



PTE300 Protector

Introduction

Since 1980, Eaton 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 Innovative Technology has a Surge Protective Device to fill it!

General Features

- Peak Surge Current — 300 kA per phase; 150 kA per mode
- ANSI/IEEE C62.41 Location Categories — B and C
- Application — High Exposure Level, industrial applications including: large service entrances, large distribution panels, and large individual equipment disconnects.
- Warranty — 20-Year Free Replacement
- Agency Listings — Compliant to UL® 1449 4th Edition as Type 1* and Type 2 SPD and UL 1283
- Manufacturer Qualifications — ISO® 9001:1994 Quality System Certification BSI FM 30833
- The Protector Series products are produced in the USA and conform to ARRA requirements.

Mechanical and Electrical Features

- Enclosure — Powder Coated Steel, weatherproof; NEMA® Type 4 (IP66)
- Connection — All connections: box terminal #14-1/0 (2.5 – 50 mm²) wire size
- Weight — ≈30 lbs (14 kg)
- Operating Temperature — -40 to 185°F (-40 to 85°C)
- Protection Modes — All Mode L-N, L-L (normal mode), L-G, N-G (common mode)
- Input Power Frequency — 47–64 Hz
- Response Time — <1 nanosecond

Note: For applications utilizing a ground fault circuit interrupting (GFCI) main breaker, please use the PTX model.

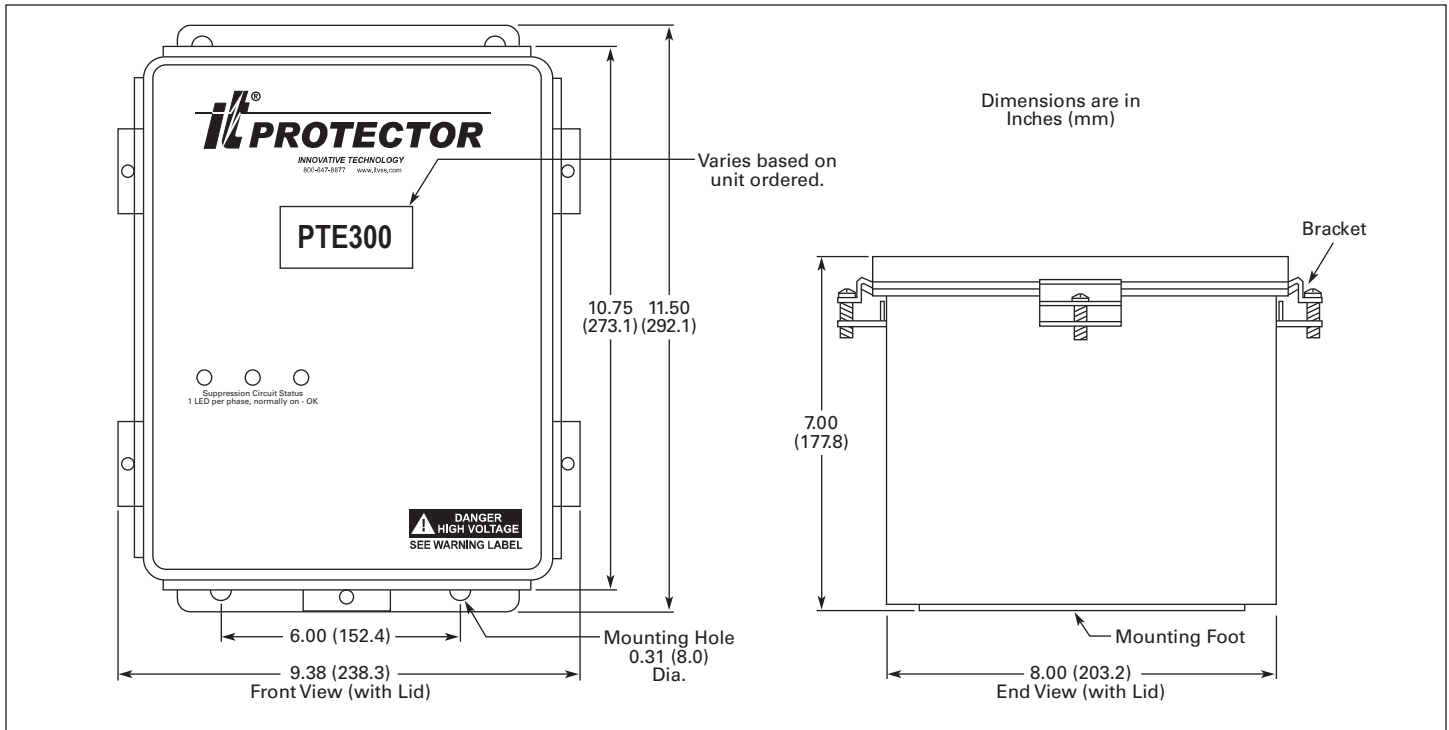
- Diagnostics — LED indicators, 1 per phase, normally on
- Remote Alarm Form C (Volt Free) relay, contact rating 60 W, or 125 Vac @ 0.5 Amp, or 30 Vdc @ 1 Amp
- Overcurrent Protection Device Requirement — Reference installation instructions for details
- Nominal Discharge Current ($I_n = 20\text{kA}$)
- Maximum 40 dB EMI/RFI attenuation per Mil-Std-220 in range of 100kHz to 400 kHz
- Active Tracking Network (ATN®)
- Short Circuit Current Rating (SCCR) 200kA

Optional Features and Equipment

- Audible Alarm, Surge Counter and Phase Loss Monitor (S.M.A.R.T.) — (-SD suffix)
- Stainless Steel, Type 4X enclosure — (-SS suffix) (contact factory, minimum quantities apply)
- Integrated Circuit Breaker (-C suffix)
- Integrated Circuit Breaker with External Disconnect (-CD suffix)

* UL 1449 4th Edition Type 1 products available only with options -C and -CD.

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Active Tracking Network (ATN) is a registered trademark of Eaton Corporation.



Performance Data

ANSI/IEEE C62.41-1991 Measured Limited Voltage*

PTE300	System Config	Nominal System Voltage	MCOV	ALL Models A1 Ring Wave 2 kV, 67 A 90° Phase Angle				ALL Models B3/C1 Impulse 6 kV, 3 kA 90° Phase Angle		ALL Models C3 Impulse 20 kV, 10 kA 90° Phase Angle		UL 1449-2 Suppressed Voltage Ratings		UL 1449-3 Voltage Protection Rating	
				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		
1P201	Single-Phase 2w+grnd	200, 208, 220, 230,240,277	320	450 500	— 90	890 950	— 900	1370 1360	— 1370	700 700	— 700	1000 1000	— 1000		
1S101	Split-Phase 3w+grnd	100/200, 110/220, 120/240, 127/254	150/300	220 260	350 90	480 530	830 500	900 1090	1270 1150	400 400	700 400	600 600	900 600		
3Y101	3-Phase Y/Star 4w+grnd	100/175, 110/190, 120/208, 127/220	150/300	220 260	350 90	480 530	830 500	900 1090	1270 1150	400 400	700 400	600 600	900 600		
3Y201	3-Phase Y/Star 4w+grnd	220/380, 230/400, 240/415, 277/480	320/640	450 500	820 90	890 950	1630 900	1320 1360	2270 1370	700 700	1500 700	1000 1000	1800 1000		
3Y300	3-Phase Y/Star 4w+grnd	305/525, 347/600	420/840	520 570	910 90	1090 1150	2040 1050	1490 1630	2480 1680	1000 1000	1800 1000	1200 1200	2000 1200		
3D101	3-Phase Δ (Hi-Leg) 4w+grnd	120/240	150/320	220 260 450	350 90 500	490 530 890	830 900 950	900 1090 1370	1270 1150 1320	400 400 700	700 400 700	600 600 1000	900 600 1000		
NN201	3-Phase Δ 3w+grnd	200, 208, 220, 230, 240	320	— 650	420 —	— 880	860 —	— 1370	1270 —	— 700	700 —	— 1000	1000 —		
NN400	3-Phase Δ 3w+grnd	380, 400, 415, 440, 480	550	— 1090	730 —	— 1490	1490 —	— 2120	2070 —	— 1200	1200 —	— 1800	1500 —		
NN501	3-Phase Δ 3w+grnd	525, 600	750	— 1420	970 —	— 1910	1870 —	— 2620	2470 —	— 1800	1800 —	— 2000	2000 —		

* 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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