



Test Report : GP25x13A

AC-DC Triple Output Industrial 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	V1 : 50mVp-p (Max) V2 : 100mVp-p (Max) V3 : 50mVp-p (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	V1 : 50 mVp-p V2 : 39 mVp-p V3 : 10 mVp-p	P
2	VOLTAGE TOLERANCE	V1 : -5% ~ +5% (Max) V2 : -5% ~ +10% (Max) V3 : -3% ~ +3% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	V1 : -1.88% ~ +2.82% V2 : -0.27% ~ +7.83% V3 : -0.01% ~ +3.40%	P
3	LINE REGULATION	V1 : -1% ~ +1% (Max) V2 : -1% ~ +1% (Max) V3 : -1% ~ +1% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	V1 : -0.01% ~ +0.04% V2 : -0.02% ~ +0.03% V3 : -0.01% ~ +0.06%	P
4	LOAD REGULATION	V1 : -5% ~ +5% (Max) V2 : -5% ~ +5% (Max) V3 : -3% ~ +3% (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	V1 : -2.06% ~ +1.54% V2 : -0.90% ~ +0.48% V3 : -0.14% ~ +0.81%	P
5	SET UP TIME	800 mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	622.3 mS	P
6	RISE TIME	50 mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	28.6 mS	P
7	HOLD UP TIME	16 mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	19.3 mS	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	62.1V ~ 264V	P
2	FREQUENCY RANGE	47HZ - 63HZ (Typ) NO DAMAGE OSC	I/P: 100VAC ~ 240VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK	P
3	EFFICIENCY	80%	I/P:230VAC O/P:FULL LOAD Ta:25°C	84.88 % (115VAC) 85.31 % (230VAC)	P
4	AVERAGE EFFICIENCY	79.81% (LEVEL VI) 79.81% (Version 5)	I/P:115/230VAC O/P:25% 、 50% 、 75% 、 100% LOAD Ta:25°C	85.96 % (115VAC) 85.80 % (230VAC)	P
5	AC CURRENT	0.8A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.462 A	P
6	NO LOAD POWER CONSUMPTION	< 0.3W (Max)	I/P:230VAC O/P: NO LOAD Ta:25°C	0.17 W	P

7	INRUSH CURRENT	< 60A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	43.8 A	P
8	LEAKAGE CURRENT	<0.75mA	I/P:240VAC O/P:Min LOAD Ta:25°C	L-FG: 0.175mA N-FG: 0.174mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	110%~160%	I/P:230VAC O/P:TESTING Ta:25°C	160% NOTE HICCUP MODE RESET : AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	YES	I/P:230VAC O/P:MIN LOAD Ta:25°C	Clamp by ZENER diode (Only +5V)	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	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:4242 VDC/min	I/P-O/P:4242 VDC/min Ta:25°C	I/P-O/P: 0.03uA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>100MΩ NO DAMAGE	P

RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 4HRS I/P:230VAC O/P:100% LOAD Ta=25°C 2. HI AMBIENT BURN-IN : 16HRS I/P:230VAC O/P:100% LOAD Ta=40°C 3. HI AMBIENT BURN-IN : 16HRS I/P:230VAC O/P: 50% LOAD Ta=70°C			P
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P : 230VAC O/P : 100% LOAD Ta= -20°C	TEST : OK	P

OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C6 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:100% LOAD Ta=25°C LIFE TIME= 88338 HRS I/P:230 VAC O/P:100% LOAD Ta=40°C LIFE TIME= 34654 HRS I/P:230 VAC O/P:50% LOAD Ta=70°C LIFE TIME= 34293 HRS			P
2	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 1.607146 M.T.B.F : 622221 HRS			P

TEST RESULT	TESTER	APPROVAL
PASS	PETER CHENG	VINCENT ZENG