



Powering Business Worldwide

# Eaton® Innovative Technology® Equalizer™

Technical Data

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**Product Application**

The Equalizer (EQX) Surge Protective Device (SPD) protects electronic equipment from damaging transients. The EQX is suitable for high, medium and low exposure level applications which require cost-effective, high quality system protection including:

- General purpose facilities.
- Residential/small business.
- Light industrial.
- Light commercial.
- Branch panel protection.

**General Description**



Equalizer

Since 1980, Eaton's Innovative Technology has been providing field-proven power quality solutions worldwide. The Equalizer is a rugged, cost-effective, high quality device that is easy to install adjacent or even internal to electrical equipment. Electrical engineers around the world recognize Innovative Technology as a leader in the SPD industry. A leading research company in a survey of over 10,000 users rated Innovative Technology No. 1 in both product quality and service. Equalizer products are UL<sup>®</sup> 1449 3rd Edition listed and UL 1283 complementary listed. All Eaton's Innovative Technology products are manufactured in an ISO<sup>®</sup> 9001:2000 and ISO 14001 certified facility.

**Features, Functions and Benefits**

- Advanced surge path technology for high fault current capacity, low impedance, high frequency design.
- Large diameter MOVs (Metal Oxide Varistors) provide long life under high stress transient environments.
- Active Response Network provides EMI/RFI noise filtering.
- Form C (dry) contacts for remote status monitoring.
- NEMA<sup>®</sup> 1 powder coated steel enclosure.
- 10-year free replacement warranty.
- Compliant to UL 1449 Third Edition, Surge Protective Devices

**Optional Features**

- Available flush-mount plate for recessed installations.
- Enhanced Sine Wave Tracking Network provides the best in transient protection against the continuous barrage of everyday transients; this filter is also UL 1283 listed as an EMI/RFI filter.

**Standards and Certifications**

- Compliant to UL 1449 Third Edition, Surge Protective Devices, high frequency design.
- UL 1283 complimentary listed.
- CE marked.
- All Innovative Technology Equalizer products have been tested per NEMA LS-1 and ANSI/IEEE C6245.

**Product Specifications**

Table 1. Equalizer Series Specifications

Description	EQX Series
kA per Phase	40, 80, 160
kA per Mode	20, 40, 80
Nomina Discharge Current	10kA
Short Circuit Current Rating (SCCR)	100kA
Protection Modes	Wye: L-L, L-N, L-G & N-G / Delta: L-L, L-G / Split-Phase L-L, L-N, L-G & N-G
Wye System Voltages <sup>1</sup>	100/175, 110/190, <b>120/208</b> , 127/220, 220/380, 230/400, 240/415, <b>277/480</b>
Delta System Voltages <sup>1</sup>	200, 208, <b>220</b> , 230, <b>240</b> , 380, 400, 415, 440, <b>480</b> , 600
Split-Phase Voltages <sup>1</sup>	100/200, 110/220, <b>120/240</b>
Single-Phase Voltages <sup>1</sup>	100, 110, <b>120</b> , 127, 200, 208, 220, 230, <b>240</b> , 277

<sup>1</sup> U.S. voltages in bold.

Table 2. Equalizer Let-Through Voltage Ratings

Ratings <sup>2</sup>	L-L	L-G	L-N	N-G	Delta System	
					L-L	L-G
<b>ANSI/IEEE Cat A1</b>						
120/240 V; 120/208 V Wye; 240 V Delta	110	300	60	320	110	580
277/480 V Wye; 480 V Delta	120	460	60	580	130	960
600 V Delta	—	—	—	—	—	—
<b>ANSI/IEEE Cat C3</b>						
120/240 V; 120/208 V Wye; 240 V Delta	1300	970	840	900	1550	1620
277/480 V Wye; 480 V Delta	2150	1400	1340	1290	2250	2190
600 V Delta	—	—	—	—	2660	2720
<b>ANSI/IEEE Cat B3/C1</b>						
120/240 V; 120/208 V Wye; 240 V Delta	940	540	490	510	960	980
277/480 V Wye; 480 V Delta	1700	960	930	910	1620	1580
600 V Delta	—	—	—	—	2020	2040
<b>UL 1449, 2nd Edition Suppressed Voltage Rating</b>						
120/240 V; 120/208 V Wye; 240 V Delta	800	400	400	400	800	800
277/480 V Wye; 480 V Delta	1500	800	800	800	1500	1500
600 V Delta	—	—	—	—	2000	2000

Table 2. Equalizer Let-Through Voltage Ratings (Continued)

Ratings <sup>2</sup>	L-L	L-G	L-N	N-G	Delta System	
					L-L	L-G

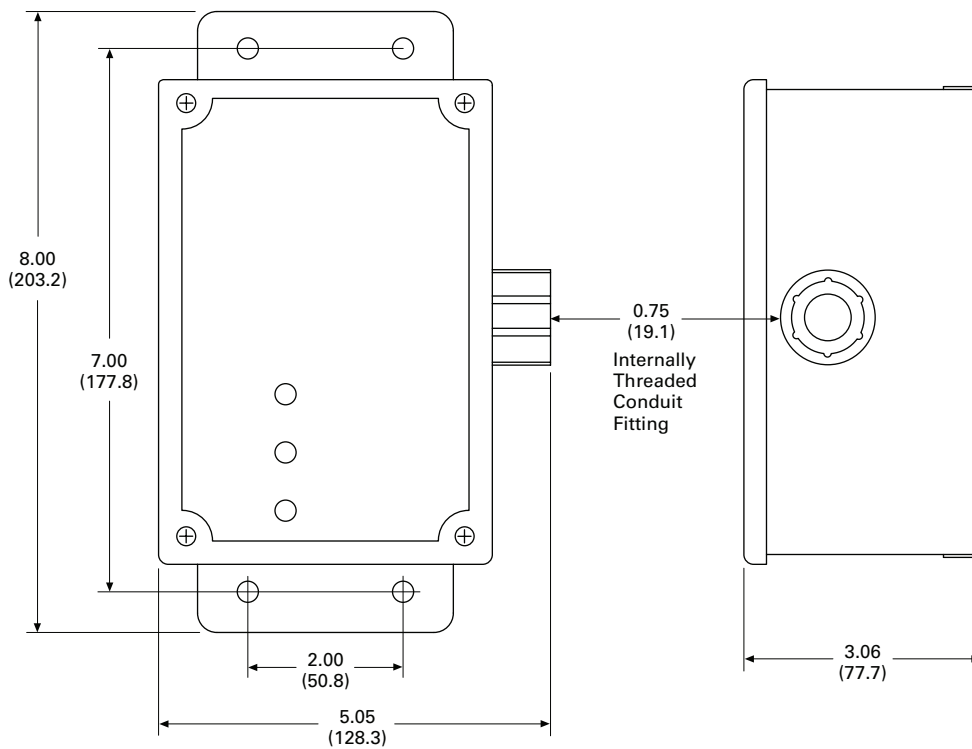
UL1449 3rd Edition Voltage Protection Rating VPR						
120/240 V; 120/208 V Wye; 240 V Delta	900	700	600	601	1200	1000
277/480 V Wye; 480 V Delta	1800	1000	1000	1000	1800	1800
600 V Delta	2500	1500	1500	1200	2000	2000

<sup>2</sup> Test environment: All tests performed with 6" lead length, positive polarity. Voltages are peak ± 10%. Measurements are taken from the zero reference per NEMA LS-1.

**Note:** Let-through voltages shown are for selected units and vary per Equalizer model. See individual submittal specification sheets for tested let-through voltage data. Standard Dimensions

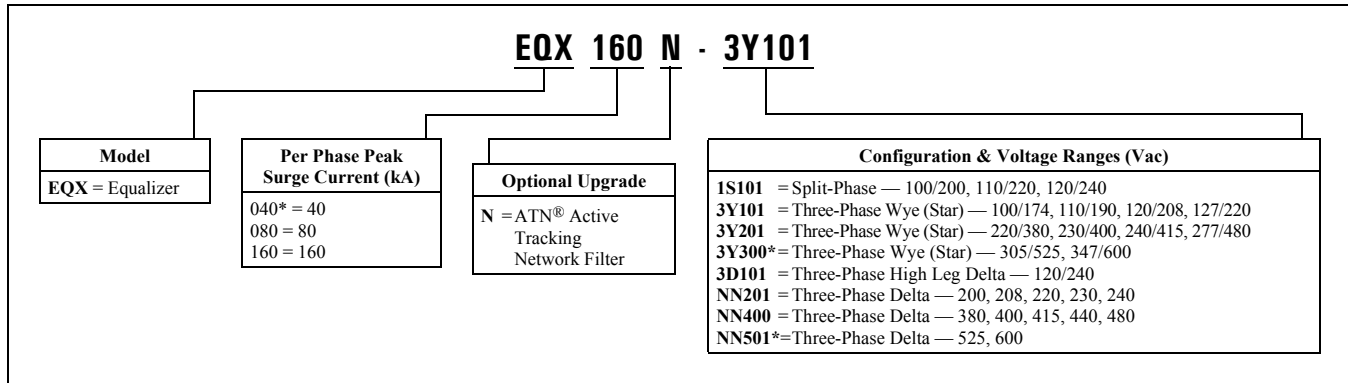
## Standard Dimensions

Figure 1. Enclosure Specifications – EQX Series for 40, 80 and 160 kA



Catalog Numbering System\*\*

Table 3. Equalizer Ordering Guidelines



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\* ATN not available with this configuration

\*\* Contact Innovative Technology Master Distributor for availability of specific product configurations.

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