

ZoneDefender² Series

The ZoneDefender² Series are compact, durable devices which offer cost effective, high capacity protection along with application versatility.

Designed for small distribution panels, and applications where a tight fit is required for high-quality surge protection.



Features

- **AC or DC application**
- **Straightforward and simple installation – wall or flush mounting**
- **LED status indication via solid state diagnostics plus remote indication contacts**
- **Thermal or short circuit fusing**
- **UL 1449 Listed**
- **15 year product warranty**

Specifications

Maximum surge current

80kA (8/20 μ s)*
 *except ZoneDefender² DC versions.
 See specifications table for details.

Lines protected AC

L-N, L-G/E, L-L, N-G/E

Lines protected DC

V+, V-

Duty cycle performance (8/20 μ s)

80,000A	1 impulse
10,000A	>4,000 impulses
100A	infinite

Long duration current pulse (10/1,000 μ s) capability

3,600A (tested)

Response time

<5ns

Ambient temperature limits

-40°F to +185°F
 (-40°C to +85°C) – working

Humidity

95% RH (non-condensing)

Enclosure

NEMA 1, 2, 3, 3R, 4, 4X, 12 and 13
 (IP66)

Terminals

12 AWG (3mm²)

Mounting

Surface mount by four 0.17" (4mm) diameter holes
 Optional flush mount (add suffix "F" to Model number)

Remote contacts

C, NO, NC rated 60W DC or 120VA AC, 3A max.

Indication

Green LED on	Protection present
Green LED off	Internal failure or no power
Red LED on	Internal failure

Weight

2.1 lbs (0.94Kg)

Dimensions

4.0" x 4.0" x 2.4"
 (102mm x 102mm x 61mm)

AIC Rating

Suitable for use on a circuit capable of delivering not more than 100,000 rms symmetrical Amperes, 240V maximum

EMC compliance

BS EN 60950: 1992
 BS EN 61000-6-2: 1999

To order specify -

Model number as per specification table



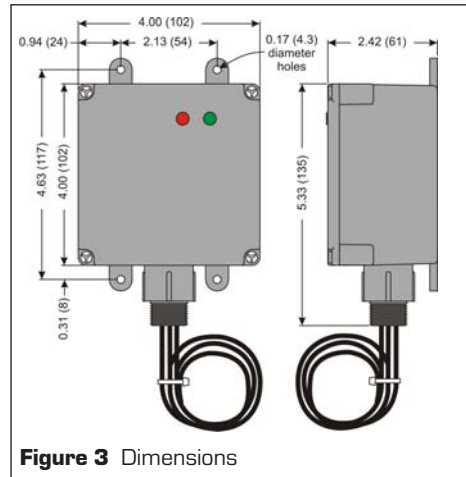
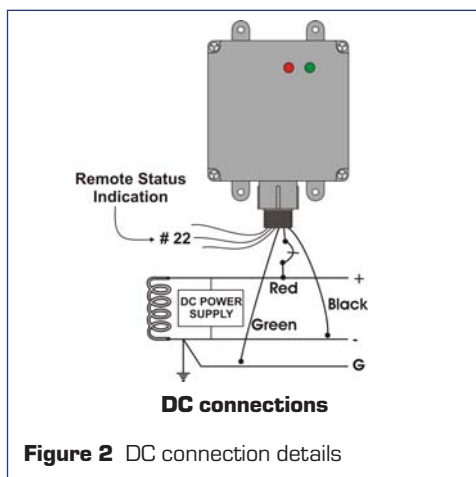
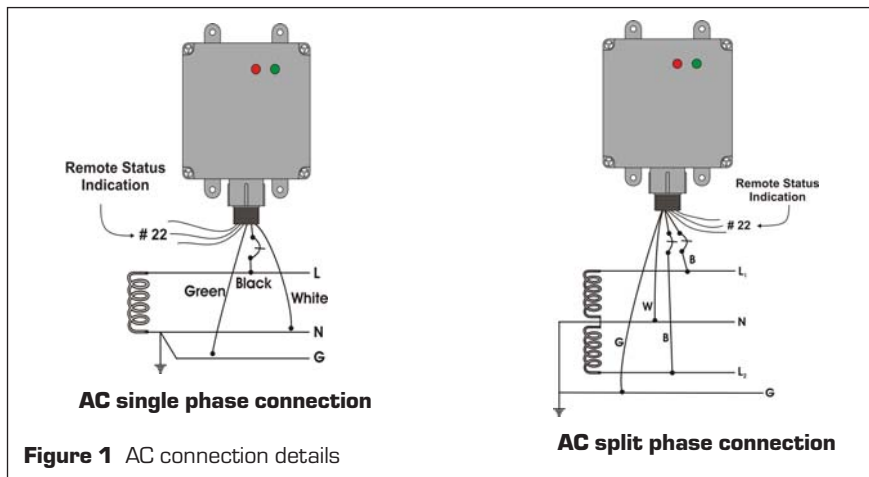
Model	Working voltage (V)	UL 1449 Listing (V)	Limiting voltage		Max. continuous operating voltage (Vac)	Phase types
			@ 3kA† (V)	@ 10kA (In)† (V)		
AC versions						
ZD16800*	120	400	430	690	140	Single phase 2-wire US
ZD16801*	120/240	400	430	690	140	Split phase 3-wire US
ZD16809‡	240	800	925	1200	320	Single phase 2-wire EU
ZD16820	120	400/800	430/925	690/1200	140/320	Single phase 2-wire TT
ZD16821	120/240	400/800	430/925	690/1200	140/320	Single phase 3-wire TT
DC versions					Max. surge current	
ZD14612	12V DC	N/A	120	292	15kA	—
ZD14624	24V DC	N/A	190	340	36kA	—
ZD14648	48V DC	N/A	280	504	53kA	—
ZD14712	12V DC	N/A	120	292	15kA	EMI filter
ZD14724	24V DC	N/A	140	340	36kA	EMI filter
ZD14748	48V DC	N/A	280	504	53kA	EMI filter

For flush mount add suffix "F" to model number

*Suitable for U.S. use only †8/20µs waveform — Tested as per ANSI/IEEE C 62.45 and ANSI/IEEE C62.41

‡ Not UL Listed

NOTE: ZD14712, ZD14724 & ZD14748 have > -30dB attenuation @ 100kHz



Approvals

Standard/Authority	Approved for	Product
UL 1449 Listed (C-UL US Listed)	AC power product	ZD16800, ZD16801, ZD16820, ZD16821

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Local sales office information is also available on our web site at:
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