

Leviton 23R23-E

Leviton 23R23-E Single Pole Cam-Type Panel Receptacle Instruction Manual

Model: 23R23-E

1. INTRODUCTION

This instruction manual provides essential information for the safe and effective use of the Leviton 23R23-E Single Pole 30 Degree Cam-Type Taper Nose Male Panel Receptacle. Please read this manual thoroughly before installation, operation, or maintenance to ensure proper function and to prevent potential hazards. The Leviton 23R23-E is a heavy-duty, completely insulated electrical connector designed for robust power distribution systems, commonly used in applications requiring reliable, high-current connections such as those found in Navy bases and shipyards for supplying 3-phase power.

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock or Fire. Improper installation or use can lead to serious injury or death.

- Always disconnect power at the circuit breaker or fuse box before installing, servicing, or removing this device.
- Installation should be performed by a qualified electrician in accordance with all national and local electrical codes.
- Do not use this device if it appears damaged.
- Ensure all connections are secure and properly insulated.
- This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 warning). Wash hands after handling.

3. PRODUCT OVERVIEW

The Leviton 23R23-E is a male panel receptacle designed for high-current electrical connections. It features a 30-degree cam-type taper nose and a threaded stud for secure mounting and connection.

Key Features:

- Shatter and Crack Proof Neoprene Rubber construction for durability.
- Waterproof when vulcanized, ensuring reliability in demanding environments.
- Tested by ETL Laboratories to meet Naval Specifications, ensuring high performance and safety standards.
- Designed for 250-750MCM wire sizes and a maximum of 690 Amps.
- Positive latching mechanism provides vibration resistance, preventing loosening and ensuring high conductivity.
- Male contacts offer enhanced surface contact for greater conductivity and reduced burnout risk.

Product Image:



Image: The Leviton 23R23-E Single Pole Cam-Type Male Panel Receptacle, showing its black neoprene rubber body and threaded stud connection point.

Specifications:

Attribute	Detail
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Manufacturer	Leviton
Part Number	23R23-E
Item Model Number	23R23-E
Item Weight	3.4 pounds
Package Dimensions	10.9 x 7 x 4.6 inches
Color	Ebony
Material	Neoprene, Rubber
Item Package Quantity	1
Certification	ETL
Wire Size Compatibility	250-750MCM
Maximum Amperage	690 Amp

4. SETUP AND INSTALLATION

IMPORTANT: Installation must be performed by a qualified electrician and comply with all applicable electrical codes and safety standards.

- Power Disconnection:** Ensure all power to the installation area is completely disconnected at the main circuit breaker or fuse panel before beginning any work. Verify with a voltage tester.
- Mounting:** The 23R23-E is a panel receptacle with a threaded stud. Securely mount the receptacle to the designated panel or enclosure using appropriate hardware for the threaded stud. Ensure a stable and rigid mounting surface.
- Wire Preparation:** Prepare the conductor cable (250-750MCM) according to standard electrical practices. Strip the insulation to the length specified by the connector's internal terminal.
- Conductor Connection:** Connect the prepared conductor to the receptacle's terminal. Ensure a tight and secure connection to prevent arcing or overheating. Follow manufacturer's torque specifications if provided.
- Insulation:** Verify that all exposed conductors are properly insulated and that no bare wires are accessible.
- Final Check:** Before restoring power, double-check all connections for tightness and proper insulation. Ensure the receptacle is firmly mounted.
- Restore Power:** Once installation is complete and verified, restore power to the circuit.

5. OPERATING INSTRUCTIONS

The Leviton 23R23-E Cam-Type Receptacle is designed for simple and secure connection with compatible cam-type plugs.

- Connecting a Plug:** Align the cam-type plug with the receptacle. Insert the plug into the receptacle

and rotate it clockwise until it locks into place with a positive latching action. This ensures a secure, vibration-resistant connection.

2. **Disconnecting a Plug:** To disconnect, rotate the cam-type plug counter-clockwise to disengage the latching mechanism, then pull the plug straight out from the receptacle.

Note: Always ensure the power source is de-energized before connecting or disconnecting high-current electrical devices, unless specifically designed for hot-swapping under controlled conditions.

6. MAINTENANCE

Regular inspection and maintenance will help ensure the longevity and safe operation of your Leviton 23R23-E receptacle.

- **Visual Inspection:** Periodically inspect the receptacle for any signs of physical damage, such as cracks, discoloration, or wear on the neoprene rubber body. Check for loose connections or corrosion on the threaded stud.
- **Cleaning:** If necessary, clean the exterior of the receptacle with a dry, lint-free cloth. For stubborn dirt, a mild, non-abrasive cleaner can be used, ensuring the device is completely dry before re-energizing. Do not use harsh chemicals or solvents.
- **Connection Integrity:** Ensure that the threaded stud connection remains tight and secure. Over time, vibrations can cause connections to loosen.
- **Professional Check:** For critical applications, consider having a qualified electrician perform periodic checks of the entire power distribution system, including these receptacles.

7. TROUBLESHOOTING

If you experience issues with your Leviton 23R23-E receptacle, consider the following common troubleshooting steps. For complex electrical problems, always consult a qualified electrician.

- **No Power:**
 - Check the circuit breaker or fuse for the circuit.
 - Verify that the cam-type plug is fully inserted and latched into the receptacle.
 - Inspect the wiring connections at the receptacle for looseness or damage (with power off).
- **Overheating:**
 - Ensure the connected load does not exceed the receptacle's 690 Amp maximum rating.
 - Check for loose or corroded connections, which can cause resistance and heat buildup.
 - Verify that the correct wire gauge (250-750MCM) is used and properly terminated.
- **Difficulty Connecting/Disconnecting:**
 - Ensure the plug and receptacle are clean and free of debris.
 - Check for any physical damage or deformation to the cam-type mechanism on either the plug or receptacle.

8. WARRANTY INFORMATION

The Leviton 23R23-E Single Pole Cam-Type Panel Receptacle comes with a **1 Year Limited Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For specific terms and conditions, or to make a warranty claim, please refer to the official Leviton warranty documentation or contact Leviton customer support.

9. SUPPORT AND CONTACT

For further assistance, technical support, or inquiries regarding the Leviton 23R23-E, please contact Leviton customer service or visit their official website.

- **Leviton Official Website:** www.leviton.com
- Refer to the website for contact numbers and support resources specific to your region.

Related Documents - 23R23-E

	<p>Leviton GFCI Receptacle Installation and Testing Guide</p> <p>A comprehensive guide on how to install and test a Leviton SmartLock Pro GFCI Receptacle, including wiring instructions, safety precautions, and troubleshooting tips.</p>
	<p>Leviton VIZIØ6-1L Incandescent Dimmer Installation Instructions</p> <p>Comprehensive installation guide for the Leviton VIZIØ6-1L Incandescent Dimmer, covering single-pole and 3-way multi-location setups, wiring diagrams, operation, advanced programming, troubleshooting, and warranty information.</p>
	<p>Leviton IP710-LF Fluorescent and LED Fixture Slide Dimmer Installation Guide</p> <p>Comprehensive installation instructions for the Leviton IP710-LF Single Pole or 3-Way Fluorescent and LED Fixture Slide Dimmer. Learn how to safely install, wire, and operate your dimmer for 0-10V dimmable fixtures.</p>
	<p>Leviton GFCI Outlet with USB Ports Installation and Operation Manual</p> <p>Comprehensive guide for installing and operating Leviton GFCI Outlets with USB Ports, including wiring instructions, safety warnings, testing procedures, and warranty information.</p>
	<p>Installing and Testing Leviton Smart GFCI Outlet: A Comprehensive Guide</p> <p>Step-by-step instructions for installing and testing Leviton Smart GFCI outlets (models D2GF1, D2GF2). Learn about GFCI functionality, wiring, troubleshooting, and safety precautions.</p>
	<p>Leviton GFNT1-DIN/GFNT2-DIN DIN Rail Mount GFCI Receptacle Installation Guide</p> <p>Comprehensive guide for installing and testing Leviton's GFNT1-DIN and GFNT2-DIN DIN Rail Mount GFCI Receptacles, including wiring instructions, safety precautions, and troubleshooting.</p>