



Test Report : GSM06x12

AC-DC Green Medical Adaptor

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

■ SAFETY TEST

Safety Test

■ RELIABILITY TEST

Environment Test

Other test

DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	100mVp-p (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	60mVp-p	P
2	VOLTAGE TOLERANCE	-5% ~ +5% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	-1.31% ~ +1.92%	P
3	LINE REGULATION	-0.5% ~ +0.5% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0.11% ~ +0.01%	P
4	LOAD REGULATION	-3% ~ +3% (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-1.10% ~ +1.85%	P
5	SET UP TIME	1000mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	694mS	P
6	RISE TIME	50mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	18mS	P
7	HOLD UP TIME	12mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	17.3mS	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE RANGE	90VAC ~ 264VAC	I/P:TESTING O/P:FULL LOAD Ta:25°C	70V ~ 264V	P
2	FREQUENCY RANGE	50HZ - 60HZ (Typ) NO DAMAGE OSC	I/P: 100VAC ~ 240VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK	P
3	EFFICIENCY	77% (Typ.)	I/P:230VAC O/P:FULL LOAD Ta:25°C	78.45%	P
4	AVERAGE EFFICIENCY	73.41% (LEVEL V)	I/P:115/230VAC O/P:25% 、 50% 、 75% 、 100% LOAD Ta:25°C	76.05% (115VAC) 76.37% (230VAC)	P
5	AC CURRENT	0.18A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.141A	P
6	NO LOAD POWER CONSUMPTION	0.3W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.2W	P

7	INRUSH CURRENT	< 30A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	20.1A	P
8	LEAKAGE CURRENT	< 0.05mA	I/P:240VAC O/P:Min LOAD Ta:25°C	L-FG: 0.02mA N-FG: 0.02mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	>105%	I/P:230VAC O/P:TESTING Ta:25°C	0.96A (192%) HICCUP MODE RESET : AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	110%~140%	I/P:230VAC O/P:MIN LOAD Ta:25°C	Clamp by ZENER diode	P
3	SHORT PROTECTION	SHORT OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE RESET AUTO RECOVER	P

■ SAFETY TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:5656 VDC/min	I/P-O/P:5656 VDC/min Ta:25°C	I/P-O/P: 0.03uA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>50MΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>100MΩ NO DAMAGE	P

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 4HRS I/P:230VAC O/P:100% LOAD Ta=25℃ 2. ROOM AMBIENT BURN-IN : 4HRS I/P:115VAC O/P:100% LOAD Ta=25℃ 3. ROOM AMBIENT BURN-IN : 40HRS I/P:230VAC O/P:100% LOAD Ta=40℃			P
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P : 230VAC O/P : 100% LOAD Ta= -0℃	TEST : OK	P

OTHER

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C5 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:100% LOAD Ta=25℃ LIFE TIME= 176676HRS I/P:115 VAC O/P:100% LOAD Ta=25℃ LIFE TIME= 175455HRS			P
2	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 1.127 M.T.B.F : 886925HRS			P

TEST RESULT	TESTER	APPROVAL
PASS	PETER	VINCENT