



# Test Report : GE40I05

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40W AC-DC Interchangeable 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	SPECIFICATION	TEST CONDITION	RESULT
1	RIPPLE & NOISE	100mVp-p (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	15 mVp-p
2	VOLTAGE TOLERANCE	-3% ~ +3% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	-1.36% ~ +2.34%
3	LINE REGULATION	-1.0% ~ +1.0% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	+0.00% ~ +0.00%
4	LOAD REGULATION	-3% ~ +3 (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-1.87% ~ +1.82%
5	SET UP TIME	3000 mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	777.282 mS
6	RISE TIME	40 mS	I/P:230VAC O/P:FULL LOAD Ta:25°C	5.207 mS
7	HOLD UP TIME	12 mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	27.073 mS

### INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	VOLTAGE RANGE	90VAC ~ 264VAC	I/P:TESTING O/P:FULL LOAD Ta:25°C	56V ~ 264V
2	FREQUENCY RANGE	50HZ - 60HZ (Typ) NO DAMAGE OSC	I/P: 100VAC ~ 240VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK
3	EFFICIENCY	81%	I/P:230VAC O/P:FULL LOAD Ta:25°C	81.91%
4	AVERAGE EFFICIENCY	83.08% (LEVEL VI) 83.68% (LEVEL 5)	I/P:115/230VAC O/P:25%、50%、75%、100% LOAD Ta:25°C	84.81% (115VAC) 84.38% (230VAC)
5	AC CURRENT	1.0A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.482A
6	NO LOAD POWER CONSUMPTION	< 0.075W (Max)	I/P:230VAC O/P: NO LOAD Ta:25°C	0.0667W
7	INRUSH CURRENT	<70A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	67.234A
8	LEAKAGE CURRENT	< 0.25mA	I/P:240VAC O/P:Min LOAD Ta:25°C	L-FG: 0.02mA N-FG: 0.02mA

## PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	110% ~ 200%	I/P:230VAC O/P:TESTING Ta:25°C	146.8% HICCUP MODE RESET : AUTO RECOVER
2	OVER VOLTAGE PROTECTION	115 ~ 135%	I/P:230VAC O/P:MIN LOAD Ta:25°C	Clamp by ZENER diode
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

## SAFETY TEST

### SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT
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
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

## RELIABILITY TEST

### ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT																																																							
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																																																									
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2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P : 230VAC O/P : 100% LOAD Ta= -20°C	TEST : OK																																																							

## OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT
1	CAPACITOR LIFE CYCLE	SUPPOSE C9 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:100% LOAD Ta=25°C LIFE TIME= 59505.97 HRS I/P:230 VAC O/P:100% LOAD Ta=40°C LIFE TIME= 17938.19 HRS		
2	MTBF	MIL-KDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE : 2.363 M.T.B.F : 423,115.296 HRS		

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN HSIAO	PETER CHENG