



IMPORTANT!

Please read all the information on this sheet.

SAVE THESE INSTRUCTIONS!

NOTICE

BEFORE USING READ INSTRUCTIONS COMPLETELY. TO BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES AND THESE INSTRUCTIONS.

CAUTION!

RISK OF ELECTRIC SHOCK, BURN, OR EXPLOSION. DISCONNECT POWER BEFORE INSTALLING. NEVER WIRE ENERGIZED ELECTRICAL COMPONENTS. FAILURE TO DO SO MAY CAUSE SEVERE SHOCK, PERSONAL INJURY, OR DEATH.

NOTICE

- ELCIs are required onboard all new manufactured boats (per ABYC E-11) to mitigate “electric shock drowning” associated with ground fault leakage incurred by boats into marina waterways. (Effective 12-31-2012).
- Marine ELCIs must meet the requirements as outlined in ABYC E-11 Electrical Systems Onboard Boat (11.11) and ABYC environmental considerations for apparatus onboard boat (S-31) as well as requirements outlined in UL 943 and UL 1053. Trip level is < 30mA and trip time is < 100mS.
- Unit is entirely potted and is ignition protected.
- Marine Module is adaptive to marine flip-seals produced by: Hubbell Marine or Marinco Marine.
- Housing meets marine environmental considerations of ABYC S-31 standard.

ELCI PROTECTION – WARNING!

- Equipment Leakage Circuit Interrupter is a safety device under normal use and it is not intended to promote activity at elevated risk.
- An ELCI is a device intended to mitigate ground fault leakage and provide protection of equipment (i.e. boats).
- Use only within the specified operating parameters (failure to do so may result in bodily injury).
- Consult a licensed electrician for assistance on installation and repairs.
- Do not use this ELCI if it fails to function as instructed. Never attempt to tamper with this device.
- This ELCI does not provide protection against shocks caused by holding both current carrying conductors.
- This ELCI does not provide protection against electrical shocks generated by the conductors supplying power to the device.

Note: primary feed to ELCI is live even when ELCI is tripped. Unit should be powered down at line (supply) side breaker before servicing load side of ELCI.

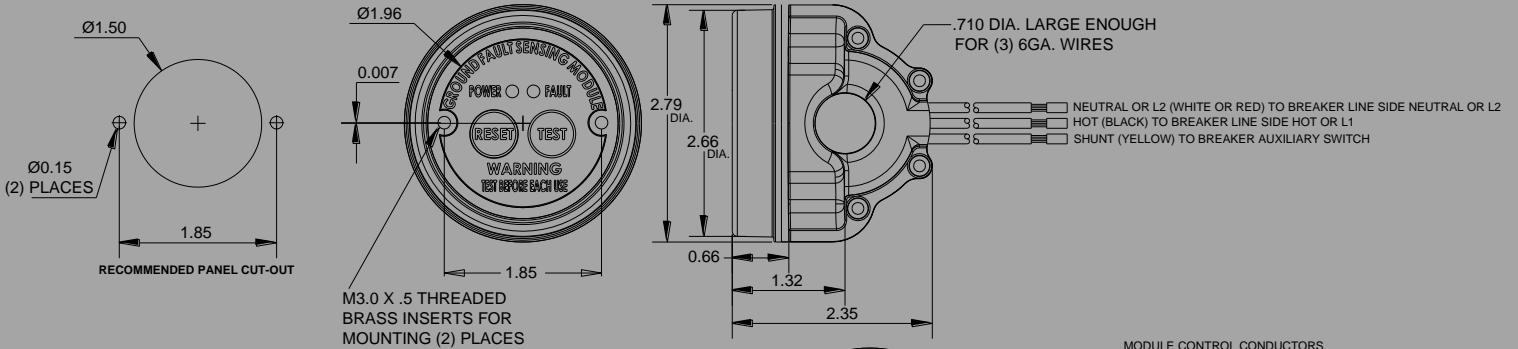
NORTH SHORE SAFETY'S TWO-YEAR LIMITED MANUFACTURER'S WARRANTY

North Shore Safety warrants to the consumer its offering of LineGard Ground Fault Circuit Interrupters (GFCIs) to be free from defects in materials and workmanship under normal use and service for a period of two years from the manufacture date. North Shore Safety, at its option will repair or replace the defective GFCIs without charge within a two year period from the date of manufacture, provided that the defect occurred during normal use and was installed according to all published instructions. All returns must be authorized by a North Shore Safety representative. In the event of product failure please contact a North Shore Safety representative at 1-440-205-9188 to obtain a Return Goods Authorization Number (RGA) prior to returning any product to North Shore Safety. North Shore Safety will refuse any item if prior Return Goods Authorization has not been granted. Defective units must be returned prepaid freight, with a description of the problem, and with an attached RGA number referenced to the Quality Assurance Dept., North Shore Safety, Ltd., 7335 Production Drive, Mentor, OH 44060. Determination of Warranty compliance is solely at the discretion of North Shore Safety and North Shore Safety's disposition is final.

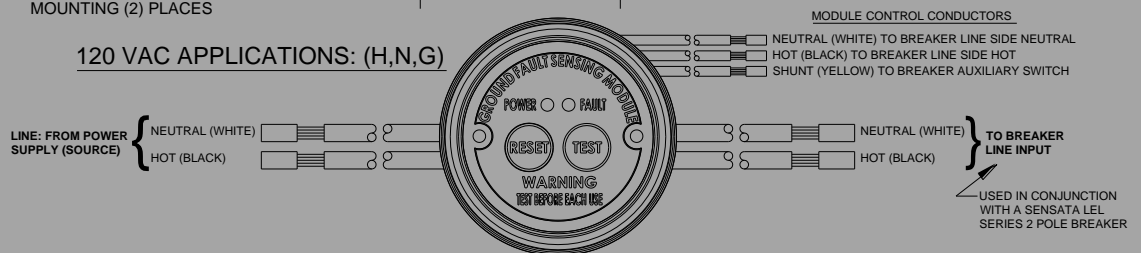
Disclaimer

North Shore Safety will not be liable, directly or indirectly, for any cost whatsoever associated with installation or removal of any device, or for any personal injury, property damages, or incidental, indirect, or consequential damages of any kind whatsoever as a result of any defective device. The exclusive remedy under this Warranty is the repair or replacement of the defective device. In no case shall North Shore Safety's liability exceed the net purchase price. This Warranty is void if the device is not properly installed, tampered with, opened, abused, or not used according to label instructions and ratings, and/or published specifications.

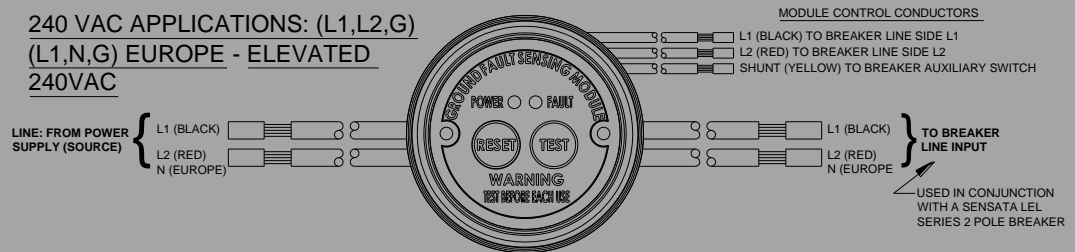
DANGER: HAZARD OF ELECTRICAL SHOCK, BURN, OR EXPLOSION. Disconnect power at main power feed before the start of installation. Failure to do so may cause severe shock, personal injury, or death



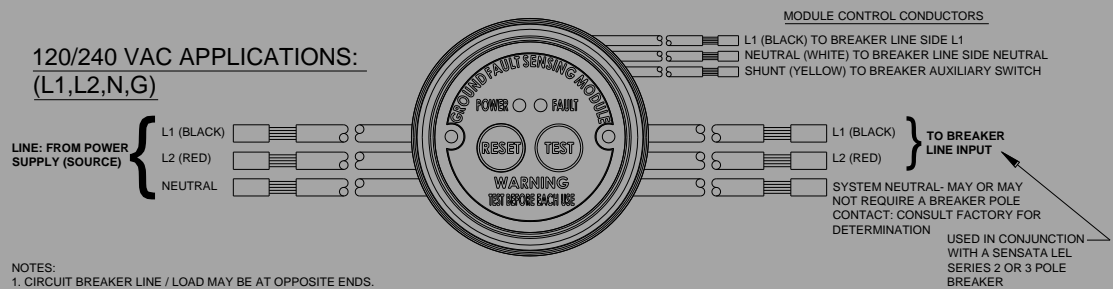
120 VAC APPLICATIONS: (H,N,G)



**240 VAC APPLICATIONS: (L1,L2,G)
(L1,N,G) EUROPE - ELEVATED
240VAC**



**120/240 VAC APPLICATIONS:
(L1,L2,N,G)**



- NOTES:**
1. CIRCUIT BREAKER LINE / LOAD MAY BE AT OPPOSITE ENDS.
 2. L1 (BLACK WIRE) SHALL ALWAYS BE CONNECTED TO THE AUX SWITCH AND SHUNT POLE.
 3. SAFETY GROUND IS NOT FED THROUGH SENSING CORE BUT IS BYPASSED TO BOAT SYSTEM SAFETY GROUNDING POINT.

IMPORTANT:

1. READ ALL THE INSTRUCTIONS IN THIS LEAFLET AND ON THE DEVICE LABEL.
2. IDENTIFY ALL THE FEATURES AND WIRES (SEE DRAWINGS).
3. IDENTIFY MODULE WIRES.
4. VERIFY THAT THE RATINGS ON THE DEVICE INCLUDING BREAKER MATCH YOUR FIELD LINE RATINGS.
5. STRIP WIRES TO 3/8", OR AS RECOMMENDED FOR YOUR CONNECTIONS: (MODULE MAY INCLUDE FIELD TERMINATIONS). MODULE SUPPLY MUST BE TERMINATED IN CONJUNCTION WITH AND IN COMPLIANCE OF ABYC E-11 AND INSTRUCTIONS PROVIDED BY SENSATA BREAKER INSTRUCTIONS.
6. CHOOSE THE RIGHT WIRING APPLICATION (120VAC, 240VAC USA, 240VAC EUROPE, OR SPLIT PHASE 120/240VAC) AND CONNECT WIRES ACCORDING TO THE DRAWINGS.
7. PLACE SUPPLIED TEST INSTRUCTION LABEL IN CLOSE PROXIMITY TO THE EQUIPMENT LEAKAGE SENSING MODULE MOUNTING AS SHOWN BELOW:



**TEST INSTRUCTIONS
ELCI SENSING MODULE
TEST BEFORE EACH USE**

NORMAL OPERATING STATE - SENSING DEVICE GREEN LED IS "ON" AND CIRCUIT BREAKER IS AT "ON" POSITION

STEP 1: PRESS "TEST" BUTTON: GREEN LED SHOULD GO "OUT" AND RED LED SHOULD GO "OUT" AND RED LED SHOULD START "BLINKING". CIRCUIT BREAKER SHOULD TRIGGER TO "OFF" POSITION

STEP 2: IF SENSING DEVICE LED OR BREAKER DOES NOT TRIP OR CHANGE STATE: "DO NOT USE" CONSULT AN ELECTRICIAN FOR ASSISTANCE

STEP 3: PRESS "RESET" BUTTON: RED LED SHOULD TURN "OFF" AND GREEN LED SHOULD TURN "ON"

STEP 4: MANUALLY RESET (SWITCH) CIRCUIT BREAKER TO "ON" POSITION TO RESTORE CIRCUIT POWER

WARNING!
IF ABOVE TESTS FAILS, DO NOT USE THIS ELCI. CONSULT A QUALIFIED ELECTRICIAN FOR REPAIR OR REPLACEMENT.

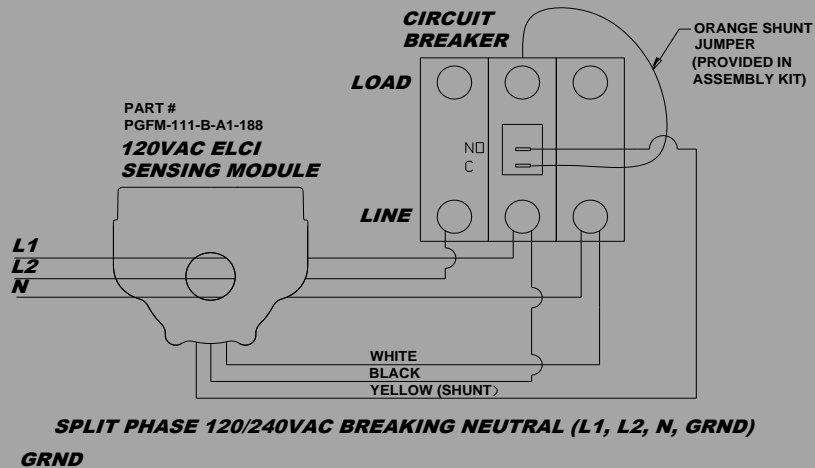
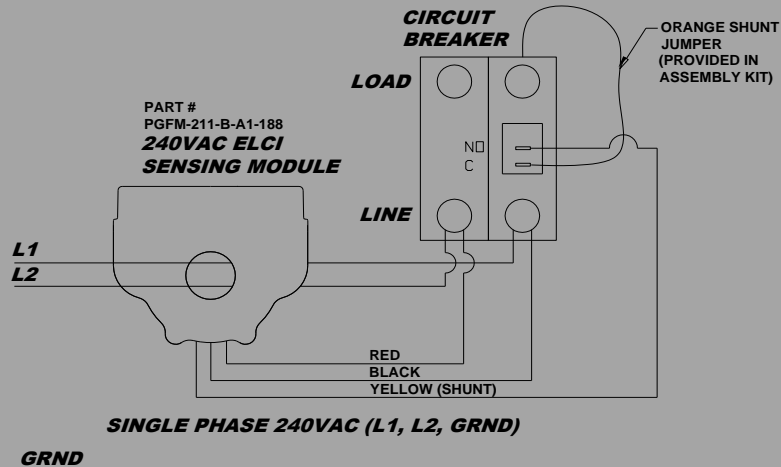
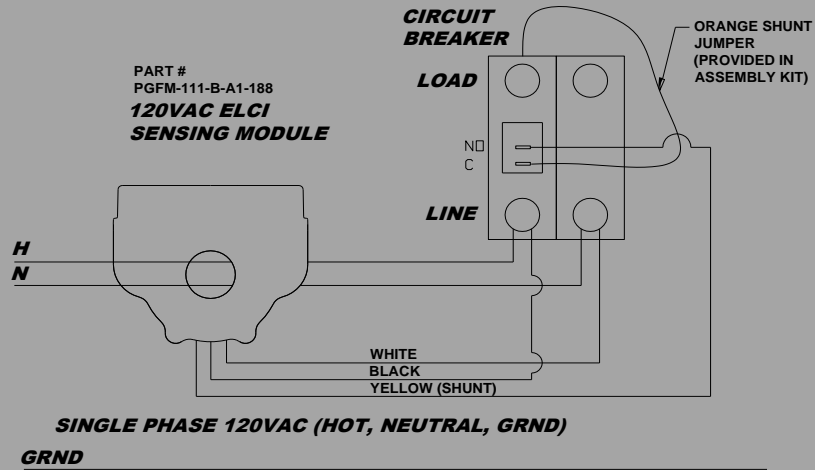
TESTING AND TROUBLESHOOTING

NORMAL OPERATING STATE – SENSING MODULE DEVICE GREEN LED IS "ON" AND CIRCUIT BREAKER IS AT "ON" POSITION.

- STEP 1: PRESS "TEST" BUTTON: GREEN LED SHOULD GO "OUT" AND RED LED SHOULD START "BLINKING". CIRCUIT BREAKER SHOULD TRIGGER TO "OFF" POSITION.
- STEP 2: IF SENSING DEVICE LED OR BREAKER DOES NOT TRIP OR CHANGE STATE: "DO NOT USE" CONSULT AN ELECTRICIAN FOR ASSISTANCE OR REPLACEMENT.
- STEP 3: PRESS "RESET" BUTTON: RED LED SHOULD TURN "OFF" AND GREEN LED SHOULD TURN "ON".
- STEP 4: MANUALLY RESET (SWITCH) CIRCUIT BREAKER TO "ON" POSITION TO RESTORE CIRCUIT POWER.

WARNING:
IF ABOVE TESTS FAILS, DO NOT USE THIS ELCI.
CONSULT AN ELECTRICIAN FOR ASSISTANCE OR REPLACEMENT.

TYPICAL WIRING DIAGRAMS



NOTES:

1. CIRCUIT BREAKER LINE/LOAD MAY BE AT OPPOSITE ENDS.
2. L1 (BLACK WIRE) WILL ALWAYS BE CONNECTED TO THE SAME POLE AS THE SHUNT COIL AND AUXILIARY SWITCH.
3. SAFETY GROUND IS NOT FED THROUGH SENSING CORE BUT IS BYPASSED TO BOAT SAFETY GROUNDING POINT.