

B-A Series

10W Encapsulated AC/DC-Converters



- Switching Power Modules for PCB Mounting
- Fully Encapsulated Plastic Case
- Universal Input Range 90 to 260VAC, 47 to 440Hz
- Regulated Output
- Low Ripple and Noise
- High Efficiency up to 80%
- CE, cUL, TUV Approvals
- 2-Year Product Warranty



Selection Guide (valid at nominal input voltage, full load and 25°C after warm-up time, unless otherwise stated)

Ordering Code	Input Voltage (VAC)	Output Voltage (VDC)	Max. Output Current (mA)	Efficiency Current (%)
B-A10-3.3S	90-260VAC or 120-370VDC	3.3	3000	68
B-A10-5S	90-260VAC or 120-370VDC	5	2000	71
B-A10-12S	90-260VAC or 120-370VDC	12	833	76
B-A10-15S	90-260VAC or 120-370VDC	15	666	76
B-A10-24S	90-260VAC or 120-370VDC	24	416	80
B-A10-5D	90-260VAC or 120-370VDC	±5	±800	72
B-A10-12D	90-260VAC or 120-370VDC	±12	±380	77
B-A10-15D	90-260VAC or 120-370VDC	±15	±300	77

Specifications (valid at nominal input voltage, full load and 25°C after warm-up time, unless otherwise stated)

Input Data

Voltage	90-260 VAC or 120-370 VDC
Frequency	47-440 Hz
Current (Full Load)	200 mA max. (115 VAC) / 130 mA max. (230 VAC)
Inrush Current (<2ms)	10 A max. (115 VAC) / 20 A max. (230 VAC)
Leakage Current	0.75 mA max.
External Fuse (Recommended)	1.5 A Slow Blow Type

Output Data

Voltage	See "Selection Guide" table
Voltage Accuracy	±2%
Current	See "Selection Guide" table
Line Regulation	±0.3% typ.
Load Regulation (5-100%)	±0.5% typ.

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B-A Series

10W Isolated DC/DC-Converters



Specifications (valid at nominal input voltage, full load and 25°C after warm-up time, unless otherwise stated)

Output Data (Continued)

Load Regulation (5-100%)		±0.5% typ.
Minimum Load	3.3S	4%
	5S, 12S, 24S	5%
	15S, 12D	3%
	5D, 15D	1%
Maximum Capacitive Load (depending on model)		470-23,000µF
Ripple & Noise		<0.5% Vout +50mV max. (Vp-p)
Current Limitation	Dual Output	120-180% Fold Back
Efficiency		See "Selection Guide" table
Hold-Up Time		15 ms min.
Switching Frequency		100 kHz

Protection Data

Over Current Protection	Hiccup Technique, Auto-Recovery
Over Voltage Protection	Zener Diode Clamp
Short Circuit Protection	Hiccup Mode, Indefinite (Automatic Recovery)

Isolation Data

Input-Output	3000VAC
Input-FG	1500VAC
Output-FG	500VAC

Environmental Data

Operating Temperature	-25°C to +71°C
Storage Temperature	-40°C to +85°C
Temperature Coefficient	0.02%/°C
Humidity	95% RH
MTBF (MIL-HDBK-217F)	>250,000h at 25°C

Physical Data

Dimension (L x W x H)	64.0 x 45.0 x 20.5 mm 2.52" x 1.77" x 0.81"
Case Material (Flammability to UL 94V-0)	Plastic Resin + Fiberglass
Weight	100 g
Cooling Method	Free Air Convection

Safety Approvals

Agency Approvals	UL/cUL, CE, TUV
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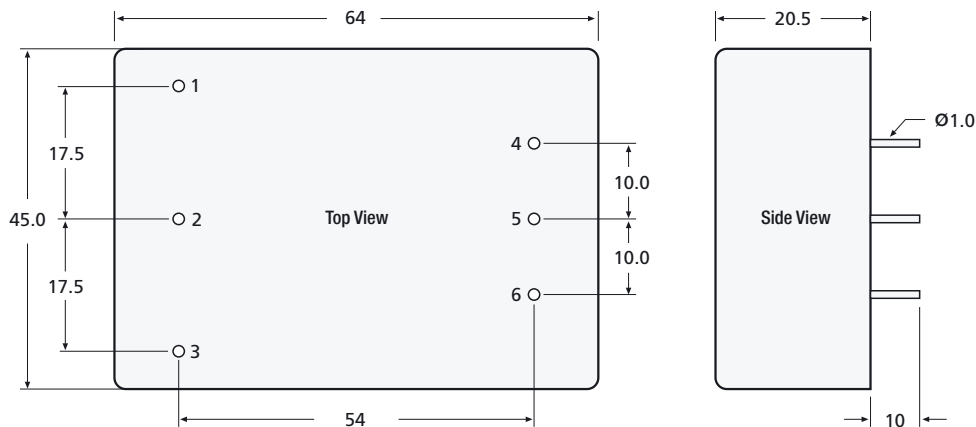
EMC

EMI (Conducted & Radiated Emission)	EN 55022 Class B
EMS (Noise Immunity)	EN 50082-1

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Package Style and Pinning (mm)

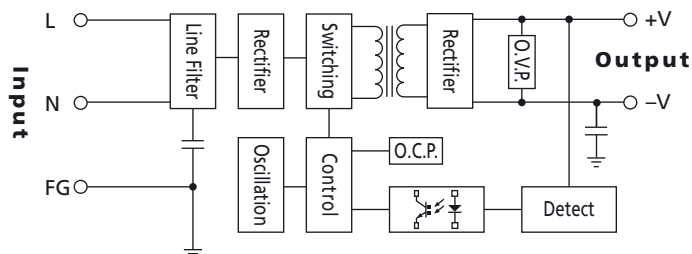


Pin Connections

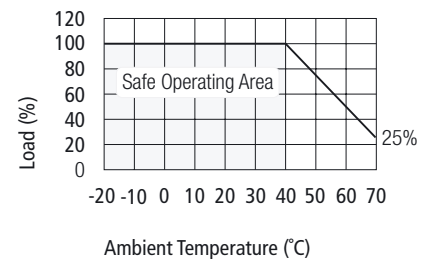
Pin #	Single	Dual
1	FG	FG
2	ACin	ACin
3	ACin	ACin
4	-DCout	-DCout
5	Do not Connect	Com
6	+DCout	+DCout

Block Diagrammes

Single Output



Derating Curve



Dual Output

