

Surge Protection



LA-P-120T



ISA-120/240



ISA-240



LA-P+



COAX Protectors









VSS 120/VSS 240

- ▶ UL 1449 3rd Edition approved
- ▶ Critical protection from voltage transients
- ▶ Plug-in or hardwired solution utilizing Metal Oxide Varistor (MOV) protection
- ▶ VSS 120/VSS 240 Series provides downed power line protection

Alpha's surge protection devices provides 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 International Specifications

Operating Voltage	120V Models				120/240V Models	240V Model		
Models Selection	Good	Better	Best	Best	Best	Good	Best	Best
Series Model:	LA-P+ 120	LA-P-120T	VSS 120-15 ²	VSS-120-20 ²	ISA 120/240 ¹	LA-P+240	ISA 240 ^{1,2}	VSS240 ²
Outlet Type / Pass Thru:	 / No	 / Yes	 / Yes	 / Yes	Hardwired / NA	 / No	Hardwired / NA	 / Yes
Protection:	L / N / G	L / N / G	L / N / G	L / N / G	L / N / G	L1 / L2 / G	L / G	L1 / L2 / G
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	-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
LED Indicator:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
UL 1449 3rd Edition Specifications								
Voltage Let Through Protection Rating:	700Vp	500Vp	500Vp	500Vp	700Vp / 1200Vp	1200Vp	1200Vp	500Vp
Nominal Discharge Current Rating:	3kA	3kA	20kA	20kA	10kA	3kA	10kA	20kA
Maximum Continuous Operating Voltage (MCOV):	150Vac	130Vac	275Vac	275Vac	150Vac / 300Vac	320Vac	320Vac	275Vac

Notes: ¹ The ISA surge protection devices are factory wired on the load side of the service entrance and available for field replacement. These arrestors should be installed by licensed electrician. ² UL1449 3rd edition not required

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 fail-safe mechanism. Listed to UL 497, CSA Listed Certified and 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

Part Numbers	162-029-10/162-027-10	162-028-10
RF Performance		
Frequency Range:	DC – 1.0GHz	DC – 1.0GHz
Characteristic Impedance:	75 Ohms	75 Ohms
Insertion Loss (Includes Flatness):	<0.3dB / 0.2dB typical	<0.3dB
Return Loss:	>30dB	>20dB
Protection		
DC Breakdown @ 2000V/s:	150 to 300V	150 to 300V
Impulse Breakdown @ 100V/μs:	<450V	<450V
Insulation Resistance:	>100 MegOhms	>100 MegOhms
Surge Life*		
10A, 10/1000μs:	>1500 Surges	>1500 Surges
100A, 10/1000μs:	>100 Surges	>100 Surges
300A, 10/1000μs:	>10 Surges	>10 Surges
5000A, 8/20μs:	>10 Surges	>10 Surges
AC Life		
5A, 1000Vac, 1 Sec:	>5 Operations	>5 Operations
1A, 1000Vac, 1 Sec:	>60 Operations	>60 Operations
Failshort		
30A, 1000Vac:	>15 Minutes	>15 Minutes
Operating Temperature:	-40 to 65°C / -40 to 149°F	-40 to 65°C / -40 to 149°F

* All specifications for service life only



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