


MODEL NO:			CUI INC	PAGE NO: 1 of 6	
PART NO: DTS120416U				UNIT: mm	DATE: 06/14/02
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1. SPECIFICATION

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.) 1.2 A MAX., AT 115Vac FULL LOAD

2.) 0.6 A MAX., AT 230Vac FULL LOAD

1-4 EFFICIENCY

78% TYP. AT FULL LOAD, (CV MODE), NOMINAL LINE

1-5 INRUSH CURRENT

1.) 40A MAX. AT 115Vac COLD START

2.) 80A MAX. AT 230Vac COLD START

1-6 HOLD UP TIME

8.3mS MIN. AT FULL LOAD, NOMINAL LINE

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

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.
+12 Vdc	+/-5 %	0	4.2 A

2-2 LOAD REGULATION

VOLTAGE	TOLERANCE	REGULATION
+12 Vdc	+/-5 %	11.4-12.6 Vdc

2-3 DYNAMIC LOAD REGULATION

+/-5% EXCURSION FOR 50% - 100% OR 100%-50% LOAD CHANGE OF DC OUTPUT 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 20MHz BANDWIDTH

OUTPUT	RIPPLE/NOISE
+12 Vdc	150mV

OUTPUT: OUT VOLTAGE

RIPPLE/NOISE: 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

OUTPUT VOLTAGE	MIN.	MAX.
+12 Vdc	---	5.5 A

2-6 OVER VOLTAGE PROTECTION

16V MAX. (OUTPUT CLAMPED 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 ANY 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 CONTINUITY (GROUNDING)

100m OHM MAX. AT 25A

2-14 LEAKAGE CURRENT

0.75mA MAX.

2-15 LED DISPLAY

DESCRIPTION	GREEN
POWER ON	ON
POWER OFF	OFF

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

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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 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

6-0 MECHANICAL FEATURES

6-1 MOUNTING CONNECTOR

CABLE 1200+/-30mm

6-2 WEIGHT

POWER ASS'Y : 253 GRAMS

6-3 DIMENSION

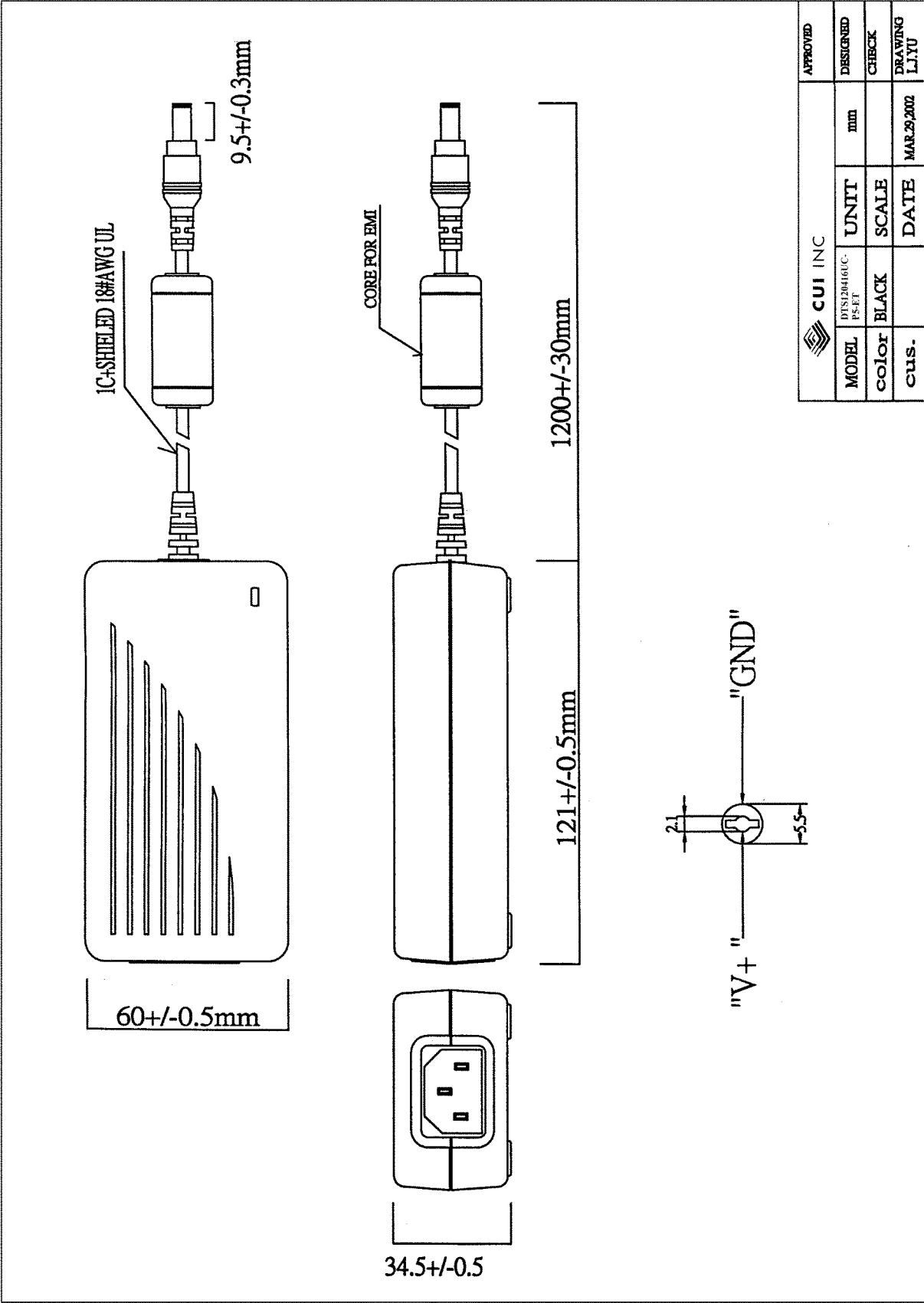
121L X 60W X 35H mm

2. SAFETY

1-0 APPROVAL

THIS AC ADAPTER IS DESIGNED TO MEET BY FOLLOWING STANDARDS

1-1 UL , CUL , TUV, CE, CB, FCC, BSMI, EK, PSE, NORDIC



CUI INC				APPROVED
MODEL	DTS120416U.C.	UNIT	mm	DESIGNED
color	BLACK	SCALE		CHECK
cus.		DATE	MAR.29.2002	DRAWING
				L.YU

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