

DATASHEET

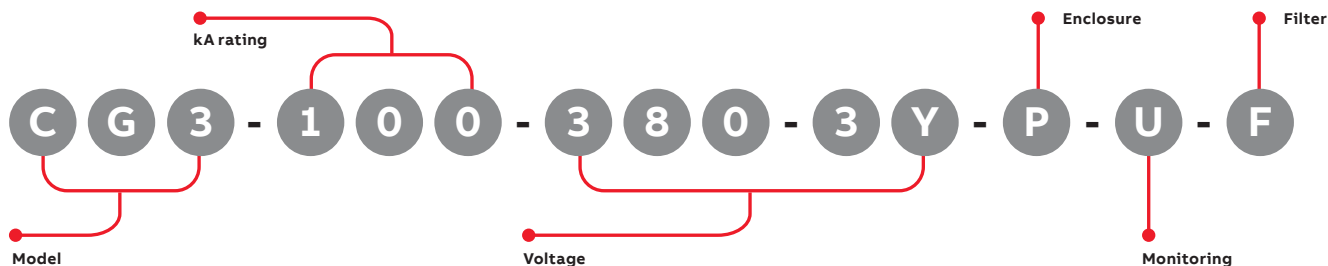
# CurrentGuard™ series — CG3-100

## Current Technology™ surge protective devices



### Product features

- UL Listed 1449 4th 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
- UL 1283 EMI/RF filter available as an option
- DTS-2 compatible for proactive testing
- Compact and lightweight design
- 10-year standard warranty



### Model number scheme

kA rating	Suffix
100 kA per mode, 200 kA per phase	100
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
Powder-coated metal NEMA 4, pre-wired	4
Stainless steel NEMA 4X, pre-wired	S
Polycarbonate with termination lugs	PL
Powder-coated metal NEMA 4 with termination lugs	4L
Stainless steel NEMA 4X with termination lugs	SL

Monitoring option (must choose one)	Suffix
Status indicator LED lights (one per phase)	B
Status indicator LED lights (one per phase), dry relay contacts, audible alarm with silence button, fault light	U

Filter option	Suffix
4 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	CG3FMPSMMETAL
Medium Metal Flush Mount Plate	CG3FMPMEDMETAL
Small Stainless Steel Flush Mount Plate	CG3FMPSMSS
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	100 kA per mode, 200 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, 4 or S enclosure suffix) or termination lugs for #10–#4 AWG conductor (PL, 4L 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
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) 5%–95% non-condensing humidity
Altitude	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
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## Regulatory

cULus 1449 4th 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

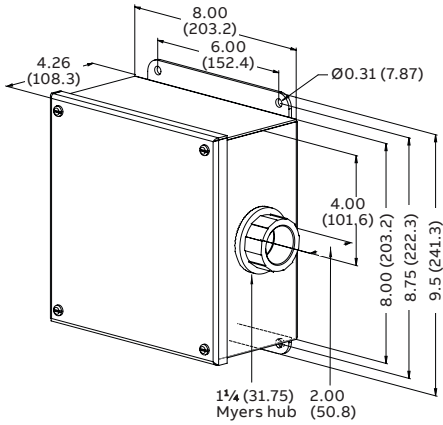
## Warranty

10 years

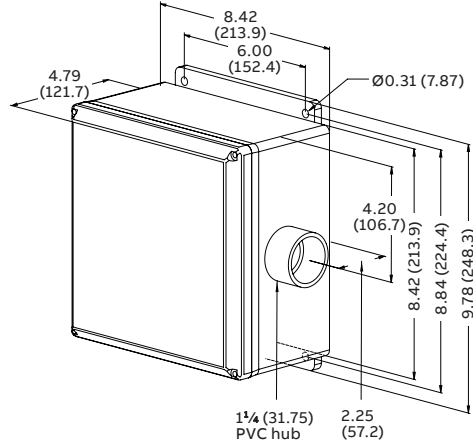
# Performance data

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 4th edition, 6 kV, 3 kA VPR
CG3-100-120-1G	120 V	L-N	150 V	341 V	554 V	765 V	600 V
CG3-100-127-1G	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
CG3-100-220-1G	220 V	L-N	320 V	391 V	949 V	1339 V	1000 V
CG3-100-230-1G	230 V	L-G	320 V	975 V	1021 V	1298 V	1200 V
CG3-100-240-1G	240 V	N-G	320 V	954 V	962 V	1339 V	1000 V
CG3-100-277-1G	270 V						
CG3-100-347-1G	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	1200 V	1285 V	1617 V	1500V
CG3-100-240-2G	240/120 V	L-N	150 V	341 V	554 V	865 V	600 V
CG3-100-208-3Y	208 Y/120 V	L-G	150 V	386 V	587 V	890 V	600 V
		N-G	150 V	518 V	552 V	878 V	600 V
		L-L	300 V	469 V	915 V	1349 V	1000 V
CG3-100-480-2G	480/240 V	L-N	320 V	391 V	949 V	1339 V	1000 V
CG3-100-380-3Y	380 Y/220 V	L-G	320 V	975 V	1021 V	1298 V	1200 V
CG3-100-400-3Y	400 Y/230 V	N-G	320 V	954 V	962 V	1339 V	1000 V
CG3-100-415-3Y	415 Y/240 V	L-L	640 V	437 V	1735 V	2101 V	1800 V
CG3-100-480-3Y	480 Y/277 V						
CG3-100-600-2G	600/347 V	L-N	420 V	281 V	1209 V	1607 V	1500 V
CG3-100-600-3Y	600 Y/347 V	L-G	420 V	1225 V	1280 V	1700 V	1500 V
		N-G	420 V	1105 V	1282 V	1617 V	1500 V
		L-L	690 V	542 V	2203 V	2606 V	2500 V
CG3-100-240-3H	240 Δ/120 V	L-N	150 V	341 V	554 V	765 V	600 V
		H-N	320 V	391 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	469 V	915 V	1349 V	1000 V
		H-L	470 V	732 V	1358 V	2104 V	1500 V
CG3-100-208-3D	208 V	L-G	320 V	548 V	1021 V	863 V	1200 V
CG3-100-240-3D	240 V	L-L	320 V	372 V	915 V	1112 V	1000 V
CG3-100-415-3D	415 V	L-G	552 V	975 V	1508 V	1298 V	1800 V
CG3-100-480-3D	480 V	L-L	640 V	437 V	1830 V	2101 V	2000 V
CG3-100-600-3D	600 V	L-G	690 V	1180 V	2203 V	1627 V	2500 V
		L-L	690 V	540 V	2203 V	2565 V	2500 V

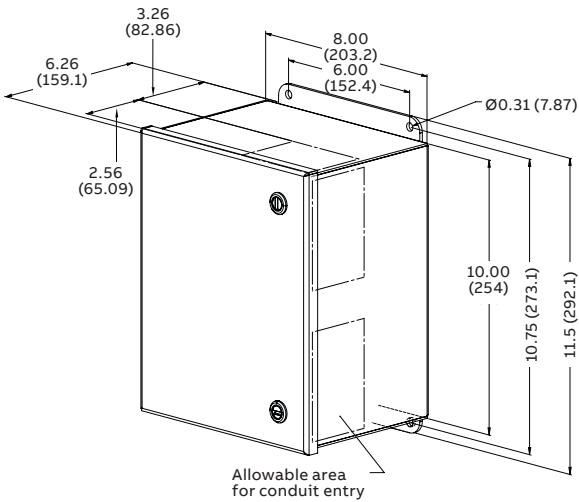
# Dimensions



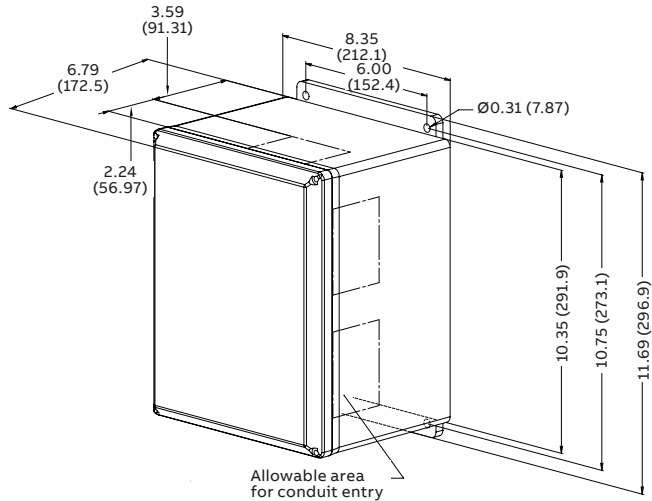
100 kA metal enclosure pre-wired  
Enclosure option M



100 kA polycarbonate enclosure pre-wired  
Enclosure option P



100 kA metal enclosure with lugs  
Enclosure option ML



100 kA polycarbonate enclosure with lugs  
Enclosure option PL

All measurements in inches (millimeters).

kA	Enclosure type	Pre-wired	Weight in lbs	Weight in kg
100	Metal	Yes	13	5.90
100	Polycarbonate	Yes	9	4.08
100	Metal	No	16	7.26
100	Polycarbonate	No	10	4.54

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