



Pin and Sleeve Mechanical Interlock Receptacles in Watertight Enclosures

20A, 30A, 60A & 100A (Non-Fused)
20A, 30A, & 60A (Fused)
100A (Breakered)

INSTALLATION INSTRUCTIONS



PK-93675-10-00-4D AR 0540

FEATURES

- Provides ON-OFF switched control of a directly connected load.
 - Meets the requirements of Outdoor/Indoor (IP67, Type 3R, 4X, Watertight, Corrosion resistant) and Indoor (Type 12K Dust tight) installations.
 - This enclosure provides lockout capability in compliance with OSHA Lockout/Tagout Regulation 29 CFR Part 1910.147 (in the OFF position) with an acceptable padlock/shackle, thereby assuring the connected equipment cannot be energized.
 - Auxiliary contact open prior to the line contacts for pilot duty switching.
- NOTE:** This enclosure must not be used as a junction box for feed-through connections.

INSTALLATION INSTRUCTIONS

WARNING: FOR INSTALLATION ONLY BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) OR THE CANADIAN ELECTRICAL CODE (CEC), LOCAL CODES, AND THE INSTALLATION INSTRUCTIONS.

WARNING: RISK OF ELECTRICAL SHOCK. DISCONNECT ALL POWER SUPPLIES TO ENCLOSURE BEFORE EXPOSING INTERIOR. MORE THAN ONE SUPPLY DISCONNECT MAY BE REQUIRED TO DE-ENERGIZE THIS EQUIPMENT BEFORE SERVICING.

WARNING: SEPARATE OVERCURRENT PROTECTION MUST BE PROVIDED IN ACCORDANCE WITH THE NEC ARTICLE 220 OR CEC, SECTION B AS APPROPRIATE. OVER CURRENT PROTECTION MUST NOT EXCEED THE AMPERE RATING OF THE RECEPTACLE PER NEC SECTION 430-42 (C) OR CEC PART 1, RULE 28-602 (3)(C)(I).

OTHER CAUTIONS AND NOTES:

- USE THIS DEVICE ONLY WITH **COPPER OR COPPER CLAD WIRE**.
- CHECK TO SEE THAT RATING MARKED ON DEVICE IS CORRECT FOR THE INTENDED INSTALLATION.
- THE LOCKOUT FEATURE DOES NOT INTERRUPT THE POWER SUPPLIED TO THE SWITCH.
- DEVICE IS SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 600 VAC MAXIMUM. FOR FUSED ITEMS, USE CLASS J FUSES.
- COVER CANNOT BE REMOVED WHEN HANDLE IS IN THE "ON" POSITION.
- THIS ENCLOSURE MUST ALWAYS BE MOUNTED VERTICALLY WITH RECEPTACLE END DOWN.

TO INSTALL:

NOTE: Leviton Mechanical Interlocks may be mounted for Top or Bottom feed of supply wires (**refer to Figure 1A, 1B and 1C**).

Mounting:

- Loosen the four (4) cover screws from the front cover (**refer to Figure 2**).
- Drill four (4) 1/4" (6.4 mm) diameter holes through the four corner wells on the inside back/rear of enclosure (**refer to Figure 1A, 1B and 1C**). If desired, or to meet Type 4x requirements, attach the four mounting feet to the rear of the enclosure using the hardware provided. The mounting feet may be oriented in several positions. Tighten each foot screw to 18 in-lbs. (2 N-m) torque. Mounting feet holes accept up to 5/16" (8.0 mm) diameter screws (not provided).

Top or Bottom Feed:

- Drill points provided for top left, top right, bottom left conduit entry. **NOTE:** A metal closure plug must be grounded (bonded) back on to an unused ground terminal.
Fitting sizes are as follows:
Mechanical Interlock rated for 20A and 30A – 1-1/2" (38.1 mm) diameter hole for 1" (25.4 mm) hub.
Mechanical Interlock rated for 60A – 2" (50.8 mm) diameter hole for 1-1/2" (38.1 mm) hub.
Mechanical Interlock rated for 100A – 1-1/2" (38.1 mm) diameter hole for 2" (50.8 mm) hub.
NOTE: Use of a UL Listed Watertight conduit fitting (not provided) is required to maintain the Type 3R, 4X and Type 12K ratings (**refer to Figure 1A, 1B and 1C**).
- Install the conduit fitting ensuring that the "O" ring is properly seated and the inside locking ring is seated tightly against the inside metal frame to assure proper grounding (**refer to Figure 1A, 1B and 1C**).
- When using Top feed conduit entrance, always form condensation drip loops in wiring as shown in **Figure 1A, 1B and 1C**.

Wiring:

NOTE: Use conductors with insulation rated 75°C or higher having sufficient ampacity in accordance with the 60°C column of Table 310-16 of the NEC or Table 2 of the Canadian Electrical Code. **DO NOT** tin conductors.

- WARNING:** TO AVOID FIRE, SHOCK, OR DEATH; **TURN OFF POWER** AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING! MAKE SURE CONNECTED EQUIPMENT RATING DOES NOT EXCEED THE RATING OF THIS DEVICE.
- Strip all conductors approximately 11/16" (17.5 mm). For Auxiliary contact, strip conductors 5/16" (8.0 mm).

For Switch terminals, use conductor size ranges as follows:

Non-Fused or Breakered		Fused	
20A and 30A	#14-#8 AWG.	20A and 30A	#14-#8 AWG.
60A	#14-#4 AWG.	60A	#14-#4 AWG.
100A	#8-#00 AWG.		
For Neutral and Ground terminals, use conductor size ranges as follows:			
Non-Fused or Breakered		Fused	
20A and 30A	#14-#6 AWG.	20A and 30A	#14-#6 AWG.
60A	#10-#2 AWG. (Neutral terminal)	60A	#10-#2 AWG. (Neutral terminal)
60A	#10-#2 AWG. (Ground terminal)	60A	#10-#2 AWG. (Ground terminal)
100A	#8-#00 AWG. (Neutral terminal)		
100A	#8-#2 AWG. (Ground terminal)		

For Auxiliary terminals, use conductor size ranges as follows:

Non-Fused		Fused	
20A and 30A	#18-#14 AWG.	20A and 30A	#18-#14 AWG.
60A	#18-#14 AWG.	60A	#18-#14 AWG.
100A	#18-#14 AWG.		

- Connect conductors per appropriate WIRING DIAGRAM.

- Tighten all terminal screws as follows:

Switch terminals:		Non-Fused or Breakered		Fused	
20A and 30A	7 in-lbs. (0.8 N-m)	20A and 30A	17 in-lbs. (2 N-m)	20A and 30A	17 in-lbs. (2 N-m)
60A	18 in-lbs. (2 N-m)	60A	30 in-lbs. (3.4 N-m)	60A	30 in-lbs. (3.4 N-m)
100A	55 in-lbs. (6.2 N-m)				

Neutral and Ground terminals:		Non-Fused or Breakered		Fused	
20A and 30A	19 in-lbs. (2 N-m)	20A and 30A	19 in-lbs. (2 N-m)	20A and 30A	19 in-lbs. (2 N-m)
60A	51 in-lbs. (5.7 N-m)	60A	51 in-lbs. (5.7 N-m)	60A	51 in-lbs. (5.7 N-m)
100A – Ground	51 in-lbs. (5.7 N-m)				
100A – Neutral	87 in-lbs. (9.8 N-m)				

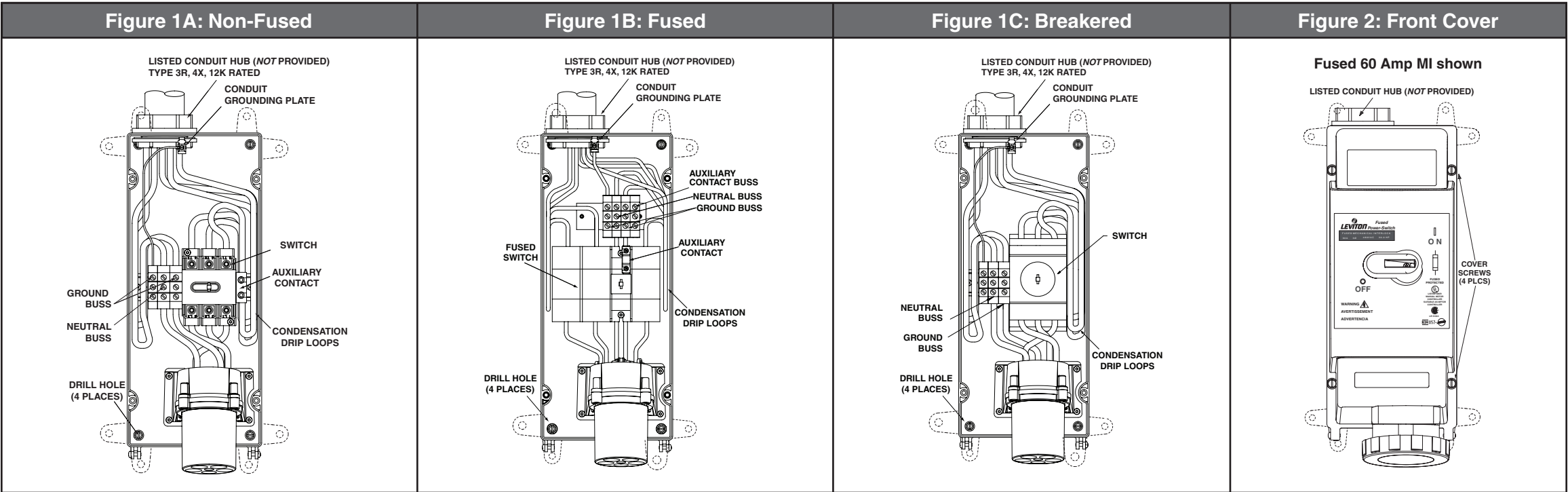
Auxiliary contact:
NOTE: There is no auxiliary contact on Breakered Mechanical Interlock Receptacles.
All other devices – 7 in-lbs. (0.8 N-m)

- Make sure that there are no stray conductor strands.
- Ensure that the gasket is in place in cover groove. Replace cover and tighten cover screws to 22 in-lbs. (2.5 N-m) torque.

NOTE: Handle must be in the "OFF" position to install cover.

Fuses (not included):
For 20A devices, use Bussman LPJ20SP or Gould-Shawmut AJT20.
For 30A devices, use Bussman LPJ30SP or Gould-Shawmut AJT30.
For 60A devices, use Bussman LPJ60SP or Gould-Shawmut AJT60.

CAUTION: Amperage rating of fuses must not exceed the maximum ampere rating of this device. See front cover of device for maximum ampere rating.



Ratings (* Consult Factory)

Table 1A: 20 and 30 Amp Type 3R, 4X, 12K Watertight Devices (Non-Fused)					
20 Amp Wiring	Voltage, AC	Mechanical Interlock	HP Rating	Use Plug Cat. No.	Wiring Diagram
2P, 3W	240	320MI6W	3	320P6W	A
2P, 3W	480	320MI7W	5	320P7W	A
3P, 4W	125/250	420MI12W	*	420P12W	G
3P, 4W	30 240	420MI9W	10	420P9W	E
3P, 4W	30 480	420MI7W	20	420P7W	E
3P, 4W	30 600	420MI5W	25	420P5W	E
4P, 5W	30Y 120/208	520MI9W	10	520P9W	J
4P, 5W	30Y 277/480	520MI7W	20	520P7W	J
4P, 5W	30Y 347/600	520MI5W	25	520P5W	J
30 Amp					
2P, 3W	240	330MI6W	5	330P6W	A
2P, 3W	480	330MI7W	10	330P7W	A
3P, 4W	125/250	430MI12W	*	430P12W	G
3P, 4W	30 240	430MI9W	10	430P9W	E
3P, 4W	30 480	430MI7W	20	430P7W	E
3P, 4W	30 600	430MI5W	25	430P5W	E
4P, 5W	30Y 120/208	530MI9W	10	530P9W	J
4P, 5W	30Y 277/480	530MI7W	20	530P7W	J
4P, 5W	30Y 347/600	530MI5W	25	530P5W	J

Table 2A: 60 Amp Type 3R, 4X, 12K Watertight Devices (Non-Fused)					
Wiring	Voltage, AC	Mechanical Interlock	HP Rating	Use Plug Cat. No.	Wiring Diagram
2P, 3W	240	360MI6W	10	360P6W	N
2P, 3W	480	360MI7W	20	360P7W	N
3P, 4W	125/250	460MI12W	*	460P12W	S
3P, 4W	30 240	460MI9W	20	460P9W	Q
3P, 4W	30 480	460MI7W	40	460P7W	Q
3P, 4W	30 600	460MI5W	40	460P5W	Q
4P, 5W	30Y 120/208	560MI9W	20	560P9W	U
4P, 5W	30Y 277/480	560MI7W	40	560P7W	U
4P, 5W	30Y 347/600	560MI5W	40	560P5W	U

Table 4A: 20A Type 3R, 4X, 12K Watertight Devices (Fused)					
Wiring	Voltage, AC	Mechanical Interlock	HP Rating	Use Plug Cat. No.	Wiring Diagram
3P, 4W	125/250	420MF12W	*	420P12W	H
3P, 4W	30 240	420MF9W	5	420P9W	F
3P, 4W	30 480	420MF7W	10	420P7W	F
3P, 4W	30 600	420MF5	15	420P5W	F

Table 3A: 100 Amp Type 3R, 4X, 12K Watertight Devices					
Wiring	Voltage, AC	Mechanical Interlock	HP Rating	Use Plug Cat. No.	Wiring Diagram
2P, 3W	125	3100MI4W	*	3100P4W	L
2P, 5W	240	3100MI6W	15	3100P6W	N
2P, 3W	480	3100MI7W	25	3100P7W	N
3P, 4W	125/250	4100MI12W	*	4100P12W	S
3P, 4W	30 240	4100MI9W	30	4100P9W	Q
3P, 4W	30 240	4100MB9W	30	4100P9W	Q
3P, 4W	30 480	4100MB7W	50	4100P7W	Q
3P, 4W	30 480	4100MI7W	50	4100P7W	Q
3P, 4W	30 600	4100MI5W	50	4100P5W	Q
4P, 5W	30Y 120/208	5100MI9W	25	5100P9W	U
4P, 5W	30Y 120/208	5100MB9W	25	5100P9W	U
4P, 5W	30Y 277/480	5100MI7W	50	5100P7W	U
4P, 5W	30Y 347/600	5100MI5W	50	5100P5W	U

Table 5A: 30A Type 3R, 4X, 12K Watertight Devices (Fused)					
Wiring	Voltage, AC	Mechanical Interlock	HP Rating	Use Plug Cat. No.	Wiring Diagram
3P, 4W	125/250	430MF12W	*	430P12W	H
3P, 4W	30 240	430MF9W	7.5	430P9W	F
3P, 4W	30 480	430MF7W	15	430P7W	F
3P, 4W	30 600	430MF5W	20	430P5W	F
4P, 5W	30Y 277/480	530MF7W	15	530P7W	K
4P, 5W	30Y 347/600	530MF5W	20	530P5W	K

Table 6A: 60A Type 3R, 4X, 12K Watertight Devices (Fused)					
Wiring	Voltage, AC	Mechanical Interlock	HP Rating	Use Plug Cat. No.	Wiring Diagram
2P, 3W	240	360MF6W	*	360P6W	D
3P, 4W	125/250	460MF12W	*	460P12W	T
3P, 4W	30 240	460MF9W	15	460P9W	R
3P, 4W	30 480	460MF7W	30	460P7W	R
3P, 4W	30 600	460MF5W	50	460P5W	R
4P, 5W	30Y 120/208	560MF9W	15	560P9W	V

LIMITED 2 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such two year period the product is returned prepaid, with proof of purchase date, and a description of the problem to **Leviton Manufacturing Co., Inc., Att: Quality Assurance Department, 201 North Service Road, Melville, N.Y. 11747**. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose**, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. **Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

<p>Wiring diagram A 20-30 Amps. Non-Fused 2-Pole, 3-Wire – Single Phase (No Neutral)</p>	<p>Wiring diagram B 20-30 Amps. Non-Fused 2-Pole, 3-Wire – Single Phase</p>	<p>Wiring diagram C 20-30 Amps. Fused 2-Pole, 3-Wire – Single Phase</p>	<p>Wiring diagram D 20-30 Amps. Fused 2-Pole, 3-Wire – Single Phase (No Neutral)</p>	<p>Wiring diagram E 20-30 Amps. Non-Fused 3-Pole, 4-Wire – 3 Phase</p>	<p>Wiring diagram F 20-30 Amps. Fused 3-Pole, 4-Wire – 3 Phase</p>	<p>Wiring diagram G 20-30 Amps. Non-Fused 3-Pole, 4-Wire – Edison System</p>
<p>Wiring diagram H 20-30 Amps. Fused 3-Pole, 4-Wire – Edison System</p>	<p>Wiring diagram J 20-30 Amps. Non-Fused 4-Pole, 5-Wire – 3 Phase Y</p>	<p>Wiring diagram K 20-30 Amps. Fused 4-Pole, 5-Wire – 3 Phase Y</p>	<p>Wiring diagram L 60-100 Amps. Non-Fused 2-Pole, 3-Wire – Single Phase</p>	<p>Wiring diagram M 60 Amps. Fused 2-Pole, 3-Wire – Single Phase</p>	<p>Wiring diagram N 60-100 Amps. Non-Fused 2-Pole, 3-Wire – Single Phase (No Neutral)</p>	<p>Wiring diagram P 60 Amps. Fused 2-Pole, 3-Wire – Single Phase (No Neutral)</p>
<p>Wiring diagram Q 60-100 Amps. Non-Fused or 100A Breakered 3-Pole, 4-Wire – 3 Phase</p>	<p>Wiring diagram R 60 Amps. Fused 3-Pole, 4-Wire – 3 Phase</p>	<p>Wiring diagram S 60-100 Amps. Non-Fused 3-Pole, 4-Wire – Edison System</p>	<p>Wiring diagram T 60 Amps. Fused 3-Pole, 4-Wire – Edison System</p>	<p>Wiring diagram U 60-100 Amps. Non-Fused or 100A Breakered 4-Pole, 5-Wire – 3 Phase Y</p>	<p>Wiring diagram V 60 Amps. Fused 4-Pole, 5-Wire – 3 Phase Y</p>	