

B SERIES

High Voltage Power Supply

The B Series of high-voltage regulated AC-DC converters addresses the need for an AC line operated, fully integrated, chassis mount, fixed-output regulated high-voltage power supply with nominal performance and limited functions. Designed and built utilizing state-of-the-art power-conversion topology, these units feature design, manufacturing process, and encapsulation techniques that provide high reliability.

Typical applications for the B Series include the following:

Bias supplies, isolation testers, electrostatics, air ionization, air & oil precipitators, ozone generators, UV lamps, capacitor charging, and flash lamps.

- Lower cost than a (2) module AC-DC & DC-DC solution
- 12 models provide fixed outputs of 1kV to 12kV
- $\pm 10\%$ output adjustment range
- 4, 20, 30 or 50 watts of output power
- Input of 115VAC or 230VAC
- Indefinite output short-circuit protection
- Output arc protection
- Fault monitor with isolated relay contacts
- Variable-frequency, low-stored-energy design
- CE, designed for UL, cUL, IEC-61010-1



PARAMETER	CONDITIONS	MODELS																UNITS												
INPUT																														
Voltage Range	Full Power	115 (100 to 130VAC)								230 (200 to 260VAC)								VAC												
Frequency	All Modes	50 to 400																Hz												
Current	No Load, Max Eout	< TBD																mA												
Current	Max Load, Max Eout	< 500 @ 115VAC																mA												
Inrush Current	Nominal Input, Full Load	< TBD																A												
OUTPUT		1kV				2kV				3kV				4kV				5kV				6kV								
Voltage	Nominal Input	1,000				2,000				3,000				4,000				5,000				6,000				VDC				
Power	Nominal Input, Max Eout	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	W
Current	out Entire Output Voltage Range	4	20	30	50	2	10	15	25	1.3	6.6	10	16.6	1	5	7.5	12.5	.8	4	6	10	.6	3.3	5	8.3	mA				
OUTPUT		7kV				8kV				9kV				10kV				11kV				12kV								
Voltage	Nominal Input	7,000				8,000				9,000				10,000				11,000				12,000				VDC				
Power	Nominal Input, Max Eout	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	4	20	30	50	W
Current	out Entire Output Voltage Range	.57	2.86	4.23	7.14	.5	2.5	3.75	6.25	.44	2.22	3.33	5.55	.4	2	3	5	.36	1.82	2.73	4.55	.33	1.67	2.5	4.17	mA				
OUTPUT		ALL TYPES																												
Voltage Adjust		$\pm 10\%$																V												
Ripple	Full Load, Max Eout	< 0.45%																%V p-p												
Line Regulation	Nom. Input, Max Eout, Full Power	< 0.10%																VDC												
Static Load Regulation	No Load to Full Load, Max Eout	< 0.10%																VDC												
Stability	30 Min. warmup, per 8 hr/ per day	< 0.10%																VDC												
FAULT MONITOR		ALL TYPES																												
Isolated Relay		OK= Normally open & common connected, Fault= Normally closed & common connected																												
ENVIRONMENTAL		ALL TYPES																												
Operating	Full Load, Max Eout, Case Temp.	0 to +40																$^{\circ}\text{C}$												
Temperature Coefficient	Over the Specified Temperature	400																PPM/ $^{\circ}\text{C}$												
Storage	Non-Operating, Case Temp.	-40 to +85																$^{\circ}\text{C}$												
Humidity	Non-Condensing	0 to 90% Non-Condensing																-												

Specifications subject to change without notice.



Making High Voltage Easier!®

Higher Service, Higher Performance, Higher Reliability

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CONSTRUCTION

Aluminum

SIZE

Dimensions:

7.87" (200mm) x 3.15" (80mm) x 1.57" (40mm)

Volume: 38.92in³ (637.78cc)

Weight: 1.21 lbs (0.55 kg)

Tolerance

±1.0mm

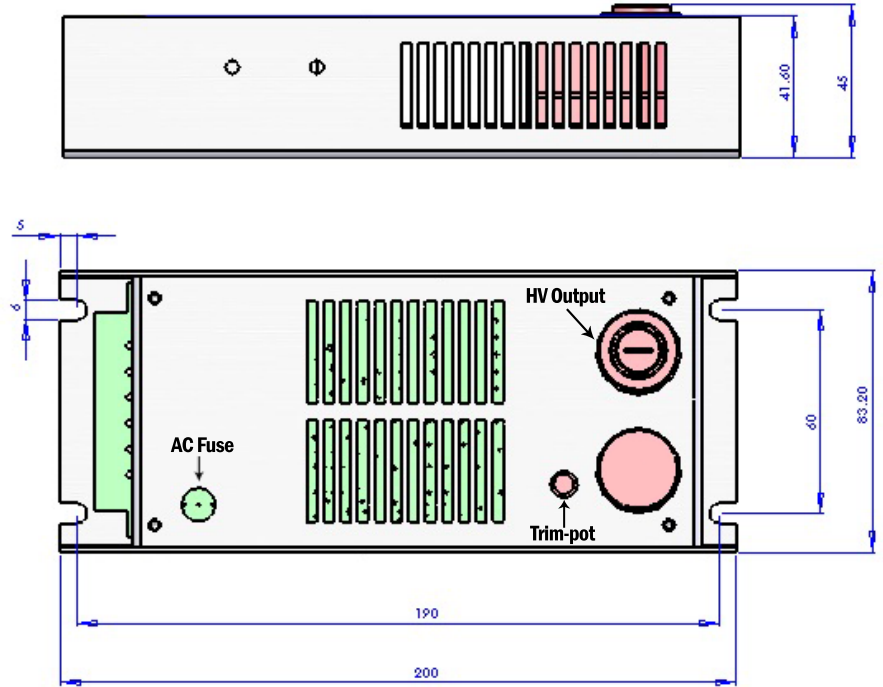
NOTES

Fault monitor is an isolated relay:

OK - Normally Open & Common connected.

FAULT - Normally Closed & Common connected.

Contact the factory for other preset fixed outputs



CONNECTIONS	
PIN	FUNCTION
1	AC Live
2	AC Neutral
3	Earth Ground
4	Fault - Common
5	Fault - N.C.
6	Fault - N.O.

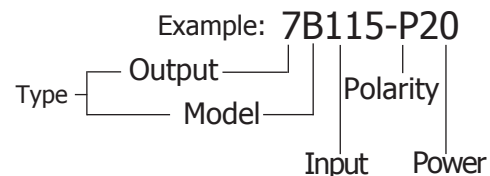


Non-RoHS compliant units are available. Please contact the factory for more information.

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ORDERING INFORMATION		
Output	0 to 1,000 VDC	1
	0 to 2,000 VDC	2
	0 to 3,000 VDC	3
	0 to 4,000 VDC	4
	0 to 5,000 VDC	5
	0 to 6,000 VDC	6
	0 to 7,000 VDC	7
	0 to 8,000 VDC	8
	0 to 9,000 VDC	9
	0 to 10,000 VDC	10
	0 to 11,000 VDC	11
	0 to 12,000 VDC	12
Model	Series Name	B
Input	115 VAC	115
	230 VAC	230
Polarity	Positive Output	-P
	Negative Output	-N
Power	0 to 4W Output	4
	0 to 20W Output	20
	0 to 30W Output	30
	0 to 50W Output	50

Contact the factory for other output requirements!



*The B Series is not available in all territories. Please contact an UltraVolt Applications Engineer for details concerning sales in your area.



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