



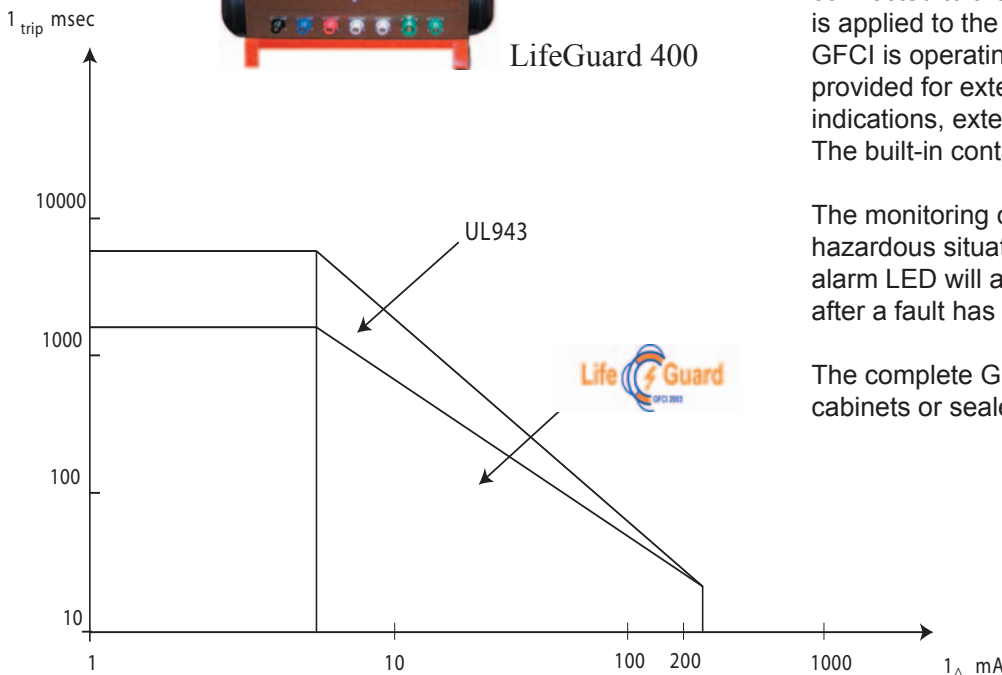
Portable LifeGuard 100



LifeGuard 250



LifeGuard 400



## Product Description

The LifeGuard 100, 250 & 400 Single & Three-Phase GFCI extends the capability of standard ground fault circuit interrupters to the detection of ground leakage currents in all stages of power conversion equipment from simple rectifiers to sophisticated variable frequency drive and brushless DC motor controllers with signal content extending from pure DC to low kHz. The LifeGuard GFCIs can detect AC and DC ground fault leakage currents including pure DC.

The alarm set-point value for the 100 and 200 is present to 6mA in accordance to UL943, the standard for personnel protection. The set-point for the LifeGuard 400 GFCI is preset to 20mA in accordance to UL943C, the standard for Special Purpose GFCIs. The minimum response time for all 3 devices is 25msec. at leakage currents of 250mA and above. UL943 - Class A GFCI's have to trip in accordance to a special timecurve which is shown below.

## Operational Information

The GFCI has to be connected to a power supply via terminal strips on the line side of the GFCI. The load will be connected to the contactor terminals. As soon as power is applied to the GFCI, the green LED indicates that the GFCI is operating. Control terminals on the line side are provided for external testing of the GFCI, additional alarm indications, external test & reset and emergency stop. The built-in contactor can be used for stop/start function.

The monitoring circuitry will trip the contactor when a hazardous situation (ground fault) occurs and the yellow alarm LED will activate. The unit has to be manually reset after a fault has been cleared.

The complete GFCI module is designed for use in control cabinets or sealed areas.

# LifeGuard

## 100, 250, 400



### Technical Data

GFCI Ground Fault Circuit Interrupters

<u>GF-Evaluator:</u>	RCMA
<u>Grounded Neutral Protection and Trip Amplifier:</u>	INS
<u>Contactors:</u>	4-Pole
<u>Line voltage:</u>	120, 208, 240, 277/480V
<u>Load current:</u>	100Amps <b>(100)</b> 250Amps <b>(250)</b> 400Amps <b>(400)</b>
<u>Alarm setpoint:</u>	6mA or 20mA fixed 20mA fixed <b>(400)</b>
<u>Response time:</u>	in accordance with UL943 time curve
<u>Example trip time:</u>	<5sec at 6mA <25msec at >= 264mA
<u>Power wiring:</u>	
Terminals T1/T2/T3 Loadside	<b>(400):</b> 4aut Portable
Terminals L1/L2/L3 Lineside	350mcm Fixed conductor sizes
<u>Control wiring:</u>	
(in combination with pushbutton station)	AWG 16, MTW, AWM or TTHN, stranded wire
<u>Alarm/Trip indication:</u>	LED red "Circuit Tripped" on PB station. (Has to be externally provided for fixed installations) LED yellow "Alarm" on GFCI
<u>Power "On" indication:</u>	LED green "Power On" on PB station. (Has to be externally provided for fixed installations) LED green "On" on GFCI
<u>Dimensions / Weight:</u>	<b>(100)</b> Overall 6" x 10.2" x 11.6" 13.5 lbs. <b>(250)</b> Enclosure 11" x 20" x 24" 145 lbs. <b>(400)</b> Overall 31H x 14W x 22D 125 lbs.

### Ordering Guide

GFCI modules are available for different single and three phase applications. The 6mA version are listed under UL943 Class A. LifeGuard also offers 20mA versions which are designed in accordance to the standard, but trip at 20mA due to the fact that 6 mA settings are likely to create nuisance tripping in systems with higher current and voltage requirements. The LifeGuard GFCI is available for both, fixed installed and portable use.

#### LifeGuard 100 Fixed installed version

AC/3AC 120,208,240V/277/480V	100A	5mA +/- 1mA Trip
AC/3AC 120,208,240V/277/480V	100A	19mA +/- 1mA Trip

#### LifeGuard 100 Portable version

AC/3AC 120,208,240V/277/480V	100A	5mA +/- 1mA Trip
AC/3AC 120,208,240V/277/480V	100A	19mA +/- 1mA Trip

#### LifeGuard 250 Fixed installed version

AC/3AC 120,208,240V 277/480V	250A	5mA +/- 1mA Trip
AC/3AC 120,208,240V 277/480V	250A	19mA +/- 1mA Trip

#### LifeGuard 250 Portable version

AC/3AC 120,208,240V	250A	5mA +/- 1mA Trip
AC/3AC 120,208,240V 277/480V	250A	19mA +/- 1mA Trip

#### LifeGuard 400 Fixed installed version

AC/3AC 120,208,240V,480V	400A	19mA +/- 1mA Trip
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#### LifeGuard 400 Portable version

AC/3AC 120,208,240V,480V	400A	19mA +/- 1mA Trip
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The Portable Lifeguard (100, 250, and 400) is enclosed in an industrial grade NEMA4X enclosure and has been designed to withstand physical impact, dirt and moisture. The units are equipped with indicator lights and operator pushbuttons which are easy to use. Various types of electrical connectors can be attached to the portable/fixed enclosures