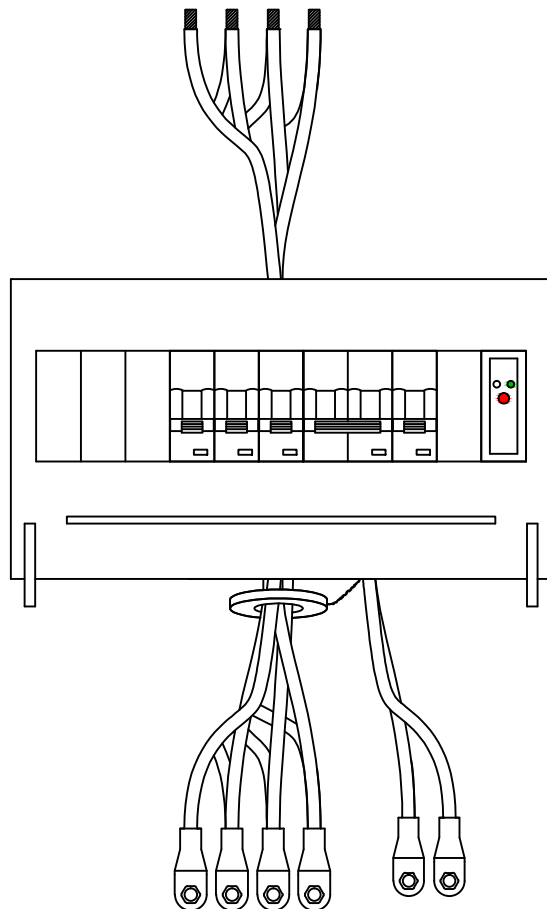


RetroSafe Model RS

Installation and Operation Manual



Patent Pending

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CONFORMS TO STD. ANSI/UL1053
CERT. TO CUL STAD.C22.2
NO 144

RetroSafe Model RS

Installation and Operation Manual

INTRODUCTION:

PRODUCT DESCRIPTION:

The RetroSafe assembly shall be listed and marked, tested and certified to conform to Class B Standard ANSI/UL® 1053 entitled “Ground Fault Relay Sensing Equipment” and CUL Standard C22.2 No. 144 entitled “Standard Ground Fault Circuit Interrupter.” It is designed for installation in, at minimum, a NEMA Type 3R enclosure.

FUNCTION: the RetroSafe assembly is designed for installation in new or existing power outlet panels, as manufactured by Marina Electrical Equipment and various other manufacturers to provide shore power ground fault protection for personnel or equipment. Equipped with a current-sensing transformer (CT), the integral GFR480-1 ground fault relay monitors for current leakage to ground. When a fault is detected, the 120V relay shunts the circuit breaker(s) to disconnect power to the shore power receptacles.

WARNING: Disconnect power before servicing. Marina Electrical Equipment, Inc. recommends that only qualified personnel or an electrician, familiar with the operation of this power outlet equipment, should service, or install this equipment. This product must be installed in accordance with the National Electrical Code (NEC) or the Canadian Standards Association (CSA) and any other applicable local codes. Before installing equipment, check with your local electrical inspector for specific requirements and information for your area.

CAUTION: Marina Electrical Equipment, Inc. will not assume any responsibility for property damage or personal injury resulting from misuse of the information in this manual.

INSTALLATION:

IMPORTANT: Installation manual for use by qualified personnel or an electrician only. Customizations may be required as power outlet panel designs differ between manufacturers.

Step 1: Disconnect power to the pedestal prior to any service. Access terminal block and circuit breakers in the power outlet panel.

Step 2: Installing the RetroFit Assembly:

- 1) Remove the existing circuit breakers and wiring from the existing power outlet panel.
- 2) Place and fasten the RetroSafe assembly in the appropriate section of the power outlet panel.
- 3) Terminate the load side wiring to the existing shore power receptacles (torque per receptacle specifications).
- 4) Terminate the line side wiring to the existing terminal block and torque to 15 ft.-lbs.
- 5) Terminate the small 120V GFR480-1 power leads to the existing terminal block (small black and small white leads) and torque to 15 ft.-lbs.

All leads are color-coated for easy termination:

Line 1: BLACK (Factory routed through CT)

Line 2: RED (Factory routed through CT)

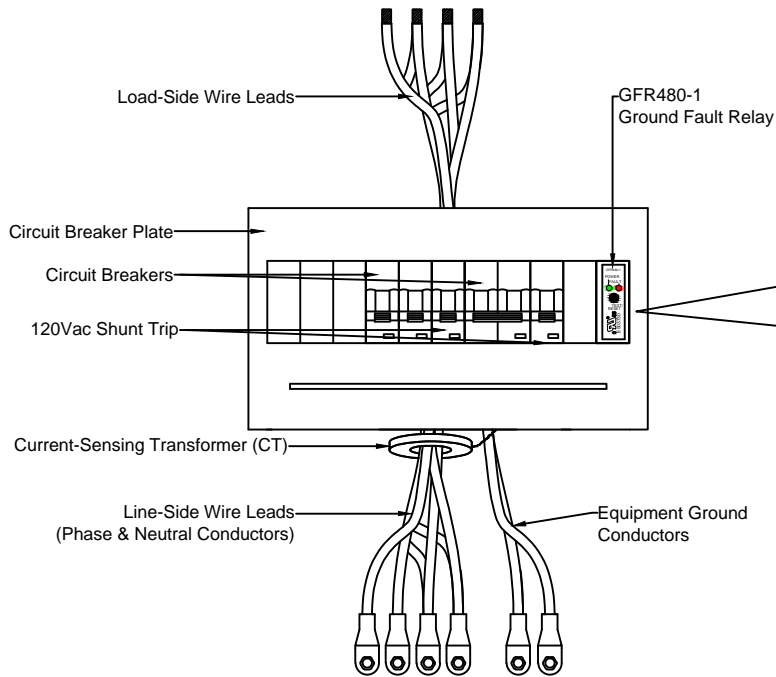
Neutral: WHITE (Factory routed through CT)

Ground: GREEN (NOT routed through CT - do not place ground conductors through CT)

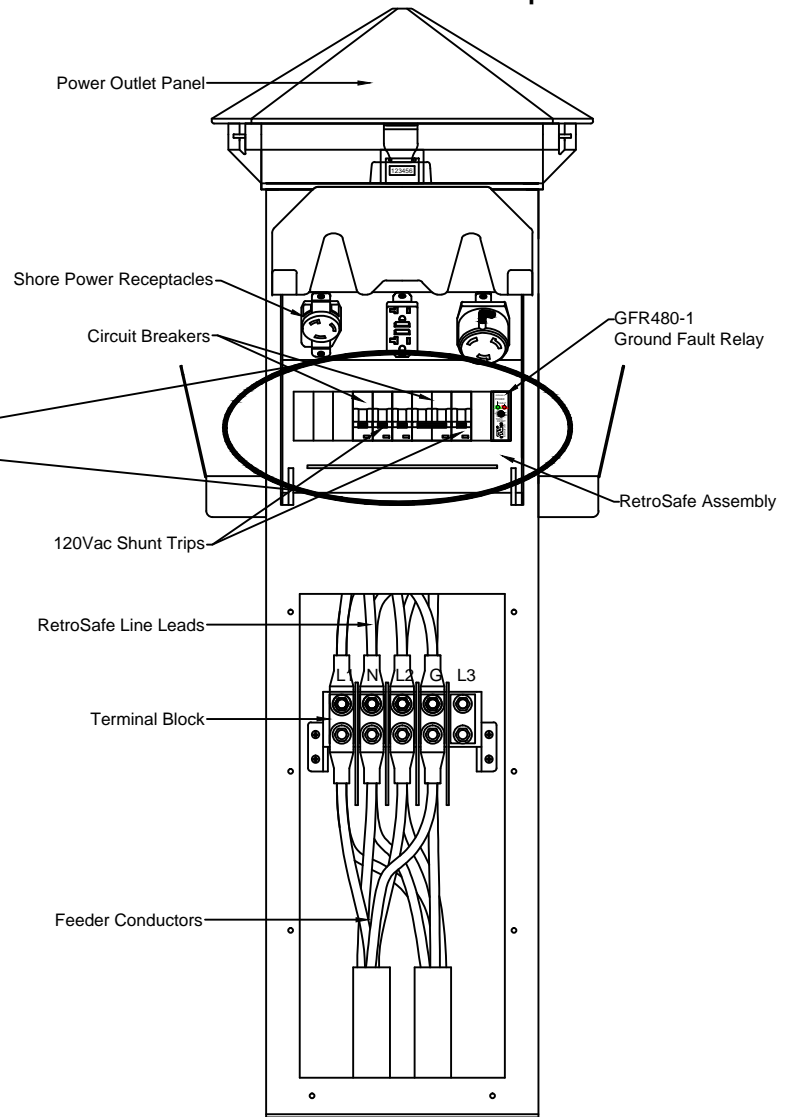
- 6) Ensure wiring is routed away from any obstructions, pinch-points or sharp edges.
- 7) Re-energize the power outlet panel and check terminal block terminals for proper voltages.

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RetroSafe Assembly



RetroSafe Assembly Installation Example



Specifications Subject to Change Without Notice
END OF SECTION

RetroSafe Model RS

Installation and Operation Manual

OPERATION:

Step 1: Turn ALL circuit breakers and shunt trips to the ON position.

Step 2: Verify the GREEN Power LED is illuminated.

Step 3: Perform a functional test by pressing and holding the TEST/RESET button on the GFR480-1 ground fault relay for 3 seconds. The LED indicator will change from green to red, an audible alarm will be heard, and ALL circuit breakers and shunt trips will trip.

Note: Replace the GFR480-1 ground fault relay immediately if this test does not result in an alarm status with tripped circuit breakers.

Step 4: Clear the manual test fault by pressing the TEST/RESET button once for less than one second. The shore power receptacles are ready to use.

Step 5: Insert the male shore power connector(s) in the receptacle(s).

Step 6: Turn ALL circuit breakers and shunt trips to the ON position.

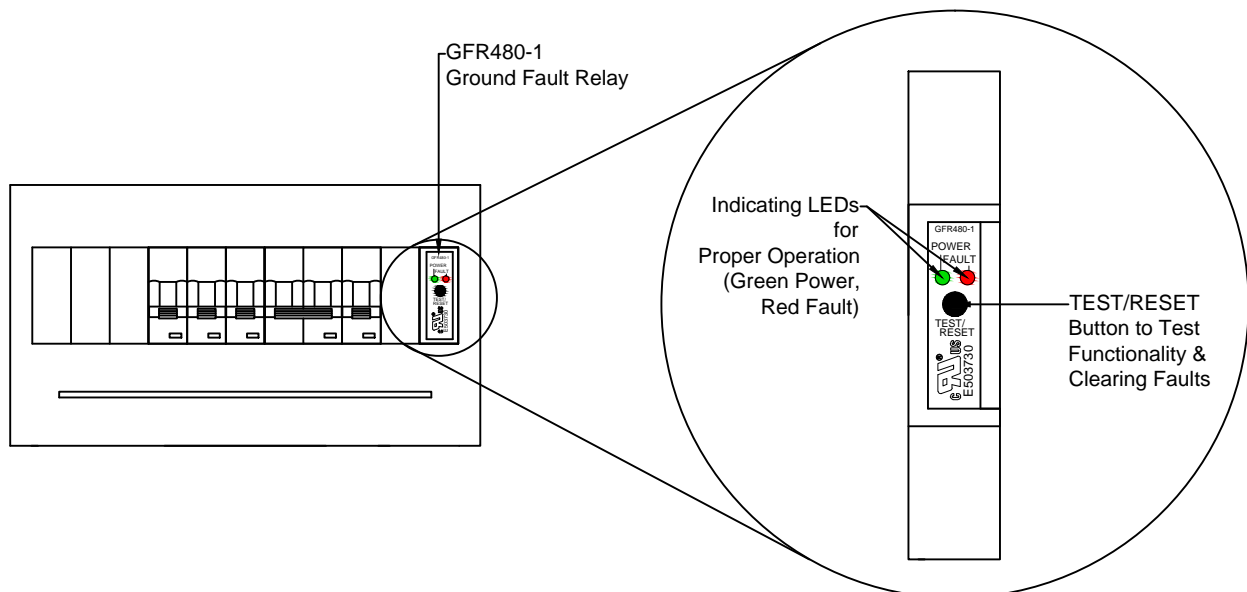
In the case of a ground fault:

1) Remove the shore power cord from the receptacle, and reset the GFR480-1 ground fault relay.

2) Correct the fault(s) before plugging the vessel back in.

Common ground fault issues resulting in tripping include: improper neutral-ground bonds, failing appliances, faulty or worn insulation, and faulty or worn shore power cords.

TEST THE GFR480-1 MONTHLY TO ENSURE MAXIMUM SAFETY!



Specifications Subject to Change Without Notice
END OF SECTION

RetroSafe Model RS

Installation and Operation Manual

WARRANTY POLICY

Assembly:

Marina Electrical Equipment, Inc. (MEE) warrants that the complete RetroSafe assembly 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 Relay:

Although the GFR480-1 Ground Fault Relay 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 relay 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:

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