

GFCI standards are changing. Know the facts.



Effective May 2021, UL has set a new standard for GFCI safety.

Leviton was the first to meet it.

The Leviton Advantage

■ Safety is our priority. Leviton GFCIs prevent reset of the device if ground-fault protection is lost.

Why Choose Leviton GFCIs?

Leviton already meets the standard - and has for years.

Why settle when you can have more complete End of Life protection?

Quick Facts

- 'Solenoid' and 'SCR' components are common to GFCI receptacles and GFCI circuit breakers.

 They are needed to trip the device in the case of a ground-fault.
- Failure of either the Solenoid or SCR will result in permanent loss of ground-fault protection.
- In the event of an open SCR or Solenoid Failure, a Leviton GFCI cannot be reset.

Current UL943 Standard for Safety Ground-Fault Circuit-Interrupters

GFCI End of Life Events

6.30.2 - In order to determine compliance with the provisions of Clause 5.16, separate samples shall be modified to represent those single component failure modes that can cause the GFCI to become unable to respond to a ground fault per this standard...

- a) Open circuit or short circuit the ground fault sensing component (transformer)
- b) Alter the integrated circuit responsible for the ground fault detection...
- c) Open circuit the current limiter (for example, dropping resistor) of the power supply of the ground fault detection circuit.
- d) ...Open-circuit the trip solenoid...
 - GFCI circuit breaker types are excepted from 6.30.2(d)
- e) ...Open the switching semiconductor supplying the trip solenoid...
 - GFCI circuit breaker types are excepted from 6.30.2(e)
- f) Short circuit the switching semiconductor supplying the trip solenoid.
- g) Open circuit or short circuit a single rectifier diode in the ground fault detection power supply circuit...

GFCI End Of Life Consequences

5.16.4 - The consequence of the auto-monitoring test detection of a problem shall be one or more of the following:

- a) Power denial (trip with the inability to reset);
- b) Trip with the ability to reset, subject to the next automonitoring test cycle or repeatedly trip;
- c) Visual and/or audible indication as permitted by 6.30.8.

■ The UL943 standard no longer exempts GFCI circuit breakers from detecting and warning when the trip solenoid and/or switching semiconductor fails in the "open" state, rendering the GFCI circuit breaker incapable of tripping in response to a fault condition, resulting in complete loss of GFCI protection. However, the effective date of this requirement is 8/11/24. Leviton GFCIs have always met the more stringent safety requirement.

one of these must occur.