

No.	Test item	Test conditions	Conditions of Acceptability	Result
1	Line conduction 雑音端子電圧	(1) Rated input(AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. 25±10°C 周囲温度 25±10°C	(1)Meets the undermentioned standard. FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A  下記規格に準拠していること FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A  with external noise filter TAC10-683 (COSEL) FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B  外付けノイズフィルタ TAC10-683 (COSEL) FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
2	Radiated emission 放射電界強度	(1) Rated input(AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. 25±10°C 周囲温度 25±10°C	(1)Meets the undermentioned standard. FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A  下記規格に準拠していること FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	OK
3	Static electricity immunity test (EN61000-4-2) 静電気放電イミュニティ試験	(1) Rated input (AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. 25±10°C 周囲温度 25±10°C (4) Contact discharge voltage 8[kV] (Level 4) 印加電圧 8kV (Level 4)	(1)No protection circuit failure. 保護回路の故障がないこと (2)No output voltage drop with control circuit failure. 出力電圧の低下がないこと (3)No any other function failure 故障がないこと	OK
4	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3) 放射性無線周波電磁界イミュニティ試験	(1) Rated input (AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. 25±10°C 周囲温度 25±10°C (4)Testing field strength 10[V/m] (Level 3) 電界強度 10[V/m] (Level 3)	(1)No protection circuit failure. 保護回路の故障がないこと (2)No output voltage drop with control circuit failure. 出力電圧の低下がないこと (3)No any other function failure 故障がないこと	OK
5	Electrical fast transient/ burst immunity test (EN61000-4-4) 電氣的ファーストランジェントバース トイミュニティ試験	(1) Rated input (AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. 25±10°C 周囲温度 25±10°C (4) Test peak voltage 4[kV] (Level 4) 印加電圧 4kV (Level 4)	(1)No protection circuit failure. 保護回路の故障がないこと (2)No output voltage drop with control circuit failure. 出力電圧の低下がないこと (3)No any other function failure 故障がないこと	OK

6	Surge immunity test (EN61000-4-5) サージイミュニティ試験	(1) Rated input (AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ 周囲温度 $25 \pm 10^{\circ}\text{C}$ (4) Test voltage Line to line 2[kV] (Level 3) Line to earth 4[kV] (Level 4)	(1)The power supply is not stop 停止しないこと (2)Circuit does not malfunction. 誤動作のないこと (3)No abnormality of the insulation destruction etc. 絶縁破壊など故障がないこと (4)Parts are no damaged. 部品の故障がないこと	OK
7	Immunity to conducted disturbances, induced by radio-frequency fields (EN61000-4-6) 伝導性無線周波数電磁界イミュニティ 試験	(1) Rated input (AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ 周囲温度 $25 \pm 10^{\circ}\text{C}$ (4) Voltage level (e.m.f.) 10[V] (Level 3) 印加電圧 10[V] (Level 3)	(1)No protection circuit failure. 保護回路の故障がないこと (2)No output voltage drop with control circuit failure. 制御回路の故障による出力低下がないこと (3)No any other function failure 故障がないこと	OK
8	Power frequency magnetic field immunity test (EN61000-4-8) 電力周波数磁界イミュニティ試験	(1) Rated input (AC230V) 入力電圧 (AC230V) (2) Rated load 定格負荷 (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ 周囲温度 $25 \pm 10^{\circ}\text{C}$ (4) Magnetic field strength 30[A/m] (Level 4) 磁界強度 30[A/m] (Level 4)	(1)No protection circuit failure. 保護回路の故障がないこと (2)No output voltage drop with control circuit failure. 制御回路の故障による出力低下がないこと (3)No any other function failure 故障がないこと	OK
9	Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11) 電圧ディップ、瞬時イミュニティ試験	(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  ・70%低下 10ms min ・40%低下 100ms min ・5%低下 5秒 min ・ $\pm 10\%$ の変動 15分間 (2) Rated load 定格負荷 (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ 周囲温度 $25 \pm 10^{\circ}\text{C}$	(1)No protection circuit failure. 保護回路の故障がないこと (2)No output voltage drop with control circuit failure. 制御回路の故障による出力低下がないこと (3)No any other function failure 故障がないこと	OK

Approved : Yoshiaki Shimizu  
Yoshiaki Shimizu

Prepared : Yosuke Murata  
Yosuke Murata

## DATA SHEET

Date 01-Dec-06

Model PBA1500T-12

Temp. 25 degreeC

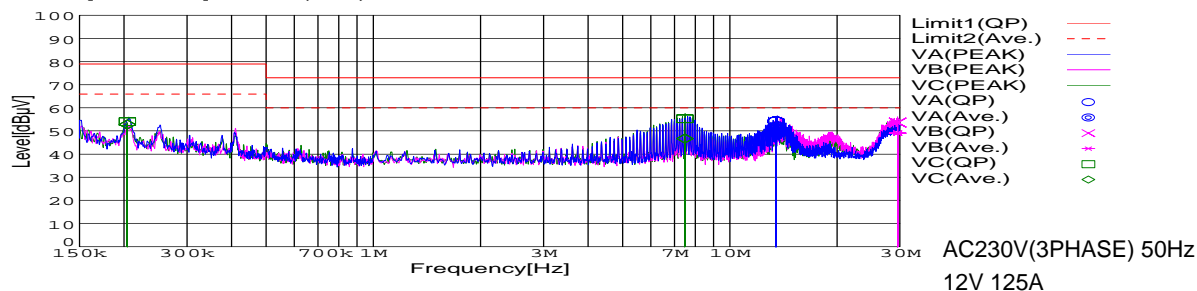
Test EMI Line conduction & Radiated emission  
雑音端子電圧,電界強度

Humid. 45 %RH

Tested by Y.Murata

## LINE CONDUCTION

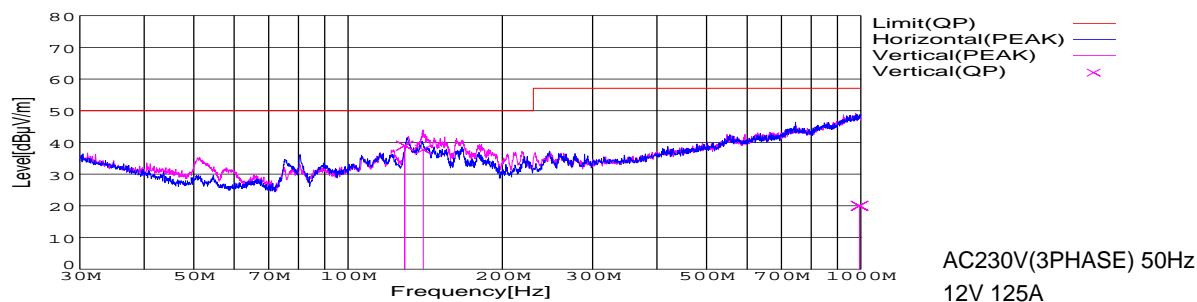
Model Name : PBA1500T-12 Temp. : 25 degreeC  
 Model No. : - Humi. : 45 %  
 Serial No. : - Date : 2006/12/1 10:56  
 Points : 4 Test Equip. : R3132,ESPC  
 Detector : PEAK/QP/Ave. Load Line : 500 mm  
 Line Mode : VA/VB/VC Comment : -  
 Power Supply : AC230V(3PHASE) 50Hz 12V 125A  
 Limit1: [EN 55022] Class A(QP)  
 Limit2: [EN 55022] Class A(Ave.)



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]
13.4553	39	43.6	10.6	49.6	54.2	VA	60	73	10.4	18.8
29.5585	38	42.5	11.1	49.1	53.6	VB	60	73	10.9	19.4
0.2043	42.8	43.5	10	52.8	53.5	VC	66	79	13.2	25.5
7.4792	36.4	44.3	10.4	46.8	54.7	VC	60	73	13.2	18.3

## RADIATED EMISSION

Model Name : PBA1500T-12 Temp. : 25 degreeC  
 Model No. : - Humi. : 45 %  
 Serial No. : - Date : 2006/12/6 10:43  
 Points : 3 Test Equip. : R3132,ESPC  
 Detector : PEAK/QP Load Line : 500 mm  
 Polarization : Hori. & Vert. Comment : -  
 Power Supply : AC230V(3PHASE) 50Hz 12V 125A  
 Limit: [EN 55022] Class A<3m>

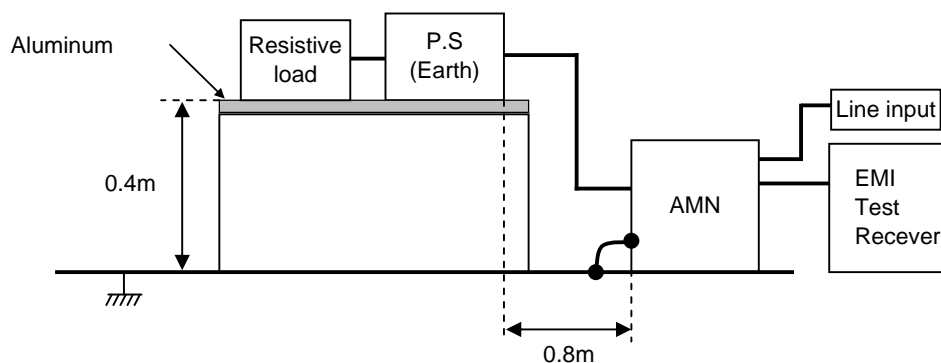


Frequency [MHz]	Meter Reading (QP) [dBuV]	Ant. Type	Antenna Factor [dB/m]	Cable & Preamp [dB]	Level(QP) [dBuV/m]	Angle [°]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
129.007	59.4	BL	11.2	-31.6	39	353	144	Vert.	50	11

## DATA SHEET

Model	Circuit used for measurement
Test	EMI Line conduction & Radiated emission

### 1. Line conduction



### 2. Radiated emission

