

SurgeFree™

MODEL

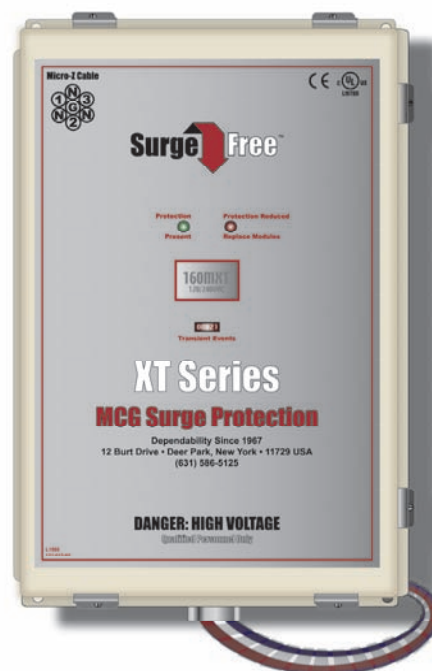
160MXT

Building Entry Protection

The 160MXT Series are brute force protectors designed for installation at the entrance of large to mid-sized facilities. The unit offers first-rate protection for 200kA applications at the main service panel. Redundant protection and complete diagnostics ensure continuous, reliable operation. All models include a twenty-year warranty on unit; lifetime on modules.

FEATURES

- 160MXT: $I_p=200\text{kA}$, $8 \times 20\mu\text{s}$
- Independent lab tested modules
- NEMA LS 1 - 1992
- Redundant modular protection withstands multiple lightning strikes. Uses 40mm MOVs
- Solid copper bus bar construction for minimal impedance and enhanced current sharing
- High performance, low inductance Micro-Z™ installed cable
- Field-replaceable protection modules for on-site maintenance
- At-a-glance monitoring system: Transient event counter, LED protection status indicators, audible alarm (with mute switch), and surge protected remote relay contacts
- Filtering standard on all XT models
- NEMA 4, Powder-Coated Steel Enclosure



$I_{peak}=200,000A$

UL 1449, 3rd Ed. Listed

**20-Year Warranty
Lifetime Module Replacement**

Filter Attenuation	120VAC	240VAC	277VAC	480VAC
MIL STD 220A (50 Ohm):	120VAC	240VAC	277VAC	480VAC
-30db	100kHz	25kHz	80kHz	80kHz
-40db	200kHz	100kHz	180kHz	180kHz
-50db	280kHz	180kHz	210kHz	250kHz
-60db	310kHz	200kHz	390kHz	390kHz

SPD Type: Type 2
I_n : 20kA
Maximum Continuous Operating VAC (MCOV): 115% Rated Line Voltage
Varistor MCOV: 125% Rated Line Voltage Minimum
SCCR: Up to 100kA AIC
Surge Current/Phase (8/20 μs): 1 Event: 200kA.
Surge Life/Phase (8/20 μs): 10,000 Events: 10kA
Surge Current/Mode (8/20 μs): L-N: 120kA; L-G: 80kA; N-G: 120kA; L-L: 200kA
Surge Current/Mode (8/20 μs), (Delta): L-L: 200kA; L-G: 200kA
Response Time: <5 ns
Status Indicators: LED Status Indicators, Event Counter, Audible Alarm, Protected Dry Contacts
Operating Altitude: 13,000ft. (4000m)
Temp. (Operating/Storage): -40° to +70°C/-40° to +85°C
Enclosure: NEMA 4, 14 gauge steel. powder coated
Dimensions: 12" x 15" x 5.5" (305mm x 381mm x 140mm)
Mounting: 8" x 15.75"/.313" ID - 4 holes (203 x 400mm/8mm ID - 4 holes)
Micro-Z Cable Connection: #10 AWG (5.27mm ²)/.128 OD (3.4mm) 8ft. length (2.43m)
Conduit Connector: 1" Rain tight hub
Weight: 35 lbs., (16.0kg)
UL File Number: E322161
UL Certification: UL Listed to 1449 3 rd Edition
UL96A Lightning Protection Master Label Compliant
ARRA Certification: Complies with ARRA 1605 requirements



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Specifications

- ANSI/IEEE C62.41-2002
- IEC 61643-1-1998
- UL 1449, 3rd Ed.

Building Entry Protection

Model 160MXT

Model	Service	VPR L-N	VPR L-G	VPR N-G	VPR L-L	20kV, 1.2/50 μ s 10kA, 8/20 μ s L-N**
-120T	120/240VAC, 1 ϕ , 3W+Gnd	800	900	700	1200	550
-120Y	120/208VAC, 3 ϕ , 4W+Gnd, Wye	800	900	700	1200	550
-240DCT*	240/120/120VAC, 3 ϕ , 4W+Gnd	800/1500	900/1500	1200	1200/2500	550/1040
-220Y	220/380VAC, 3 ϕ , 4W+Gnd, Wye	1500	1500	1200	2500	1040
-240Y	240/415VAC, 3 ϕ , 4W+Gnd, Wye	1500	1500	1200	2500	1040
-277Y	277/480VAC, 3 ϕ , 4W+Gnd, Wye	1500	1500	1200	2500	1040
-240D	240VAC, 3 ϕ , 3W+Gnd, Delta	n/a	1500	n/a	2500	1040 (L-G)

* High-leg Delta Center Tapped
 ** Actual Measurements w/ 6" Lead Length

Energy Absorption (8/20 μ s) in joules: 11,000J - 43,200J

A Note On Headroom A surge protector responds to increases in voltage. Surge protectors triggered by the nominal line voltage are undesirable, consequently headroom is always factored into surge protector design. Long duration voltage swells occur on power lines and can damage a surge protector, leaving facility equipment vulnerable. By employing higher headroom, continuity of surge protection is guaranteed. This feature is standard in MCG surge protectors. Higher headroom allows varistors to ride out voltage swells while ensuring that let-through voltage remains within CBEMA (now ITIC) guidelines. The CBEMA curve is the most accepted graph worldwide for equipment susceptibility analysis.