1-7 SPECIFICATIONS, ELECTRICAL

Parameter		RBX 02-120K	RBX 05-120K	RBX 12-50K	RBX 24-25K	RBX 48-12.5K
a-c Input Voltage	115/230V Selectable (85-132/170-264)					
a-c Brown-out Voltage	80/160V a-c					
a-c Input Frequency	47-440Hz					
Output Voltage		2V	5V	12V	24V	48V
Output Adj. Range		1.6 ~ 2.2V	4.0 ~ 5.5V	9.6 ~ 13.2V	19.0 ~ 26.5V	38.4 ~ 52.8V
Output Current		0-120A	0-120A	0-50A	0-25A	0-12.5A
Overvoltage Setting		2.6 ~ 2.8V	6.0 ~ 6.5V	14.0 ~ 14.5V	27.0 ~ 27.5V	55.0 ~ 57.0V
Overcurrent Setting		125 ~ 145A	125 ~ 145A	52 ~ 60A	26 ~ 30A	13 ~ 15A
Max. a-c Input Current at Nominal Output Power	At Minimum Input Voltage	8/4.5A	13.5/8A	13.5/8A	13/8A	13/8A
First ½-Cycle Surge Peak Current at Turn-on	115V a-c: 15A/230V a-c: 30A					
Efficiency		65%	80%	80%	85%	85%
Hold-up Time: (nom. input, full load)	30 msec typically, 20 msec minimum					
Output Power		240 Watts	600 Watts	600 Watts	600 Watts	600 Watts
Source Effect: (min — max)	typ	1.5%	0.8%	0.8%	0.6%	0.6%
	max	3.0%	1.6%	1.6%	1.2%	1.2%
Load Effect: (10% — 100%)	typ	1.0%	0.4%	0.4%	0.3%	0.3%
	max	2.0%	0.8%	0.8%	0.6%	0.6%
Temperature Effect: (0°C — 50°C)	typ			0.2%		
	max			1.0%		
Combined Effect:	typ	2.7%	1.4%	1.4%	1.1%	1.1%
	max	4.0%	2.0%	2.0%	2.0%	2.0%
Ripple & Noise: (source & switching components, p-p)	typ	<10mV	<20mV	<25mV	<25mV	<50mV
	max	<50mV	<100mV	<100mV	<100mV	<200mV
Spike Noise: (d-c to 50 MHz, p-p)	max	<100mV	<200mV	<250mV	<250mV	<500mV
Time Effect: (0.5-8 hr. drift at 25°C, maximum load)	typ	0.1%				
	max	0.5%				
Recovery Characteristics: 50-100% Load Change Step rise or fall >50μsec	Excursion	<10%	<4.0%	<4.0%	<4.0%	<4.0%
	Recovery to 1% of Setting	300 μsec.	300 μsec.	300 μsec.	300 μsec.	300 μsec.

1-8 ENVIRONMENTAL AND MECHANICAL SPECIFICATIONS:

Operating Temperature-Range	Mounting horizontally using the provided mounting holes	0°C to +50°C ambient
Storage Temperature-Range	N.A.	−25°C to +75°C
Humidity:	Operating or Non-operating Non-Condensing	Up to 85% RH
Vibration:	5-10 Hz. 10-55 Hz.	10 mm, 3 axes 2g, 3 axes
Shock: **Size**	11 ms ± 5 ms. N.A.	20 g, 3 axes See FIG. 1-2
Weight	N.A.	See FIG. 1-2
Safety	N.A.	UL 478 recognized; CSA C22.2-154, certified
Isolation @ 20°C, 65% RH.	Between input and output terminals Between input terminals and chassis Between ground and output terminals Between ±RC terminals and output	2KV a-c for 1minute (without Y capacitor) 2KV a-c for 1 minute 500V, 50 Megohm minimum 500V d-c, 50 Megohm minimum
Warranty	Operated within given specifications	5 years

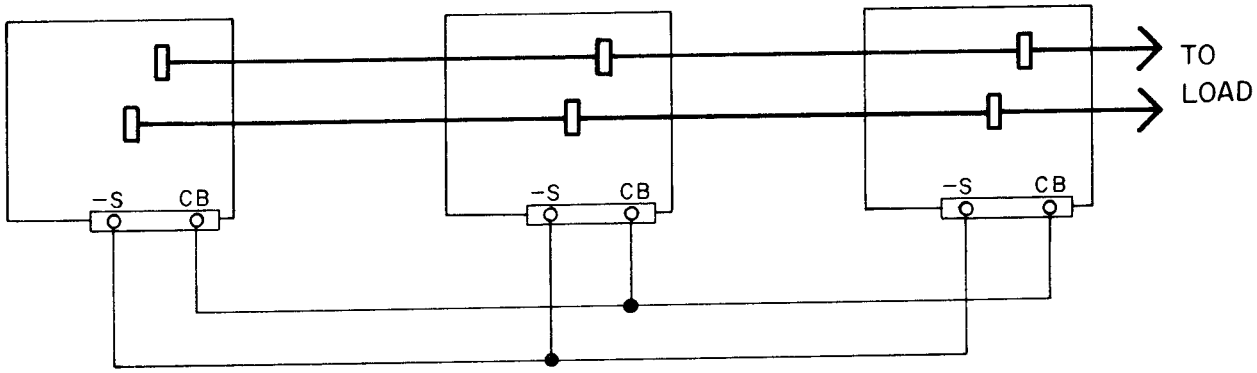
1-9 SPECIFICATIONS, ACCESSORY FUNCTIONS

A) REMOTE ERROR SENSING. Remote error sensing can compensate for load wire voltage drops up to 0.35V per wire.

B) REMOTE ON/OFF. A TTL compatible logic level signal, applied to the ±RC terminals may be used to turn the power supply output "on" or "off". This signal is optically isolated from the output terminals.

OUTPUT ON: "H" LEVEL: +2.4V to 24V (or ±RC open)
OUTPUT OFF: "L" LEVEL: 0V to +0.4V (or ±RC shorted)

C) BALANCE CIRCUIT. Up to three (3) RBX power supplies, with identical output ratings, may be paralleled by connecting their "CB" and "-S" terminal as shown below.



NOTES: *1) Maximum units in parallel: three (3)*
2) Output voltages of parallel units must be within 5% of each other.
3) Output current range of each unit 20-95% at nominal line.

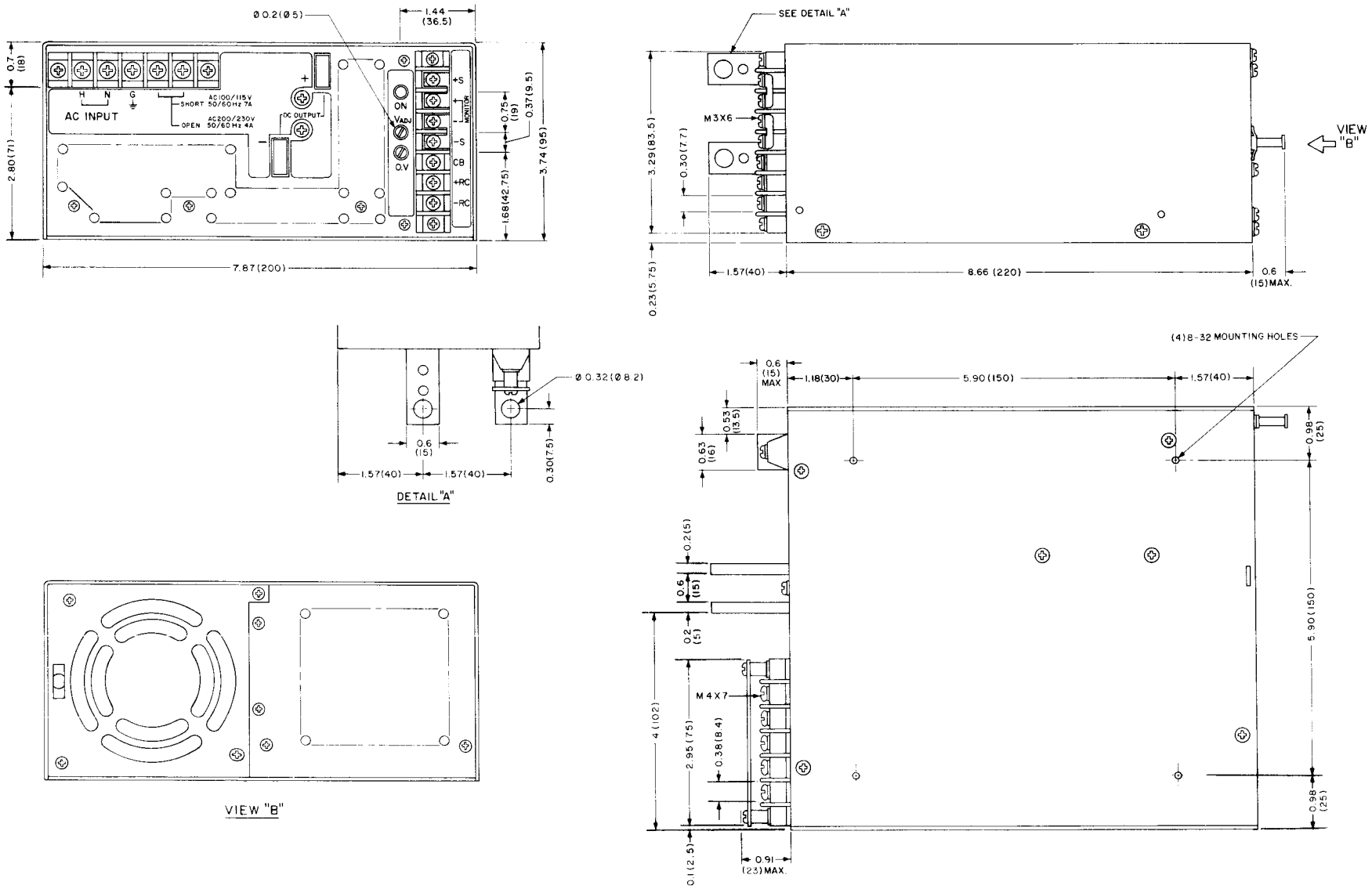


FIG. 1-2 MECHANICAL OUTLINE DRAWING, RBX SERIES, WITH COVER.

NOTES:

1) Dimensions in parentheses are in millimeters, others are in inches.
2) TOLERANCES: 0.04" (1 mm) unless otherwise noted.
3) TERMINAL SCREWS: M3 x 6 and M4 x 7 as indicated.
4) MOUNTING SCREWS: (4) 8-32 machine screws, maximum penetration: 0.2" (5 mm).
5) MATERIAL AND FINISH: Chassis and Cover. Aluminium, cadmium plated.
6) WEIGHT: 9.25 lbs. (4.2 Kg.) 5V, 12V, 24V and 48V models; 8.6 lbs. (3.9 Kg.) 2V model.