

CVX050/100 models, surge protective device



Introduction

With more than two decades of experience in the surge suppression industry and extensive R&D initiatives, Eaton is considered to be a world leader in surge protective device (SPD) manufacturing.

Application description

Medium and low exposure level AC power service entrances, branch panels, and/or individual equipment disconnects feed all types of loads.

- Nominal discharge current: 20 kA
- Short-circuit current rating: 100 kA

Features

General features

- Parallel configured, hardwire connected, SPD
- Peak surge current
 - CVX050: 50 kA
 - CVX100: 100 kA
- Warranty: five-year free replacement

Mechanical and electrical features

- Enclosure: NEMA® 4X (IP56) polycarbonate weatherproof enclosure (meets or exceeds NEMA 1, 2, 4, 4X, 12, and 13)
- Mounting: threaded conduit fitting and multi-point case mounting holes (external mounting feet available separately)

- Connection: #10 (6 mm²) stranded wire
- Weight: ≈2.0 lb (1.0 kg)
- Operating temperature: -13 °F to +140 °F (-25 °C to +60 °C)
- Protection: all modes
- Input power frequency: 47–420 Hz (50/60 Hz typical)
- Diagnostics: LED indicators, one per phase, normally ON

Optional features and equipment

- External mounting feet
- Flush mount plate

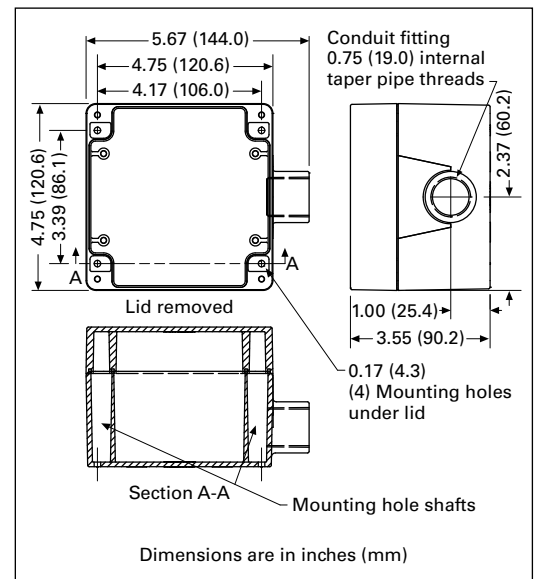


Figure 1. Standard dimensions

Standards and certifications

- Unit listings: UL® 1449 5th Edition; permanently connected ①
- CE Compliant to IEC 61643-1 Test Classification I and II
- Vibration tested to IEC 60255-21-1 and -2
- Manufacturer qualifications: ISO® 9001:1994 Quality System Certification BSI FM 30833

① CE and UL on AC unit only.



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Technical data

Table 1. CVX050/100 voltage ratings

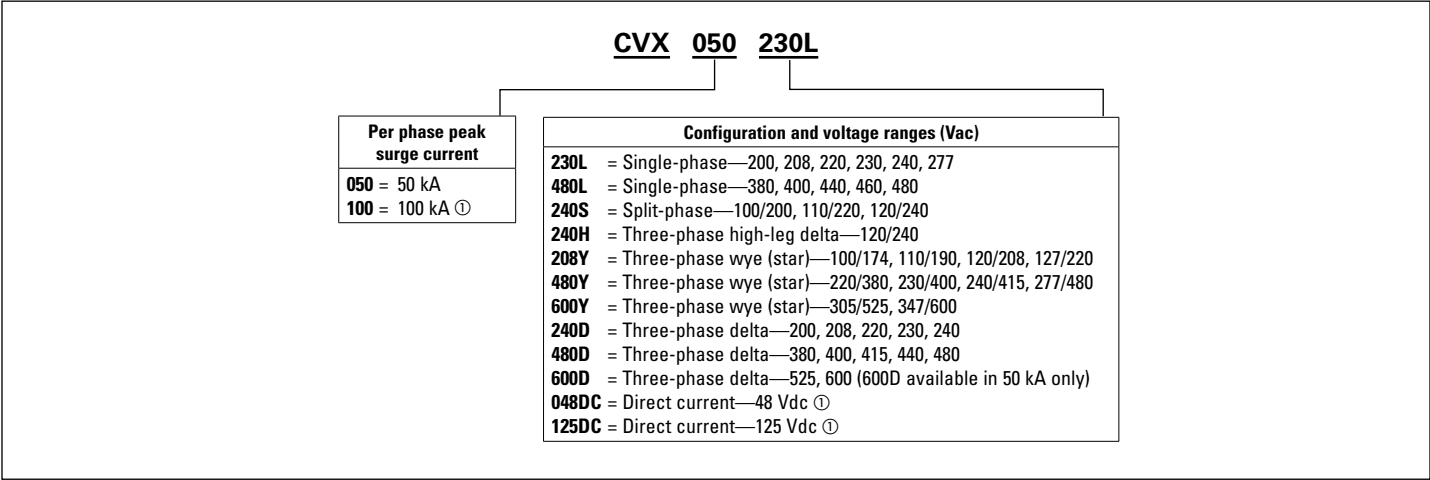
Model	System configuration	Nominal system voltage	MCOV				UL 1449-5 VPR ①			
			L-L	L-N	L-G	N-G	L-L	L-N	L-G	N-G
CVX050										
230L	Single-phase two-wire + ground	200, 208, 220, 230, 240, 277	—	320	640	320	—	1200	1200	1200
480L	Single-phase two-wire + ground	380, 400, 440, 460, 480	—	550	1100	550	—	1800	4000	1800
240S	Split-phase three-wire + ground	100/200, 110/220, 120/240	300	150	300	150	—	700	1200	800
208Y	Three-phase wye (star) four-wire + ground	100/175, 110/190, 120/208, 127/220	300	150	300	150	—	700	1200	800
480Y	Three-phase wye (star) four-wire + ground	220/380, 230/400, 240/415, 277/480	640	320	640	320	2500	1200	2000	1200
600Y	Three-phase wye (star) four-wire + ground	305/525, 347/600	840	420	840	420	2500	1500	2500	1500
240D	Three-phase delta three-wire + ground	200, 208, 220, 230, 240	640	—	320	—	2000	—	1200	—
240H	Three-phase high-leg delta	240	300	150	150	640	1500	700	1200	700
480D	Three-phase delta three-wire + ground	380, 400, 415, 440, 480	1100	—	550	—	3000	—	1800	—
600D	Three-phase delta three-wire + ground	525, 600	1100	—	700	—	3000	—	2500	—
048DC	Direct current	48 Vdc ②	130	—	65	—	—	—	—	—
125DC	Direct current	125 Vdc ②	288	—	144	—	—	—	—	—
CVX100										
230L	Single-phase two-wire + ground	200, 208, 220, 230, 240, 277	—	320	320	320	—	1200	1200	1200
480L	Single-phase two-wire + ground	380, 400, 440, 460, 480	—	550	550	550	—	1800	1800	1800
240S	Split-phase three-wire + ground	100/200, 110/220, 120/240	300	150	150	150	1200	700	800	700
208Y	Three-phase wye (star) four-wire + ground	100/175, 110/190, 120/208, 127/220	300	150	150	150	1000	600	700	700
480Y	Three-phase wye (star) four-wire + ground	220/380, 230/400, 240/415, 277/480	640	320	320	320	1800	1200	1200	1200
600Y	Three-phase wye (star) four-wire + ground	305/525, 347/600	840	420	420	420	2500	1500	1500	1500
240D	Three-phase delta three-wire + ground	200, 208, 220, 230, 240	640	—	320	—	1800	—	1200	—
240H	Three-phase high-leg delta	240	300	150	150	150	1200	700	700	700
480D	Three-phase delta three-wire + ground	380, 400, 415, 440, 480	1100	—	550	—	3000	—	1800	—

① UL 1449 5th Edition VPR (voltage protection rating) test environment: All tests performed with 6-inch lead length, positive polarity.

② DC models only available in 50 kA.

Product selection

Table 2. Catalog numbering system



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