



# MilliAMP 120V/20A or 240V/16A with trip level 10mA Electrical Equipment Protection Device

Product Number: MA-10

## Installation Instructions

### General Information

This 10 ma. current leakage detection device is designed for electrical equipment protection.

It can be used to protect sewage pumps, water pumps, heating cables and many other electrical appliances to aid in electrical shock protection.

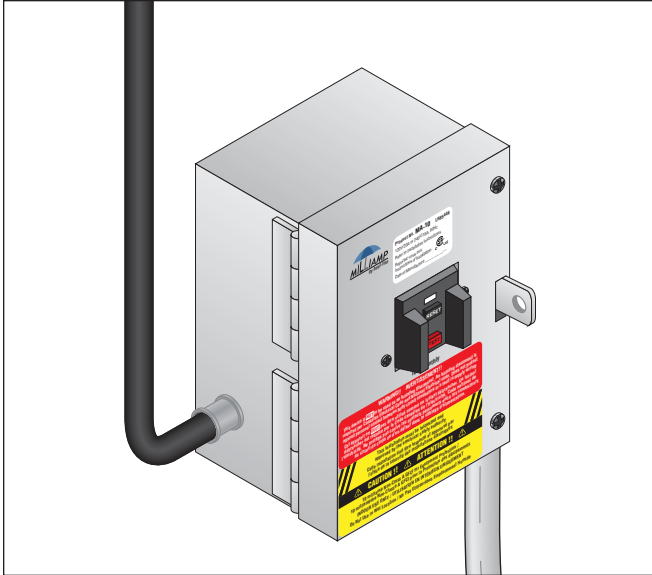
Check with local authorities to ensure this product meets local electrical safety codes and restrictions.

For submersible pumps of all types where this device is utilized, we recommend the ACWU90 or Teck90 cable where applicable and sealed from moisture ingress to reduce insulation resistance breakdown (IR drop).

Installation is to be made by a qualified electrician and must be inspected by local electrical authorities before use.

This device should be tested monthly by following the test and reset procedures in this instruction when equipment is in use.

This product is designed NOT to reset if there is a fault in the wiring or equipment being protected. If this product fails to reset or frequently trips, contact a qualified electrician.



### Kit Contents

Complete Device and Wire Nut Connector Package

Installation instructions

### Approvals



Enclosure CSA type 1

Non-Class A GFCI - 10 milliamp

**⚠ WARNING!** This device must be installed by a qualified electrician in accordance to governing electrical codes, CEC (Canadian Electrical Code) NEC (National Electrical Code) and inspected by local power authority before use.

### FOR YOUR PROTECTION, PROPER INSTALLATION AND REGULAR TESTING IS IMPORTANT - TEST AND RECORD MONTHLY

Each Non-Class A GFCI device is calibrated to trip with a ground current of 10 milliamperes.

While the Non-Class A GFCI device affords a high degree of protection, there is no substitute for the knowledge that electricity can be dangerous when carelessly handled or used without reasonable caution.

### ⚠ WARNING:

This component is an electrical device that must be installed correctly to ensure proper operation and to prevent shock or fire. Read these important warnings and carefully follow all of the installation instructions.

**A. THIS IS NOT A CLASS A GFCI AND IS DESIGNED FOR EQUIPMENT PROTECTION.**

B. This is a professional product designed to be installed by licensed tradepersons and must be inspected by the proper electrical and mechanical authorities following completion of the finished installation.

C. Turn off all power before installing or servicing this equipment.

D. This product is designed for indoor "ordinary" locations and should not be used in outdoor, wet or damp environments.

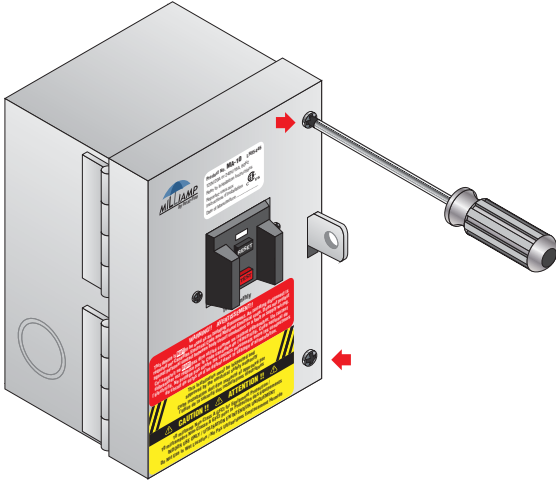
E. Be sure all component covers are secure on the enclosure before energizing.

F. This device should be tested and reset monthly while in use.

G. Ampacities should not exceed 80% of total load rating of this device

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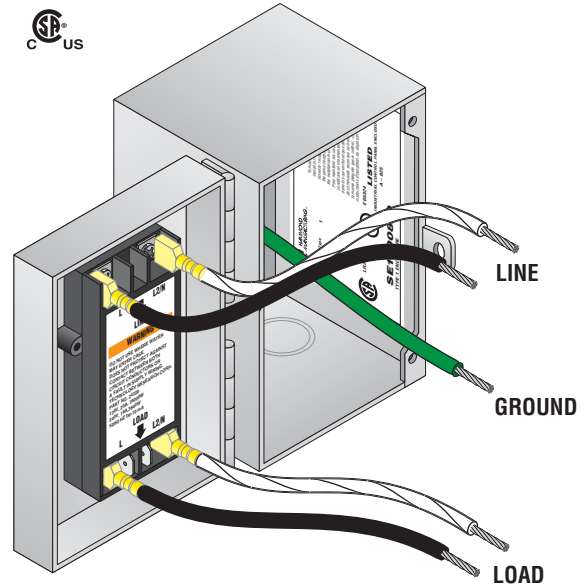
- Unfasten 2 machine screws to open door.



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Enclosure CSA type 1  
Non-Class A GFCI - 10 milliamp

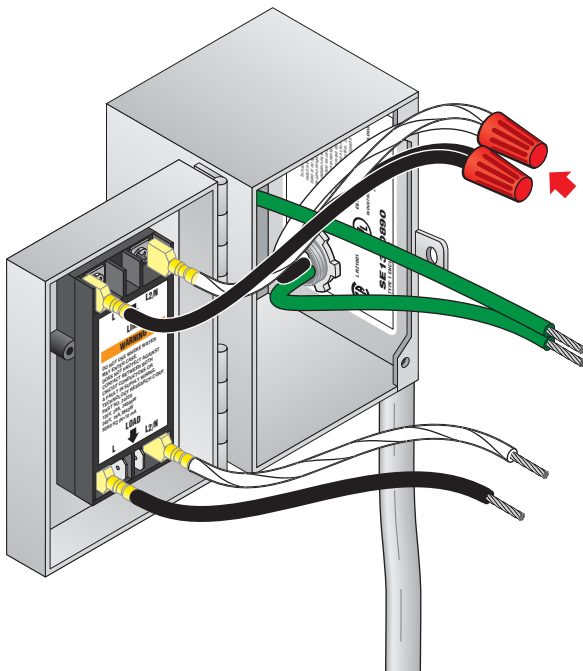
Approvals



**⚠ WARNING!** This device must be installed by a qualified electrician in accordance to governing electrical codes, CEC (Canadian Electrical Code) NEC (National Electrical Code) and inspected by local power authority before use.

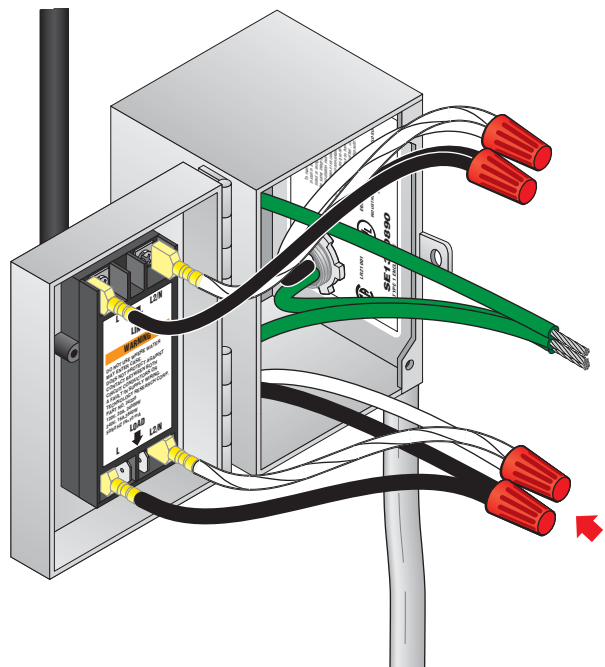
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- Install power supply cable and connect power to **LINE** wires (top of device) using wire nuts.



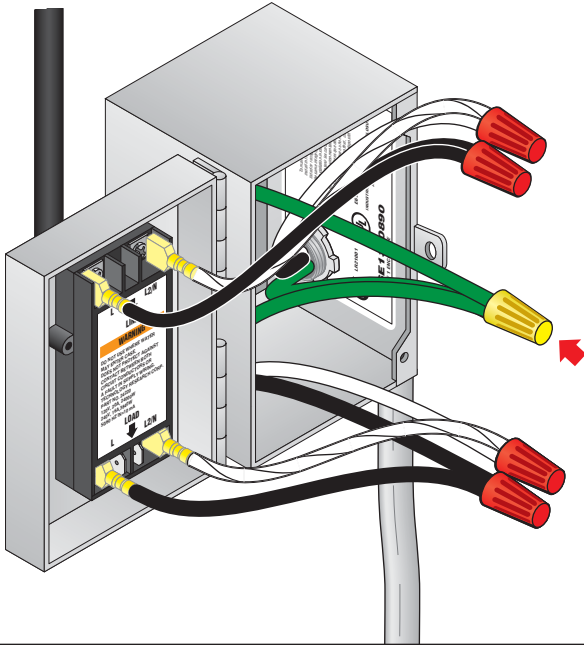
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- Install and connect power supply cable feeding equipment being protected to the **LOAD** wires (bottom of device) using wire nuts.



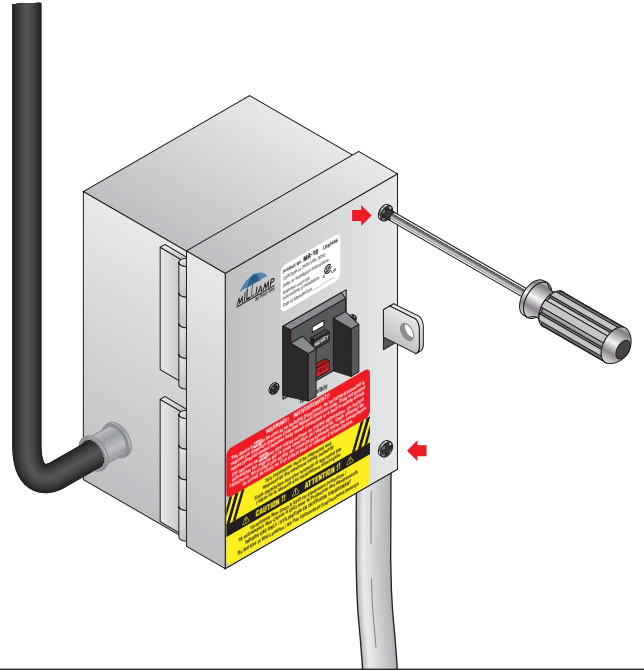
5

- Connect power supply wires according to electrical code requirements.
- Connect ground wires to enclosure according to electrical code requirements.



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- Carefully fold and stow wires and close box using screws.
- Box can be padlocked or secured as required through tab.



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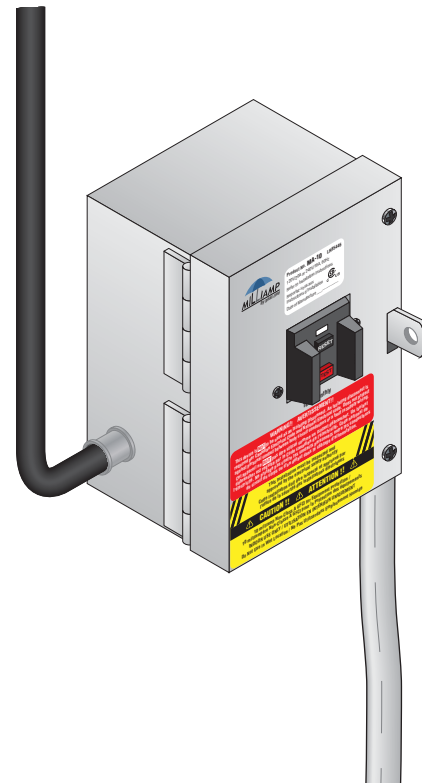
**TEST and RESET Procedure**

With power on:

1. Push the TEST button and the red flag will disappear from the window.
2. Push the RESET button and the red flag should appear in the window indicating the circuit is engaged.
3. Test monthly to be certain your equipment is protected and functioning at all times.

**IMPORTANT** – If red flag appears in the window when test button is pressed or the device fails to reset, the Equipment Protection is not complete. NOTIFY a qualified electrician IMMEDIATELY.

If nuisance tripping or circuit trips frequently NOTIFY a qualified electrician IMMEDIATELY.



## Limited Warranty

During the time periods and subject to the conditions hereinafter set forth. Heat-Line will repair or replace to the original user any portion of your Heat-Line product which proves defective in materials or workmanship of Heat-Line. Contact Heat-Line or your installer for warranty service.

At all times Heat-Line shall have and possess the sole right and option to determine whether to repair or replace defective equipment, parts or components. **Damage due to lightning or conditions beyond the control of Heat-Line are NOT COVERED BY THIS WARRANTY.**

**WARRANTY PERIOD:** 12 months from date of installation or 18 months from date of manufacture, whichever ever occurs first.

**ACCESSORIES, COMPONENTS, ELECTRONICS:** not manufactured by Heat-Line, are warranted only to the extent of original manufacturer's warranty.

**LABOUR, COSTS, ETC.:** Heat-Line shall in **NO EVENT** be responsible or liable for the cost of field labour or other charges incurred by any customer in removing and/or reaffixing any Heat-Line product, part or component thereof.

**THIS WARRANTY WILL NOT APPLY:** (a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided, (b) to failures resulting from abuse, accident or negligence; (c) to normal maintenance services and (d) the parts used in accordance with applicable local codes, ordinance and good trade practices; (e) if the unit is moved from its original installation location or (f) if the unit is used for purposes other than for what it was designed and manufactured, (g) to the integral ground fault device and related electronics.

**PRODUCT IMPROVEMENTS:** Heat-Line reserves the right to change or improve its products or any component thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such change or improvement.

**WARRANTY EXCLUSIONS:** As to any Heat-Line product after the expiration of the time period of the warranty applicable thereto as set forth above. There will be no warranties including any implied warranties of merchantability or fitness for any particular purpose. No warranties or representations at any time made by any representative of Heat-Line, shall vary or expand the provisions hereof.

**LIABILITY LIMITATION:** In no event shall Heat-Line be liable or responsible for consequential, incidental or special damages resulting from or related in any manner to any Heat-Line product or parts thereof. In the absence of suitable proof of the purchase date, the effective date of this warranty will be based upon the date of manufacture plus 180 days.

## Heat-Line Freeze Protection Systems

1095 Green Lake Road  
Algonquin Highlands, ON Canada  
KOM 1S0  
Tel: (705) 754-4545  
(800) 584-4944  
Fax: (705) 754-4567  
info@heatline.com  
[www.heatline.com](http://www.heatline.com)

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**Important:** All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their particular application. Heat-Line a Division of Christopher MacLean Ltd. makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Heat-Line's only obligations are those in the Heat-Line Standard Terms and Conditions of Sale for this product, and in no case will Heat-Line be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Specifications are subject to change without notice. In addition, Heat-Line reserves the right to make changes—without notification to Buyer—to processing or materials that do not affect compliance with any applicable specification.