
	3P 4W			3Ø 600V	HBL420MI5W	HBL420P5W	—	—	—	—
30	2P 3W			120V	HBL330MI4W	HBL330P4W	—	—	—	—
	2P 3W			240V	HBL330MI6W	HBL330P6W	—	—	—	—
	2P 3W			480V	HBL330MI7W	HBL330P7W	—	—	—	—
	3P 4W			120/240V	HBL430MI12W	HBL430P12W	—	—	HBL430MIF12W	HBL430P12W
	3P 4W			3Ø 240V	HBL430MI9W	HBL430P9W	HBL430MI9WR	HBL430P9WR	HBL430MIF9W	HBL430P9W
	3P 4W			3Ø 480V	HBL430MI7W	HBL430P7W	HBL430MI7WR	HBL430P7WR	HBL430MIF7W	HBL430P7W
	3P 4W			3Ø 600V	HBL430MI5W	HBL430P5W	HBL430MI5WR	HBL430P5WR	HBL430MIF5W	HBL430P5W
32	4P 5W			3ØY 120/208V	HBL530MI9W	HBL530P9W	—	—	—	—
	4P 5W			3ØY 277/480V	HBL530MI7W	HBL530P7W	—	—	HBL530MIF7W	HBL530P7W
	4P 5W			3ØY 347/600V	HBL530MI5W	HBL530P5W	—	—	—	—
	3P 4W			380V 50HZ– 440V 60Hz	HBL432MI3W	HBL432P3W	—	—	—	—

Note: 20, 30 and 32A – 1 inch NPT hub supplied; 60 and 100A – 1¼ inch hub supplied.



fused
mechanical interlock

Replacement Auxiliary Contacts

Description	Black Style Switch	Gray Style Switch
Auxiliary contact, normally open, A600 pilot duty, break before break	ACFSNO	HBLACFSNO
Auxiliary contact, normally closed, A600 pilot duty, break before break	ACFSNC	HBLACFSNC

Note: Auxiliary contacts are specific to the style switch noted and are NOT interchangeable. All new installations are shipped with gray style switch.



black style switch

Replacement Switches

Description	Gray Style Switch
For 30A fused switches	HBL30MIFRS
For 60A fused switches; Gray Style switch will retrofit Black Style switch	HBL60MIFRS
For 20A mechanical interlocks	HBLDS3RS
For 30 and 32A mechanical interlocks	HBL30MIRS
For 60 and 100A mechanical interlocks	HBLDS60100RS



gray style switch

Watertight Closure Plug Kits

Description	Catalog Number
For 30A Circuit-Lock® unfused and fused Pin and Sleeve mechanical interlocks	MICPK30
For 60 and 100A Circuit-Lock® unfused and fused Pin and Sleeve mechanical interlocks	MICPK60



watertight closure plug
kit for 30A devices

Rating					Unfused Circuit-Lock® Devices		Reverse Service		Fused Circuit-Lock® Devices	
Amps	Poles/ Wires	Configuration Recep.	Plug	AC Voltage	Mechanical Interlock	Mating Plug	Mechanical Interlock	Mating Plug	Mechanical Interlock	Mating Plug
60	2P 3W			120V	HBL360MI4W	HBL360P4W	—	—	—	—
	2P 3W			240V	HBL360MI6W	HBL360P6W	—	—	—	—
	2P 3W			480V	HBL360MI7W	HBL360P7W	—	—	—	—
	3P 4W			120/240V	HBL460MI12W	HBL460P12W	HBL460MI12WR	HBL460P12WR	HBL460MIF12W	HBL460P12W
	3P 4W			3Ø 240V	HBL460MI9W	HBL460P9W	HBL460MI9WR	HBL460P9WR	HBL460MIF9W	HBL460P9W
	3P 4W			3Ø 480V	HBL460MI7W	HBL460P7W	HBL460MI7WR	HBL460P7WR	HBL460MIF7W	HBL460P7W
	3P 4W			3Ø 600V	HBL460MI5W	HBL460P5W	HBL460MI5WR	HBL460P5WR	HBL460MIF5W	HBL460P5W
	4P 5W			3ØY 120/208V	HBL560MI9W	HBL560P9W	—	—	HBL560MIF9W	HBL560P9W
	4P 5W			3ØY 277/480V	HBL560MI7W	HBL560P7W	—	—	—	—
	4P 5W			3ØY 347/600V	HBL560MI5W	HBL560P5W	—	—	—	—
100	2P 3W			240V	HBL3100MI6W	HBL3100P6W	—	—	—	—
	3P 4W			120/240V	HBL4100MI12W	HBL4100P12W	HBL4100MI12WR	HBL4100P12WR	—	—
	3P 4W			3Ø 240V	HBL4100MI9W	HBL4100P9W	HBL4100MI9WR	HBL4100P9WR	—	—
	3P 4W			3Ø 480V	HBL4100MI7W	HBL4100P7W	HBL4100MI7WR	HBL4100P7WR	—	—
	3P 4W			3Ø 600V	HBL4100MI5W	HBL4100P5W	HBL4100MI5WR	HBL4100P5WR	—	—
	4P 5W			3ØY 120/208V	HBL5100MI9W	HBL5100P9W	—	—	—	—

Note: 20, 30 and 32A – 1 inch NPT hub supplied; 60 and 100A – 1¼ inch hub supplied.

Replacement Flip Covers

Description	Catalog Number
For 20A mechanical interlocks.	CA420MI
For 30 and 32A, 3 and 4 wire mechanical interlocks.	CA3430MI
For 30A, 5 wire mechanical interlocks.	CA530MI
For 60A mechanical interlocks.	CA60MI
For 100A mechanical interlocks.	CA100MI



Replacement Mounting Feet

Description	Catalog Number
Replacement mounting feet and screws for 30 and 60A fused mechanical interlocks	HBLRFT2 ^Δ

Note: ^ΔPackage of 10 feet and 10 screws.



Ground Block

Description	Catalog Number
For 20, 30 and 32A switches	HBL30RGB
For 60 and 100A switches	HBL60100RGB



Neutral Block

Description	Catalog Number
For 20, 30 and 32A switches	HBL30RNB
For 60A switches	HBL60RNB
For 100A switches	HBL100RNB

Advantage™ Series Switch-Rated Pin and Sleeve Devices

Hubbell Wiring Device-Kellems Advantage™ Series Switch-Rated Pin and Sleeve Devices are IEC 60309-2 compatible devices that are approved as a disconnecting means for motor and branch circuits. Hubbell's Pin and Sleeve connections have always been safe, that hasn't changed. The Advantage™ Series simply has more.

Spring-Loaded Disconnect Button

Oversized for easy actuation with gloved hands.

Heavy Duty External Cord Grips

Provide maximum cord retention to maintain unstressed terminations.



Spring-Loaded Cover

Spring-loaded to the open position, reminding users that the cover must be secured to ensure maximum ingress protection.

Pocketed Recess for Screws

Deters slippage of the screwdriver and are conveniently located on the same side for easy installation.

Robust and Durable Housing

The UV-stabilized, impact and corrosion-resistant PBT housing is designed to withstand harsh industrial environments.

Compact Design

Device is similar in size to standard IEC 60309-2 devices. Receptacles mount to standard Hubbell IEC pin and sleeve back boxes.

Stainless Steel Hardware

Provides superior corrosion resistance in wet and harsh environments.

Full Line of Accessories

Advantage™ Series receptacles have the same mounting pattern as standard receptacles for non-metallic and metallic back boxes



Power Indicating LED Lights
Provides visual verification of power when connected.

Impact Resistant Cover Arm

Compact, durable internal swing arm is fully shrouded, protecting it from damage.



Ergonomic Design
Hubbell puts the Advantage™ into the palm of your hands with the easy-to-use leverage grip design from Hubbell.

More Advantages

IEC 60309 Singalarly Rated Device
Mates with existing installed base of IEC 60309-2 pin and sleeve devices. Color coded by voltage for easy identification of mating devices.

IP69k Superior Water Ingress Protection
UL witnessed IP69k and UL Type 4X and 12. Built to withstand wet and harsh environments.

PWR Power Indicating LED Lights
Highly visible, long lasting green LED lights on both sides of the device provide visual verification of power when connected.

Continuous Ground Engagement
Ground pin is first-to-make and last-to-break followed by switched neutral and phase contact(s).

Permanent Labelless Markings
Product ratings are molded into the device and will not wash off for clear permanent identification.

Sleek Modern Design
Ergonomic device is easy to clean, making it ideal for hygienic food processing facilities.

Designed to Higher Standards

UL 2682
The standard to which all switch-rated plugs and connectors are tested.

Advantage™ Series Switch-Rated connections established new benchmarks for mechanical and electrical performance in this category. Robust 100kA Maximum Short Circuit Current Interruption (SCCR)* and up to a 50HP rating far exceed most application requirements, making the Advantage™ Series the ideal solution for your motor connections.

NEC® Section 430.102(B)
Requires each motor controller to have a disconnecting means within line of sight from the motor and driven equipment.

Advantage™ Series IEC Pin and Sleeve Switch-Rated Devices are approved as disconnecting means for both motor circuits and branch circuits.

Ordering Information

Rating					Pin and Sleeve Devices					Accessories	
Amps	Poles/ Wires	Configuration Recep./ Conn.	Plug/ Inlet	AC Voltage	Connector	Receptacle	HP	Mating Plug	IP69k Inlet	Back Boxes	Closure Caps
30	2P 3W			125V	HBLS330C4W	HBLS330R4W	2	HBL330P4W	HBL330B4W	BB2030N	PC3430
32	2P 3W			100–130V	HBLS332C4W	HBLS332R4W	2	HBL332P4W	HBL332B4W		
30	2P 3W			250V	HBLS330C6W*	HBLS330R6W*	5	HBL330P6W*	HBL330B6W*		
32	2P 3W			220–240V							
30	2P 3W			480V	HBLS330C7W	HBLS330R7W	10	HBL330P7W	HBL330B7W		
30	3P 4W			125/250V	HBLS430C12W	HBLS430R12W	2	HBL430P12W	HBL430B12W	BB2030N	PC3430
30/32	3P 4W			3Ø 250V	HBLS430C9W*	HBLS430R9W*	10	HBL430P9W*	HBL430B9W*		
30	3P 4W			3Ø 480V	HBLS430C7W	HBLS430R7W	20	HBL430P7W	HBL430B7W		
30	3P 4W			3Ø 600V	HBLS430C5W	HBLS430R5W	30	HBL430P5W	HBL430B5W		
30/32	3P 4W			380–415V	HBLS430C6W*	HBLS430R6W*	7.5	HBL430P6W*	HBL430B6W*		
32	3P 4W			380–440V	HBLS432C3W	HBLS432R3W	10	HBL432P3W	HBL432B3W		
30	4P 5W			3ØY 347/600V	HBLS530C5W	HBLS530R5W	30	HBL530P5W	HBL530B5W	BB2030N	PC530
30	4P 5W			200/346– 240/415V	HBLS530C6W*	HBLS530R6W*	7.5	HBL530P6W*	HBL530B6W*		
32	4P 5W			220/380V 240/415V							
30	4P 5W			3ØY 277/480V	HBLS530C7W	HBLS530R7W	20	HBL530P7W	HBL530B7W		
30/32	4P 5W			3ØY 120/208V	HBLS530C9W*	HBLS530R9W*	10	HBL530P9W*	HBL530B9W*		
60	2P 3W			125V	HBLS360C4W	HBLS360R4W	3	HBL360P4W	HBL360B4W	BB60N	PC60
60	2P 3W			250V	HBLS360C6W*	HBLS360R6W*	7.5	HBL360P6W*	HBL360B6W*		
63	2P 3W			220–240V							
60	2P 3W			480V	HBLS360C7W	HBLS360R7W	15	HBL360P7W	HBL360B7W		
60	3P 4W			125/250V	HBLS460C12W	HBLS460R12W	3	HBL460P12W	HBL460B12W	BB60N	PC60
60/63	3P 4W			3Ø 250V	HBLS460C9W*	HBLS460R9W*	10	HBL460P9W*	HBL460B9W*		
60	3P 4W			3Ø 480V	HBLS460C7W	HBLS460R7W	30	HBL460P7W	HBL460B7W		
60	3P 4W			3Ø 600V	HBLS460C5W	HBLS460R5W	40	HBL460P5W	HBL460B5W		
60/63	3P 4W			380–415V	HBLS460C6W*	HBLS460R6W*	10	HBL460P6W*	HBL460B6W*		
60	4P 5W			3ØY 347/600V	HBLS560C5W	HBLS560R5W	40	HBL560P5W	HBL560B5W		
60/63	4P 5W			200/346– 240/415V	HBLS560C6W*	HBLS560R6W*	10	HBL560P6W*	HBL560B6W*	BB60N	PC60
60	4P 5W			3ØY 277/480V							
60/63	4P 5W			3ØY 120/208V	HBLS560C9W*	HBLS560R9W*	10	HBL560P9W*	HBL560B9W*		



connector



receptacle



plug



inlet

Note: *Certain IEC configurations allow for a single product to be certified as both a North American (Series 2) and International amperage (Series 1).

These products are marked accordingly with both the UL Listing and UL Classified markings.

ADVANTAGE™ series receptacles have the same mounting pattern as standard Hubbell IEC pin and sleeve.

Add a "P" suffix for Pilot pin for 60 amp devices.

Optional Pilot Pin Available on All 60A Devices

The pilot pin is smaller than the ground and phase pins and is designed to make after main and break before main breaks. This pin can be used to communicate with auxiliary devices within your facility. They are “break before main break” and are the last contact in the sequence to make and first to break by design.



Rating			Pin and Sleeve Devices			
Amps	Poles/Wires	AC Voltage	Connector with Pilot Sleeve	Receptacle with Pilot Sleeve	Plug with Pilot Pin	Inlet with Pilot Pin
60/63	3P 4W	3Ø 250V	HBLS460C9WP*	HBLS460R9WP*	HBLS460P9WP*	HBLS460B9WP*

Note: *Add a "P" suffix for Pilot pin for 60 amp devices.

Rating					Pin and Sleeve Devices					Accessories	
Amps	Poles/Wires	Configuration		AC Voltage	Connector	Receptacle	HP	Mating Plug	Inlet**	Back Boxes	Closure Caps
		Recep./Conn.	Plug/Inlet								
100	3P 4W			3Ø 600V	HBLS4100C5W	HBLS4100R5W	50	HBL4100P5W	HBL4100B5W	BB100N	PC100
100	3P 4W			380–415V	HBLS4100C6W*	HBLS4100R6W*	15	HBL4100P6W	HBL4100b6W		
100	3P 4W			3Ø 480V	HBLS4100C7W	HBLS4100R7W	40	HBL4100P7W	HBL4100b7W		
100	3P 4W			3Ø 250V	HBLS4100C9W*	HBLS4100R9W*	15	HBL4100P9W	HBL4100b9W		
100	3P 4W			125/250V	HBLS4100C12W	HBLS4100R12W	10; 3	HBL4100P12W	HBL4100B12W		
100	4P 5W			3ØY 347/600V	HBLS5100C5W	HBLS5100R5W	50	HBL5100P5W	HBL5100B5W	BB100N	PC100
100	4P 5W			200/346–240/415V	HBLS5100C6W*	HBLS5100R6W*	15	HBL5100P6W	HBL5100B6W		
100	4P 5W			3ØY 277/480V	HBLS5100C7W	HBLS5100R7W	40	HBL5100P7W	HBL5100B7W		
100	4P 5W			3ØY 120/208V	HBLS5100C9W*	HBLS5100R9W*	15	HBL5100P9W	HBL5100B9W		

Note: *Certain IEC configurations allow for a single product to be certified as both a North American (Series 2) and International amperage (Series 1). These products are marked accordingly with both the UL Listing and UL Classified markings.

	IEC Pin and Sleeve			Advantage™ Series			Unfused Circuit-Lock® Disconnects			Unfused Circuit-Lock® Mechanical Interlock			Fused Disconnects		Fused Circuit-Lock® Mechanical Interlock	
	30A	60A	100A	30A	60A	100A	30A	60A	100A	30A	60A	100A	30A	60A	30A	60A
UL Category	UL1682			UL2682			UL508	60947-4-1	60947-4-1	UL508	60947-4-1	60947-4-1	UL98		UL98	
Circuit Application	Branch			Branch			Branch			Branch			Branch or Feeder		Branch	
Supports NFPA 70E Servicing Practices	Yes			Yes			Yes			Yes			Yes		Yes	
Motor Controller	No			No			Yes			Yes			No		No	
Motor Disconnect	Yes			Yes			Yes			Yes			Yes		Yes	
Branch Disconnect	No			Yes			No			No			Yes		Yes	
SCCR	N/A			100kA			65kA			65kA			200kA		200kA	
HP Rating 480V 3Ø	15	20	40	20	30	40	15	50	50	15	30	30	15	30	15	30
Water Ingress	Type 4X, 12 & IP69k			Type 4X & IP69k			Type 4X, 12 & IP69k			IP67			IP67		IP66	
Visual Verification of Power	No			Yes			Yes			Yes			Yes		Yes	
Lockout/Tagout	On Plug			On Plug			Yes			Yes			Yes		Yes	
Auxiliary Contacts	No			No	Yes	No	Yes			Yes			Yes		Yes	

Low Profile Devices

Hubbell's Low Profile Pin and Sleeve devices were designed to save space without sacrificing pin and sleeve strength, safety and convenience. The small compact design of these plugs and receptacles is ideal for indoor applications where space is at a premium.

These devices are fully interchangeable with standard IEC 60309 pin and sleeve. They are a perfect fit for tight situations frequently found in hotels, restaurants, convention centers, warehouses, assembly benches and offices.



Housing Design

Both interior and exterior are made of tough, durable nylon
Shrouded recessed pins are protected from impact and abuse



Brass Box Terminal

Permits high clamping pressure on conductors without damaging wire strands for best electrical conductivity
Solid one-piece pin construction for long life, reliable electrical contact and maximum conductivity



Safety

Large markings for easy recognition results in ease of wiring on the assembly line or in the field
Shroud protects personnel from exposure to arcing



Split Sleeves

20/30A - Self-adjusting stainless steel springs assure constant contact pressure
60A - Beryllium copper insert with multiple contact points assures easy insertion and a tight fit
Stainless steel terminal screws resist rust and corrosion



Identification

Color coding for quick, easy visual identification of mating devices
Ratings and certification are molded into the nylon housing for easy identification and reordering



Cord Grip

Integrated cord grip limits strain on terminals and keeps cord connected

Ordering Information

		Rating			Devices		Cord Diameter	
Amps	Poles/Wires	Recep./ Conn.	Plug/Inlet	AC Voltage	Plug	Receptacle	Min. Inches	Max. (mm)
20	3P 4W			3Ø 250V	—	L420R9	.350" - .710"	(8.3 - 15.9)
	3P 4W			125/250V	L430P12	L430R12	.390" - .775"	(9.9 - 19.7)
30	3P 4W			3Ø 250V	L430P9	L430R9	.390" - .775"	(9.9 - 19.7)
	3P 4W			3Ø 250V	A460P9	A460R9 A460R9KIT*	.75" - 1.25"	(19.1 - 31.8)
60	4P 5W			3ØY 120/208V	A560P9	HBL560R9W	.89" - 1.42"	(22.6 - 36.1)
	4P 5W			3ØY 120/208V	A5100P9	HBL5100R9W	1.34" - 1.50"	(34.0 - 38.1)

Note: *Receptacle with cover

DC Rated Pin and Sleeve Devices for Data Centers

In today's environmentally conscious world, energy savings is a principal part of going green. Direct Current (DC) is being used to reduce power consumption and decrease the amount of infrastructure needed to energize specific types of data center equipment.

Hubbell is the first manufacturer to introduce a series of IEC Pin and Sleeve devices configured for the UL 1686 eight o'clock ground position for DC voltage (not for disconnecting under load). Hubbell's IEC DC rated pin and sleeve line has been qualified by UL to the requirements of DC voltage.



Rating					Watertight Devices		
Amps	Poles/Wires	Configuration Recep./Conn.	Plug	DC Voltage	Receptacle	Plug	Connector
30	2P 3W			550V	HBL330R8WDC	HBL330P8V0DC	HBL330C8V0DC
60	2P 3W			550V	HBL360R8WDC*	HBL360P8V0DC	HBL360C8V0DC
100	2P 3W			550V	HBL3100R8WDC	HBL3100P8V0DC	HBL3100C8V0DC
	4P 5W			400V	HBL5100R8WDC	HBL5100P8V0DC	HBL5100C8V0DC

Note: *Inlet available - HBL360B8WDC.



receptacle



plug



connector

Corrosion Resistant Devices for Abusive Environments

Hubbell offers a superior grade of 100A IEC Pin and Sleeve devices designed for use in the most demanding environments, featuring nickel plated solid brass pins for long life and reliable electrical contact. They have a supertough, highly visible, nonmetallic yellow housing with stainless steel screws and fasteners. Heavy duty external cord clamps provide maximum cord retention to maintain secure terminations.

Ideal for:

- Food Processing
- Factory
- Water Treatment
- Washdown
- Temporary Power
- Meat Packing
- Construction
- Agriculture
- Outdoor Entertainment
- Marine

Rating					Standard Devices			Reverse Service Devices	
Amps	Poles/Wires	Configuration Recep./Conn.	Plug/Inlet	AC Voltage	Receptacle	Plug	Connector	Inlet	Connector
	3P 4W			125/250V	M4100R12	M4100P12	M4100C12	M4100B12R	M4100C12R
100	4P 5W			3ØY 120/208V	M5100R9	M5100P9	M5100C9	M5100B9R	M5100C9R
	4P 5W			3ØY 277/480V	M5100R7	M5100P7	M5100C7	M5100B7R	M5100C7R



receptacle



plug



connector



reverse service
inlet



reverse service
connector

Accessories

Back Boxes

Hubbell manufactures an extensive line of back boxes for use with IEC Pin and Sleeve devices. Each back box is designed to give the user the maximum amount of wiring room while achieving grounding to metallic conduit. Hubbell back boxes are available in non-metallic and cast metal versions.

Non-Metallic 15° Angle Back Box*

Description	NPT Hub Size	Catalog Number
For 16, 20, 30 and 32A devices	1"	BB2030N
For 60 and 63A devices	1¼"	BB60N
For 100 and 125A devices	1½"	BB100N



Stainless Steel 15° Angle Back Box and Adapter – IP69k, UL Type 4X, 12

Description	NPT Hub Size	Catalog Number
For 16, 20, 30 and 32A devices	¾"	BB201WSS
	1"	BB301WSS
For 60 and 63A devices	1¼"	BB601WSS
	1½"	BB1001WSS
For 100 and 125A devices	2"	BB1002WSS



Metallic 15° Angle Back Box and Adapter**

Description	NPT Hub Size	Catalog Number
For 16, 20, 30 and 32A devices	¾"	BB201W
	1"	BB301W
For 60 and 63A devices	1¼"	BB601W
	1½"	BB602W
For 100 and 125A devices	1½"	BB1001W
	2"	BB1002W
Angle adapter only for 60, 63, 100 and 125A devices	–	AA6010015



Metallic 55° Angle Back Box and Adapter**

Description	NPT Hub Size	Catalog Number
Feed-thru box back box and adapter for 16, 20, 30 and 32A devices	1"	AB203055
Angle adapter only	–	AA203055
Back box and adapter for 60, 63, 100 and 125A devices	1½"	FW6010055
Angle adapter only	–	AA6010055



Metallic Feed-Thru Back Box**

Description	NPT Hub Size	Catalog Number
For 16, 20, 30 and 32A devices	¾"	FT202W
	1"	FT302W



Metallic Four-Way 15° Angle Back Box**

Description	NPT Hub Size	Catalog Number
For 60, 63, 100 and 125A devices	1½"	FW60100

Straight Wall Box Adapter

Description	Catalog Number
Adapts 16, 20, 30 & 32A watertight IEC Pin and Sleeve devices to 2-gang device boxes and FD boxes	HBL2030AP

Angle Wall Box Adapter†

Description	Catalog Number
Adapts 16, 20, 30 and 32A watertight IEC Pin and Sleeve devices to standard wall boxes	AA2030PS



Note: *Hub is not included; order one of the following Racor® part numbers: 1 in. = 1704, 1¼ in. = 1705, 1½ in. = 1706. These boxes meet IP69k requirements and Type 4X requirements when installed with a watertight conduit hub.

**These boxes are cast aluminum, suitable for IP54 requirements and are finished with enamel paint.

†Adapts 20 and 30A Watertight Pin and Sleeve receptacle to single, 2-gang standard wall box and 4 or 4¼ inch square for non-watertight applications.

Closure Caps

Cap assemblies provide watertight sealing to a disconnected male IEC Pin and Sleeve plug or inlet. Manufactured of the same tough non-metallic material as the watertight IEC Pin and Sleeve devices for corrosion and abuse resistance.

Closure Caps

Description	Catalog Number	
Fits all 16 and 20A	3 wire plugs and inlets	PC320
	4 wire plugs and inlets	PC420
	5 wire plugs and inlets	PC520
Fits all 30 and 32A	3 and 4 wire plugs and inlets	PC3430
	5 wire plugs and inlets	PC530
Fits all 60 and 63A plugs and inlets		PC60
Fits all 100 and 125A plugs and inlets		PC100



Cover Assemblies

Replacement cover assemblies for use with watertight connector bodies and receptacles. Kit contains cover, arm assembly and installation tool.

Exact replacement cover assemblies are required to maintain proper water ingress protection. They are not reverse compatible. Please check the IP rating marked on the housing and order accordingly.

Cover Assemblies

Description		IP67	IP69k/4X
Fits all 16 and 20A	3 wire watertight female devices	CA320	HBLCA320
	4 wire watertight female devices	CA420	HBLCA420
	5 wire watertight female devices	CA520	HBLCA520
Fits all 30 and 32A	3 and 4 wire watertight female devices	CA3430	HBLCA3430
	5 wire watertight female devices	CA530	HBLCA530
Fits all 60 and 63A watertight female devices		CA60	HBLCA60
Fits all 100 and 125A watertight female devices		CA100	HBLCA100



IP67 cover assembly



IP69k cover assembly

Cord Clamp and Locking Ring

Replacement cord clamp and locking ring for use with IEC plugs, connectors and inlets.

Cord Clamp and Locking Ring

Description		Cord Clamp and Locking Ring	Locking Ring Only*
Fits all 16 and 20A	3 wire plugs, connectors and inlets	CC320	LR320
	4 wire plugs, connectors and inlets	CC420	LR420
	5 wire plugs, connectors and inlets	CC520[†]	LR520
Fits all 30 and 32A	3 and 4 wire plugs, connectors and inlets	CC3430	LR3430
	5 wire plugs, connectors and inlets	CC530[†]	LR530
Fits all 60 and 63A plugs, connectors and inlets		CC60	LR60
Fits all 100 and 125A plugs, connectors and inlets		CC100	LR100

Note: *Locking Ring only for plugs and inlets. | [†]Consult factory.



Liquidtight Adapters

Machined aluminum adapters are available to provide a means for attaching flexible liquidtight metal conduit to rear of a pin and sleeve plug or connector. To install, remove cord grip and two gland cap screws. Use screws to attach adapter. Kellems® liquidtight conduit connectors are available to control arc of bend and to prevent conduit pull-out where vibration, motion or strain is present. These grips interface directly with Hubbell's liquidtight adapters and are available in a wide variety of NPT sizes and configurations. Consult your local code grounding requirements before using liquidtight adapters.

Liquidtight Adapters

Rating of Hubbell Pin and Sleeve Device	Liquidtight Conduit Size	Liquidtight Adapters		Optional Kellems Liquidtight Conduit Grip
		Aluminum	Non-Metallic	
16 and 20 Amp 3 and 4 Wire	½" NPT	SAA12	—	074093402
	¾" NPT	SAA34	—	074093403
	1" NPT	SAB12	—	074093402
16 and 20 Amp 5 wire and 30 and 32 Amp 3 and 4 wire	½" NPT	SAB34	—	074093403
	¾" NPT	SAB100	—	074093404
	1" NPT	SAC12	SAC12NM	074093402
30 and 32 Amp 5 wire and 60 and 63 Amp (all)	¾" NPT	SAC34	SAC34NM	074093403
	1" NPT	SAC100	SAC100NM	074093404
	1¼" NPT	SAC125	—	074093405
100 and 125 Amp (all)	1½" NPT	SAD125	—	074093405
	1½" NPT	SAD150	—	074093406



IEC Pin & Sleeve Devices



Online Resources

The Hubbell Wiring Device-Kellems website offers fast and convenient information through our online catalog, technical support, videos and more. The website also features a landing page on energy savings. Visit www.hubbell.com/wiringdevice-kellems/en.

Literature Support

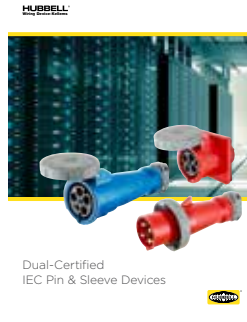
Hubbell offers an extensive literature library for product support. Downloadable PDFs are available online.



Hubbell Wiring Device-Kellems
Full Line Catalog



Advantage™ Series
IEC Pin & Sleeve Devices



Dual-Certified
IEC Pin & Sleeve Devices



Circuit-Lock®
Motor Disconnects



inSIGHT™ Data Monitoring
Solutions