

BM020S Universal 15-20 Watt Series

- 100-240 Vac Universal Input
- Meets "ENERGY STAR" Program Requirements
- Single Output to 10W-20W
- Regulated Output with Low Ripple
- Meets Safety Agency Requirements
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs Also Available
- Desktop and Wall Plug Style with Interchangeable Blades



Model	Output Voltage DC (V)	Maximum Current (A)	Maximum Watts (W)	Ripple & Noise Vp-p max. (mV)
BM020-S-05-X	5	3.00	15.00	50
BM020-S-06-X	5.9	2.50	14.75	59
BM020-S-07-X	7.5	2.00	15.00	75
BM020-S-09-X	9	2.00	18.00	90
BM020-S-12-X	12	1.50	18.00	120
BM020-S-14-X	14	1.20	16.80	140
BM020-S-15-X	15	1.20	18.00	150
BM020-S-18-X	18	1.00	18.00	180
BM020-S-24-X	24	0.83	19.92	240
BM020-S-48-X	48	0.42	20.16	480

Input Specification

Input Voltage Range	100 to 240VAC -10%, +10%
Line Frequency	47 to 63 Hz
Input Current	0.5A max. at 100VAC Input
Protection	Internal Primary Current Fuse, Inrush Limiting

Output Specification

Line & Load Regulation (at End of Cable)	Line Regulation	+/- 1%
	Load Regulation	+/- 5%
Ripple & Noise	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	Convectional - Non vented case

Input Configuration

IEC320 C14 (F)	IEC320 C8 (N)	IEC320 C18 (Q)	N.A./Japan /China (B)	Europe /Korea (M, Kingdom) (G)	United	Australia (H)

Specify the input configuration Code in your Order.

Part Number Key

BM020	S	05	X
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	Basic voltage : Minimum Average Efficiency in Active Mode ≥ [0.071 * ln(Pout)-0.0014*P(out)] + 0.67 Low voltage : Minimum Average Efficiency in Active Mode ≥ [0.0834 * ln(Pout)-0.0014*P(out)] + 0.609
Hold-up Time	20ms min. @100VAC
EMI	Complies with EMC Directives
Max. Power in No-Load	≤ 0.1W@115VAC & 230VAC
MTBF	250,000 Calculated Hrs
Approvals and Safety Standards	UL60601-1, IEC/EN60601-1, K60950-1 EMC : EN60601-1-1-2 / EN55011
Case and Dimension	3.3(L) x 1.81(W) x 1.26(H) [in] 84(L) x 46(W) x 32(H) [mm] 83(L) x 47(W) x 37(H) [mm] (Changeable)
Case Material	Black 94V0 Polycarbonate
Cord and Connectors	18 AWG 1,500mm 2 Conductor. Other cable and connectors are available.