ERAM
POWER ELECTRONICS

Technical Datasheet

BLITZCARE

LIGHTNING PROTECTOR

Eram Power Electronics 'BlitzCare' is designed to protect the Commercial, Aerospace, Industrial electronics equipment from a highly intensive lightning strike. The product covers DO-160 sessions 22 (Lightning Induced Transient Susceptibility and lightning direct effects) and IEC-61000-4-2.

BlitzCare covers the major three tests to be performed on the test equipment, while protecting against the lightning to safeguard the unit with uninterrupted operations.

- Pin Injection – This method is used to directly inject the waveform into connector pins of both cables and printed wiring boards.
- Cable Bundle Induction – This method uses a coupling transformer to inductively couple the waveform onto the cable bundle.
- Ground Injection – This method is often used as an alternate method to inject the waveform onto the ground wire of the unit under test, referenced to the Ground plane that is located on the surface of the test table.





ERAM
POWER ELECTRONICS

BLITZCARE
LIGHTNING PROTECTOR

Electrical Specification				
Parameters	Value			
Mains AC Supply (V AC)	☐1ϕ, with N; 100 - 300 V AC		☐3ϕ with N; 415 ± 20%	
Power Rating (k VA)	☐5 k VA	☐10 k VA,	☐25 k VA,	☐100 k VA
Mains Frequency (Hz)	50 Hz, 60 Hz, 400 Hz			
DC Current Rating (A)	1-1000A			
Installation	Indoor			
Operating Temperature	0°C to +85°C			
Enclosure	IP40			
Lightning	YES			

Test category: D0-160 pin injection

Level	Waveforms				
	2/1	2/1	3/3 ✓	4/1 ✓	4/5A
	V_I/I_T	V_T/I_L	V_T/I_L	V_T/I_L	V_I/I_T
1	50/100	50/100	100/20	50/100	50/150
2	125/250	125/250	250/50	125/250	125/400
3 ✓	300/600	300/600	600/120	300/600	300/1000
4	750/1500	750/1500	1500/300	750/1500	750/2000
5	1600/3200	1600/3200	3200/640	1600/3200	1600/5000

Test category: DO-160 Cable bundles single stroke test

Level	Waveforms		
	3/3 ✓	4/1 ✓	5A/5A
	Voc/Isc	Voc/Isc	Voc/Isc
1	100/4	50/10	50/50
2	250/10	125/25	125/125
3 ✓	600/24	300/60	300/300
4	1500/60	750/150	750/750
5	3200/128	1600/320	1600/1600

ERAM
POWER ELECTRONICS

BLITZCARE
LIGHTNING PROTECTOR



In-compliance with:

- **DO-160/Sec. 22**
- **IEC-61000-4-2**



Applications



UTILITES



HIGH RISE TOWERS



HOSPITALS



EDUCATION INSTITUTIONS



AVIATION INDUSTRIES



MILITARY GROUND VEHICLES