



Watertight Materials

Part	Material
Inlet	
Housing	Zytel® 101 Nylon*
Locking Ring	Reinforced Thermoplastic Polyester
Mounting Flange	Zytel® 101 Nylon
Mounting Screws	Stainless Steel (300 Series)
Contact Carrier	High-Impact Thermoset
Retainer	High-Impact Thermoset
Ground, Phase Pins	Brass (M-Series - Nickel-plated brass)
Terminal Screws	Stainless Steel (300 Series)
Assembly Screws (2)	Stainless Steel (300 Series)
Gaskets	Solid Neoprene

Listed to standard UL1682/CSA C22.2 No. 182.1-02, Plugs, Receptacles and cable connectors of the Pin and Sleeve Type.

UL Classified to IEC Standards 60309-1 (Plugs, Socket Outlets, and Couplers for Industrial Purposes) for Series I (European) rated voltages and services.

When used with cord, these devices require no further investigation by UL for equipment Classification to IEC 435 or IEC 380.

Connector Body	
Housing	Zytel® ST801 Nylon
Cord Clamps	Reinforced Thermoplastic Polyester
Glands	Solid Neoprene
Cover Arms	Reinforced Thermoplastic Polyester
Arm Springs	Stainless Steel (17-7 type)
Covers	Reinforced Thermoplastic Polyester
Cover Screw	Nickel-plated brass
Rotating Sealing Disc	Polycarbonate
Gaskets	Solid Neoprene
Contact Carrier	High-Impact Thermoset
Retainer	High-Impact Thermoset
Phase, Ground Sleeves	Brass
Sleeve Spring	20A and 30A Stainless Steel (300 Series); others are Beryllium Copper multi-contact inserts with silver plating
Terminal Screws	Stainless Steel (300 Series)
Assembly Screws	Stainless Steel (300 Series)

Plug	
Housing	Zytel® ST801 Nylon
Locking Ring	Reinforced Thermoplastic Polyester
Sealing Gasket	Solid Neoprene
Cord Clamp	Reinforced Thermoplastic Polyester
Gland Cap	Reinforced Thermoplastic Polyester
Gland	Solid Neoprene
Cord Clamp Screws	Stainless Steel (300 Series)
Clamp Nut	Nickel-Plated Brass
Gland Clamp Screws	Stainless Steel (300 Series)
Contact Carrier	High-Impact Thermoset
Retainer	High-Impact Thermoset
Ground, Phase Pins	Brass (M-Series - Nickel-plated brass)
Terminal Screws	Stainless Steel (300 Series)
Assembly Screws	Stainless Steel (300 Series)

Receptacle	
Housing	Zytel® 101 Nylon
Mounting Flange	Zytel® 101 Nylon
Arm Spring	Stainless Steel (17-7 type)
Cover Arm	Reinforced Thermoplastic Polyester
Cover	Reinforced Thermoplastic Polyester
Cover Screw	Nickel-plated brass
Rotating Sealing Disc	Polycarbonate
Gaskets	Solid Neoprene
Mounting Screws	Stainless Steel (300 Series)
Terminal Screws	Stainless Steel (300 Series)
Phase, Ground Sleeves	Brass
Sleeve Spring	20A and 30A Stainless Steel (300 Series); others are Beryllium Copper multi-contact inserts with silver plating

Specifications

Typical Specification	
Manufacturer's Identification	Hubbell HBL520P9W
Description	Plug, Power Supply
Type	3 Pole + Neutral + Earth
Rating	20A, 120/208V AC, 3 Phase WYE
Configuration	UL 1686 C2, IEC 60309-2, Clock Position 9, Watertight
Certification	UL Listed, File E146032 Receptacles and Inlets, E146033 Plugs and Connectors, UL Standard UL1682 and UL 1686C2, CSA Certified File LR280C for Plugs, Connectors Inlets and LR285C for Receptacle CSA Standard C22.2 No. 182.1, UL Classified to IEC 60309-1 IEC 60309-2

Note: *All devices on page G-11 have Valox® housings.

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Valox® is a trademark of SABIC Innovative Plastics, acquired from General Electric Company.



Performance

Electrical

Dielectric Withstand Voltage	3000V AC.
Max. Working Voltage	600V RMS (i.e., minimum creepage distance 10 millimeters, minimum clearance 8 millimeters, per IEC 60309-1 for devices rated over 500V).
Current Interrupting	Certified for current interrupting at full rated current (Except DC rated devices).
Temperature Rise	Max. 30°C temperature rise at full rated current after 50 cycles of overload at 150% of rated current at a power factor of 75%.
Endurance	5,000 connect and disconnect cycles with load for 16A and 20A, 1,000 cycles with load and 1,000 cycles without load for 30A, 32A, 60A and 63A, and 250 cycles with load and 250 cycles without load for 100A and 125A.

Mechanical

Impact Resistance	Per CSA C22.2 No. 182.1 / UL1682.
Cord Grip Cable Retention	Per CSA C22.2 No. 182.1 / UL1682.
Cord Accommodation	Round portable service cords of diameters commensurate with the device rating as defined in UL Standard 62, CSA C22.2 No. 49 and the harmonized <HAR> European Standards.
Terminal Identification	Terminals identified in accordance with North American and IEC conventions.
Product Identification	Identification and ratings are a permanent part of the device housing.

Environmental

Moisture Resistance	Watertight per IEC 60309-1.
Ingress Protection	IP67 Suitability.
Flammability	HB or better per UL 94 or CSA C22.2 No. 0.17.
Operating Temperatures	Maximum Continuous 75°C; Minimum - 40°C without impact.

Materials

Housings	Nylon.
All Other Materials	Resistant to corrosion and chemical attack.

Note: Specification sheets for all other Pin and Sleeve catalog numbers are available upon request.

Horsepower Ratings for IEC Pin and Sleeve

AC Voltage Rating	Horsepower	Catalog Number			
3Ø 250	2	HBL420R9W	HBL420P9W	HBL420C9W	HBL420B9W
3Ø 480	5	HBL420R7W	HBL420P7W	HBL420C7W	HBL420B7W
3Ø 600	7.5	HBL420R5W	HBL420P5W	HBL420C5W	HBL420B5W
3ØY 120/208	.5	HBL520R9W	HBL520P9W	HBL520C9W	HBL520B9W
3ØY 277/480	5	HBL520R7W	HBL520P7W	HBL520C7W	HBL520B7W
3ØY 347/600	7.5	HBL520R5W	HBL520P5W	HBL520C5W	HBL520B5W
3Ø 250	3	HBL430R9W	HBL430P9W	HBL430C9W	HBL430B9W
3Ø 480	7.5	HBL430R7W	HBL430P7W	HBL430C7W	HBL430B7W
3Ø 600	10	HBL430R5W	HBL430P5W	HBL430C5W	HBL430B5W
3ØY 120/208	2	HBL530R9W	HBL530P9W	HBL530C9W	HBL530B9W
3ØY 277/480	7.5	HBL530R7W	HBL530P7W	HBL530C7W	HBL530B7W
3ØY 347/600	10	HBL530R5W	HBL530P5W	HBL530C5W	HBL530B5W
3Ø 250	5	HBL460R9W	HBL460P9W	HBL460C9W	HBL460B9W
3Ø 480	10	HBL460R7W	HBL460P7W	HBL460C7W	HBL460B7W
3Ø 600	15	HBL460R5W	HBL460P5W	HBL460C5W	HBL460B5W
3ØY 120/208	3	HBL560R9W	HBL560P9W	HBL560C9W	HBL560B9W
3ØY 277/480	10	HBL560R7W	HBL560P7W	HBL560C7W	HBL560B7W
3ØY 347/600	15	HBL560R5W	HBL560P5W	HBL560C5W	HBL560B5W
3Ø 250	10	HBL4100R9W	HBL4100P9W	HBL4100C9W	HBL4100B9W
3Ø 480	30	HBL4100R7W	HBL4100P7W	HBL4100C7W	HBL4100B7W
3Ø 600	30	HBL4100R5W	HBL4100P5W	HBL4100C5W	HBL4100B5W
3ØY 120/208	10	HBL5100R9W	HBL5100P9W	HBL5100C9W	HBL5100B9W
3ØY 277/480	30	HBL5100R7W	HBL5100P7W	HBL5100C7W	HBL5100B7W
3ØY 347/600	30	HBL5100R5W	HBL5100P5W	HBL5100C5W	HBL5100B5W



Features and Benefits

IP67
SUITABILITY

Unfused Circuit-Lock® Pin and Sleeve Mechanical Interlocks

The National Electrical Code (NEC®) requires a separate disconnect means within sight of all motor loads. The NEC requires the disconnecting means in a motor-circuit be listed as “Suitable as Motor Disconnect” if the motor is rated greater than 2 HP.

Hubbell’s revolutionary Circuit-Lock interlock incorporates the disconnect switch and receptacle in one compact, non-metallic and economical unit. Removing the plug and locking it out provides a visual means of verifying equipment has been disconnected. All Circuit-Lock mechanical interlocks can be locked out as a method of compliance with the OSHA Lockout/Tagout regulation.

The switch cannot be turned ON until the plug is completely engaged, and the plug cannot be removed until the switch is turned OFF. At the same time, it 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 the metallic conduit and not interfere with the ground continuity.

In addition, these horsepower rated units are durable, watertight and easy to install. And they are compatible with IEC 60309-2 plugs. These Circuit-Lock units are available in 20, 30, 60 and 100A models, and in 3, 4 and 5 wire configurations that are designed to the IEC 60309-1 and 60309-2 standards.

Hubbell’s Circuit-Lock Mechanical Interlocks are also available in “Reverse Service” versions. These units incorporate the disconnect switch and reverse service receptacle (inlet) in one compact, non-metallic and economical unit. These units are available in 30, 60 and 100A models, 4 wire configurations.



HBL430MI7W



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



Interior Design

- Large gears enclosed in a gear box 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



Safety

- Lockable handle to meet 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)
- Captured neoprene gasket for a watertight seal



Liftcover

- Replaceable spring-loaded liftcover with gasket for a watertight seal
- Pre-wired IEC Pin and Sleeve receptacle
- Reverse service has dependable solid brass pins for longer life and reliable electrical contact



Identification

- Color coded rating pad and receptacle mount to signify voltage



Installation

- Comes with brass inserts and stainless steel screws for higher torque and better sealing
- Three molded-in conduit drill points are located on top, bottom and back surface of enclosure
- Adjustable mounting feet are ductile to allow mounting on irregular surfaces



































































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

Pin and Sleeve Devices/Mechanical Interlocks



IP67
SUITABILITY

Enclosure Type 4X, 12

Rating					Unfused Circuit-Lock® Devices		Reverse Service	
Amps	Poles and Wires	Configuration Recep.	Configuration Plug	AC Voltage	 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	—	—
	3P 4W			3Ø 240V	HBL430MI9W	HBL430P9W	HBL430MI9WR	HBL430P9WR
	3P 4W			3Ø 480V	HBL430MI7W	HBL430P7W	HBL430MI7WR	HBL430P7WR
	3P 4W			3Ø 600V	HBL430MI5W	HBL430P5W	HBL430MI5WR	HBL430P5WR
	4P 5W			3ØY 120/208V	HBL530MI9W	HBL530P9W	—	—
	4P 5W			3ØY 277/480V	HBL530MI7W	HBL530P7W	—	—
	4P 5W			3ØY 347/600V	HBL530MI5W	HBL530P5W	—	—
32	3P 4W			380V 50HZ-440V 60Hz	HBL432MI3W	HBL432P3W	—	—
60	2P 3W			120V	HBL360MI4W	HBL360P4W	—	—
	2P 3W			240V	HBL360MI6W	HBL360P6W	—	—
	2P 3W			480V	HBL360MI7W	HBL360P7W	—	—
	3P 4W			120/240V	HBL460MI12W	HBL460P12W	HBL460MI12WR	HBL460P12WR
	3P 4W			3Ø 240V	HBL460MI9W	HBL460P9W	HBL460MI9WR	HBL460P9WR
	3P 4W			3Ø 480V	HBL460MI7W	HBL460P7W	HBL460MI7WR	HBL460P7WR
	3P 4W			3Ø 600V	HBL460MI5W	HBL460P5W	HBL460MI5WR	HBL460P5WR
	4P 5W			3ØY 120/208V	HBL560MI9W	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.



Typical Specifications

Manufacturer's Identification	Hubbell HBL430MI7W
Description	Circuit-Lock® Pin and Sleeve Mechanical Interlock
Electrical Type	3 Pole + Earth
Rating	30A, 480V AC, 3 Phase
Configuration	IEC 60309-2, UL1686 C2, Clock position 7
Enclosure Type	Outdoor - 4X (Watertight, Washdown); Indoor - 12 (Dust-tight, Falling Dirt and Noncorrosive Liquids)
Ingress Protection	IP67 Suitability
Enclosure Material	Non-metallic, enclosure suitable for metallic conduit
Certification	UL Listed, CSA Certified

Note: This device provides on/off switched control of a plug connected load and includes an interlocking feature to prevent the plug from being disconnected while the receptacle is energized. The switch cannot be turned "ON" until the plug is inserted properly, and the plug cannot be removed until the switch is turned "OFF."

Materials

Part	Material	Part	Material
Base	Valox®	Top	Valox®
Handle	Valox®	Conduit Hub	Zinc
Enclosure Gasket	Neoprene	Shaft	Valox®
Shaft Seal	Neoprene	Ground Plate	Galvanized Steel
Enclosure Screws	Stainless Steel 300 Series	Enclosure Inserts	Brass
Hinge Pins	Nickel Plated Brass	Hinge Spring	Stainless Steel 300 Series

Performance

Electrical	
Dielectric Voltage	Withstands 3,000V AC Min.
Max. Working Voltage	600V AC RMS.
Current Interrupting	Certified for current interrupting at full rated current and voltage.
Short Circuit Withstand Rating	Suitable for use on a circuit capable of delivering not more than 10,000 RMS symmetrical amperes at the voltage rating of the receptacle. 20A and 30A models: Suitable for use on a circuit capable of delivering not more than 65,000 RMS symmetrical amperes, 600V when protected by class "J" fuses rated 30A.
Operations	Mechanical 10,000 cycles, electrical 6,000 cycles.

Mechanical

Impact Resistance	In accordance with UL 746C.
Terminal Identification	In accordance with UL, CSA and international conventions.
Product Identification	Identification and ratings are part of the external label and molded into the receptacle mount.
Mounting	External adjustable feet.

Environmental

Moisture Resistance	Outdoor - 4X (Watertight, Washdown); Indoor - 12 (Dust-tight, Falling Dirt and Noncorrosive Liquids).
Ingress Protection	IP67 Suitability.
Flammability	UL94-5VA and V-0 Classification.
Operating Temperature	Max. Continuous +75°C; Min. Continuous -40°C.
UV Resistance	All materials are UV stabilized.

Horsepower Ratings

Amps	AC Voltage Rating	Horsepower	Mechanical Interlock	Mating Plug
20	120/240V AC	2	HBL420MI12W	HBL420P12W
20	3Ø 240V AC	5	HBL420MI9W	HBL420P9W
20	3Ø 480V AC	10	HBL420MI7W	HBL420P7W
20	3Ø 600V AC	10	HBL420MI5W	HBL420P5W
30	120V AC	2	HBL330MI4W	HBL330P4W
30	240V AC	3 (208-240V AC)	HBL330MI6W	HBL330P6W
30	480V AC	7.5	HBL330MI7W	HBL330P7W
30	120/240V AC	3 (208-240V AC)	HBL430MI12W	HBL430P12W
30	3Ø 600V AC	20	HBL430MI5W	HBL430P5W
30	3Ø 480V AC	15	HBL430MI7W	HBL430P7W
30	3Ø 250V AC	7.5	HBL430MI9W	HBL430P9W
30	3ØY 347/600V AC	20	HBL530MI5W	HBL530P5W
30	3ØY 277/480V AC	15	HBL530MI7W	HBL530P7W
30	3ØY 120/208V AC	5	HBL530MI9W	HBL530P9W
32	380V AC 50Hz – 440V AC 60Hz	15 (440V AC 3Ø 60Hz)	HBL432MI3W	HBL432P3W
60	120V AC	3	HBL360MI4W	HBL360P4W
60	240V AC	7.5 (208-240V AC)	HBL360MI6W	HBL360P6W
60	480V AC	20	HBL360MI7W	HBL360P7W
60	120/240V AC	7.5 (208-240V AC)	HBL460MI12W	HBL460P12W
60	3Ø 600V AC	40	HBL460MI5W	HBL460P5W
60	3Ø 480V AC	30	HBL460MI7W	HBL460P7W
60	3Ø 250V AC	15	HBL460MI9W	HBL460P9W
60	3ØY 347/600V AC	40	HBL560MI5W	HBL560P5W
60	3ØY 277/480V AC	30	HBL560MI7W	HBL560P7W
60	3ØY 120/208V AC	15	HBL560MI9W	HBL560P9W
100	240V AC	15 (10 @ 208V AC)	HBL3100MI6W	HBL3100P6W
100	120/240V AC	15	HBL4100MI12W	HBL4100P12W
100	3Ø 600V AC	50	HBL4100MI5W	HBL4100P5W
100	3Ø 480V AC	50	HBL4100MI7W	HBL4100P7W
100	3Ø 250V AC	25 (208-240V AC)	HBL4100MI9W	HBL4100P9W
100	3ØY 120/208V AC	20	HBL5100MI9W	HBL5100P9W

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