

# SA0612

## 1-0 INPUT REQUIREMENTS

### 1-1 INPUT VOLTAGE

90 TO 264 $\pm$  10%Vac

### 1-2 INPUT FREQUENCY

47 TO 63Hz

### 1-3 INPUT CURRENT

1.)0.6 A MAX., AT 115Vac , FULL LOAD

2.)0.3 A MAX., AT 230Vac , FULL LOAD

### 1-4 EFFICIENCY

70% TYP. AT FULL LOAD,NOMINAL LINE

### 1-5 INRUSH CURRENT

1.)25A MAX. AT 115Vac , COLD START

### 1-6 HOLD UP TIME

10mS MIN.AT FULL LOAD, NOMINAL LINE

### 1-7 CONFIGURATION

2-WIRE INPUT AC LINE(LIVE, NEUTRAL)

### 1-8 INPUT FUSE

THE HOT LINE SIDE OF THE INPUT SHALL HAVE A FUSE

### 1-9 LINE REGULATION

THE MAXIMUM VOLTAGE CHANGE ON DC OUTPUT SHALL BE WITHIN TOLERANCE WHEN AC INPUT VOLTAGE VARIES WITHIN THE RANGE SPECIFIED IN 1-1

### 1-10 INPUT PROTECTION DEVICE

AN ADEQUATE INTERNAL FUSE ON THE AC INPUT LINE SHALL BE PROVIDED

### 1-11 POWER LINE NOISE

THE POWER SUPPLY WILL HAVE AN ON BOARD AC FILTER THAT WILL MEET CONDUCTED NOISE SPECIFICATIONS OF FCC AND CLASS B

### 1-12 HI-POT TESTS

PRIMARY-SECONDARY 3.0KVac FOR 3 SECOND(LEAKAGE CURRENT10mA )

### 1-13 INSULATION RESISTANCE

INSULATION RESISTANCE SHALL BE MORE THAN 100Mohm AT 500Vdc BETWEEN PRIMARY LINE, NEUTRAL LINE AND SECONDARY BETWEEN PRIMARY LINE NETURAL LINE AND FRAME GROUND (F.G)



# SA0612

## 2-0 OUTPUT REQUIREMENTS

### 2-1 DC OUTPUT

	TOLERANCE (ACCURACY)	OUTPUT CURRENT	
		MIN.	MAX.
+12Vdc(main)	+/-5%	0A	1.7A

OUTPUT PIN OF THE MOUNTING CONNECTOR(FRONT VIEW)

### 2-2 LOAD REGULATION

VOLTAGE	TOLERANCE	REGULATION
+12Vdc(main)	+/-5%	11.4~12.6Vdc

### 2-3 DYNAMIC LOAD REGULATION

+/-6% EXCURSION FOR 50% - 100% OR 100%-50% LOAD CHANGE OF OUTPUT +5.3Vdc AT ANY FREQUENCY UP TO 1KHz (DUTY 50%)

### 2-4 RIPPLE & NOISE

THE POWER SUPPLY SHALL NOT EXCEED THE FOLLOWING LIMITS ON THE INDICATED VOLTAGES FOR 60Hz OR 50Hz RIPPLE , SWITCHING FREQUENCY RIPPLE AND NOISE AND DYNAMIC LOAD VARIATIONS MEASURED WITH A 10MHz BANDWIDTH

A	B
+12Vdc	70mVp-p

COLUMN A: OUT VOLTAGE

COLUMN B: 60Hz RIPPLE + SWITCHING RIPPLE AND NOISE

- © RIPPLE & NOISE ARE MEASURED AT THE END OF OUTPUT CABLES WHICH ARE ADDED A 0.1uF CERAMIC CAPACITOR AND A 47uF ELECTROLYTIC CAPACITOR

### 2-5 OVER CURRENT PROTECTION (OVER POWER PROTECTION)

THE POWER SUPPLY SHALL NOT BE DAMAGED BY A OVER CURRENT FROM THE OUTPUT TO RETURN LINE, PROTECTION TO BE INVOKED IF CURRENT EXCEEDS MAX. RATING BY ABOUT 5% OR MORE

### 2-6 OVER – VOLTAGE PROTECTION

19.2V MAX. (THE OUTPUT CLAMPED WITH A ZENER DIODE, DO NOT TEST WITH EXTERNAL DC SOURCE)

### 2-7 SHUTDOWN VOLTAGE PROTECTION

N/A

# SA0612

## 2-8 SHORT-CIRCUIT PROTECTION

A SHORT CIRCUIT PLACE AT ANY OUTPUT WILL CAUSE NO DAMAGE TO THIS ADAPTER

## 2-9 OPEN CIRCUIT PROTECTION

WHEN PRIMARY POWER IS SUPPLIED WITH NO LOAD ON ANY OUTPUT LEVEL,NO DMAGES OR HAZARDOUS CONDITIONS SHOULD OCCUR

## 2-10 TEMPERATURE COEFFICIENT

0.2%/°C,MAX. OVER ENTIRE OPERATING TEMPERATURE RANGE FROM 0°C TO 40°C

## 2-11 STABILITY

2% AT CONSTANT LOAD WITH CONSTANT INPUT (AFTER 30 MINUTES OF OPERATION)

## 2-12 DROP-OUT(POWER LINE DISTURBANCE)

OUTPUT VOLTAGES SHALL REMAIN WITHIN THE SPECIFIED REGULATION RANGE , THROUGH THE ABSENCE OF A LINE INPUT DURING 1/2 CYCLE, AT FULL LOAD AND MIN.AC LINE INPUT

## 2-13 VOLTAGE ISOLATION

THE DC GROUND WILL BE ISOLATED FROM THE AC NEUTRAL AND AC LINE

## 2-14 COOLING

COOLING SHALL BE NEUTRAL CONVECTION COOLING ,THE POWER SUPPLY MUST BE CAPABLE OF OPERATION WHEN MOUNTED EITHER VERTICALLY OR HORIZONTALLY ACCORDING TO THE MECHANICAL DRAWING

## 2-15 GROUND CONTINUITY TEST

N/A

## 2-16 LEAKAGE CURRENT

0.25mA MAX.

## 2-17 LED DISPLAY

DESCRIPTION	GREEN
POWER ON	ON
POWER OFF	OFF

## 3-0 ENVIRONMENTAL REQUIREMENTS

### 3-1 TEMPERATURE

1.)OPERATION : 0 TO 40 °C

2.)STORAGE : -20 TO 85 °C

# SA0612

## 3-2 HUMIDITY

- 1.)OPERATION : 8%~90%RH
- 2.)STORAGE : 5%~90%RH

## 3-3 VIBRATION AND SHOCK

NO EVIDENCE OF ANY MECHANICAL OR FUNCTIONAL DAMAGE AFTER THE VIBRATION AND SHOCK TESTING

### 1.)VIBRATION

FREQUENCY:5 TO 50Hz  
ACCELERATION:± 7.35M (S\*S)  
DIRECTION:X, Y AND Z AXIS

### 2.)SHIPPING SHOCK

THIS AC ADAPTER IN THE SHIPPING PACKAGE JUN BE DROPPED 8 TIMES FROM A HEIGHT OF 900mm

### 3.)SHIPPING DROP TEST

HIGHT: 91cm  
1 CONER 3EDGES & 6 FACES

## 3-4 ALTITUDE

- 1.)OPERATION : 10,000 FEET
- 2.)STORAGE : 40,000 FEET

## 3-5 MARKING (LABEL)

THE POWER SUPPLY WILL MARKED BY THE VENDOR WITH THE FOLLOWING INFORMATION : VENDOR IDENTIFICATION, VENDOR ,DATECODE, MODEL NAME INPUT VOLTAGE ,OUTPUT CURRENT SAFETY APPROVAL JUNK

## 4-0 EMI/EMC REQUIREMENTS

THE RADIATED AND CONDUCTED EMISSIONS OF THIS AC ADAPTER COMPLIES WITH THE REQUIREMENTS OF THE FCC PART 15 , CLASS B & CISPR 22 CLASS B

## 6-0 RELIABILITY

THE POWER SUPPLY SHALL BE DESIGNED AND PRODUCED TO HAVE A MEAN TIME BETWEEN FAILURES(MTBF) OF 30000 OPERATING HOURS AT 90% CONFIDENCE-LEVEL WHILE OPERATING UNDER THE FOLLOWING CONDITIONS

TEST CONDITION : INPUT VOL. 220Vac AND 40 PCS OF UNITS FOR 30 DAYS BURN-IN AT FULL LOAD AND 40°C AMBIENT WITHOUT FAILURE

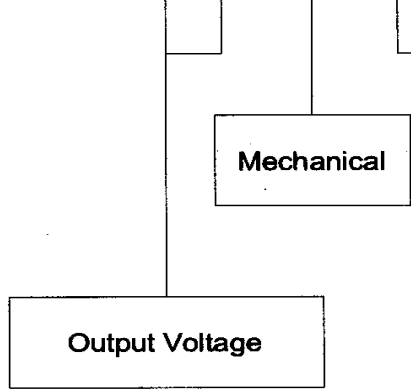
## 7-0 MECHANICAL FEATURES

### 7-1 MOUNTING CONNECTOR

# SA0612

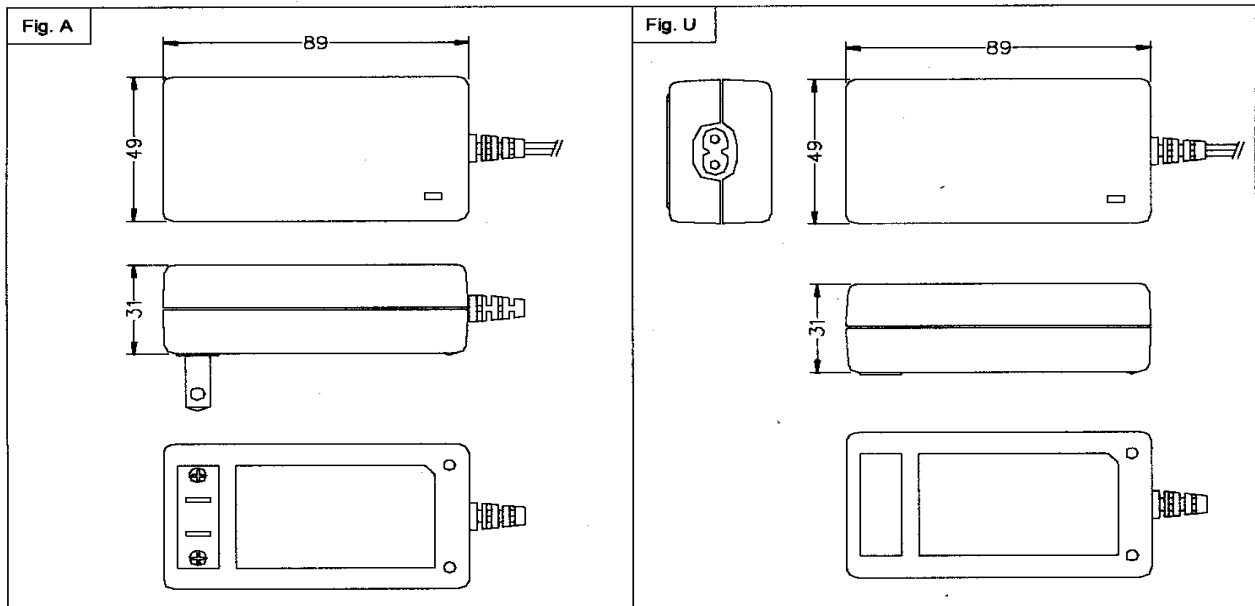
## ORDERING INFORMATION

\*SA06 0 5 - A - 1 A — Special Output Cable



1	I.D. O.D. Length	1.35 3.5 —	
2	I.D. O.D. Length	2.1 5.5 <9.5	
3	I.D. O.D. Length	2.1 5.5 11.5	
4	I.D. O.D. Length	1.35 3.5 —	
5	I.D. O.D. Length	2.1 5.5 <9.5	
6	I.D. O.D. Length	2.1 5.5 11.5	
7	I.D. O.D. Length	2.5 5.5 —	
8	I.D. O.D. Length	2.5 5.5 —	

## MECHANICAL



\*Standard Output Cable: AWG18, SPT-1, 6 Ft. Long

Unit: m.m.