

# CONGRATULATIONS! YOU HAVE JUST PURCHASED THE BEST SURGE PROTECTION IN THE INDUSTRY!

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

## Introduction

This document explains how to install the **ZoneDefender PRO** Series 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 **Zone Defender PRO** will depend on the mounting structure and are not included with the unit.

### AC Power Connections

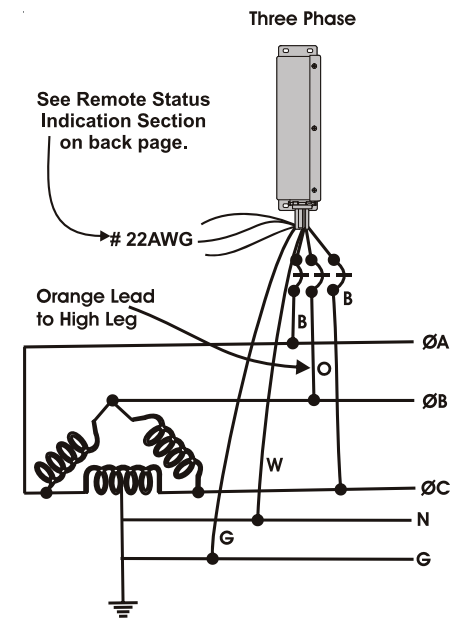
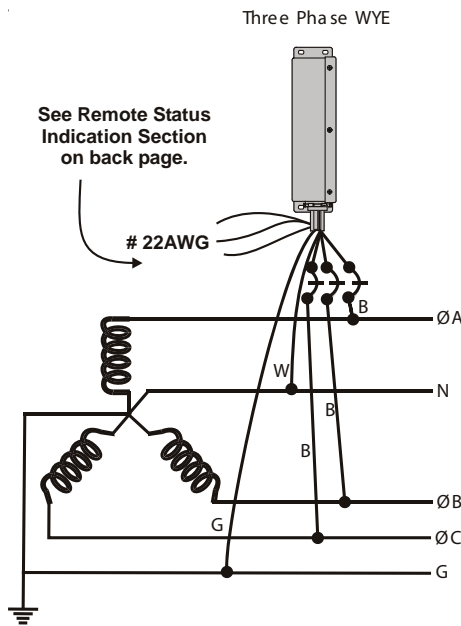
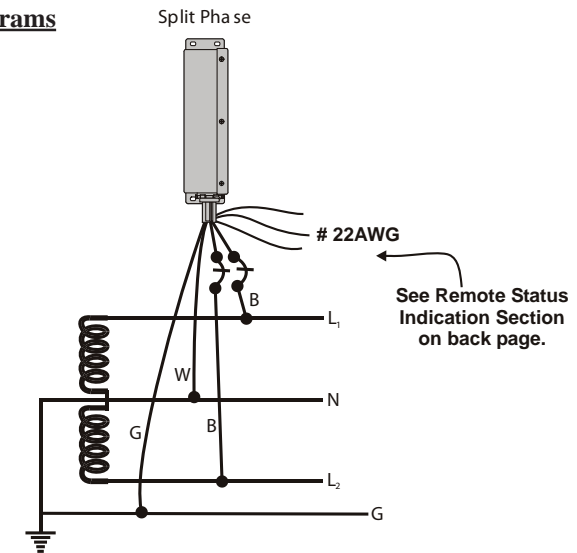
Proper wiring techniques associated with the National Electrical Codes should be followed. The use of a 30 AMP minimum circuit breaker is **required** in the event the connection wires short or the **Zone Defender PRO** needs servicing.

The 3/4" nipple on the **Zone Defender PRO** can be inserted directly into an existing panel knockout to ease the wire connections between the panel and the **Zone Defender PRO**. If the mounting location prevents this type of installation proper conduit fittings should be used in order to protect the connecting wires.

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 **Zone Defender 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.

**INCORRECT INSTALLATION WILL IMPAIR THE EFFECTIVENESS OF AC PANEL SURGE PROTECTORS.** Particularly important is the length and routing of the connecting leads.

## Connection Diagrams



**Note:** Circuit breaker (30A - 60A) is **MANDATORY**.

**High Leg Delta**

### Status Indicator

**NOTE:** ALL WIRES MUST BE CONNECTED AND POWER APPLIED ***BEFORE*** THE LED WILL ILLUMINATE.

The **ZoneDefender PRO** Series of suppressors has comprehensive, solid state, continuous visual status monitoring present in each unit. The GREEN indicator light will go out in the event the suppressor capability is exceeded or if there is an internal safety component failure. If the light goes out, call the factory for replacement instructions.

### Diagnostic Indication

The **Zone Defender 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.  
**RED (ON)** In addition, an audible alarm will sound and the remote indication will change states.

### Remote Status Indication

The **Zone Defender 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.

*For more information please contact your local MTL office  
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# INSTALLATION INSTRUCTIONS/ USER MANUAL

## **ZONEDEFENDER PRO SERIES**

**AC Panel Transient Voltage Surge Suppressor**