



PBA300F EMI/EMS Test result

 September 16, 2004
 Design engineering dep.
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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. $25\pm 10^{\circ}\text{C}$	(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. $25\pm 10^{\circ}\text{C}$	(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. $25\pm 10^{\circ}\text{C}$	(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. $25\pm 10^{\circ}\text{C}$ (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. $25\pm 10^{\circ}\text{C}$ (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. $25\pm 10^{\circ}\text{C}$ (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. $25\pm 10^{\circ}\text{C}$ (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. $25\pm 10^{\circ}\text{C}$ (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. $25\pm 10^{\circ}\text{C}$ (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. - $\pm 10\%$ variation at 15 minutes (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK

DATA SHEET							Date	30-Mar-04				
Model	PBA300F-48						Temp.	25 degreeC				
Test	EMI Line conduction & Radiated emission						Humid.	45 %RH				
							Tested by	H.GOTO				
LINE CONDUCTION												
Model Name		PBA300F-48			Temp.		25					
Model No.					Humi.		45					
Serial No.					Date		2004/3/30 18:33					
Points		7			Test Equip.		R3132,ESPC					
Detector		PEAK/QP/Ave.			Load Line		150mm					
Line Mode		VA/VB			Comment		H.GOTO					
Power Supply		AC 230V 50Hz			48V 7A							
Limit1: [EN 55022] Class B(QP)												
Limit2: [EN 55022] Class B(Ave.)												
							AC 230V 50Hz 48V 7A					
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]		
0.2184	27.8	30.8	9.8	37.6	40.6	VA	52.9	62.9	15.3	22.3		
0.2956	20.4	26.5	9.8	30.2	36.3	VB	50.4	60.4	20.2	24.1		
0.4024	22.9	28.8	9.9	32.8	38.7	VB	47.8	57.8	15	19.1		
0.4136	23.5	30	9.9	33.4	39.9	VB	47.6	57.6	14.2	17.7		
0.4258	21.7	28.2	9.9	31.6	38.1	VB	47.3	57.3	15.7	19.2		
10.3816	16.1	29.3	10.1	26.2	39.4	VB	50	60	23.8	20.6		
28.2853	24.8	28.4	10.4	35.2	38.8	VA	50	60	14.8	21.2		
RADIATED EMISSION												
Model Name		PBA300F-48			Temp.		25					
Model No.					Humi.		45					
Serial No.					Date		2004/3/30 23:35					
Points		2			Test Equip.		R3132,ESPC					
Detector		PEAK/QP			Load Line		150mm					
Polarization		Vertical			Comment		H.GOTO					
Power Supply		AC 230V 50Hz			48V 7A							
Limit: [VCCI] Class B<3m>												
							AC 230V 50Hz 48V 7A					
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]		
121.222	50	BL	11	-31.7	29.3	126	160	Vert.	40	10.7		
306.873	54	BL	13.2	-30.9	36.3	97	104	Vert.	47	10.7		