

# BM090S Universal 90 Watt Series

- 100-240 Vac Universal Input
- Meets "ENERGY STAR VI" Program Requirements
- Single Output to 90W
- Regulated Output with Low Ripple
- Meets Safety Agency Requirements
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs Also Available
- Desktop Style



Model	Output Voltage DC (V)	Maximum Current (A)	Maximum Watts (W)	Ripple Vp-p max. (mV)
BM090-S-12-X-XX	12	7.50	90.0	120
BM090-S-15-X-XX	15	6.00	90.0	150
BM090-S-18-X-XX	18	5.00	90.0	180
BM090-S-24-X-XX	24	3.75	90.0	240
BM090-S-48-X-XX	48	1.87	89.8	480

Input Specification	
Input Voltage Range	100 to 240VAC -10%, +10%
Line Frequency	47 to 63 Hz
Input Current	1.3A max. at 90VAC Input
Protection	Internal Primary Current Fuse, Inrush Limiting

Output Specification		
Line & Load Regulation (at End of Cable)	Line Voltage	+/- 1%
	Load Voltage	+/- 5%
Ripple	1% Vp-p max.	
Transient Response	0.5ms for 50% Load change Typ.	
Protection	Over-current Protection (Hiccup)	
	Over-voltage Protection (OVP)	
	Short Circuit Protection	

Environmental Specification	
Operating Temperature	0°C to 40°C with no derating
Relative Humidity	5% to 95% non-condensing
Altitude	0 - 16,000 feet
Cooling	Convictional - Non vented case

Input Configuration		
IEC320 C14 (F)	IEC320 C8 (N)	IEC320 C18 (Q)

Specify the input configuration Code in your Order.

Part Number Key			
<u>BM090</u>	<u>S</u>	<u>12</u>	<u>X</u>
Product Family Name	Single Output	Volt (DC)	Input Configuration

General Specification	
Topology	Switching - Fixed Frequency Flyback
Leakage Current	Less than 100uA
Dielectric Withstand	4,500VAC Primary - Secondary
	1,800VAC Primary - F.G
	500VDC Secondary - F.G
Storage Temperature	-30 °C to 85 °C
Efficiency	Minimum Average Efficiency in Active Mode
	≥ 88%
Hold-up Time	20ms min. @100VAC
EMI	Complies with EMC Directives
Max. Power in No-Load	≤ 0.21W @115VAC & 230VAC
MTBF	250,000 Calculated Hours Minimum.
Approvals and Safety Standards	UL60601-1, IEC/EN60601-1, K60950-1 EMC : EN60601-1-1-2 / EN55011
Case and Dimension	6.043(L) by 2.70(W) by 1.25 [in]
	153.5(L) by 68.6(W) by 32(H) [mm]
Case Material	Black 94V0 Polycarbonate
Cord and Connectors	18 AWG 1,200mm 4 Conductor.
	Other cable and connectors are available.