EA10603B-20V

▲EFFICIENCY OVER 80%
▲OVER-VOLTAGE PROTECTIVE INSTALLATION
▲SHOT-CIRCUIT PROTECTIVE INSTALLATION
▲PROTECTION TYPE：AUTO-RECOVERY
▲OPERATION TEMPERATURE 0℃～40℃
▲IEC 320 RECEPTACLE 3P(SMALL SIZE)
▲COMPACT SIZE：L107×W61×H30MM

1-0 INPUT REQUIREMENTS

1-1 INPUT VOLTAGE
100 TO 240± 10%Vac， FULL RANGE

1-2 INPUT FREQUENCY
47 TO 63 Hz

1-3 INPUT CURRENT
1.) 1.6 A MAX., AT 115Vac，FULL LOAD
2.) 0.8 A MAX., AT 230Vac，FULL LOAD

1-4 EFFICIENCY
82% MIN. AT FULL LOAD, NOMINAL LINE

1-5 INRUSH CURRENT
1.)50A MAX. AT 115Vac， COLD START
2.) 100A MAX. AT 230Vac， COLD START

1-6 HOLD UP TIME
10mS MIN.AT FULL LOAD, NOMINAL LINE

1-6-1 TRUN-ON TIME
3 SEC. MAX.(AT AC 115V, COLD START)

1-7 CONFIGURATION
3-WIRE INPUT AC LINE (LINE ,NEUTRAL,FG)

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

EA10603B-20V

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 CISPR

1-12 HI-POT TESTS
PRIMARY-SECONDARY 1.5KVac FOR 1 MINUTE (LEAKAGE CURRENT 10mA)

1-13 INSULATION RESISTANCE
INSULATION RESISTANCE SHALL BE MORE THAN 100Mohm AT 500Vdc BETWEEN PRIMARY LINE, NEUTRAL LINE AND SECONDARY

2-0 OUTPUT REQUIREMENTS

2-1 DC OUTPUT

	TOLERANCE	OUTPUT CURRENT		
OUTPUT VOLTAGE	(ACCURACY)	MIN.	MAX.	
+20 Vdc	+/-5 %	0	3 A	

2-2 LOAD REGULATION

VOLTAGE	TOLERANCE	REGULATION
+20 Vdc	+/-5 %	19–21 Vdc

2-3 DYNAMIC LOAD REGULATION
+/-5% EXCURSION FOR 50% - 100% OR 100%-50% LOAD CHANGE OF DC OUTPUT AT 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 20MHz BANDWIDTH

A	B
+20 Vdc	250mV

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

EA10603B-20V

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

OUTPUT VOLTAGE	MIN.	MAX.
+20 Vdc	---	4 A

2-6 OVER－VOLTAGE PROTECTION
27V MAX. (OUTPUT CLAMPLED WITH ZENER DIODE, DO NOT TEST WITH EXTERNAL DC SOURCE)

2-7 SHORT-CIRCUIT PROTECTION
A SHORT CIRCUIT PLACE AT ANY OUTPUT WILL CAUSE NO DAMAGE TO THIS ADAPTER

2-8 OPEN CIRCUIT PROTECTION
WHEN PRIMARY POWER IS SUPPLIED WITH NO LOAD ON OUTPUT LEVEL,NO DAMAGES OR HAZARDOUS CONDITIONS SHOULD OCCUR

2-9 STABILITY
2% MAX. AT CONSTANT LOAD WITH CONSTANT INPUT (AFTER 30 MINUTES OF OPERATION)

2-10 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

2-11 VOLTAGE ISOLATION
THE DC GROUND WILL BE ISOLATED FROM THE AC NEUTRAL AND AC LINE

2-12 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

2-13 LEAKAGE CURRENT
0.25mA MAX.

2-14 LED DISPLAY

DESCRIPTION	GREEN
POWER ON	ON
POWER OFF	OFF

EA10603B-20V

3-0 ENVIRONMENTAL REQUIREMENTS

3-1 TEMPERATURE：
1.)OPERATION：0 TO 40℃
2.)STORAGE：－20 TO 85℃

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.)SHIPPING VIBRATION
THIS AC ADAPTER MAY BE VIBRATED IN THE THREE MUTUALLY PERPENDICULAR AXES OF 0.5mm DISPLACEMENT PEAK TO PEAK AT 2 TO 55 TO 2Hz，7 MINUTES PER CYCLE FOR A DURATION OF 30 MINUTES
2.)SHIPPING SHOCK
THIS AC ADAPTER IN THE SHIPPING PACKAGE MAY BE DROPPED 8 TIMES FROM A HEIGHT OF 900㎜

3-4 ALTITUDE
1.)OPERATION：10，000 FEET
2.)STORAGE：40，000 FEET

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 ＆ EN 55022 CLASS B

5-0 APPROVAL
THIS AC ADAPTER IS DESIGNED TO MEET BY FOLLOWING STANDARDS

5-1 UL , CUL , TUV, CB, CE

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℃ AMBIENT WITHOUT FAILURE

7-0 MECHANICAL FEATURES

7-1 MOUNTING CONNECTOR
CABLE 1800+/-50mm

7-2 WEIGHT
POWER ASS'Y : 280 GRAMS

EA10603B-20V