

DATASHEET

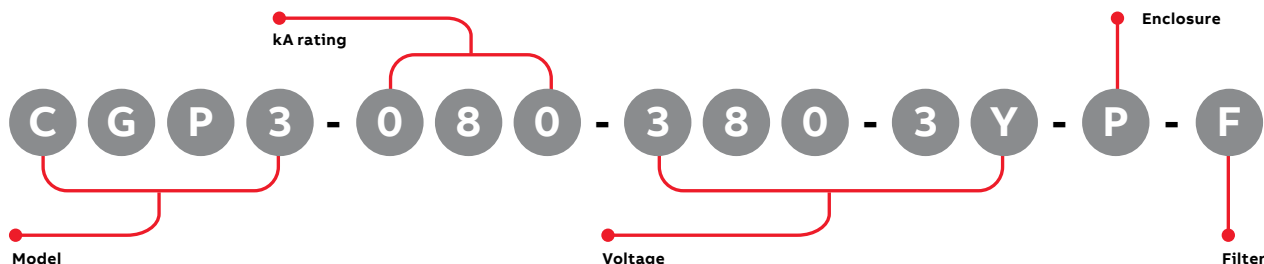
# CurrentGuard™ Plus series — CGP3-080

## Current Technology™ surge protective devices



**Product features**

- UL Listed 1449 5th edition for Type 1 and Type 2 SPD applications
- Thermally protected MOVs provide superior protection and continuous operation
- 200 kAIC short circuit current rating allows direct bus connection without the need for an upstream over-current protection device
- Advanced monitoring is standard with surge counter, tri-color LEDs, dry relay contacts, audible alarm, alarm silence button and fault light
- UL 1283 EMI/RF filter available as an option
- DTS-2 compatible for proactive testing
- Compact and lightweight design
- 15-year standard warranty



**Model number scheme**

| kA rating                        | Suffix |
|----------------------------------|--------|
| 80 kA per mode, 160 kA per phase | 080    |

| Voltage (must choose one)                      | Suffix |
|--|--------|
| 120 V, 1-phase, 2-wire + ground                | 120-1G |
| 127 V, 1-phase, 2-wire + ground                | 127-1G |
| 220 V, 1-phase, 2-wire + ground                | 220-1G |
| 230 V, 1-phase, 2-wire + ground                | 230-1G |
| 240 V, 1-phase, 2-wire + ground                | 240-1G |
| 277 V, 1-phase, 2-wire + ground                | 277-1G |
| 347 V, 1-phase, 2-wire + ground                | 347-1G |
| 480 V, 1-phase, 2-wire + ground                | 480-1G |
| 240/120 V, 2-phase, 3-wire + ground            | 240-2G |
| 480/240 V, 2-phase, 3-wire + ground            | 480-2G |
| 600/347 V, 2-phase, 3-wire + ground            | 600-2G |
| 240Δ /120 V, 3-phase high-leg, 4-wire + ground | 240-3H |
| 208Y/120 V, 3-phase Wye, 4-wire + ground       | 208-3Y |
| 380Y/220 V, 3-phase Wye, 4-wire + ground       | 380-3Y |
| 400Y/230 V, 3-phase Wye, 4-wire + ground       | 400-3Y |
| 415Y/240 V, 3-phase Wye, 4-wire + ground       | 415-3Y |
| 480Y/277 V, 3-phase Wye, 4-wire + ground       | 480-3Y |
| 600Y/347 V, 3-phase Wye, 4-wire + ground       | 600-3Y |
| 208 V, 3-phase Delta, 3-wire + ground          | 208-3D |
| 240 V, 3-phase Delta, 3-wire + ground          | 240-3D |
| 380 V, 3-Phase Delta, 3-wire + ground          | 380-3D |
| 415 V, 3-phase Delta, 3-wire + ground          | 415-3D |
| 480 V, 3-phase Delta, 3-wire + ground          | 480-3D |
| 600 V, 3-phase Delta, 3-wire + ground          | 600-3D |

| Enclosure option                                 | Suffix |
|--|--------|
| Polycarbonate, pre-wired                         | P      |
| Polycarbonate with termination lugs              | PL     |
| Powder-coated metal NEMA 4 with termination lugs | ML     |
| Stainless steel NEMA 4X with termination lugs    | SL     |

| Filter option | Suffix |
|---------------|--------|
| 8 UF filter * | F      |
| No filter     | N      |

\* Standard filter

| Stand-alone option (must be ordered as separate line item) | Item no.       |
|--|----------------|
| Small Metal Flush Mount Plate                              | CG3FMPMMETAL   |
| Medium Metal Flush Mount Plate                             | CG3FMPMEDMETAL |
| Small Stainless Steel Flush Mount Plate                    | CG3FMPMSSS     |
| Medium Stainless Steel Flush Mount Plate                   | CG3FMPMEDSS    |
| Metal Disconnect   | CG3DISCMETAL   |
| Stainless Steel Disconnect                                 | CG3DISCSTEEL   |
| DTS-2 diagnostic test kit                                  | DTS            |

# Product specifications

## Electrical

|  |  |
|--|--|
| Maximum surge current rating           | 80 kA per mode, 160 kA per phase   |
| Nominal discharge current rating (L-N) | 20 kA  |
| Operating frequency                    | 47–63 Hz   |
| Connection method                      | Pre-wired with 36 inches of #6 AWG conductor (P, M or S enclosure suffix) or termination lugs for #10–#4 AWG conductor (PL, ML or SL enclosure suffix) |
| Modes of protection                    | All modes (L-N, L-G, N-G, L-L)   |
| Fault rating (SCCR)                    | 200 kAIC — no upstream over-current protection device (breaker or fuse) required   |
| Monitoring                             | Surge counter, tri-color LEDs (one per phase), dry relay contacts, audible alarm, alarm silence button, fault light                                    |
| Repetitive surge current rating        | 3,000 impulses per mode based on actual test data (using ABSI/IEEE C642.41.1-2002 C3 combo wave)   |
| Application                            | ANSI/IEEE C62.41.1 locations A, B and C ideal for distribution panels, branch panels and critical loads  |

## Mechanical

|                       |   |
|-----------------------|---|
| Installation location | Indoor or outdoor                                       |
| Mounting method       | Dual mounting flanges                                   |
| Operating environment | -40 °F to 149 °F (-40 °C to +65 °C)                     |
| Altitude              | 5%–95% non-condensing humidity<br>0–12,000 ft (3.66 km) |
| Product design        | Individual thermally fused MOV technology               |

## EMI/RFI filter attenuation

|                   |                                    |
|-------------------|------------------------------------|
| Mil Standard 220B | Up to 40 dB from 10 kHz to 100 MHz |
|-------------------|------------------------------------|

## Regulatory

|                                    |                      |
|------------------------------------|----------------------|
| cULus 1449 5th Edition             | VZCA: E316636 Type 1 |
| UL 1283 with filter option         | Yes                  |
| UL96A compliant                    | Yes                  |
| IEEE C62.62.41.1, C62.41.2, C62.45 | Yes                  |
| NFPA 70 (NEC), Article 285         | Yes                  |
| RoHs compliant                     | Yes                  |
| Listed by                          | UL                   |

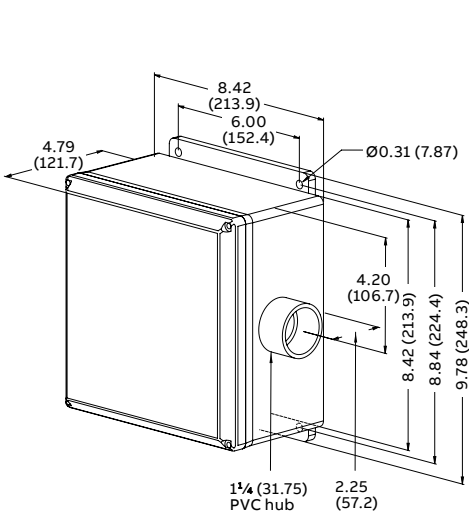
## Warranty

15 years

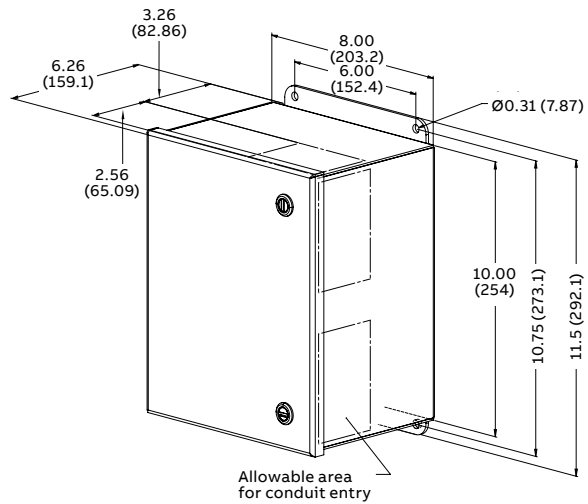
# Performance data

| Model no.       | System voltage | Protective mode | MCOV   | B3 ring wave, 6 kV, 500 A | B3/C1 combo wave, 6 kV, 3 kA | C3 combo wave, 20 kV, 10 kA | UL 1449 5th edition, 6 kV, 3 kA VPR |
|-----------------|----------------|-----------------|--------|---------------------------|------------------------------|-----------------------------|-------------------------------------|
| CGP3-080-120-1G | 120 V          | L-N             | 150 V  | 329 V                     | 554 V                        | 765 V                       | 600 V                               |
| CGP3-080-127-1G | 127 V          | L-G             | 150 V  | 386 V                     | 587 V                        | 863 V                       | 600 V                               |
|                 |                | N-G             | 150 V  | 518 V                     | 552 V                        | 860 V                       | 600 V                               |
| CGP3-080-220-1G | 220 V          | L-N             | 320 V  | 311 V                     | 949 V                        | 1339 V                      | 1000 V                              |
| CGP3-080-230-1G | 230 V          | L-G             | 320 V  | 975 V                     | 1021 V                       | 1298 V                      | 1200 V                              |
| CGP3-080-240-1G | 240 V          | N-G             | 320 V  | 954 V                     | 962 V                        | 1339 V                      | 1000 V                              |
| CGP3-080-277-1G | 270 V          |                 |        |                           |                              |                             |                                     |
| CGP3-080-347-1G | 347 V          | L-N             | 420 V  | 376 V                     | 1290 V                       | 1555 V                      | 1500 V                              |
|                 |                | L-G             | 420 V  | 1180 V                    | 1322 V                       | 1627 V                      | 1500 V                              |
|                 |                | N-G             | 420 V  | 1180 V                    | 1285 V                       | 1617 V                      | 1500V                               |
| CGP3-080-240-2G | 240/120 V      | L-N             | 150 V  | 329 V                     | 554 V                        | 765 V                       | 600 V                               |
| CGP3-080-208-3Y | 208 Y/120 V    | L-G             | 150 V  | 386 V                     | 587 V                        | 863 V                       | 600 V                               |
|                 |                | N-G             | 150 V  | 518 V                     | 552 V                        | 860 V                       | 600 V                               |
|                 |                | L-L             | 300 V  | 318 V                     | 915 V                        | 1112 V                      | 1000 V                              |
| CGP3-080-480-2G | 480/240 V      | L-N             | 320 V  | 311 V                     | 949 V                        | 1339 V                      | 1000 V                              |
| CGP3-080-380-3Y | 380 Y/220 V    | L-G             | 320 V  | 975 V                     | 1021 V                       | 1318 V                      | 1200 V                              |
| CGP3-080-400-3Y | 400 Y/230 V    | N-G             | 320 V  | 954 V                     | 962 V                        | 1339 V                      | 1000 V                              |
| CGP3-080-415-3Y | 415 Y/240 V    | L-L             | 640 V  | 387 V                     | 1735 V                       | 2101 V                      | 1800 V                              |
| CGP3-080-480-3Y | 480 Y/277 V    |                 |        |                           |                              |                             |                                     |
| CGP3-080-600-2G | 600/347 V      | L-N             | 420 V  | 376 V                     | 1209 V                       | 1555 V                      | 1500 V                              |
| CGP3-080-600-3Y | 600 Y/347 V    | L-G             | 420 V  | 1180 V                    | 1280 V                       | 1627 V                      | 1500 V                              |
|                 |                | N-G             | 420 V  | 1180 V                    | 1282 V                       | 1617 V                      | 1500 V                              |
|                 |                | L-L             | 690 V  | 540 V                     | 2203 V                       | 2565 V                      | 2500 V                              |
| CGP3-080-240-3H | 240 Δ/120 V    | L-N             | 150 V  | 329 V                     | 554 V                        | 765 V                       | 600 V                               |
|                 |                | H-N             | 320 V  | 311 V                     | 1064 V                       | 1339 V                      | 1200 V                              |
|                 |                | L-G             | 150 V  | 386 V                     | 587 V                        | 863 V                       | 600 V                               |
|                 |                | H-G             | 320 V  | 975 V                     | 1040 V                       | 1298 V                      | 1200 V                              |
|                 |                | N-G             | 150 V  | 518 V                     | 552 V                        | 860 V                       | 600 V                               |
|                 |                | L-L             | 300 V  | 318 V                     | 915 V                        | 1112 V                      | 1000 V                              |
|                 |                | H-L             | 470 V  | 640 V                     | 1358 V                       | 2104 V                      | 1500 V                              |
| CGP3-080-208-3D | 208 V          | L-G             | 548 V  | 386 V                     | 1021 V                       | 863 V                       | 1200 V                              |
| CGP3-080-240-3D | 240 V          | L-L             | 372 V  | 318 V                     | 915 V                        | 1112 V                      | 1000 V                              |
| CGP3-080-415-3D | 415 V          | L-G             | 866 V  | 975 V                     | 1508 V                       | 1298 V                      | 1800 V                              |
| CGP3-080-480-3D | 480 V          | L-L             | 357 V  | 387 V                     | 1830 V                       | 2101 V                      | 2000 V                              |
| CGP3-080-600-3D | 600 V          | L-G             | 1225 V | 1180 V                    | 2203 V                       | 1627 V                      | 2500 V                              |
|                 |                | L-L             | 542 V  | 540 V                     | 2203 V                       | 2565 V                      | 2500 V                              |

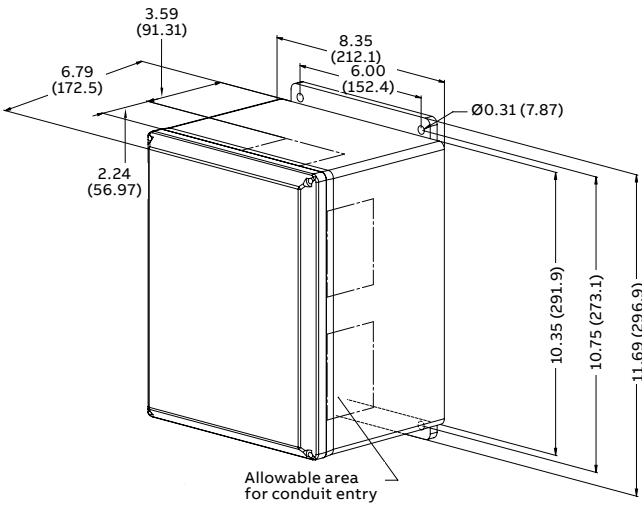
# Dimensions



80 kA polycarbonate enclosure pre-wired  
Enclosure option P



80 kA metal enclosure with lugs  
Enclosure option ML



80 kA polycarbonate enclosure with lugs  
Enclosure option PL

All measurements in inches (millimeters).

| kA | Enclosure type | Pre-wired | Weight in lbs | Weight in kg |
|----|----------------|-----------|---------------|--------------|
| 80 | Polycarbonate  | Yes       | 9             | 4.08         |
| 80 | Metal          | No        | 16            | 7.26         |
| 80 | Polycarbonate  | No        | 10            | 4.54         |

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