



CRMx26 Series

260 kA Per Phase
Peak Surge Current
ANSI/UL1449 UL

A = Type 2 SPD 10 kA

B = Type 2 SPD 20 kA

Designed for mission critical applications, the CRM series is a great choice for most small electrical panel applications. The CRM series of Surge Protective Devices provides the features, performance and value required by discriminating specifying engineers. This device is intended for protection of general-purpose load applications ranging from individual equipment disconnects and sub panels to distribution panels and service entrance locations. It is extremely effective in limiting lightning surges as well as internally generated transients.

The CRM series provides an effective blend of leading edge suppression design technology, straight forward, no frills engineering and customer driven, value added options. Specify the CRM with confidence.

- Description:** Parallel connected, AC power Surge Protective Device.
- Application:** Designed for use at ANSI/IEEE location categories C, B and A. Designed to protect all types of loads fed from individual disconnects, sub-panels, distribution panels and service entrance locations.
- Warranty:** **10 Years**
- Unit Listings:** Listed to ANSI/UL 1449 by UL (E315947), CSA (MC#241804); UL1283
- Circuit Design:** Parallel connected, hybrid circuit design incorporating both component level thermal fusing and internal over-current fusing. All protection circuits are encapsulated in our high dielectric compound to promote long component life and protection from the weather and vibration. Includes additional filtering circuitry to reduce and/or eliminate the effects of both internal and external ringing transients.
- Directly Connected Protection Modes:** L-N, (Normal Mode), and N-G (Common Mode). (Based on Wye configuration, L-G on Delta configuration.)
- Input Frequency:** 50-60 Hz (60 Hz typical)
- EMI/RFI Filtering:** Up to 52 db normal mode, 49 db common mode
- Circuit Diagnostics:** Super Bright LED, 1 per phase, normally on. See pg. 2 for additional diagnostics options
- Connection/mounting:** #10 Wire (pre-installed), hub (pre-installed on base models, installed at the time of installation on optional enclosures) and integral, multi-point mounting feet.
- Circuit Interrupt:** Internal component level thermal fusing and patented circuit board mounted, over-current fusing. No external over-current protection required. (Note: National and local codes may require the use of a circuit interrupt device(s) if conduit is added to make the wired connection to the panel or gear). SCCR = 200 kA
10 kA (CRMA26); 20 kA** (CRMB26) (**Complies with the requirements of UL 96A Master Label for Installation Requirements for Lightning Protection Systems)
- Nominal Discharge Current (I_n) Rating:**



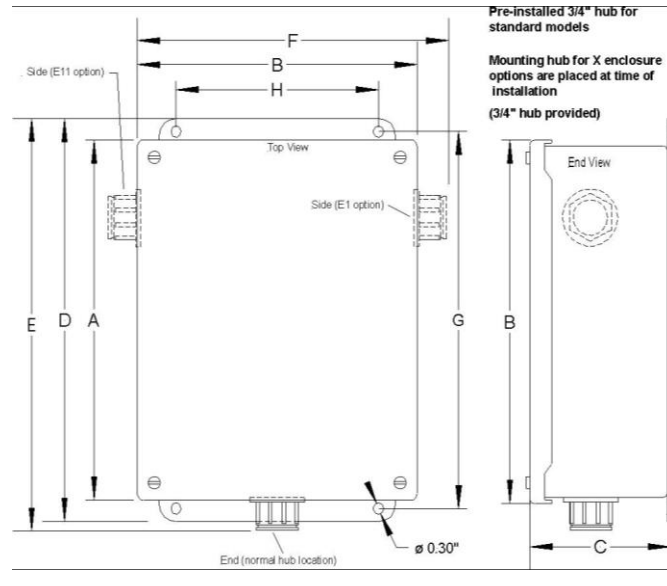
Key Features:

- Industry Leading Measured Limiting Voltage Performance
- Independent Verification of Performance and Safety
- Component Level Thermal Fusing
- Patented Internal Over-current Fusing
- Circuit Encapsulation
- 10 Year Warranty

| Voltage Code | ANSI/UL 1449 (Fourth Edition) Voltage Protection Rating (VPR) | | | | | | |
|--------------|--|------|------|------|------|------|------|
| | L-N | HL-N | L-G | HL-G | N-G | L-L | HL-L |
| 1P1 | 600 | - | 1500 | - | 700 | - | - |
| 1S1 | 600 | - | 1500 | - | 700 | 1200 | - |
| 3Y1 | 600 | - | 1500 | - | 700 | 1200 | - |
| 3D1 | 600 | 1200 | 1500 | 2000 | 700 | 1200 | 1800 |
| 3Y2 | 1200 | - | 2500 | - | 1200 | 2500 | - |
| 3N2 | - | - | 1200 | - | - | 2500 | - |
| 3N4 | - | - | 1800 | - | - | 4000 | - |



| Options | Description |
|---|---|
| AC10 | Basic Internal Audible Alarm |
| AC11 | Advanced Internal Audible Alarm w/ on, off, and test |
| AC10S6 | Basic Alarm/ Surge Counter |
| AC11S6 | Advanced Alarm w/ surge counter on, off, and test |
| D5 (CSA) | Integral Disconnect Switch ** |
| D6 (CSA) | Integral Disconnect Switch (no external handle) ** |
| E1 | Hub on right side of enclosure |
| E11 | Hub on left side of enclosure |
| -LP | Remote LEDs in liquid tight holders |
| P | Flush Mount Plate |
| R2 | Remote LED's in separate enclosure |
| S | Internal Surge Counter |
| W | NEMA 4 Metal Enclosure |
| X | NEMA 4X (Box-in-box) with terminals |
| XS | NEMA 4X Stainless Steel Corrosion Resistant Enclosure |
| Additional options may be available upon request. | |
| ** Housed in a NEMA 4X Composite Enclosure | |



| Inches (mm) | Enclosure Dimensions | | |
|-------------|----------------------|-------------------|-------------------|
| | Standard Model | Enclosure Options | |
| A | 14.00 (356) | 14.00 (356) | 18.00 (458) |
| B | 12.00 (305) | 12.00 (305) | 16.00 (407) |
| C | 6.00 (153) | 6.00 (153) | 10.00 (254) |
| D | 15.50 (394) | 15.50 (394) | 19.50 (496) |
| E | 15.98 (406) | 15.98 (406) | 19.98 (508) |
| F | 13.23 (309) | 13.23 (309) | 17.23 (411) |
| G | 14.75 (375) | 14.75 (375) | 18.94 (482) |
| H | 10.00 (254) | 10.00 (254) | 14.00 (356) |
| Type | NEMA 12 Steel | NEMA 4 Steel | NEMA 4X Composite |
| lbs. (kg) | 14 (6.36) | 14 (6.36) | 32 (14.52) |

Model Number Example: CRMB263Y2D3

| Base Model: | SPD Rating: | PSC | Voltage Code: | Options: |
|-------------|--|-------------|-----------------------|---------------------|
| CRM | A = Type 2 SPD 10 kA B = Type 2 SPD 20 kA C = Type 1 SPD 10 kA D = Type 1 SPD 20 kA | 26 (260 kA) | See Voltage Codes 3Y2 | See Option codes D3 |

MEASURED LIMITING VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS

| Voltage Code | Circuit Type | Peak Surge Current (Amps) Per Mode & Per Phase | MCOV | Mode | ANSI/IEEE C62.41 & C62.45 6" External Lead Length Let-Through Voltage Test Results | |
|--------------|---|--|------|------|---|--|
| | | | | | Cat A 30 Ω 100 kHz Ring Wave 2 kV / 67 A @ 270° Phase Angle | Category C (High) 10 kA 8/20 Current Driven Test [†] |
| 1P1 | 120 V, Single Ø (2 wire + ground) | 260,000 | 150 | L-N | 52 V | 729 V |
| | | | | N-G | 67 V | 991 V |
| 1S1 | 120/240 V, Split Ø (3 wire + ground) | 260,000 | 150 | L-N | 52 V | 729 V |
| | | | | N-G | 67 V | 991 V |
| 3Y1 | 120/208 V, 3ØY (4 wire + ground) | 260,000 | 150 | L-N | 52 V | 729 V |
| | | | | N-G | 67 V | 991 V |
| 3D1 | 120/240 V, 3ØΔ (4 wire + ground) | 260,000 | 150 | L-N | 52 V | 729 V |
| | | | | HL-N | 40 V | 1,374 V |
| | | | | N-G | 67 V | 991 V |
| 3Y2 | 277/480 V, 3ØY (4 wire + ground) | 260,000 | 320 | L-N | 40 V | 1,374 V |
| | | | | N-G | 53 V | 1,661 V |
| 3N2 | 240 V, 3ØΔ (3 wire + ground) | 260,000 | 320 | L-G | 1,038 V | 1,414 V |
| 3N4 | 480 V, 3ØΔ (3 wire + ground) | 260,000 | 550 | L-G | 1,559 V | 2,071 V |

Measured Limiting Voltage (MLV) Test Parameters: Positive polarity, Category A: Line power applied, Category C: No line power applied, Voltages are peak (±10%). Measured Limiting Voltages are measured from the insertion point on the sine wave to the peak of the surge for powered tests. Each MLV is the average of the phases within that mode of protection. In order to duplicate the results, the specified mode of protection must be tested in all phases (except N-G) and averaged together. (Individual mode or shot results may vary by more than 10%. Scope Settings: Time Base = 10 microseconds per division, Sampling Rate = 2.5 GigaSamples/sec, Bandwidth = 400 MHz (200 MHz for Cat C), Probes: Tektronix P5100/P6015A. These settings help to assure MLV results are accurate). **All tests performed with 6" lead length (external to the enclosure), simulating actual installed performance.** The MLVs reported above are certified by Third-Party, Independent Testing. Individual test reports are available upon request.

[†]The MLV reported for the Category C High, 10 kA 8/20 Current Driven Test is determined by measuring the MLV of one of the fifteen 10 kA impulses impressed through the SPD during the Nominal Discharge Current (In) Test from C62.62TM-2010 and ANSI/UL 1449 (4th Edition). This is not the MLV recorded during the pre- and/or post-test 6 kV / 3 kA Combination Wave Test used to determine the VPR of the SPD. The VPRs are reported on page 1 of this specification.