

EMI/EMS Test Result

According to IEC60601-1-2 4th Edition (EMS)

Model Name : GHA300F series

The EUT is operated with following condition during EMI/EMS test.

Input Voltage : 230VAC / 50Hz
Output Current : Rated Current
Ambient Temperature : 25°C ± 10°C

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#	Subject	Reference standard	Test Condition	Criteria *1	Result	
1	EMI		Conducted Emission	EN55011, EN55032 Class B CISPR 32 Class B FCC Part15 Class B VCCI Class B	-	Pass
			Radiated Emission	EN55011, EN55032 Class B CISPR 32 Class B FCC Part15 Class B VCCI Class B	-	Pass
			Harmonic Current	IEC61000-3-2 Class A	-	Pass
4	EMS	IEC61000-4-2	Electrostatic discharge immunity test Contact Discharge : Level 4 (8kV) Air Discharge : Level 4 (15kV)	A	Pass	
5		IEC61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test 10V/m : (80MHz~2.7GHz) 80% Amplitude modulated	A	Pass	
6		IEC61000-4-4	Electrical fast transient / Burst immunity test Level 3 (2kV) Repetition Rate : 100kHz *2	A	Pass	
7		IEC61000-4-5	Surge immunity test Line to Line : Level 3 (2kV) Line to Earth : Level 4 (4kV)	B	Pass	
8		IEC61000-4-6	Immunity to conducted disturbances, induced by radio-frequency fields Voltage Level (e.m.f.) : Level 3 (10Vrms)	A	Pass	
9		IEC61000-4-8	Power frequency magnetic field Immunity test Magnetic Field Strength : Level 4 (30A/m)	A	Pass	
10		Voltage dips, short interruptions and voltage variations immunity test	IEC61000-4-11	(1) 100% dip for 10ms, 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315°	A	Pass
				(2) 100% dip for 20ms, 0°	A	Pass
				(3) 60% dip for 100ms, 0°	B	Pass
				(4) 30% dip for 500ms, 0°	B	Pass
			(5) 100% dip for 5 seconds (short interruption)	B	Pass	

***1 Definition of Criteria**

Criteria A : (1) No output voltage drop with control circuit failure.
(2) No protection circuit and other circuit malfunction.

Criteria B : (1) The output voltage is temporary degradation of performance.
It recovers its normal performance without operator intervention.
(2) No protection circuit and other circuit failure.

*2 Required adding ferrite core RFC-H13 (Kitagawa Industries Co., Ltd.) or equivalent on the input line.

<Notes>

Power supply shall not determine the final equipment performance against EMS test. Therefore we confirmed the output voltage performance only. EMS test should be performed as a final product.