

Power Surge Protection



LA-P+



LA-P-120T



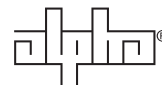
ISA 120/240



COAX Protectors

- Critical protection from voltage transients
- Modular and hardwired Metal Oxide Varistors (MOV) options
- Convenient, plug-in design for easy installation
- LA Series features piggyback plug to optimize receptacle use

Alpha's surge protection devices provide reliable protection of power supplies and related equipment from the damaging powerline disturbances common to cable TV and broadband applications. The LA and ISA Series incorporate Metal Oxide Varistors (MOVs) that effectively limit voltage surges and absorb excessive energy levels. Housed in durable polymer casings with standard electrical plugs, the LA Series plugs directly into any electrical outlet, while the ISA is factory wired into the service entrance.



Surge Protection

Model Selection	Good	Good	Better	Best
LA Series Model:	LA-P+ 120 ¹	LA-P+240 ¹	LA-P-120T ¹	ISA 120/240 ²
Part Number:	020-098-24	020-098-25	162-046-10	162-041-10
Outlet Type:				Hardwired
Operating Voltage:	120	240	120	120/240 3 wire

Nominal Specifications

Clamping Voltage:	150VAC	320VAC	130VAC	150VAC
Protection:	L/N/G	L1/L2/G	L/N/G	L/N/G
Energy Absorption (Joules):	210	112	210	960
Surge Current (8/20ms) Up To:	6.5kA	6.5kA	13.5kA	40kA
Response Time:	<1Ns	<1Ns	<5Ns	<5Ns
Operating Temperature:	-40° to 55°C (-40 to 131°F)	-40° to 55°C (-40° to 131°F)	-40° to 55°C (-40° to 131°F)	-40° to 55°C (-40° to 131°F)
Varistor Voltage@1mA:	240V (216-264)	510V (459-561)	184V	N/A
Max. Clamping Voltage:	395@100A	895@100A	340@60A	710@5kA
LED Indicator:	Yes	Yes	Yes	Yes

Notes:

¹ The LA Series is designed for use in Alpha power supply enclosures with convenience outlets. These outlets must be protected by an appropriate fuse or circuit breaker.

² The ISA surge protection devices are factory wired on the load side of the service entrance are available for field replacement. These arrestors should be installed by a licensed electrician.

COAX Protectors

Ideally suited to protect costly status-monitoring transponders, digital set top boxes, cable modems and satellite receivers in the headend as well as high-end HDTV sets from potentially damaging surges. The patented coaxial gas tube surge protector is equipped with an integral failsafe mechanism. Listed to UL 497, CSA Listed Certified & Complies with 1999 National Electric Code.

- Patented In-Line® Coaxial Gas Tube Surge Protection
- Provide Lightning and Surge Protection for Distribution, Customer Premises and Headend Equipment
- Improves Broadband Network Reliability and Reduces Service Outages
- Power Passing
- Listed to UL 497, CSA Listed Certified & Complies with NEC

Part Number	Description
162-029-10	Female/Female connector configuration, "F" type connector
162-027-10	Male/Female connector configuration, "F" type connector
162-028-10	Female/Female connector configuration, "F" type connector with integral ground block

COAX Protector Specifications

Part Number	162-029-10/162-027-10	162-028-10
RF Performance	DC – 1.0 GHz	1.0 GHz – 1.5 GHz
Characteristic Impedance	75 Ohms	75 Ohms
Insertion Loss (includes flatness)	< 0.1 dB	< 0.2 dB
Return Loss	> 30 dB	> 20 dB
Protection		
DC Breakdown @2000 V/s		150V – 300V
Impulse Breakdown @ 100 V/μs		< 450V
Insulation Resistance		> 100 MegOhms
Surge Life:		
10 A, 10/1000μs		> 1500 Surges
100 A, 10/1000μs		> 100 Surges
1000 A, 10/1000μs		> 10 Surges
5000 A, 8/20μs		> 10 Surges
AC Life:		
5A, 1000VAC, 1 s		> 5 Operations
1A, 1000 VAC, 1 s		> 60 Operations
Failshort:		
30A, 1000VAC		> 15 min.
Operating Temperature		-40° to 65°C (-40° to 149°F)

*All specifications for service life only

For more information visit www.alpha.com

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