

**Installation, Operation
and Maintenance Manual**

PN 750-0098-005

CurrentGuardTM *Disconnect*

**Surge
Protective
Devices**



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BEFORE INSTALLATION



WARNING: HAZARDOUS VOLTAGES PRESENT Improper installation or misapplication may result in serious personnel injury and/or damage to electrical system. Read the complete installation instructions before proceeding with installation. Remove all power to the electrical panel before installing or servicing the suppressor.

IMPORTANT SAFETY INSTRUCTIONS All work must be performed by licensed and qualified personnel. The electrical system must be properly grounded in accordance with the U.S. National Electrical Code, state and local codes or other applicable codes for this suppressor to function properly.

1. System Configuration Verification

The disconnect switch is a companion device to the base CurrentGuard Surge Protective Devices (SPDs). Please refer to the CurrentGuard/CurrentGuard Plus SPD Installation and Operation Manual for system configuration verification.

MODEL NUMBER	DESCRIPTION	ENCLOSURE TYPE
CGP-60A-NID	Non-fused disconnect switch, 60A, 200KAIC, 1" mounting kit included	NEMA 4 steel

2. Wiring Connection Diagrams

Figures 1-5 show the electrical relationship between the CurrentGuard SPD, the disconnect switch and these five basic service configurations: Single phase, 2 wire; Split phase, 3 wire; Three phase, 4 wire WYE; Three phase, 3 wire DELTA and Three phase, 4 wire high leg DELTA.

Fig. 1: Single Phase, 2-Wire, with Non-Fused Disconnect Switch

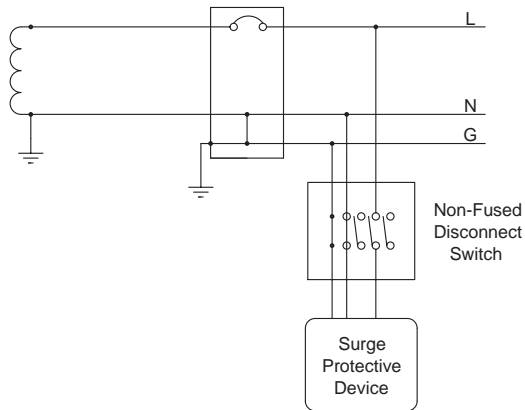


Fig.2: Split Phase, 3-Wire, with Non-Fused Disconnect Switch

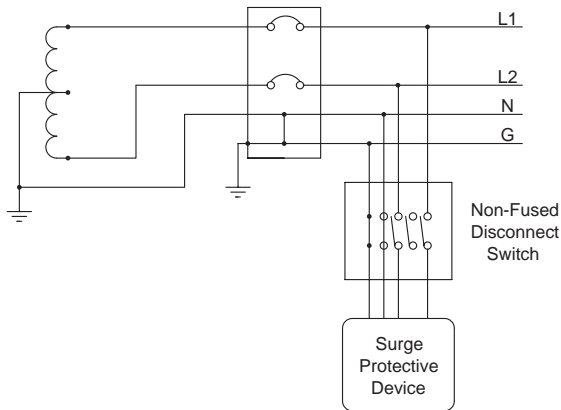


Fig.3: 3-Phase, 4-Wire WYE, with Non-Fused Disconnect Switch

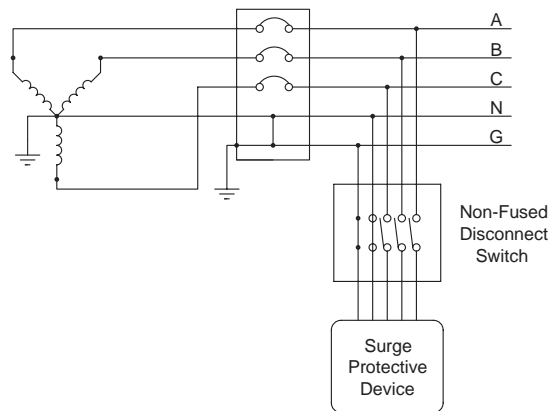


Fig.4: 3-Phase, 3-Wire DELTA, with Non-Fused Disconnect Switch

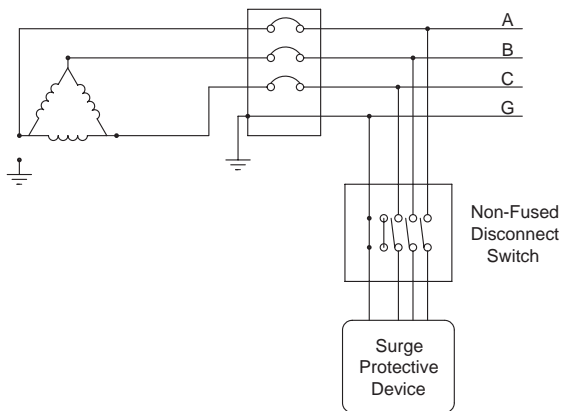


Fig.5: 3-Phase, 4-Wire High-Leg DELTA, with Non-Fused Disconnect Switch

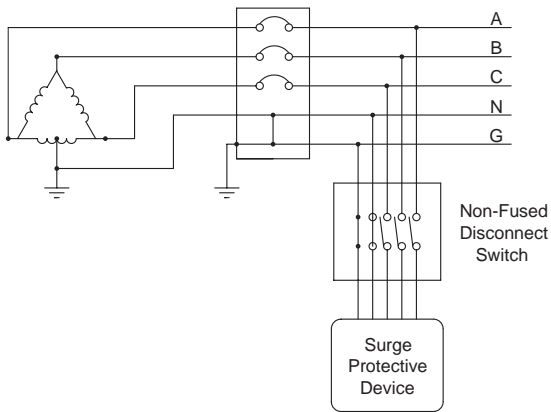
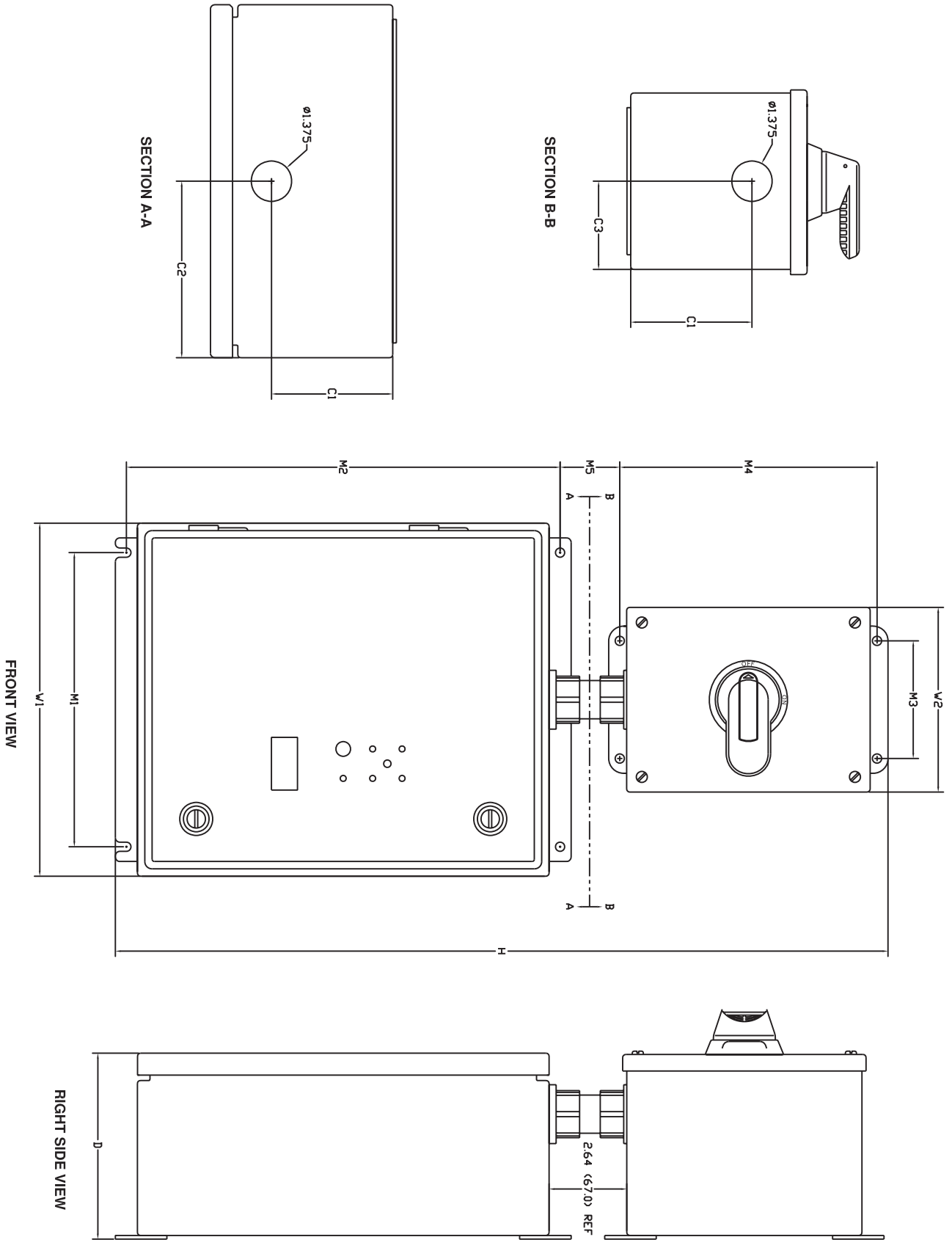


Fig. 6 Disconnect Enclosure Coupling Method and Mounting Dimensions



SPD SURGE RATING 100, 150, 200 kA	OVERALL DIMENSIONS - in (mm)					MOUNTING HOLES - in (mm)					TRADE SIZE 1 (25.4)	CONDUIT FITTING (SUPPLIED) PUNCH LOCATIONS		
	H	W1	W2	D	M1	M2	M3	M4	M5	C1		C2	C3	
	26.28 (667.5)	12.00 (304.8)	6.28 (159.5)	6.28 (159.5)	10.00 (254)	14.75 (374.6)	4.00 (101.6)	8.75 (222.2)	2.03 (51.5)	4.12 (104.7)	6.00 (152.4)	3.00 (76.2)		

Connection between CurrentGuard SPD and disconnect switch:

Connections are made to terminals inside the suppressor enclosure. These terminals are marked with labels. For 3 phase units phase A is marked as “PHASE A”, phase B is marked as “PHASE B” and phase C is marked as “PHASE C”. For split phase units, the phase connections are marked “PHASE A” and “PHASE B”. For single-phase units, the phase connection is marked “PHASE A”. Neutral (if applicable) is marked as “N” and ground is marked as “GND”.

3. Mounting

As shown in figure 6, the disconnect switch must be mounted on top of or on the side of the CurrentGuard SPD. Mount the enclosures using construction methods and hardware appropriate for your site. Use the conduit hub and chase nipple to connect the disconnect to the SPD. Do not use conduit in between the disconnect and SPD, this ensures a minimal conductor length and optimizes surge performance of the SPD.

CONNECTION AND WIRING INSTRUCTIONS

1. Phase, Neutral, and Ground Connections

NOTE: In order to connect the CurrentGuard devices, the covers of the units must be removed or opened.

CAUTION: Prior to installation ensures the system configuration and voltage is equivalent to the CurrentGuard unit being installed.

Following all applicable National Electrical Code standards as well as state and local codes, connect phase, neutral* and ground to the disconnect switch and to the SPD. Ensure that the conductor lengths are kept as short and straight as possible. Tighten all lugs to 20 in-lb (2.2Nm). For high leg delta systems, the Phase B (color-coded orange according to NEC) conductor must be connected to the Phase B terminal of the suppressor.

* *3-wire plus ground DELTA CurrentGuard does not have a neutral conductor.*

2. Verification and Power Up

Consult the CurrentGuard SPD Installation and Operation manual for Verification and Power up sequence.

Troubleshooting

Your CurrentGuard system does not require scheduled maintenance. The unit's heavy-duty construction is designed to provide years of uninterrupted service. The unit contains no serviceable parts.

INDICATION	PROCEDURE
One or more phase protection status indicating lights are off, service required indicating light is on and form C alarm contacts have changed state	Verify that the input power feeding CurrentGuard is energized using a voltage tester. If power is present, contact factory for assistance: 800-238-5000

Technical Assistance

Our staff is ready to support you and answer any questions.
Monday through Friday, 8:00 a.m. to 5:00 p.m. (EST) at 800-238-5000

Returns and Warranty Procedures

CurrentGuard Plus units are warranted for a period of 15 years from date of purchase. In the event that any module or subassembly within the SPD fails to perform as specified during the warranty period, call our Technical Support at 800-238-5000 to obtain a Return Material Authorization number. We will immediately ship a replacement for the defective parts free of charge (installation labor and site preparation excluded). Return the defective parts to Current Technology within 30 days of receiving the replacement. Failure to return the defective parts will result in billing for the replacement parts. To help expedite the return procedures, please have the following information at hand when you contact Current Technology:

INFORMATION	EXAMPLE
Model Number	CGP80-277/480-3GY
Serial Number	15478-0105-001
Date of Purchase	January 2, 2005 (1st week)
Sales Order Number	15478
Description of Failure	"Service Required" indicating light illuminated
Desired Action from Current Technology	Replace

Warranty Statement

Current Technology warrants that CurrentGuard, CurrentGuard Plus and CurrentGuard Disconnect surge protective device (the "Product"), shall meet applicable industry standards and specifications and be free from defects in materials and/or workmanship. Should any failure of the Product to conform to this warranty appear within the warranty period, Current Technology shall either repair or replace the defective Product, or part thereof, upon return to Current Technology manufacturing facility in Richmond, Virginia with transportation charges pre-paid. The applicable warranty period is outlined below in the warranty period section.

Current Technology shall have no liability under this warranty for any problems or defects directly or indirectly caused by misuse of the Product, alteration of the Product (including removal of any warning labels), accidents, or improper installation, application, operation, or repair of the Product.

THIS WARRANTY REPRESENTS THE ENTIRE WARRANTY OF CURRENT TECHNOLOGY. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

The liability of Current Technology under this warranty is expressly limited to the replacement or repair of the defective part thereof, at Current Technologys' sole option.

IN NO EVENT SHALL CURRENT TECHNOLOGY BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, NOR SHALL CURRENT TECHNOLOGYS' LIABILITY EVER EXCEED THE PURCHASE PRICE PAID FOR SUCH DEFECTIVE PRODUCT.

This warranty is not transferable and may only be enforced by the sole purchaser. Claims under this warranty must be submitted to Current Technology within thirty (30) days of discovery of any CurrentGuard product defect.

Warranty Period

CurrentGuard™ Disconnect 15 Years from original date of purchase



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