

Model : MES30A-5 30W  
+18Vdc / 1.66A

## OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	70mVp-p (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	18mVp-p	P
2	VOLTAGE TOLERANCE	-2% - +2%(Max)	I/P:90VAC~264VAC O/P:FULL-MIN. LOAD Ta:25°C	-0.8% ~ +0.9%	P
3	LINE REGULATION	-1% - +1%(Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0.1% ~ +0%	P
4	LOAD REGULATION	-2% - +2%(Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-0.8% ~ +0.8%	P
5	SET UP TIME	300mS (Max)	I/P: 230VAC O/P:FULL LOAD Ta:25°C	160mS	P
6	RISE TIME	50mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	8.1mS	P
7	HOLD UP TIME	16mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	70mS	P

## INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE RANGE	100VAC ~ 240VAC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	62V ~ 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	78% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	78.8%	P
4	AC CURRENT	0.8A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.58A	P
5	INRUSH CURRENT	35A (Max) COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	30.4A	P
6	LEAKAGE CURRENT	0.3mA (Max)	I/P:240VAC O/P:Min LOAD Ta:25°C	L-FG:0.22mA N-FG:0.23mA	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	150-350% (Typ)	I/P:230VAC O/P:TESTING Ta:25°C	281% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	110-140% (Typ)	I/P:230VAC O/P:MIN LOAD Ta:25°C	120%(21.5VDC) HICCUP MODE RESET: AUTO RECOVER	P
3	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE RESET AUTO RECOVER	P

**ENVIRONMENT TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 16HRS I/P:230VAC O/P:100% LOAD Ta=28°C			P

NO	Position	P/N	TEMP Ta=25°C
1	C5	Rubycon 68u/400V WXA 105°C 18*25	76.6°C
2	D1	KBP205G 2A/600V	98.1°C
3	T1	EF-25 (0540)	106.8°C
4	IC1	TOP246YN	98.1°C
5	D4	FCF10A20 TO-220F	86.8°C
6	C15	N.C.C 680uF/25V KY 105°C 10*20	75.1°C

**SAFETY**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SAFETY STANDARDS	TUV: Certificate NO : TA 5004008 UL: File NO : E246346			P
2	HARMONIC	IEC61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	PASS	P
3	WITHSTAND VOLTAGE	I/P-O/P:5656VDC/min I/P-FG:2828VDC/min	I/P-O/P:5656VDC/min I/P-FG:2828VDC/min Ta:25°C	I/P-O/P:2.7mA I/P-FG:2.05mA NO DAMAGE	P
4	ISOLATION RESISTANCE	I/P-O/P:500VDC>50MΩ I/P-FG: 500VDC>50MΩ	I/P-O/P:500VDC I/P-FG:500VDC Ta:25°C	I/P-O/P: 23.2GΩ I/P-FG: 28GΩ NO DAMAGE	P
5	GROUNDING CONTINUITY	FG(PE) TO CHASSIS < 100 mΩ	30A / 2min Ta:25°C	6mΩ	P



**OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C15 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=55613HRS (7000hrs)			P
2	MTBF	MIL-HDBK-217F NOTICES 2 PARTS COUNT TOTAL FAILURE RATE: 1.607378 M.T.B.F: 622131HRS			P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2005.12.28	MES30A-5	PASS	T.K.CHENG	MAX LIN