



IT Equalizer™

**Introduction**

Since 1980, Eaton’s Innovative Technology has provided Surge Protective Devices (SPDs) to power quality equipment users around the world. Whatever your electrical surge protection need may be, Eaton’s Innovative Technology has a Surge Protective Device to fill it!

**General Features**

- Peak Surge Current — 40, 80, 160 kA per phase
- ANSI/IEEE C62.41 Location Categories — A, B and C
- Application — ac power service entrances, branch panels and/or individual equipment
- Warranty — Ten-Year Free Replacement
- Unit Listings — UL®1449 Second Edition, cUL®, UL 1283 filter, CE
- Manufacturer Qualifications — ISO® 9001:1994 Quality System Certification BSI FM 30833

**Mechanical and Electrical Features**

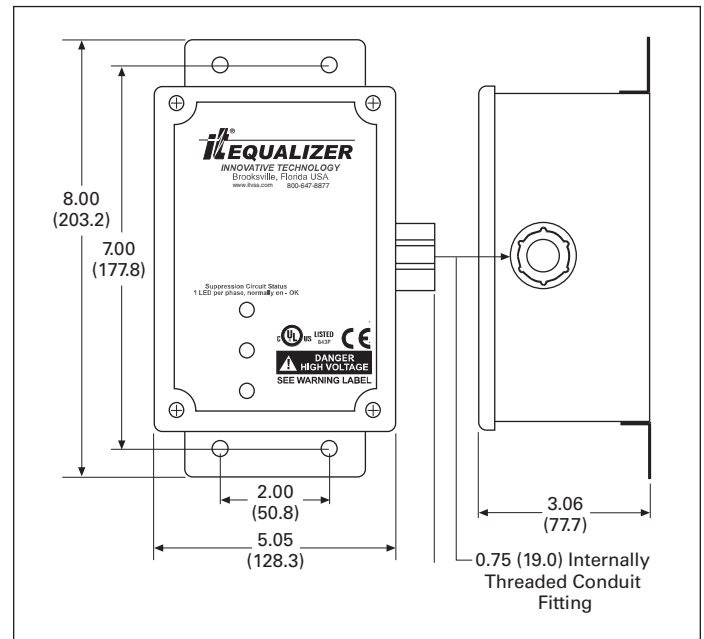
- Enclosure — Powder Coated Steel, NEMA® Type 1 (IP20)
- Mounting — Threaded conduit fitting and/or multi-point mounting feet
- Connection — #10 (6 mm<sup>2</sup>) stranded wire
- Weight — ≈5 lbs (2.2 kg)
- Operating Temperature — -40°F (-40°C) to +140°F (+60°C)
- Protection Modes — Full Mode: L-N (normal mode), L-G, N-G (common mode)
- Input Power Frequency — 47 – 420 Hz (50 – 60 Hz for ATN® models)
- Response Time — <1 nanosecond
- Capacitance — Up to 30 nf with EQX, up to 1.5 µf with EQXN
- Diagnostics — Green LED indicators, Dry Relay (Volt-Free) contacts (contact rating 60 W or 125 VA, 125 Vac at 0.5 Amp or 30 Vdc at 1 Amp)
- Circuit Interrupt Requirement — Reference installation instructions for details

**Maximum EMI/RFI Attenuation — Mil-Std-220**

1 kHz	10 kHz	100 kHz	1 MHz	10 MHz	Maximum Attenuation Frequency
0 dB	8.5 dB	30 dB	23 dB	6.8 dB	58 dB @ 238 kHz

**Optional Features and Equipment**

- Active Tracking Network (ATN®) — EQXxxN
- Flush Mount Plate (ZPLATE-4)



## Performance Data

EQX40, EQX80, EQX160	System Config	Nominal System Voltage	MCOV	ANSI/IEEE C62.41-1991 Measured Limiting Voltage*								UL SVR	
				A1 Ring Wave 2 kV, 67 A 180° Phase Angle		A1 Ring Wave 2 kV, 67 A 90° Phase Angle		All Modles B3/C1 Impulse 6 kV, 3 kA 90° Phase Angle		All Modles C3 Impulse 20 kV, 10 kA 90° Phase Angle		UL 1449-2 Suppressed Voltage Ratings	
				L-N L-G HiL-N	L-L N-G HiL-G	L-N L-G HiL-N	L-L N-G HiL-G	L-N L-G HiL-N	L-L N-G HiL-G	L-N L-G HiL-N	L-L N-G HiL-G	L-N L-G HiL-N	L-L N-G HiL-G
1P101	Single-Phase 2w + grnd	100, 110, 120, 127	150	330 340	— 380	370 390	— 330	490 540	— 510	840 970	— 900	400 400	— 400
1P201	Single-Phase 2w + grnd	200, 208, 220, 230, 240, 277	320	670 670	— 720	760 740	— 720	930 960	— 910	1340 1400	— 1290	800 800	— 800
1S101	Split-Phase 3w + grnd	100/200, 110/220 120/240, 127/254	150/300	330 340	620 380	370 390	680 330	490 540	940 510	840 970	1300 900	400 400	800 400
3D101	3-Phase Δ (Hi-Leg) 4w + grnd	120/240	150/300	330 670 670	620 720 670	370 740 760	680 720 740	490 960 930	940 910 960	840 1400 1340	1300 1290 1400	400 400 800	1800 400 800
3Y101	3-Phase Y/Star 4w + grnd	100/175, 110/190 120/208, 127/220	150/300	330 340	620 80	370 390	680 330	490 540	940 510	840 970	1300 900	400 400	800 400
3Y201	3-Phase Y/Star 4w + grnd	220/380, 230/400 240/415, 277/480	320/640	670 670	1130 720	760 740	1380 720	930 960	1700 910	1340 1400	2150 1290	800 800	1500 800
NN201	3-Phase Δ 3w + grnd	200, 208, 220, 230, 240	320	— 740	740 —	— 740	740 —	— 980	960 —	— 1620	1550 —	— 800	800 —
<b>EQX80 EQX160</b>													
NN400	3-Phase Δ 3w + grnd	380, 400, 415, 440, 480	550	— 1200	1260 —	— 1200	1260 —	— 1580	1620 —	— 2190	2250 —	— 1500	1500 —
NN501	3-Phase Δ 3w + grnd	525, 600	750	— 1580	1590 —	— 1580	1590 —	— 2040	2020 —	— 2720	2660 —	— 2000	2000 —
<b>EQX80N EQX160N</b>													
1S101	Split-Phase 3w + grnd	100/200, 110/220 120/240, 127/254	150/300	60 300	110 320	220 380	390 320	540 540	930 490	1010 1160	1350 90	400 400	800 400
3D101	3-Phase Δ (Hi-Leg) 4w + grnd	120/240	150/300	60 460 60	110 20 460	220 750 430	390 580 750	540 940 940	930 900 940	1010 1310 1290	1350 1350 1310	400 400 800	1500 400 800
3Y101	3-Phase Y/Star 4w + grnd	100/175, 110/190 120/208, 127/220	150/300	60 300	110 320	220 380	390 320	540 540	930 490	1010 1160	1350 990	400 400	800 400
3Y201	3-Phase Y/Star 4w + grnd	220/380, 230/400 240/415, 277/480	320/640	60 460	120 580	430 750	550 580	940 940	1710 900	1290 1310	2140 1350	800 800	1500 800
NN201	3-Phase Δ 3w + grnd	200, 208, 220 230, 240	320	— 580	110 —	— 650	430 —	— 930	960 —	— 1490	1540 —	— 800	800 —
NN400	3-Phase Δ 3w + grnd	380, 400, 415 440, 480	550	— 960	130 —	— 1170	760 —	— 1630	1670 —	— 2410	2390 —	— 1500	1500 —

\* Test environment: All tests performed with 6" lead length, positive polarity. Voltages are peak ±10%. Measurements are taken from zero reference per NEMA LS-1.

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