

ZoneDefender pro range

Single and split phase AC panel
transient voltage surge suppressor



Introduction

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

Installation Instructions

Mounting

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 $\frac{3}{4}$ " 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

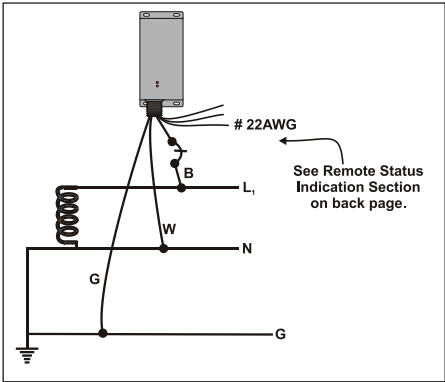
type of installation proper conduit fittings should be used in order to protect the connecting wires.

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.

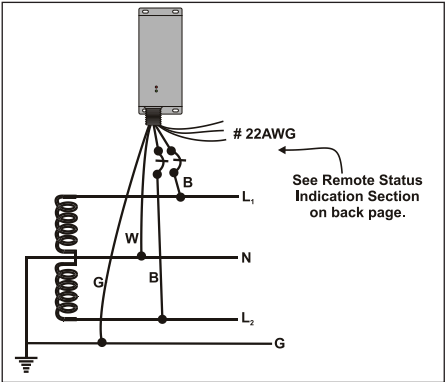
IMPORTANT

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

Connection diagrams



Single phase



Split phase

NOTE:

Circuit breaker (30A) is recommended.

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.

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