

ZoneDefender pro range

AC panel transient voltage surge suppressor

Adhering to these instructions guarantees maximum performance of this Protection device.

Introduction

This document explains how to install the ZoneDefender pro range of AC panel surge protective devices.

Installation Instructions

Mounting

The suppressor should be mounted as close to the panel and wire connections as possible. The shortest and most direct wire connections will ensure best performance. Use the four mounting holes located on the tabs to secure unit to a solid flat surface. The type of hardware used to mount the ZoneDefender pro will depend on the mounting structure and are not included with the unit.

AC Power Connections

Proper wiring techniques associated with the National Electrical Codes should be followed. The use of a 30 AMP minimum circuit breaker is required in the event the connection wires short or the ZoneDefender pro needs servicing.

This product is NOT designed to be nipple mounted.

When making the connections, cut each conductor as short as possible. Avoid large loops and sharp bends in the wire. Bind all connecting wires tightly together throughout the wire run from the ZoneDefender pro to the panel.

Connect the BLACK wires to the phase conductors,

connect the WHITE wire to the neutral bus and connect the GREEN wire to the ground bus.

NOTE

Removal of the existing nut from the 3/4" conduit nipple will cause the nipple seal to be broken. Ensure that if this nut is removed and/or replaced by another fitting, it is tightened to ensure the internal gasket maintains the original seal.

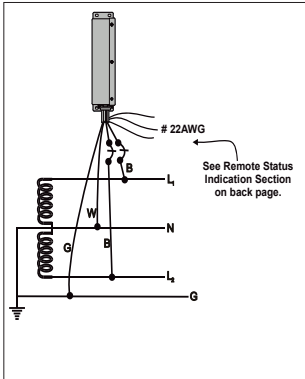
CAUTION

Do not over-tighten and cause wire damage. Failure to ensure the seal of the conduit nipple will not be covered by the warranty.

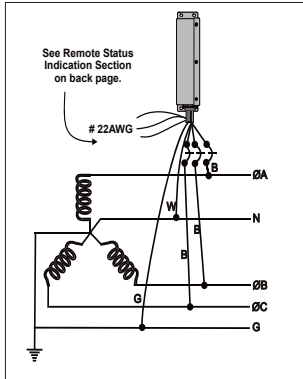
NOTE

Incorrect installation will impair the effectiveness of AC panel surge protectors. Particularly important is the length and routing of the connecting leads.

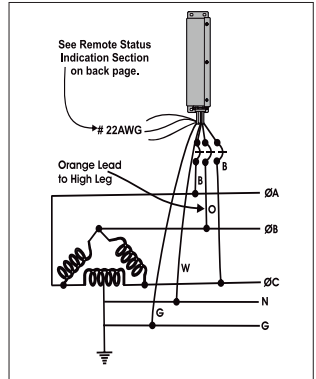
Connection diagrams



Split phase



Three phase WYE



Three phase high leg delta

NOTE:

Circuit breaker (30A - 60A) is MANDATORY.

The Status Indicator

NOTE:

All wires must be connected and power applied **before** the led will illuminate.

Diagnostic Indication

The ZoneDefender pro provides a patent pending diagnostic circuitry that monitors connected power and protection status. The following is a description of each indication.

GREEN (ON)	AC POWER is present and protection is provided.
RED (OFF)	

GREEN (OFF)	AC POWER is present but the Zone Defender PRO needs replaced. In addition, an audible alarm will sound and the remote indication will change states.
RED (ON)	

Remote Status Indication

The ZoneDefender pro provides for remote monitoring via a (normally open) or (normally closed) circuit. The circuit is rated for 3amps maximum at 60W (DC supply) or 120VA (AC supply). The common wire is YELLOW, the normally open wire is BLUE and the normally closed wire is RED.

Maintenance

At intervals not exceeding two months, check:

1. Status indication light
2. Conditions of connecting cables

NOTE:

No customer serviceable parts inside.
Opening unit **WILL** void Warranty.

THIS PAGE IS LEFT INTENTIONALLY BLANK

AUSTRALIA

MTL Instruments Pty Ltd,
10 Kent Road, Mascot, New South Wales, 2020, Australia
Tel: +61 1300 308 374 Fax: +61 1300 308 463
E-mail: mtl-salesanz@eaton.com

BeNeLux

MTL Instruments BV
Ambacht 6, 5301 KW Zaltbommel
The Netherlands
Tel: +31 (0) 418 570290 Fax: +31 (0) 418 541044
E-mail: mtl-benelux@eaton.com

CHINA

Cooper Electric (Shanghai) Co. Ltd
955 Shengli Road, Haigang Industrial Park
Pudong New Area, Shanghai 201201
Tel: +86 21 2899 3817 Fax: +86 21 2899 3992
E-mail: mtl-cn@eaton.com

FRANCE

MTL Instruments srl,
7 rue des Rosières, 69410 Champagne au Mont d'Or
France
Tel: +33 (0)4 37 46 16 53 Fax: +33 (0)4 37 46 17 20
E-mail: mtlfrance@eaton.com

GERMANY

MTL Instruments GmbH,
Heinrich-Hertz-Str. 12, 50170 Kerpen, Germany
Tel: +49 (0)22 73 98 12-0 Fax: +49 (0)22 73 98 12-2 00
E-mail: cskkerpen@eaton.com

INDIA

MTL India,
No.36, Nehru Street, Off. Old Mahabalipuram Road
Sholinganallur, Chennai- 600 119, India
Tel: +91 (0) 44 24501660 / 24501857 Fax: +91 (0) 44 24501463
E-mail: mtlindiasales@eaton.com

ITALY

MTL Italia srl,
Via San Bovio, 3, 20090 Segrate, Milano, Italy
Tel: +39 02 959501 Fax: +39 02 95950759
E-mail: chminfo@eaton.com

JAPAN

Cooper Crouse-Hinds Japan KK,
MT Building 3F, 2-7-5 Shiba Daimon, Minato-ku,
Tokyo, Japan 105-0012
Tel: +81 (0)3 6430 3128 Fax: +81 (0)3 6430 3129
E-mail: mtl-jp@eaton.com

NORWAY

Norex AS
Fekjan 7c, Postboks 147,
N-1378 Nesbru, Norway
Tel: +47 66 77 43 80 Fax: +47 66 84 55 33
E-mail: info@norex.no

RUSSIA

Cooper Industries Russia LLC
Elektrozavodskaya Str 33
Building 4
Moscow 107076, Russia
Tel: +7 (495) 981 3770 Fax: +7 (495) 981 3771
E-mail: mtlrussia@eaton.com

SINGAPORE

Cooper Crouse-Hinds Pte Ltd
No 2 Serangoon North Avenue 5, #06-01 Fu Yu Building
Singapore 554911
Tel: +65 6 645 9864 / 5 Fax: +65 6 487 7997
E-mail: sales.mtlsing@eaton.com

SOUTH KOREA

Cooper Crouse-Hinds Korea
7F Parkland Building 237-11 Nonhyun-dong Gangnam-gu,
Seoul 135-546, South Korea
Tel: +82 6380 4805 Fax: +82 6380 4839
E-mail: mtl-korea@eaton.com

UNITED ARAB EMIRATES

Cooper Industries/Eaton Corporation
Office 205/206, 2nd Floor SJ Towers, off. Old Airport Road,
Abu Dhabi, United Arab Emirates
Tel: +971 2 44 66 840 Fax: +971 2 44 66 841
E-mail: mtgulf@eaton.com

UNITED KINGDOM

Eaton Electric Limited,
Great Marlings, Butterfield, Luton
Beds LU2 8DL
Tel: +44 (0)1582 723633 Fax: +44 (0)1582 422283
E-mail: mtlenquiry@eaton.com

AMERICAS

Cooper Crouse-Hinds MTL Inc,
3413 N. Sam Houston Parkway W,
Suite 200, Houston TX 77086, USA
Tel: +1 281-571-8065 Fax: +1 281-571-8069
E-mail: mtl-us-info@eaton.com



Eaton Electric Limited,
Great Marlings, Butterfield, Luton
Beds, LU2 8DL, UK.
Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283
E-mail: mtlenquiry@eaton.com
www.mtl-inst.com
© 2016 Eaton
All Rights Reserved
Publication No. INS 801-654 Rev I 041016
October 2016

EUROPE (EMEA):
+44 (0)1582 723633
mtlenquiry@eaton.com
THE AMERICAS:
+1 800 835 7075
mtl-us-info@eaton.com
ASIA-PACIFIC:
+65 6 645 9888
sales.mtlsing@eaton.com

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.