LEVITON

smartlockpro™

Installing and Testing a DIN Rail Mount GFCI Receptacle

Please read this leaflet completely before getting started.

PK-A3094-10-00-0C

⚠ CAUTION

- To prevent severe shock or electrocution always turn the power OFF at the service panel before working with wiring.
- Use this GFCI with copper or copper-clad wire. Do not use it with aluminum wire.
- Do not install this GFCI receptacle on a circuit that powers life support equipment because if the GFCI trips it will shut down the equipment.
- For installation in wet locations, protect the GFCI receptacle with a weatherproof enclosure that will keep both the receptacle and any plugs dry.
- Must be installed in accordance with national and local electrical codes.

1. What is a GFCI?

A GFCI receptacle is different from conventional receptacles. In the event of a ground fault, a GFCI will trip and quickly stop the flow of electricity to prevent serious injury.

Definition of a ground fault:
Instead of following its normal safe path, electricity passes through a person's body to reach the ground. For example, a defective appliance can cause a ground fault.

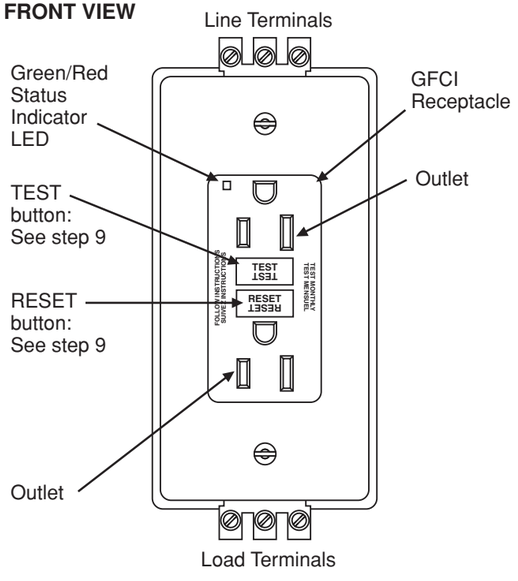
A GFCI receptacle does **NOT** protect against circuit overloads, short circuits, or shocks. For example, you can still be shocked if you touch bare wires while standing on a non-conducting surface, such as a wood floor.

GFCI's contain a lockout feature that will prevent RESET if:

- There is no power being supplied to the GFCI.
- The GFCI is miswired due to reversal of the LINE and LOAD leads.
- The GFCI cannot pass its internal test, indicating that it may not be able to provide protection in the event of a ground fault.

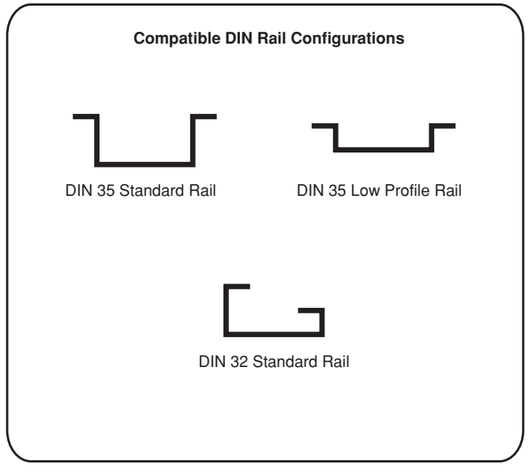
2. GFNT1-DIN (with GFCI) features:

FRONT VIEW



3. Compatible DIN Rail Configurations

The device mounts using two DIN clips attached to its back. It will properly mount using any of the following DIN rail configurations:



4. Should <u>you</u> install it?

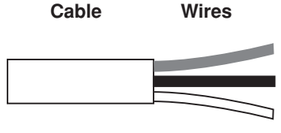
Installing a GFNT1-DIN or GFNT2-DIN, with GFCI receptacle, can be more complicated than installing a conventional receptacle.

Make sure that you:

- Understand basic wiring principles and techniques
- Can interpret wiring diagrams
- Have circuit wiring experience
- Are prepared to take a few minutes to test your work, making sure that you have wired the device (with GFCI) correctly

5. LINE vs. LOAD

A cable consists of 2 or 3 wires.

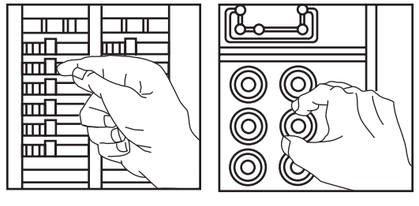


LINE cable:
Delivers power from the service panel (breaker panel or fuse box) to the device. If there is only one cable entering the electrical box/enclosure, it is the LINE cable. This cable should be connected to the device's LINE terminals only.

LOAD cable:
Delivers power from the device (with GFCI) to another receptacle in the circuit. This cable should be connected to the device's LOAD terminals only.

6. Turn the power OFF

Plug an electrical device, such as a lamp or radio, into the receptacle on which you are working. Turn the lamp or radio ON. Then, go to the service panel. Find the breaker or fuse that protects that receptacle. Place the breaker in the OFF position or completely remove the fuse. The lamp or radio must turn OFF.



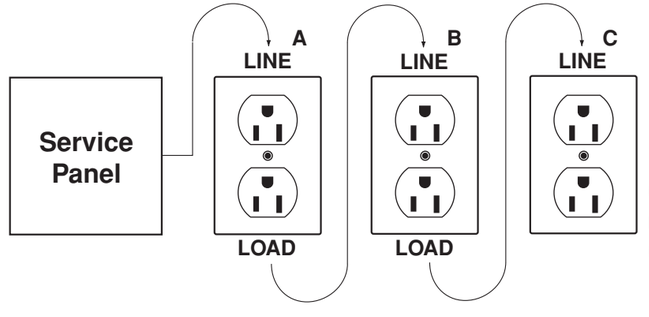
Next, plug in and turn ON the lamp or radio at the receptacle's other outlet to make sure the power is OFF at both outlets. If the power is not OFF, stop work and call an electrician to complete the installation.

7. Placement in circuit

The GFCI's place in the circuit determines if it protects other receptacles in the circuit.

Placing the GFCI in position A will also provide protection to "load side" receptacles B and C. On the other hand, placing the GFCI in position C will not provide protection to receptacles A or B. Remember that receptacles A, B, and C can be in different rooms.

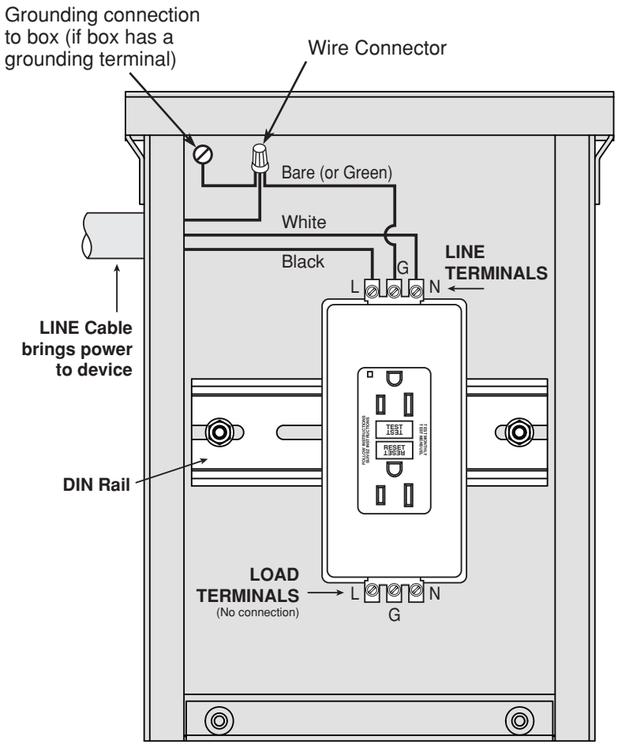
Sample circuit:



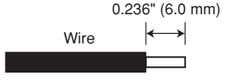
WEB VERSION

8. Connect the wires (choose A or B)... only after reading other side completely

A: Non-Feed-thru Installation



About Wire Connections To Device:			
Device	**Current (A)**	**Voltage (V)**	**AWG**
GFNT1-DIN	15	125	14-10
GFNT2-DIN	20	125	12-10



Connect the LINE cable wires to the device LINE terminals:
- The white wire connects to the Neutral (N) terminal.
- The black wire connects to the Line (L), or Hot terminal.

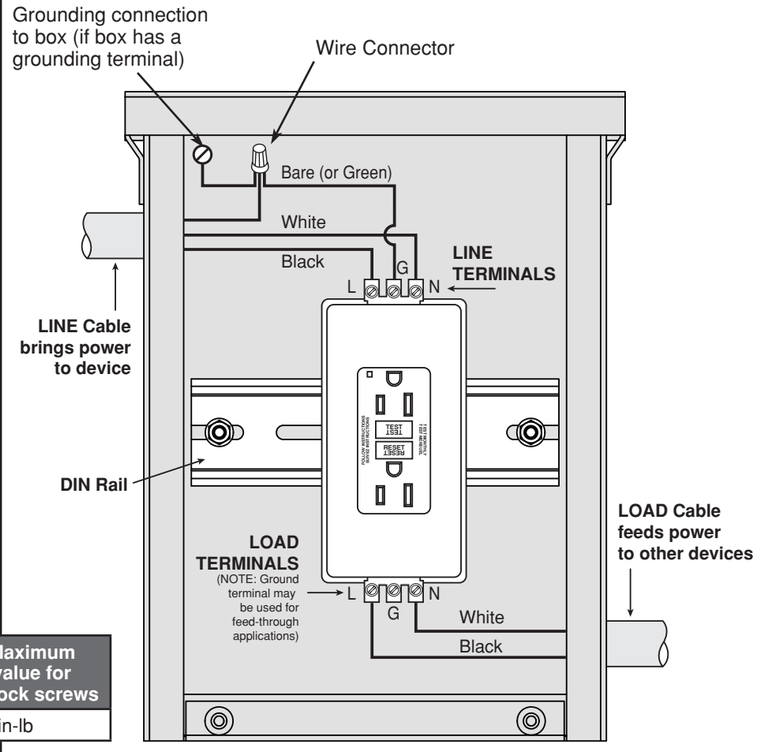
Connect the grounding wire (only if there is a grounding wire):
- For installations with no grounding terminal in enclosure (diagram not shown): Connect the LINE cable's bare copper (or GREEN) wire directly to the grounding terminal on the device.
- For installations with a grounding terminal in enclosure (diagram shown above): Connect a bare copper (or GREEN) 10, 12 or 14 AWG wire to the grounding terminal on the device. Also connect a similar wire to the grounding terminal on the box/enclosure. Connect the ends of these wires to the LINE cable's bare copper (or GREEN) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:
- Test your work. Go to step 9.

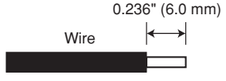
NOTE: Maximum torque value for terminal block screws

4.5 in-lb

B: Feed-thru (provides downstream protection)



About Wire Connections To Device:			
Device	**Current (A)**	**Voltage (V)**	**AWG**
GFNT1-DIN	15	125	14-10
GFNT2-DIN	20	125	12-10



Connect the LINE cable wires to the device LINE terminals:
- The white wire connects to the Neutral (N) terminal.
- The black wire connects to the Line (L), or Hot terminal.

Connect the LOAD cable wires to the device LOAD terminals:
- The white wire connects to the Neutral (N) terminal.
- The black wire connects to the Line (L), or Hot terminal.

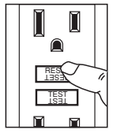
Connect the grounding wires (only if there is a grounding wire):
- Connect a bare copper (or GREEN) 10, 12 or 14 AWG wire to the grounding terminal on the device. If the box/enclosure has a grounding terminal, also connect a similar wire to the grounding terminal on the box/enclosure. Connect the ends of these wires to the LINE or LOAD cable's bare copper (or GREEN) wire using a wire connector. If these wires are already in place, check the connections.

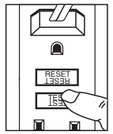
Complete the installation:
- Test your work. Go to step 9.

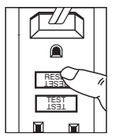
9. Test your work

Why perform this test?

- If you miswired the device with GFCI, it may not prevent personal injury or death due to a ground fault (electrical shock).
- If you mistakenly connect the LINE wires to the LOAD terminals, the GFCI will not reset and will not provide power to either the GFCI receptacle face or the LOAD terminals. The LED indicator light will be ON.







Procedure:

(a) This device (with GFCI) is shipped from the factory in the tripped condition and cannot be reset until it is wired correctly and power is supplied to the device. Plug a lamp or radio into the GFCI (and leave it plugged in). Turn the power ON at the service panel. Ensure that the GFCI is still in the tripped condition by pressing the TEST button. If the lamp or radio is OFF, and the GFCI will not reset, go to the Troubleshooting section as the Line and Load connections are reversed.

(b) Press the RESET button **fully** and release. If the Status Indicator Light turns Green and the lamp or radio is ON, the GFCI has been installed correctly. If the Status Indicator Light turns or continuously blinks Red, or the GFCI cannot be reset, go to the Self-Test Operation section.

(c) If you installed your GFCI using step 8B, plug a lamp or radio into surrounding receptacles to see which one(s), in addition to the GFCI, lose power when you press the GFCI TEST button. Place a "GFCI PROTECTED OUTLET" sticker on every receptacle that lost power, then press the RESET button to reset the GFCI. DO NOT plug life saving devices into any of the receptacles that lost power.

(d) Press the TEST button (then RESET button) **every month** to assure proper operation. If the Status Indicator Light does not turn Green when the RESET button is depressed and then released, or the GFCI cannot be reset, it must be replaced.

TROUBLESHOOTING

Turn the power OFF and check the wire connections against the appropriate wiring diagram in step 8A or 8B. Make sure that there are no loose wires or loose connections. If the Status Indicator Light is not ON and the device is unable to reset this could be a result of no power available. Start the test from the beginning of step 9 if you rewired any connections to the GFCI.

SELF-TEST OPERATION

- A Self-Test GFCI receptacle has all the features of a conventional GFCI receptacle. In addition, this receptacle tests itself periodically to confirm the GFCI electronics are functional. The Status Indicator Light will be solid green when the GFCI is powered from Line side and working correctly.
- **Self-Test Indications:** If the Status Indicator Light is solid or flashing RED a problem may exist. Press the TEST button to trip the GFCI. If unable to Reset, replace the GFCI. **NOTE:** The status indicator may flash Red at power "ON" and Reset.

Self Test Cat. No.	Description
GFNT1-DIN	15A-125VAC, 60Hz DIN Rail Mount GFCI
GFNT2-DIN	20A-125VAC, 60Hz DIN Rail Mount GFCI
All devices rated 20A feed-through when using #12 or #10 AWG conductors	

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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. **For details visit www.leviton.com or call 1-800-824-3005.** 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.

For Technical Assistance Call: 1-800-824-3005 (U.S.A. Only) 1 800 405-5320 (Canada Only) www.leviton.com

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Patents covering this product, if any, can be found on Leviton.com/patents.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320.**

WEB VERSION

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