参考資料

COSEL

PBA1000F EMI/EMS Test result

September 16, 2004
Design engineering dep.

Approved : Takahiro Yonada

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No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input(AC100V,120V,230V) (2) Rated load (3) Ambient temp. 25±10℃	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	ok
2	Radiated emission	(1) Rated input(AC100V,120V,230V) (2) Rated load (3) Ambient temp. 25±10℃	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	ok
3	Harmonic current (EN61000-3-2)	(1) Rated input (AC100V,230V) (2) Load 0 - Rated load (3) Ambient temp. 25±10℃	(1)Meets the undermentioned standard. EN61000-3-2 classA	ok
4	Static electricity immunity test (EN61000-4-2)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. 25±10℃ (4) Contact discharge voltage 8[kV] (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	ok
5	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. 25±10℃ (4)Testing field strength 10[V/m] (Level 3)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	ok
6	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. 25±10℃ (4) Test peak voltage 4[kV] (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	ok
7	Surge immunity test (EN61000-4-5)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. 25±10℃ (4) Test voltage Line to line 2[kV] (Level 3) Line to earth 4[kV] (Level 4)	(1)The power supply is not stop (2)Circuit does not malfunction. (3)No abnormality of the insulation destruction etc. (4)Parts are no damaged.	ok
8	Immunity to conducted disturbances, induced by radio-frequency fields (EN61000-4-6)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. 25±10℃ (4) Voltage level (e.m.f.) 10[V] (Level 3)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	ok
9	Power frequency magnetic field immunity test (EN61000-4-8)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. 25±10℃ (4) Magnetic field 30A/m (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	ok
10	Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11)	(1) Rated input (AC230V) ・30% reduction at 10mS min. ・60% reduction at 100mS min ・95% reduction at 5S min. ・±10% variation at 15 minutes (2) Rated load (3) Ambient temp. 25±10℃	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	ok

参考資料

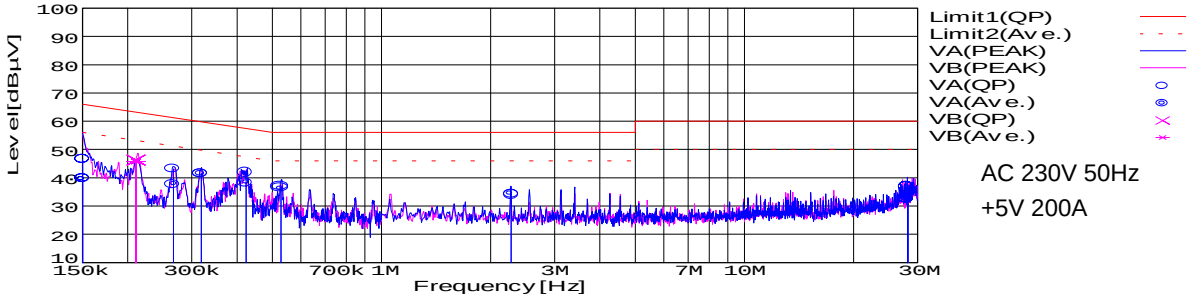
COSEL

DATA SHEET		Date	10-Feb-04
Model	PBA1000F-5	Temp.	25 degreeC
Test	EMI Line conduction & Radiated emission	Humid.	45 %RH
		Tested by	K.Uotani

LINE CONDUCTION

Model Name : PBA1000F-5
Model No. :
Serial No. :
Points : 8
Detector : PEAK/QP/Ave.
Line Mode : VA/VB
Power Supply : AC 230V 50Hz
Limit1: [EN 55022] Class B(QP)
Limit2: [EN 55022] Class B(Ave.)

Temp. : 25
Humi. : 45
Date : 2004/2/10 23:03
Test Equip. : R3132,ESPC
Comment : K.Uotani
+5V 200A

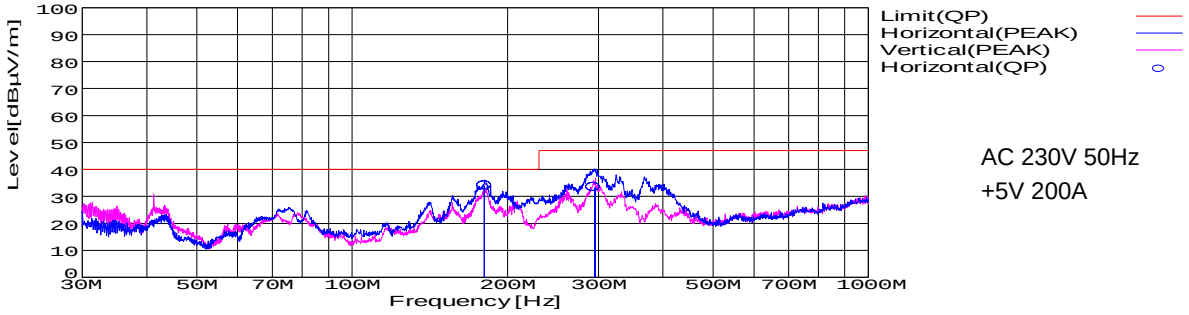


Frequency [MHz]	Meter Reading (Ave.)[dBuV]	Meter Reading (QP)[dBuV]	Factor [dB]	Level(Ave.) [dBuV]	Level(QP) [dBuV]	Line	Limit(Ave.) [dBuV]	Limit(QP) [dBuV]	Margin(Ave.) [dB]	Margin(QP) [dB]
0.1501	29.9	36.6	9.8	39.7	46.4	VA	56	66	16.3	19.6
0.2107	36	36.5	9.8	45.8	46.3	VB	53.2	63.2	7.4	16.9
0.2673	27.9	33.4	9.8	37.7	43.2	VA	51.2	61.2	13.5	18
0.3186	31.7	31.7	9.8	41.5	41.5	VA	49.8	59.8	8.3	18.3
0.4239	28.4	31.8	9.9	38.3	41.7	VA	47.4	57.4	9.1	15.7
0.5291	26.5	27	9.9	36.4	36.9	VA	46	56	9.6	19.1
2.2764	24.5	24.1	9.9	34.4	34	VA	46	56	11.6	22
28.1682	22.1	26.3	10.4	32.5	36.7	VA	50	60	17.5	23.3

RADIATED EMISSION

Model Name : PBA1000F-5
Model No. :
Serial No. :
Points : 2
Detector : PEAK/QP
Polarization : Horizontal
Power Supply : AC 230V 50Hz
Limit: [EN 55022] Class B<3m>

Temp. : 25
Humi. : 45
Date : 2004/2/10 23:03
Test Equip. : R3132,ESPC
Comment : K.Uotani
+5V 200A



Frequency [MHz]	MeterReading (QP)[dBuV]	Ant. Type	Antenna Factor[dB/m]	Cable & Preamp[dB]	Level(QP) [dBuV/m]	Angle [°]	Height[cm]	Polar.	Limit [dBuV/m]	Margin [dB]
180.231	56.7	BL	8.4	-31.3	33.8	195	159	Hori.	40	6.2
295.209	51.2	BL	13	-30.9	33.3	148	108	Hori.	47	13.7