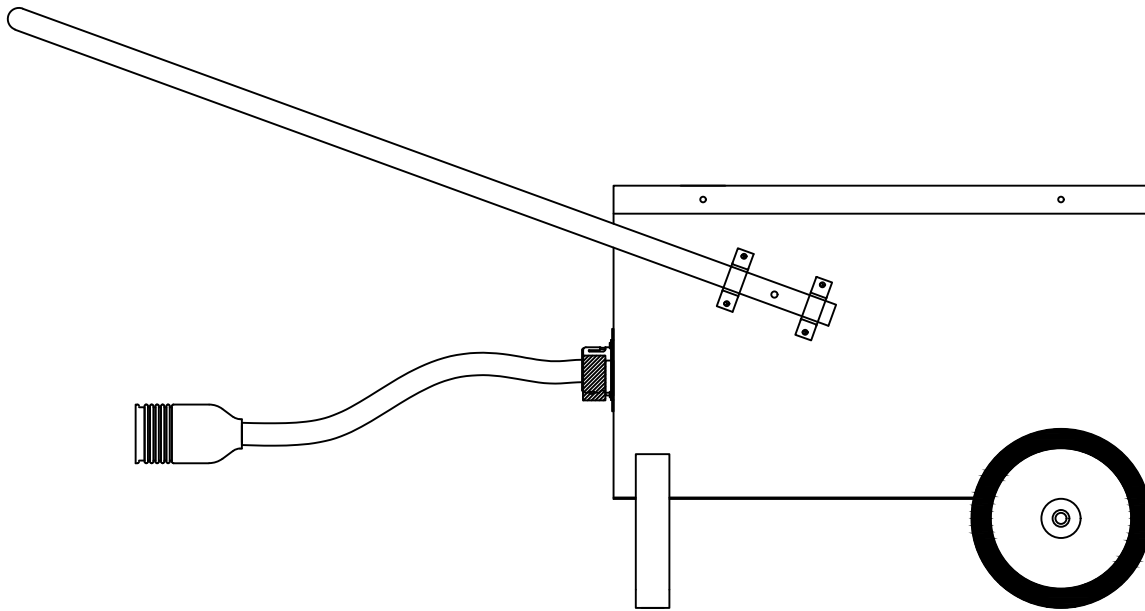


Isolating Vessel Ground Fault  
Check Unit  
Model VGFCU-ISO  
General Specifications



Patent Pending

Marina Electrical Equipment, Inc.  
1715 Merrimac Trail  
Williamsburg, VA 23185  
Toll Free: 1-855-258-3939  
Fax: 1-757-258-3988



CONFORMS TO STD. ANSI/UL508A  
CERT. TO CUL STAD UL508A

## SECTION A: ACCEPTABLE MANUFACTURERS:

Marina Electrical Equipment, Inc.  
1715 Merrimac Trail  
Williamsburg, VA 23185  
Toll Free: 1-855-258-3939  
Web: [www.marinaee.com](http://www.marinaee.com)

## SECTION B: GENERAL REQUIREMENTS

1. The Isolating Vessel Ground Fault Check Unit is designed to test vessel AC shore power systems for ground fault leakage current while electrically isolating the test vessel from the marina AC shore power system to comply with NEC Article 555 and NFPA 303 requirements for initial plug-in and annual testing.
2. Shall be listed and marked, tested and certified to conform to Standard UL® 508A entitled "Industrial Control Panels, Standard UL® 1053 entitled "Ground Fault Relay Sensing Equipment" and CUL Standard C22.2 No. 144 entitled "Standard Ground Fault Circuit Interrupter."
3. Circuit Breaker shall be listed and marked, tested and certified to conform to Standard UL® 489 entitled Molded-Case Circuit Breakers, Molded-Case Switches.
4. Circuit Breaker(s) shall be miniature molded case thermal-magnetic type with SCCR of 10 kAIC.

## SECTION C: CONSTRUCTION REQUIREMENTS

1. All materials and components used in the construction of the equipment shall be listed.
2. Enclosure: Shall be listed as a NEMA® 1 (not weatherproof) portable enclosure, equipped with wheels and handle, and constructed of 316L stainless steel with white textured polyester powder coat.
3. Device shall contain male plug (varies based on configuration) with 6 ft. cable for power input, and receptacle(s) for power output (varies based on configuration).
4. User Interface Ground Fault Monitor: Shall be constructed of UL® 94 V-0 materials with LCD screen and test/reset button.

## SECTION D: USER INTERFACE AND INDICATOR LIGHTS

1. Neutral-to-Ground Bond sensor shall have an audible alarm with red LED indicator.
2. Ground Fault Monitor shall contain LCD screen which displays real-time ground fault current leakage and test/reset button to test the monitor and clear fault alarms.
3. Individual circuit breakers provided for each shore power outlet receptacle.

## SECTION E: WIRING

1. All components shall be factory assembled and wired with high-stranding tin-plated copper THHW/MTW VW-1 Boat Cable rated for 105°C.

## SECTION F: SETTINGS

1. Trip Setting: 100 mA trip alarm,  $\leq$  100 mS trip time. Shall be set from the factory and sealed to prevent tampering.
2. Load: Non continuous-duty. Designed for testing individual circuits only.

END OF SECTION

*Specifications Subject to Change without Notice*

# General Specifications - Isolating Vessel Ground Fault Check Unit Model VGFCU-ISO

## SECTION G: FUNCTION

1. The VGFCU-ISO is a portable testing device that plugs into a host power outlet panel and delivers power to the test vessel to measure ground fault leakage current within the vessel AC shore power system.
2. The device electrically isolates the test vessel from the marina/dock AC shore power electrical system to eliminate nuisance-tripping issues in the marina's electrical system while testing.
3. Ground fault leakage current is displayed on the LCD screen, and an audible alarm with red LED signify when improper neutral-ground bonds are sensed.

## SECTION H: TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE: NEMA 1 (NOT WEATHERPROOF)

LISTING AGENCY: UL

LISTING STANDARDS: UL508A INDUSTRIAL CONTROL PANEL, UL1053 GROUND FAULT SENSING EQUIPMENT

RECEPTACLES: 20A 125V 5-20R, 30A 125V L5-30R, 50A 125/250V SS-2, 100A 125/250V 4100RA12W, 100A 208Y/120V 5100RA9W, 100A 480V 4100RA7W, 100A 480Y/277V 5100RA7W

kVA: 3-5 kVA, 1 PHASE or 3 PHASE (BASED ON RECEPTACLE CONFIGURATIONS)

PRIMARY VOLTS: 120VAC or 480V (BASED ON RECEPTACLE CONFIGURATIONS)

SECONDARY VOLTS: 120/240VAC, 208Y/120V, 480V or 480Y/277V (BASED ON RECEPTACLE CONFIGURATIONS)

POWER INPUT: 20A 125V 5-20P, 30A 125V L5-30P, 50A 125/250V SS-2P, 100A 125/250V 4100P7W, 100A 208Y/120V 5100P9W, 100A 480V 4100P7W, or 100A 480Y/277V 5100P7W (BASED ON RECEPTACLE CONFIGURATIONS) WITH 6 ft. SOOW CORD

CIRCUIT BREAKERS: 20A (Protects 30A Rec.), 50A, 100A (125/250V, 208Y/120V, 480V, or 480Y/277V (BASED ON RECEPTACLE CONFIGURATIONS)

AIC RATING: 10 kAIC

FREQUENCY: 60 Hz

SOUND LEVEL: 30 dB MAX

INSULATION CLASS: 180°C

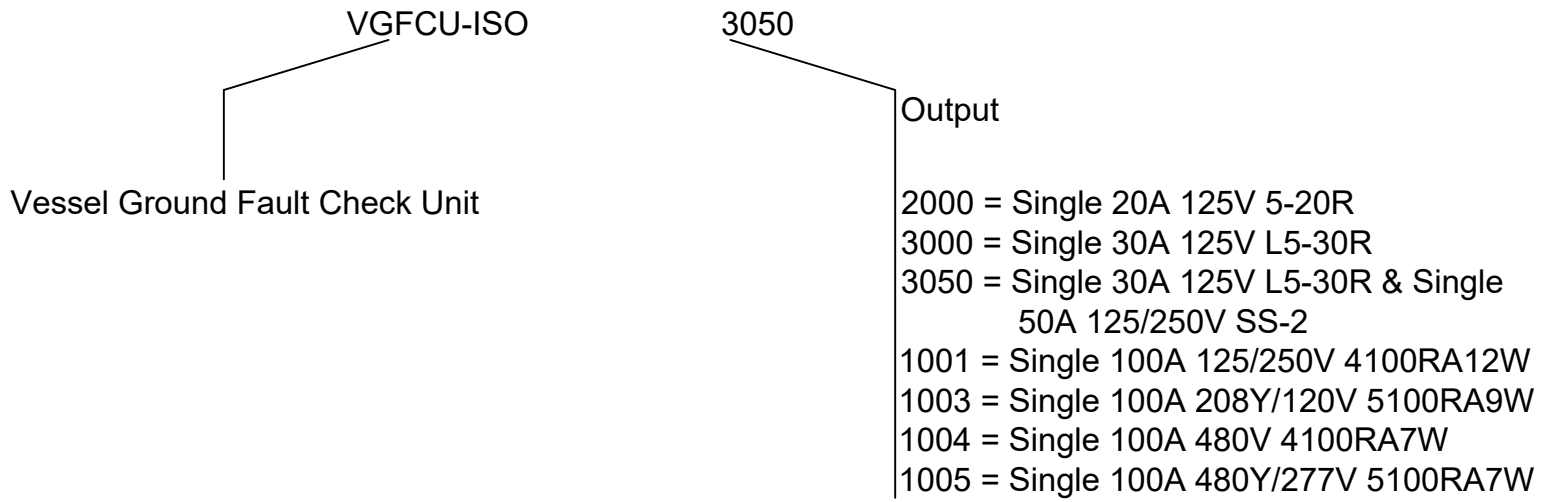
WIRING: FINE STRANDED, TIN PLATED COPPER

TEMP. RISE @ 80%: 60°C

TYP. WEIGHT\*: 115 LBS.\* MAY VARY BASED ON RECEPTACLE CONFIGURATIONS

**SECTION H: MODEL NUMBERS**

## Model Number Structure

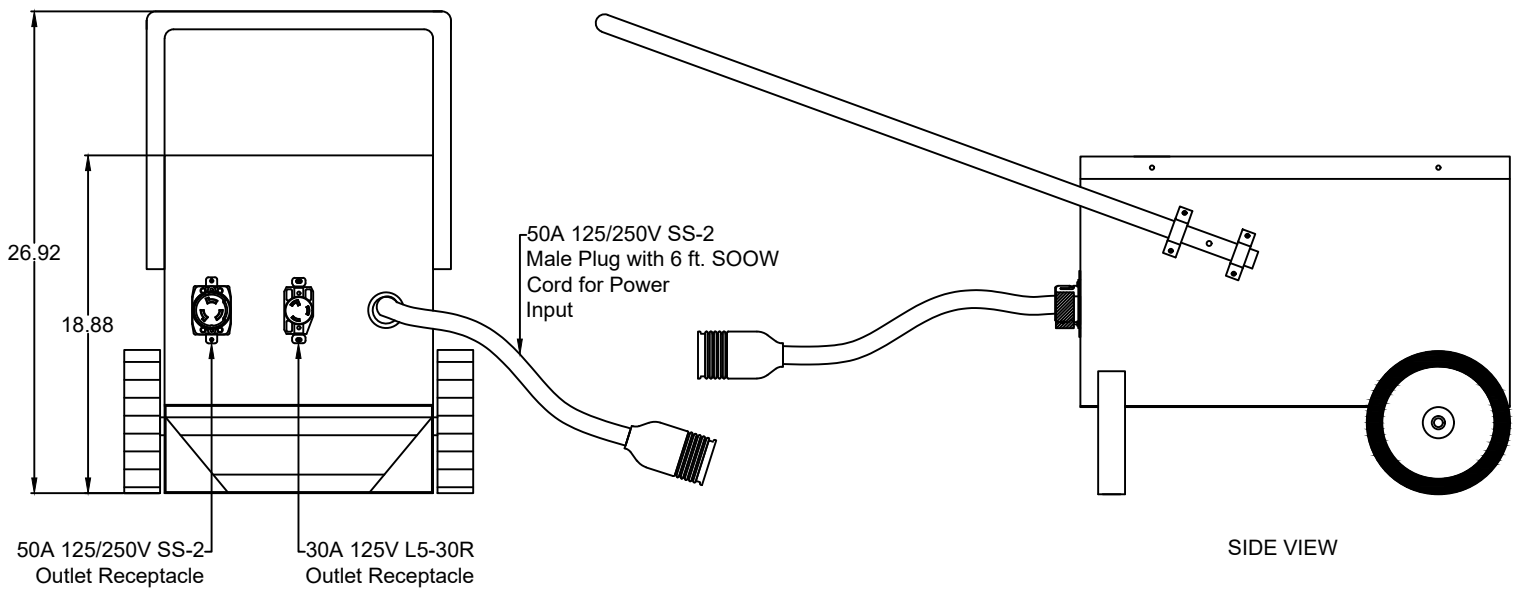
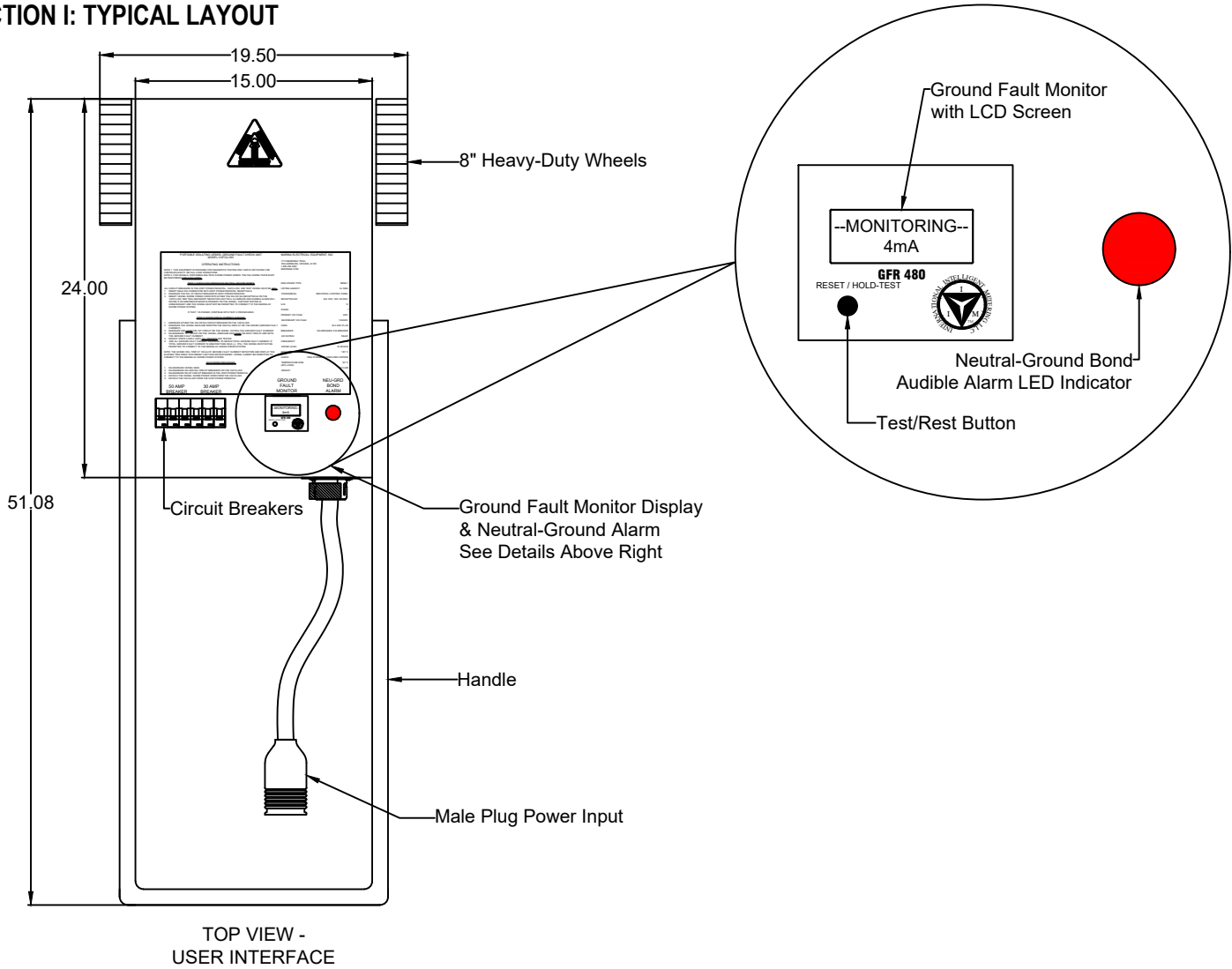


Custom channel quantities may be available-consult factory for details.

Custom trip settings may be available-consult factory for details.

# General Specifications - Isolating Vessel Ground Fault Check Unit Model VGFCU-ISO

## SECTION I: TYPICAL LAYOUT



FRONT VIEW -  
POWER INPUT & OUTPUT

PATENT PENDING

Specifications Subject to Change Without Notice

END OF SECTION

## **SECTION J: WARRANTY POLICY**

### **Assembly:**

Marina Electrical Equipment, Inc. (MEE) warrants that the equipment will be free from failure resulting from defects in material and/or workmanship, and are covered by a limited warranty of one (1) year. Should any of the associated parts fail to comply with the above-mentioned warranty, MEE will either repair or replace the defective part(s), or credit the purchaser for the purchase price of the part.

### **Ground Fault Monitor:**

Although the GFR480 Ground Fault Monitor contains integrated surge protection, MEE and IIM will not warrant the product against severe over-voltage conditions such as lightning strikes or abnormal utility surges. Should a ground fault monitor fail to comply with the above-mentioned warranty, MEE will either repair or replace the defective part(s)/components, or credit the purchaser for the purchase price of the part. This warranty is voided if the damage to any or all of the components is the result of abuse, misuse, or Force Majeure. This warranty is voided if the factory seal is broken or manipulated.

This warranty policy does not cover damage or failure resulting from abuse, misuse, negligence or Force Majeure. All warranty claims must be made in writing and all defective products shall be returned to MEE for evaluation unless stated otherwise by MEE. MEE will not be responsible for reimbursing the purchaser for any sort of expense incurred by the purchaser as a result of the repair or replacement of a warranty claim.

Send all warranty claims to:

Marina Electrical Equipment, Inc.  
1715 Merrimac Trail  
Williamsburg, VA 23185  
Toll Free: 1-855-258-3939  
Fax: 757-258-3988

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END OF SECTION