

APEX IMAX HT Series

AC EMP PANEL SURGE PROTECTION

HEMP TESTED



The APEX IMAX HT Series of surge protection devices are UL designed and HEMP Tested to protect a wide range of 120 Vac power configurations. Each product within the APEX IMAX HT Series is engineered around a modular approach using robust surge assemblies that bolt directly across AC bus bars for maximum HEMP protection. The surge elements are constructed using patented assembly configurations to achieve premier performance that meet the Transtector HEMP Tested standard. Annunciation contacts are located conveniently on the interior main board assembly within an EMC rated enclosure to assure clear operational visibility.

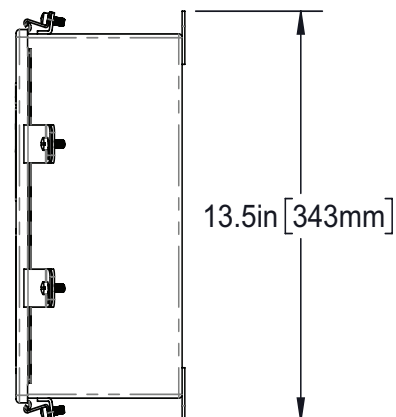
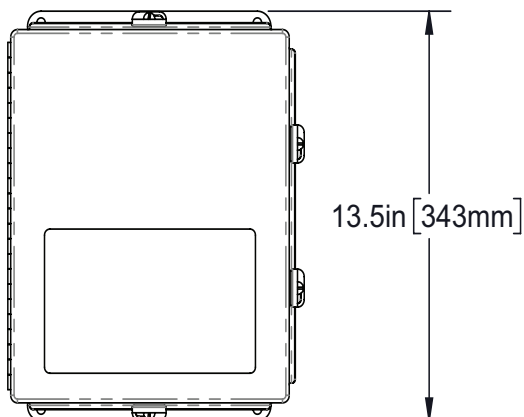


FEATURES

- Robust coordinated Silicon and MOV hybrid technology
- EMI shielded enclosure
- Illuminated and remote (dry contact relay) status indication per phase
- Line and load bidirectional protection
- UL 1449 4th Edition
- HEMP Tested per MIL-STD-188-125

As providers of electronic application-specific components and subsystems, Transtector's innovative solutions enable ultimate systems performance in the harshest environments. Since 2002 Transtector has been a partner with Military contractors in the design, manufacture and testing of specialized electronic and radio frequency products designed to prepare and protect critical systems from HEMP events.

DRAWINGS



SPECIFICATIONS

Part Number	HT-AO-IMAX-120Y	HT-AO-IMAX-120T	HT-AI-IMAX-120S
Device	Panel Protector	Panel Protector	Protection Module
Application	120/208 Vac	120/240 Vac	120 Vac
Technology	Silicon / MOV hybrid	Silicon / MOV hybrid	Silicon (SASD)
Service Voltage	120/208 V	120/240 V	120 V
Frequency Rating	50 to 400 Hz	50 to 400 Hz	50 to 400 Hz
Phase	3 Phase Wye	Split Phase	Single Phase
Voltage Protection Rating	700 V (peak) L-L, 1000 V (peak) L-N @ 3kA (8/20 μ s)	700 V (peak) L-L, 1000 V (peak) L-N@ 3kA (8/20 μ s)	NA
Fault Current Rating (SCCR)	65 kAIC per NEC 285.6	65 kAIC per NEC 285.6	NA
Protection Modes	L-L, L-N	L-L, L-N	L-N
Early Time HEMP (E1)	5 kA 20/500ns per MIL-STD-188-125	5 kA 20/500ns per MIL-STD-188-125	5 kA 20/500ns per MIL-STD-188-125
Intermediate Time EMP (E2)	250 A 1.5/3-5000 μ s per MIL-STD-188-125	250 A 1.5/3-5000 μ s per MIL-STD-188-125	250 A 1.5/3-5000 μ s per MIL-STD-188-125
Max Discharge Current (Imax)	160 KA	160 KA	20 kA
Shielding Effectiveness	80 dBm (50 MHz to 1 GHz)	80 dBm (50 MHz to 1 GHz)	NA
IEEE location category	C High and C Low	C High and C Low	B High, B Low
Enclosure Rating	UL50 Type 4	UL50 Type 4	NA
Enclosure Type	Continuously welded plated steel, Grey Powder Coat	Continuously welded plated steel, Grey Powder Coat	Noryl 190X
Operating Temperature	-40°C to +75°C	-40°C to +75°C	-40°C to +75°C
Humidity	100% Non-condensing	100% Non-condensing	100% Non-condensing
Mounting	Panel Mount	Panel Mount	Replacement Module
Dimensions	12 x 10 x 8	12 x 10 x 8	4.25 x 4.55 x 0.75
Weight	24lb (10.9 kg)	24lb (10.9 kg)	0.5 lb. (0.2kg)
HEMP Tested	E1 & E2 per MIL-STD-188-125	E1 & E2 per MIL-STD-188-125	E1 & E2 per MIL-STD-188-125
UL	UL 1449 4th Edition, Type 2	UL 1449 4th Edition, Type 2	UL 1449 4th Edition, Type 4CA
CE	IEC 61643-1 Class II	IEC 61643-1 Class II	IEC 61643-1 Class II
EMP Protection Level	1, 2, 3	1, 2, 3	1, 2, 3
Warranty	15 Years	15 Years	15 Years



HEMP Tested products by Transtector are now available for civil infrastructure applications including utilities, transportation, telecommunications, and first responders. Tested to stringent Military Standard 188-125 these products are engineered to provide EMP protection for equipment and facilities per Department of Homeland Security guidelines, and have been tested for survivability to the peak threat levels of the harsh Early Time (E1) and Intermediate Time (E2) High-Altitude (HEMP) environments. For additional information on custom EMP/HEMP solutions or to discuss commercial applications for HEMP Tested products contact Transtector at 1 208 635 6400.