



MA15 Series

Although industrial computers and PLCs are designed to be rugged, the extra protection provided by the DIN-rail mounting MA15 units is critical. Ideally suited for protecting panel mounted equipment and typically used in the controls section of a motor control center (MCC), the MA15 range provides surge and RFI protected power.

With a unique ‘three-stage’ combination of protection elements, these units suppress conducted RFI and voltage surges. The circuit elements are: (1) surge clipping components to absorb transient surges that may otherwise damage equipment, (2) a filter to suppress noise in the system and, (3) ring suppression. Ring suppression prevents surges causing the filter to ‘ring’ (oscillate) under low load conditions – an effect that actually accentuates interference in most commercially available filters.

Suitable for AC or DC application, MA15 units reduce both electromagnetic emissions and the susceptibility of the associated equipment to emissions from other sources. MA15 devices also offer installation flexibility. To protect circuits rated 15A or less, MA15 devices should be installed in series. To protect higher current circuits, simply install the MA15 in parallel.

LED status indication is standard with the MA15 units. Thermal fusing is also incorporated into each 18kA rated device as an additional safety feature. MA15 modules also offer short circuit protection for added safety.

Specifications MA15 Series

Maximum surge current: 18kA (8/20 μ s) per mode	
Maximum leakage current: <0.3mA	
Maximum continuous operating current	
15A series connection	
Unlimited Amps in parallel	
Maximum continuous operating voltage	
25% above nominal	
Limiting voltage	Let through voltage
@ 500A ring	
120V/140V versions	295V
240V/280V versions	356V
@ 500A 8/20 μs	
120V/140V versions	320V
240V/280V versions	800V
@ 3kA 8/20 μs	
120V/140V versions	396V
240V/280V versions	975V
@ 10kA 8/20 μs	
120V/140V versions	585V
240V/280V versions	1210V
Maximum attenuation (typical): -55dB @ 100MHz	
Modes protected: L-N, L-G, N-G	
Ambient temperature limits	
-40°F to +185°F (working)	
-40°C to +85°C (working)	
Humidity	
95% RH (non-condensing)	
Casing	
Polyamide-PA, with G- or T-section	
(Top-hat) DIN-rail mounting foot	
Connectors	
Screw terminal	
Terminals	
0.1 inch ² (2.5mm ²) 12 AWG	
Mounting	
G- or T-section (“Top-hat”) or	
1.4 inch (35mm) DIN rail	
Weight	
3.53oz (100g)	
EMC compliance	
BS EN 60950 : 1992	
BS EN 61000-6-2 : 1999	
LED Indication	
Green LED on Protection present	
Green LED off Internal failure	

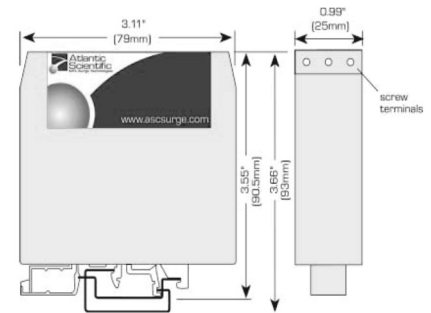
All figures typical at 77°F (25°C) unless otherwise stated

Ordering Data		
Part No.	AC	DC
MA15D1SI	120V, 47-63Hz	140V
MA15D2SI	240V, 47-63Hz	280V

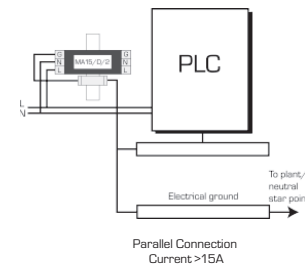
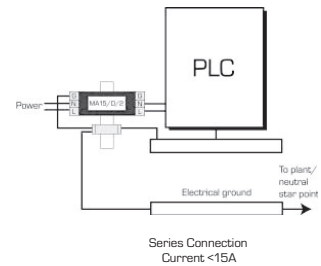
Approvals

Country (Authority)	Standard	Approved for	Product No.
United States	UL 1449	AC Power Product	MA15D1SI,
Canada	Recognized Component		MA15D2SI
United States	UL 1449	Hazardous Locations	MA15D1SI,
Canada	Recognized Component	Class I, Division 2	MA15D2SI
	UL 1604	Groups A, B, C and D	

Dimensions



Installation



The grounding of the surge protector and the protected equipment is very important and, if possible, should be accomplished as illustrated.

Please note that the unit is marked Line and Load and it is important that the unit is installed with the Line side connected to the incoming power and the Load connected to the equipment to be protected. For parallel application however, the Line side is connected to the incoming power and the Load left unconnected.

