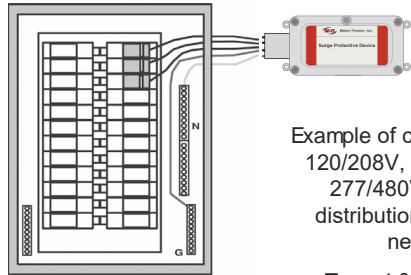
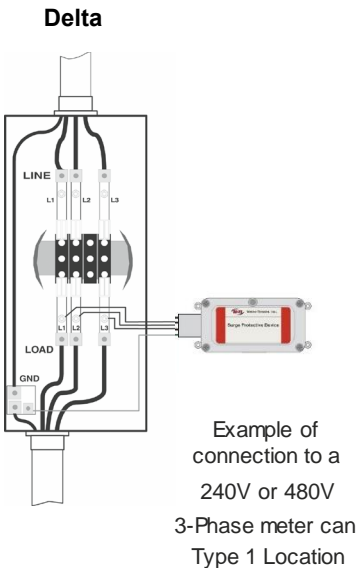


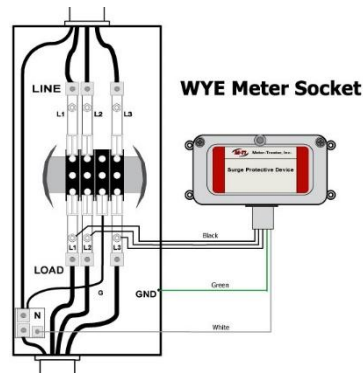
Example of connection to a 240V or 480V 3-Phase distribution panel no neutral  
Type 1 & 2 Location



Example of connection to a 120/208V, 120/240V, or 277/480V 3-Phase distribution panel with neutral  
Type 1 & 2 Location



Example of connection to a 240V or 480V 3-Phase meter can  
Type 1 Location



Example of connection to a 120/208V, 120/240V, or 277/480V 3-Phase meter can  
Type 1 Location

1. De-energize as much as possible prior to installation.
2. Locate the mounting position of the SPD as close as possible to the electrical connection point. The SPD may be connected directly to the load side of the meter socket via spare/additional lugs or through a disconnect, fuse or circuit breaker rated not less than 30 amps.
3. Prepare any supplementary conduit, or other materials for wire routing. Minimize right angles as they will degrade overall SPD performance.
4. Mount the device in your predetermined location next to the panel or equipment to be protected.
5. Connect the Green Ground wire to the system ground.
6. Connect the White Neutral wire to the neutral bus. Where there is no neutral bus and the SPD is equipped with a white neutral wire, the white neutral wire from the SPD should be connected to ground.
7. Applicable for high leg delta systems: connect the orange wire to the high leg phase. **CONNECTING A BLACK WIRE TO THE HIGH LEG OF A HIGH LEG DELTA WILL DAMAMGE THE SPD.**
8. Connect the Black Phase wire(s) to each phase.
9. Energize the circuit and check that the LED light is on.

## WARRANTY INFORMATION

Meter-Treater, Inc. (MTI) warrants all RCHW-PC Series models to be free from defects, and will at our option repair or replace the product should it fail within fifteen (15) years from the first date of shipment. This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as warranted, your sole recourse shall be repair or replacement as described above. Under no condition shall MTI be liable for any damages incurred by the use of this product. Damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. MTI specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

## WARRANTY RETURNS

All warranty and non-warranty repairs must be returned freight prepaid and insured to MTI. All returns must have a Return Authorization (RA) number on the outside of the shipping container. This number may be obtained from MTI Warranty Department (800) 342-6890. Products returned without an RA number will not be accepted.

# RCHW-PC Series (Hardwired SPDs)

## USER MANUAL AND INSTALLATION GUIDE



Meter-Treater, Inc.  
1349 South Killian Drive • Lake Park, FL 33403  
Phone: 561.845.2007 • Fax: 561.848.2372  
Email: [sales@metertreater.com](mailto:sales@metertreater.com)  
Website: [www.metertreater.com](http://www.metertreater.com)

Please Note:  
There are no user serviceable parts inside.

The RCHW Series is ETL listed to the latest ANSI/UL1449 Standard as both a Type 1 and Type 2 Surge Protection Device (SPD)

IF UNIT(S) ARE RECEIVED DAMAGED,  
NOTIFY THE SHIPPING COMPANY  
IMMEDIATELY. RETAIN ALL SHIPPING

## INSTALLATION INSTRUCTIONS FOR:

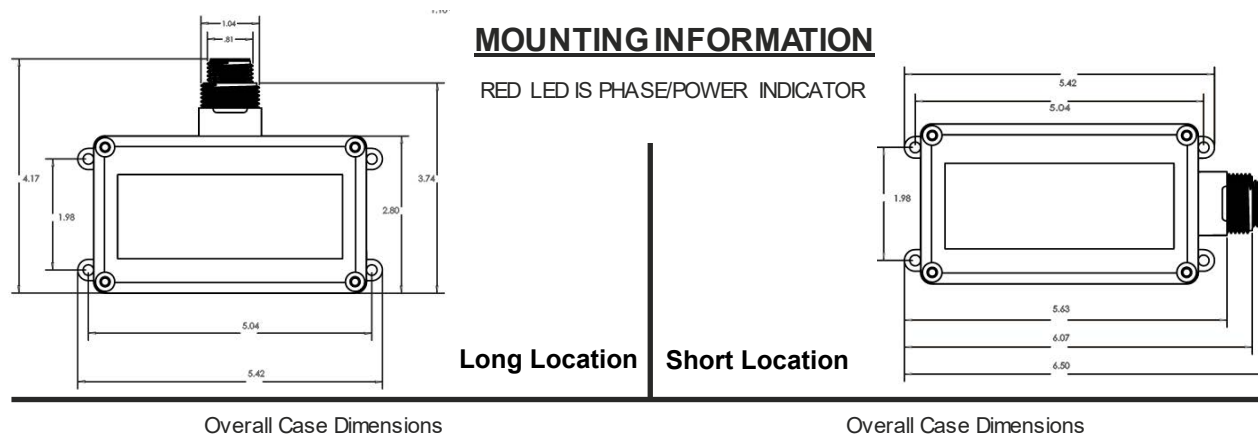
### GENERAL

1. This document provides detailed information on how to install and operate the RCHW-PC Series of Surge Protection Devices (SPD).
2. Locate a position to mount the SPD that will minimize the length of connecting wires required. SPDs should be located as close as possible to the AC panel or service area. Mount the units using the mounting holes provided on the enclosure as shown by the illustrations in these instructions.
3. The RCHW Series of protectors are installed and connected in parallel ("shunt") across the AC supply to be protected. Connecting wires do not carry the supply current, only the short duration currents associated with the suppression of a transient event.
4. Identified or indicated leads/wires must be connected exactly with respect to the AC Power feeding the SPD. Failure to do so may result in damage to the device or pose a danger to personnel.
5. Incorrect installation could significantly impair the performance of the Surge Protection Device. It is particularly important that all installation procedures and guidelines be followed exactly.
6. Installation of this device should only be performed by a qualified licensed installer.
7. Before starting any installation procedures, verify service voltages with an AC voltmeter to ensure that the correct SPD model has been selected.
8. Check to ensure that all connections are correct and secure before energizing.
9. Keep this manual in a safe, dry place for future reference.

RCHWXXX/120-SO-PC/M-X	Single Phase	2 Wire + Gnd
RCHWXXX/120-10-PC/M-X	Single Phase	2 Wire + Gnd
RCHWXXX/120-SP-PC/M-X	Split Phase	3 Wire + Gnd
RCHWXXX/120-2P-PC/M-X	Single Phase	2 Wire + Gnd
RCHWXXX/240-2P-PC/M-X	Single Phase	2 Wire + Gnd
RCHWXXX/120-3W-PC/M-X	3 Phase Wye	4 Wire + Gnd
RCHWXXX/220-3W-PC/M-X	3 Phase Wye	4 Wire + Gnd
RCHWXXX/230-3W-PC/M-X	3 Phase Wye	4 Wire + Gnd
RCHWXXX/240-3W-PC/M-X	3 Phase Wye	4 Wire + Gnd
RCHWXXX/120-3H-PC/M-X	High Leg Delta	4 Wire + Gnd
RCHWXXX/240-3D-PC/M-X	3 Phase Delta	3 Wire + Gnd
RCHWXXX/277-3W-PC/M-X	3 Phase Wye	4 Wire + Gnd

### **ALL RCHW-PC MODELS ARE APPROVED FOR OUTSIDE USE**

1. Type 1 SPDs can be directly connected across the load side of the meter can or at the line side of the main breaker. For breaker panel locations a 30 Amp or 60 Amp disconnect breaker may be used for ease of maintenance.
2. Optimize device performance by keeping connecting wires as short and as straight as possible. Plan the wiring path(s) prior to commencing any installation procedure. This will assist in keeping the wire lengths and inductance to a minimum.



**IF POSSIBLE, SECURE ALL POWER FROM THE PANEL TO WHICH THE DEVICE IS BEING INSTALLED.**

**ENSURE ALL CONNECTIONS ARE CORRECT AND SECURE BEFORE ENERGIZING SPD.**

#### UNIT DIAGNOSTICS

**PHASE LED INDICATOR:** When the SPD is securely connected and operating properly, the RED LED will be illuminated. Replacement of the SPD is required if the LED is not illuminated.

**MAINTENANCE:** Check the status of the LED indicator at intervals not to exceed 2 months. If the Indicator is not illuminated the SPD requires replacement.

Mount the RCHW-PC Series SPD using the four mounting holes as close as possible to the connection point to the system. Keeping the lead length short will increase the performance of the unit. Connecting conduit should be rated for use in the environment that the SPD is mounted. Splicing wires to gain extra lead length is not advisable as the extra lead length will degrade the performance of the device.

**CAUTION: WORKING NEAR EXPOSED LIVE CONDUCTORS IS HAZARDOUS. POWER SHOULD BE SECURED OR APPROPRIATE ELECTRICAL SAFETY EQUIPMENT SHOULD BE USED TO THE GREATEST EXTENT POSSIBLE BEFORE CONNECTING.**

CONTAINERS AND PACKING MATERIALS FOR INSPECTION.