

March 3, 2021 US Design Dept.

<u>EMI/EMS Test Result</u>
According to IEC60601-1-2 4th Edition (EMS)

: PCA1500F series Model Name

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

Input Voltage : 230VAC / 50Hz

Seiya Shimada Output Current Rated Current Prepared: Ambient Temperature : 25°C ± 10°C

#	Subject		Reference standard	Test Condition	Criteria *1	Result
1	ЕМІ	Conducted Emission		EN55011, EN55032 Class A CISPR11,CISPR32 Class A FCC Part15 Class A VCCI Class A	-	Pass
2		Radiated Emission		EN55011, EN55032	-	Pass
3		Harmonic Current	IEC61000- 3-2	Class A	-	Pass
4		Electrostatic discharge immunity test	IEC61000- 4-2	Contact Discharge : Level 4 (8kV) Air Discharge : Level 4 (15kV) Applied to Chassis, Input, Output and FG terminal	A	Pass
5		Radiated, radio-frequency, electromagnetic field immunity test	IEC61000- 4-3	10V/m : (80MHz~2.7GHz) 80% Amplitude modulated	A	Pass
6		Electrical fast transient / Burst immunity test	IEC61000- 4-4	Level 4 (4kV) Repetition Rate : 5kHz and 100kHz	А	Pass
7		Surge immunity test	IEC61000- 4-5	Line to Line : Level 3 (1kV) Line to Earth : Level 4 (4kV)	А	Pass
8	EMS	Immunity to conducted disturbances, induced by radio-frequency fields	IEC61000- 4-6	Voltage Level (e.m.f.) : Level 3 (10Vrms)	А	Pass
9		Power frequency magnetic field Immunity test	IEC61000- 4-8	Magnetic Field Strength : Level 4 (30A/m)	А	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° (2) 100% dip for 20ms, 0° (3) 30% dip for 500ms, 0° (4) 100% dip for 5 seconds (short interruption)	A *2 A B	Pass Pass Pass

*1 Definition of Criteria

Criteria A: (1) Output voltage fluctuation is less than the following.

•5% of rated voltage (Rated output voltage : 5V or less)

•10% of rated voltage (Rated output voltage: More than 5V)

(2) No circuit malfunctions.

Criteria B: (1) The power supply is not failed.

(2) The output voltage recovers automatically, even if it drops temporarily.

*2 Output current: 55% or less of rated current (at 100VAC) Output current: 75% or less of rated current (at 240VAC)

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