



BC SYSTEMS, INC.

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ELECTRICAL SPECIFICATIONS, BCPS-300 POWER SUPPLY

INPUT:

90-264 VAC, 47-440 HZ SINGLE PHASE, CONTINUOUS RANGE

POWER FACTOR:

EXCEEDS .99, MEETS IEC555-2

CONDUCTED EMI:

DESIGNED TO MEET FCC PART 15 SUB B LEV A, EN55022 LEV B FVG243, MIL-STD 461 CE01 AND CE03

BATTERY BACKUP:

OPTIONAL PLUG IN BOARD ALLOWS OPERATION FROM A 24VDC BATTERY. TRANSITION TO BACK-UP POWER IS AUTOMATIC UPON FAILURE OF PRIME POWER. UNIT CAN ALSO OPERATE AS A DC/DC POWER SUPPLY FROM A 28VDC SOURCE.

QUALITY STANDARDS:

ISO9001, MIL-I-45208

SAFETY AGENCIES:

DESIGNED TO MEET UL1950, CSA22.2, IEC950, EN60950, VDE0806

EFFICIENCY:

75% TYPICAL

OUTPUTS: (SEE TABLE 1)

TOTAL OUTPUT POWER LIMITED TO 350 WATTS. OUTPUTS 2, 3, AND 4 ARE FLOATING, AND CAN BE CONNECTED FOR POSITIVE OR NEGATIVE OPERATION

LOAD REGULATION:

.5% FOR ALL OUTPUTS

LINE REGULATION:

.5% FOR ALL OUTPUTS

RIPPLE AND NOISE:

1% OF OUTPUT VOLTAGE (TYPICAL)

HOLD-UP TIME:

20MSEC MINIMUM AT FULL LOAD WITH AC INPUT
10MSEC MINIMUM AT FULL LOAD WITH 28VDC INPUT

MINIMUM LOAD:

NONE REQUIRED

OUTPUT VOLTAGE ADJUSTMENT:

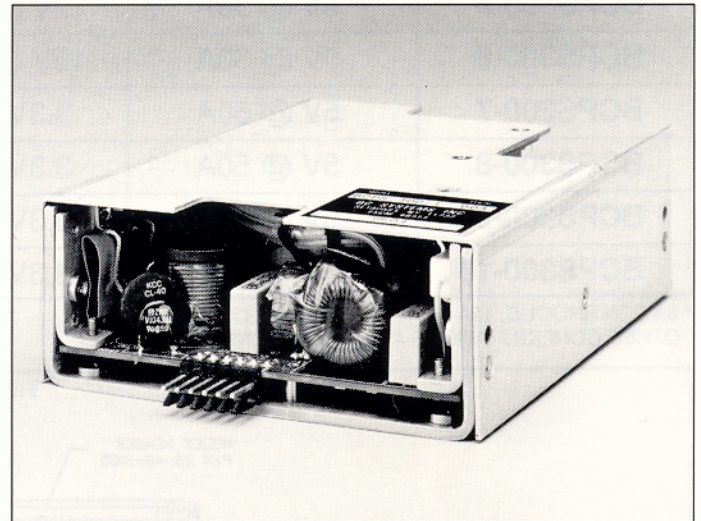
ALL OUTPUTS ADJUSTABLE +/- 5%

REMOTE SENSE:

WILL COMPENSATE .5V DROP ON OUTPUT #1

TRANSIENT RESPONSE:

RECOVERY TO 1% OF NOM. WITHIN 200uSEC FOR 50% LOAD STEP



BCPS-300 POWER SUPPLY

REDUNDANCY N+1:

EACH OUTPUT CAN BE PARALLELED WITH OTHER OUTPUTS OF SAME VOLTAGE. OUTPUT #1 CURRENT SHARES TO +/- 10%

REMOTE ON/OFF:

GROUNDING THIS INPUT TURNS UNIT OFF. LEAVING PIN OPEN TURNS UNIT ON

OVERLOAD PROTECTION:

EACH OUTPUT IS CURRENT LIMITED AND SHORT CIRCUIT PROTECTED

OVERVOLTAGE PROTECTION:

LIMITED TO 130% OF OUTPUT VOLTAGE ON EACH OUTPUT

AC LOW:

TTL LOGIC 1 WHEN AC VOLTAGE DROPS BELOW 95VAC, OCCURS 5MS BEFORE LOSS OF OUTPUTS

5V GOOD:

TTL LOGIC 0 WHEN 5V OUTPUT IS ABOVE 4.75VDC. 30MSEC DELAY AT POWER UP FOR POWER ON RESET IMPLEMENTATIONS

TEMPERATURE RANGE:

-20 TO 50 DEG C WITH 30 CFM OF AIRFLOW. OPTIONAL COVER WITH FAN

THERMAL PROTECTION:

SHUTDOWN WITH AUTO RECOVERY

DIM./MOUNTING:

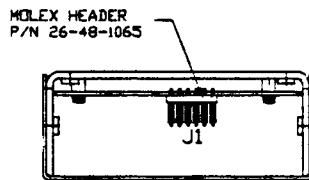
5" x 6" x 2" (SEE FIG. 1)

TABLE 1 OUTPUT CONFIGURATION

MODEL #	OUTPUT #1	OUTPUT #2	OUTPUT #3	OUTPUT #4
BCPS300-1	5V @ 50A	12V @ 8/12A*	12V @ 4A	5V @ 4A
BCPS300-2	5V @ 50A	12V @ 8/12A*	12V @ 4A	12V @ 4A
BCPS300-3	5V @ 50A	12V @ 8/12A*	24V @ 4A	5V @ 4A
BCPS300-4	5V @ 50A	12V @ 8/12A*	15V @ 4A	15V @ 4A
BCPS300-5	5V @ 50A	12V @ 8/12A*	3.3V @ 4A	12V @ 4A
BCPS300-6	5V @ 50A	15V @ 8/12A*	12V @ 4A	15V @ 4A
BCPS300-7	5V @ 50A	3.3V @ 12A	12V @ 4A	5V @ 4A
BCPS300-8	5V @ 50A	3.3V @ 12A	12V @ 4A	12V @ 4A
BCPS300-9	5V @ 50A	3.3V @ 12A	24V @ 4A	12V @ 4A
BCPS300-10	5V @ 50A	3.3V @ 12A	24V @ 4A	5V @ 4A

* 8A CONTINUOUS, 12A SURGE FOR <15 SECONDS
OTHER CONFIGURATIONS AVAILABLE, CONSULT FACTORY

FIGURE 1



NOTES:

1. ALL EXTERIOR METAL SURFACES ARE ALUMINUM ALLOY 5052-H32.
2. FINISH: CHEMICAL FILM PER MIL-C-5541, TYPE 1, COLOR GOLD.
3. THE LABEL SHOWN IS LOCATED APPROXIMATELY AS SHOWN.

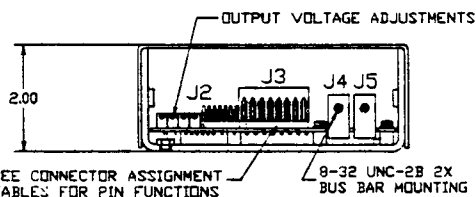
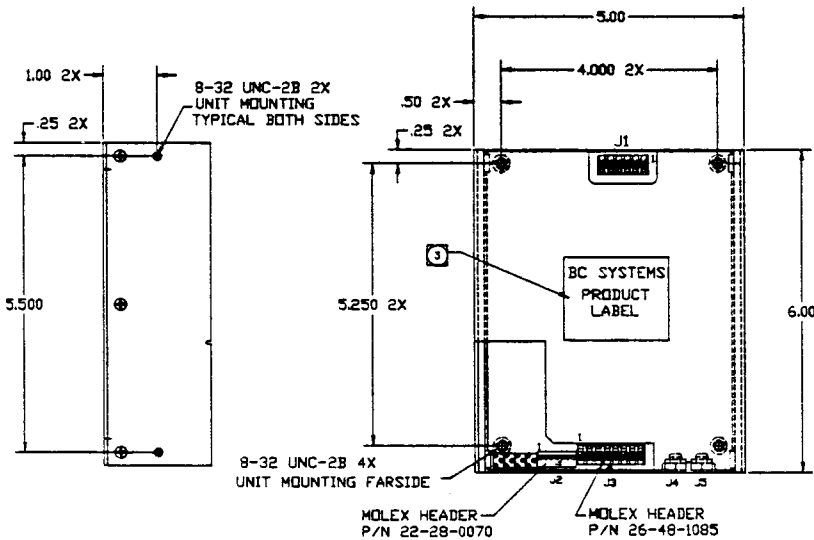
CONNECTOR ASSIGNMENT TABLES

CONNECTOR	FUNCTION	REMARKS
J1-1	115/230VAC	NEUTRAL
J1-2	N/A	
J1-3	115/230VAC	HOT
J1-4	N/A	MATING CONN
J1-5	CHASSIS GND	MOLEX
J1-6	CHASSIS GND	09-50-8061

CONNECTOR	FUNCTION	REMARKS
J2-1	SENSE +	
J2-2	SENSE -	MATING CONN
J2-3	+5V OK	MOLEX
J2-4	AC FAIL	22-01-2067
J2-5	REM ON/OFF	
J2-6	RTN	
J2-7	5V SHARE	

CONNECTOR	FUNCTION	REMARKS
J3-1	OUTPUT#4 POS	
J3-2	OUTPUT#4 NEG	MATING CONN
J3-3	OUTPUT#3 POS	MOLEX
J3-4	OUTPUT#3 NEG	09-50-8081
J3-5	OUTPUT#2 POS	
J3-6	OUTPUT#2 POS	
J3-7	OUTPUT#2 NEG	
J3-8	OUTPUT#2 NEG	

CONNECTOR	FUNCTION	REMARKS
J4	5V RTN	BUS BAR
J5	5V	BUS BAR



SERVING NATIONAL AND INTERNATIONAL CLIENTELE FOR OVER A DECADE

BC Power Systems' philosophy is to design and manufacture power supplies to the customer's requirements.

The skills of Design and Manufacturing are accomplished in a modern, well-equipped facility.