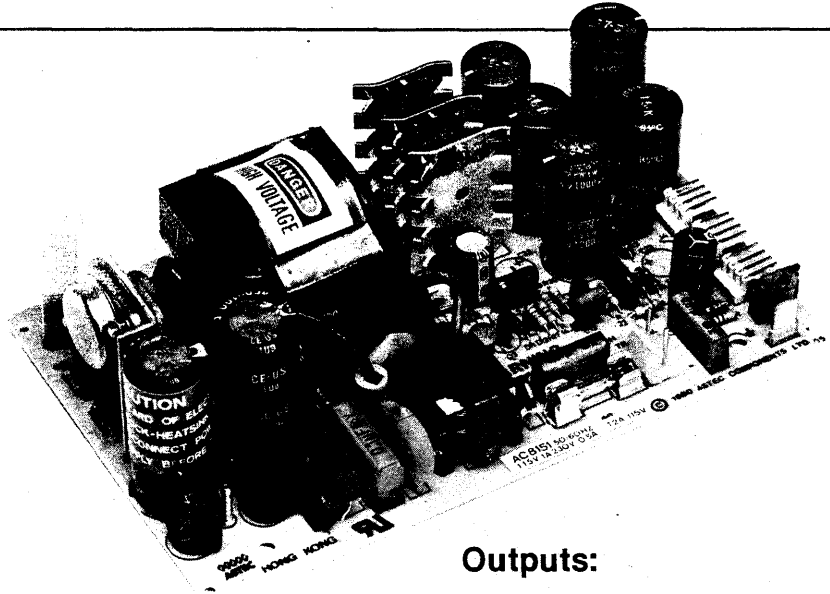




AC 8151 40 Watt Switching Power Supply

DESCRIPTION

The AC 8151 is a 40 Watt, multiple-output switching power supply, produced on an open printed circuit board. It is ideally suited for use in small microprocessor based systems, disc drive systems, terminals, and other mixed logic applications. Input voltage is jumper selectable for either 115 VAC or 230 VAC. The AC 8151 is UL and CSA approved and designed to meet European safety standards.

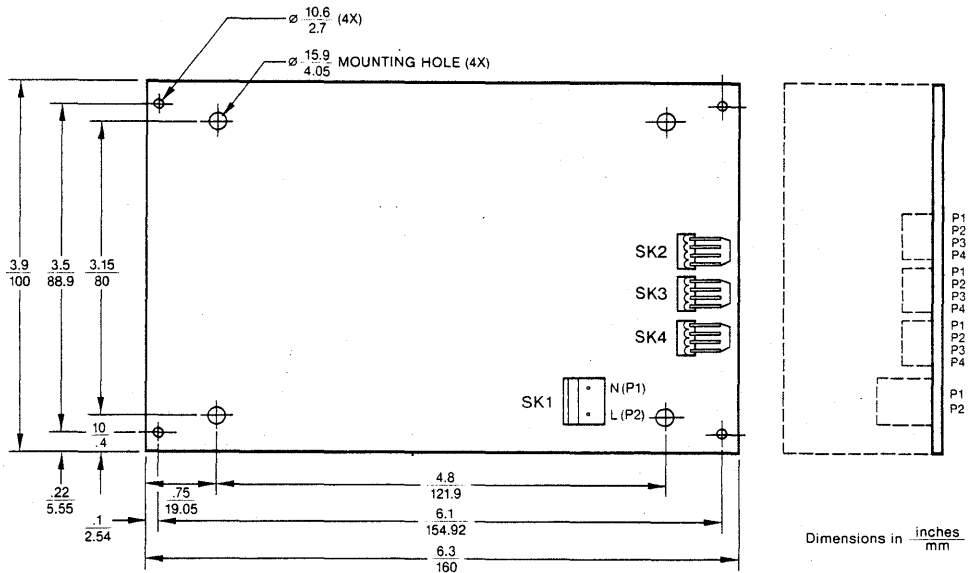


Outputs:

- + 5V DC @ 2.5A
- + 12V DC @ 2.0A
- 12V DC @ 0.1A

FEATURES

- High Efficiency
- Built-in EMI filter
- UL/CSA approved
- Meets European safety standards
- 100% thermal cycle and burn-in
- Vacuum impregnated transformers
- Dual input voltage 115/230 VAC
- Low output ripple
- Over voltage protection
- Short circuit protection
- Open PCB construction



PIN ASSIGNMENT

- SK1 P1 Neutral
- P2 Live
- SK2/3/4
- P1 - 12V
- P2 + 12V
- P3 Common
- P4 + 5V

AC 8151 ELECTRICAL CHARACTERISTICS

Input Characteristics

AC Input voltage: 95 to 135 VAC, or 190 to 270 VAC
(Selectable by jumper on PCB)
AC Input frequency: 47 to 63Hz
AC Input current: 0.85A (rms)

Output Characteristics

Output current capacity:

Output Voltage	Load		Tolerance ¹	Output Ripple ²
	min	max		
+ 5 VDC	0.45A	2.5A	± 5%	50mV p-p
+ 12 VDC	0.3A	2.0A	± 5%	150mV p-p
- 12 VDC	0	0.1A	+ 25% / - 8.3%	150mV p-p

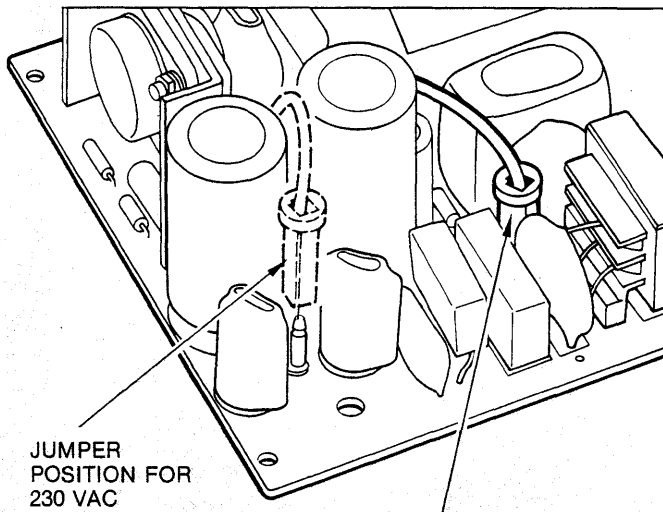
NOTES:

1. The output tolerance refers to the nominal voltage and includes line regulation, load regulation, temperature drift and set-up tolerance.
2. The specified ripple is at the rated line voltage and load range.

Individual maximum ratings:

- + 5V DC: 5 amps if no load on + 12V output, or 2.5 amps if load draws 2.5 amps on + 12V output.
- + 12V DC: 2.5 amps if + 5V output load draws 1.5 amps or less.
- 12V DC: 0.5 amps

NOTE: The maximum continuous output power shall not exceed 40 Watts. Specified voltage tolerances do not apply to the above individual maximum currents.



DUAL AC INPUT VOLTAGES
(JUMPER SELECTABLE)

General Characteristics

Operating temperature: 0 to 50 °C
Efficiency: 65% (min) at full load
Input line regulation: ± 0.2% max.
Over-voltage protection: 5.8V min. to 6.8V max.
(+ 5V line only)
Hold-up time: 15msec.
Line regulation: ± 0.5% high line at full load
Overcurrent protection: All outputs protected to short circuit conditions
Line transient response: Meets IEEE standards
Power line disturbances: Output supply unaffected through half cycle absence of input power during full load and 95 VAC input.
EMI Requirements: Meets conduction limits of:
a) FCC Class "B" rules
b) VDE 0871 Class "B" rules
Safety requirements: Meets or exceeds:
a) UL 1012 (File #E69016)
b) CSA 22.2 (File #LR42983-22)
c) IEC 435
d) CEE: Part 1 and Part 2P
Inrush current: 30 amps @ 115 VAC, or 60 amps @ 230 VAC at 25 °C ambient cold start.

Mechanical Characteristics

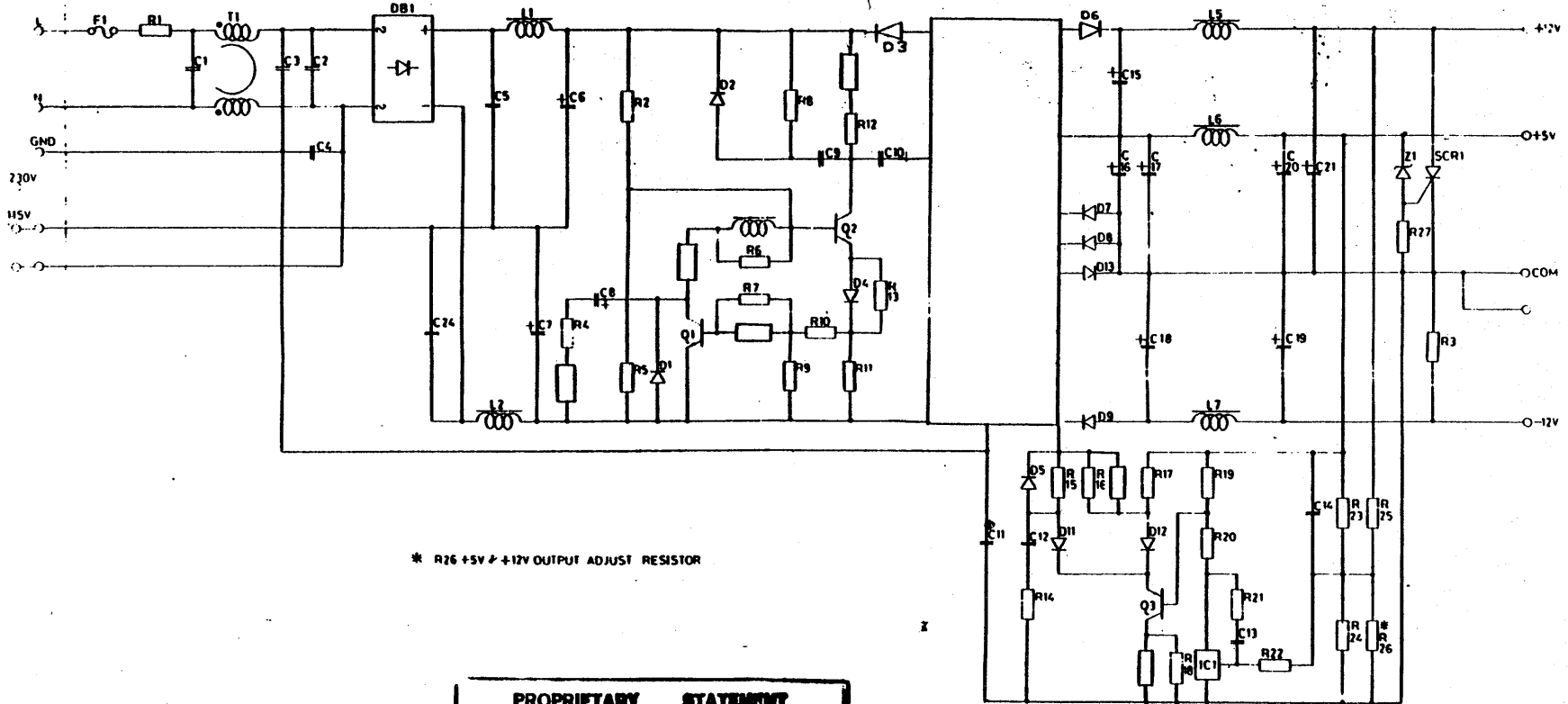
Size (Overall): length: 6.3 in. (160 mm)
width: 3.9 in. (100 mm)
height: 2.0 in. max (51.4 mm)
Weight: 15.17 oz (0.43 kg)
Mating connectors:
AC input: Molex P/N 09-50-3031
DC Output: Molex P/N 22-01-1043



A BSR Company

1101 SPACE PARK DRIVE,
SANTA CLARA, CA 95050 U.S.A.
TEL. (408) 727-3350 748-1200
TELEX: 357471 ASTEC SNTA
TWX: 910-3380021

R	R1	R4 R2 R5	R6 R7,R8,R9,R10,R11,R12,R13	R14,R15 R16	R17,R18	R19,R20,R21,R22,R23,R24,R25,R26,R27,R3				
C	C1	C3 C2,C4	C24 C5	C6,C7 C8	C9	C10	C11 C12	C15,C16,C17,18,19	C13	C20,19,21,14
L/I	T1	L1,L2			T3			L7	L5 L6	
Q/D				D1	Q1 Q2	Q2 Q4	D3			D6,D5,D11,D7,8,9,13,12,Q3
MISC	F1		DB1						IC1	Z1 SCR1



* R26 +5V & +12V OUTPUT ADJUST RESISTOR

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		ISSUE/TECH

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ANGLE ±	DATE	FIRST USED ON
DECIMAL .1 ±	8.5.80	PART NO
.125 ±	APPROVED	ACB151
	DATE	MATERIAL
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