MODEL：PM-05-15

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	V1: 150 mVp-p (Max)	I/P: 230VAC O/P:FULL LOAD Ta:25℃	V1: 18 mVp-p (Max)	P
2	OUTPUT VOLTAGE TOLERANCE	V1: 2 %~ -2 % (Max)	I/P:115 VAC / 264 VAC O/P:FULL/ MIN LOAD Ta:25℃	V1: 0.05 %~ -0.05 %	P
3	LINE REGULATION	V1: 0.5 %~ -0.5 % (Max)	I/P:115 VAC ~ 264 VAC O/P:FULL LOAD Ta:25℃	V1: 0.04 %~ -0.04 %	P
4	LOAD REGULATION	V1: 1 %~ -1 % (Max)	I/P: 230 VAC O/P:FULL ~MIN LOAD Ta:25℃	V1: 0 %~ 0 %	P
5	SET UP TIME	230VAC: 1000 ms (Max) 115 VAC: 1000 ms (Max)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25℃	230VAC/ 774 ms 115VAC/ 326 ms	P
6	RISE TIME	230VAC: 20 ms (Max) 115VAC: 20 ms (Max)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25℃	230VAC/ 7 ms 115VAC/ 8 ms	P
7	HOLD UP TIME	230VAC: 100 ms (TYP) 115VAC: 24 ms (TYP)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25℃	230VAC/ 171 ms 115VAC/ 40 ms	P
8	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230 VAC O/P:FULL LOAD Ta:25℃	TEST: <5 %	P
9	DYNAMIC LOAD	V1: 1500 mVp-p	I/P: 230 VAC O/P:FULL /Min LOAD 90%DUTY/1KHZ Ta:25℃	185 mVp-p	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	85VAC~264 VAC	I/P:TESTING O/P:FULL LOAD Ta:25℃	42 V~264V	P
			I/P: LOW-LINE-3V= 82 V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD ON: 30 Sec . OFF: 30 Sec 10MIN (AC POWER ON/OFF NO DAMAGE)	TEST: OK	
2	INPUT FREQUENCY RANGE	47HZ ~440 HZ NO DAMAGE OSC	I/P: 85 VAC ~ 264 VAC O/P:FULL~MIN LOAD Ta:25℃	TEST: OK	P
3	EFFICIENCY	74 % (TYP)	I/P: 230 VAC O/P:FULL LOAD Ta:25℃	74.7 %	P
4	INPUT CURRENT	230V/ 0.08 A (TYP) 115V/ 0.12 A (TYP)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25℃	I = 0.069 A/ 230 VAC I = 0.108 A/ 115 VAC	P
5	INRUSH CURRENT	230V/ 45 A (TYP) 115V/ 25 A(TYP) COLD START	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25℃	I = 24 A/ 230 VAC I = 13 A/ 115 VAC	P
6	LEAKAGE CURRENT	<80uA /264 VAC for touch leakage current	I/P: 264 VAC O/P:Min LOAD Ta:25℃	L-V+ : 69 uA L-V-: 69 uA N-V+: 69 uA N-V-: 69 uA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	Above 105 %	I/P: 230 VAC I/P: 115 VAC O/P:TESTING Ta:25℃	181 %/ 230 VAC 169 %/ 115 VAC Hiccup Mode	P
2	OVER VOLTAGE PROTECTION	CH1: 17.25V~ 20.25V	O/P:MIN LOAD Ta:25℃	18.3V/ 60mA Shut off	P
3	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 264 VAC O/P:FULL LOAD Ta:25℃	NO DAMAGE Hiccup Mode	P

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	No load power consumption	<0.5W	I/P: 240 VAC O/P:NO LOAD	0.32 W/ 240 VAC	P

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	MODEL： PM-05-24 1. ROOM AMBIENT BURN-IN：1.5 HRS I/P: 230VAC O/P: FULL LOAD Ta= 25 ℃ 2. HIGH AMBIENT BURN-IN：2 HRS I/P: 230VAC O/P: FULL LOAD Ta= 50.8 ℃			P
2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR (MIN)	I/P: 230 VAC O/P: 139 % LOAD Ta:25℃	TEST：OK	P
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P: 230 VAC O/P: 100 % LOAD Ta= -20℃	TEST：OK	P
4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50℃ NO DAMAGE	I/P: 272 VAC O/P:FULL LOAD Ta= 50℃ HUMIDITY= 95 %R.H	TEST：OK	P
5	TEMPERATURE COEFFICIENT	± 0.03 %(0~50℃)	I/P: 230 VAC O/P:FULL LOAD	± 0.01 %(0~50℃)	P
6	VIBRATION TEST	1 Carton & 1 Set (1) Waveform: Sine Wave (2) Frequency:10~500Hz (3) Sweep Time:10min/sweep cycle (4) Acceleration:2G (5) Test Time:1 hour in each axis (X.Y.Z) (6) Ta:25℃		TEST：OK	P

NO	Position	P/N	ROOM AMBIENT Ta= 25 ℃	HIGH AMBIENT Ta= 50.8℃
1	U1	DM0265RNB FAIR	52.6℃	76.2℃
2	D1	BYV26C 1A/600V VIS	48.2℃	71.3℃
3	ZD1	P6KE220A PAN	53.8℃	77.1℃
4	T1 COIL	TF-1391 LS	51.0℃	73.2℃
5	BD1	KBP208G 2A/800V LT	44.0℃	67.3℃
6	D100	HER203 2A/200V REC	46.0℃	68.4℃
7	C36	47U/50V RUB 105℃ YXF	45.9℃	69.0℃
8	L100	DR006C	42.9℃	65.3℃
9	C105	100U/35V RUB 105℃ YXF	43.3℃	65.7℃
10	C5	22U/400V RUB 105℃ YXA	42.8℃	66.1℃
11	LF1	LF-502 LS	42.5℃	66.0℃
12				
13				
14				
15				

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P: 4 KVAC/min	I/P-O/P: 4.4 KVAC/min Ta:25℃	I/P-O/P: 1 mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P: 500 VDC Ta:25℃	I/P-O/P: 17 GΩ NO DAMAGE	P
3	APPROVAL	TUV: Certificate NO ：TA50081369 UL: File NO ：			P

E.M.C TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	HARMONIC	EN61000-3-2 CLASS A	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	PASS	P
2	CONDUCTION	EN55022 EN55011 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL/50% LOAD Ta:25℃	PASS Test by certified Lab	P
3	RADIATION	EN55022 EN55011 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL LOAD Ta:25℃	PASS Test by certified Lab	P
4	E.S.D	EN61000-4-2 MEDICAL AIR:8KV / Contact:6KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A	P
5	E.F.T	EN61000-4-4 MEDICAL INPUT: 2KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A	P
6	SURGE	IEC61000-4-5 MEDICAL L-N :1KV L,N-PE:2KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A	P
7	Test by certified Lab & Test Report Prepare				

M.T.B.F & LIFE CYCLE CALCULATION

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C105 IS THE MOST CRITICAL COMPONENT I/P: 230VAC O/P:FULL LOAD Ta= 25℃ LIFE TIME= 599760 HRS I/P: 230VAC O/P:FULL LOAD Ta= 50℃ LIFE TIME= 134196 HRS			P
2	MTBF	MIL-HDBK-217F NOTICES2 PARTS COUNT TOTAL FAILURE RATE: 1513.4KHRS			P

COMPONENT STRESS TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	Power Transistor (D to S) or (C to E) **Peak Voltage**	U1 Rated DM0265RNB : 660 V 1.5A	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on (2) Full Load (3)Output Short Ta:25℃	(1) 620 V (2) 620 V (3) 640 V	P
2	Diode Peak **Voltage**	D100 Rated HER203 : 200V 2A	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on (2) Full Load (3)Output Short Ta:25℃	(1) 148 V (2) 124 V (3) 150 V	P
3	Clamp Diode Peak **Voltage**	D1 Rated BYV26C : 600V 1 A	I/P:High-Line +3V = 267 V O/P: (1)Full Load (2) Dynamic Load 90%Duty/1KHz Ta:25℃	(1) 544 V (2) 544 V	P
4	**Input Capacitor Voltage**	C5 Rated :22u / 400V/ 105℃	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change (4)Burn in 1hour Ta:25℃	(1) 374 V (2) 374 V (3) 374 V (4) 374 V	P
5	**Control IC Voltage Test**	U1 Rated DM0265RNB : 20 V	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta:25℃	(1) 16.1 V (2) 10.7 V (3) 16.1 V	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2006/1/12	RD SAMPLE	PASS	VINCENT TSENG	MAX LIN
2006/4/7	PRODUCT SAMPLE W0602A12	PASS	VINCENT TSENG	MAX LIN

2003/12/12 A50-F023