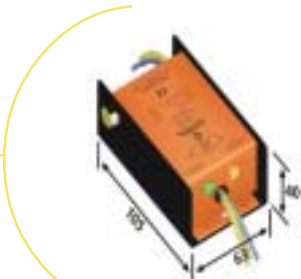


Single-phase surge protector and RFI filter

MSB-HF & MSB



The MSB and MSB-HF are secondary surge protector for especially sensitive equipment. The MOV-GDT “surge protection” circuit is completed combined with EMI/RFI filtering capability. This combination of functions results in enhanced efficiency against transient overvoltages (low clamping voltage) and RF interference. The MSB-HF surge protector is installed in series with connected equipment while the MSB is connected in parallel. Each unit provides LED indication for power present, fault indication and proper connection to the grounding system.

The units are available for 110V to 230V single phase applications and are housed in a NEMA 1 metal enclosure.

Applications

- Control & Instrumentation, PLCs
- Gate controllers
- Rectifiers
- Conveyor systems
- Transmitters and Receivers
- Video Surveillance Cameras
- Irrigation Systems

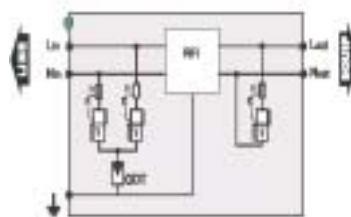
Standards & Guidelines

IEC 61643-11	International
ANSI/IEEE C62.41	USA
NFC 61740-95	France
VDE0675-6	Germany
CSA C22.2	Canada
CE Marked	European

OEM Series AC Protection

- 30kA transient amps protection (8/20µs)
- Series or parallel installed, surface mount
- Hybrid protection circuit with RFI filter
- LED indicator for power present, fault indication and proper connection to grounding system
- All modes of protection
- 10-Year warranty

Electrical Diagram



V: High-energy varistor
 Ft: Thermal fuse
 C: Remote signaling contact
 t°: Thermal disconnection
 MI: Disconnection indicator
 *No RFI for MSB

Specifications

Citel Model	MSB-130HF	MSB-230HF
System Voltage	110-130V	220-230V
MCOV	150V	250V
Ipeak (8/20µs)	30kA	30kA
Max. Line Current	20A	20A
ClampV @ 3kA	330V	650V
RFI Filtering	40dB@10MHz	40dB@10MHz
kAIC Rating	10,000 amps	10,000 amps
Leakage Current	< 0.5mA	< 0.5mA
Diagnostics	LEDs- Power, Fault, Ground	
Housing Materials	NEMA 1, Metal	
Operating Temperature	-40°C to +85°C	
Operating Altitude	13,000 ft (400m)	
Connection Method	Series(MSB-HF), Parallel(MSB)	
Protection Type	MOV-GDT-RFI based	
Connection	12" #12 AWG Leads	
Protection Modes	L-N, L-G, N-G	
Dimensions	90Hx70Wx59D (in mm)	