

# MW170KB

## Universal 10-15 Watt Series



**Medical / Switch Mode Power Supply**

**3 Year Warranty**

- 100-240 VAC Universal Input
- Desktop and Wall Plug Style with Interchangeable Blades\* (Kit Sold Separately)
- Single Output to 15W
- Seven Models Available; 5V to 24V
- Regulated Output with Low Ripple
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs
- No Load Power Consumption < 0.50W
- Designed to Meet EISA Requirements — see reverse side for details



\*Photo shows optional blades kit



**International Safety Standard Approvals**



## Specifications

### Output Specifications

Line and Load Regulation (Excluding cord)		Line Voltage +/-1% Load Voltage +/-5%
Ripple		1% Vp-p max.
Transient Response		0.5ms for 50% Load change Typical
Protection		Over-current Protection (Hiccup) Short Circuit Protection

### Input Specifications

Input Voltage Range	Universal input	100-240VAC -10%, +10%
Line Frequency		47-63Hz
Input Current	90VAC Input	0.4A max.
Protection		Internal Primary Current Fuse, Inrush Limiting

### Environmental Specifications

Thermal Performance	Operating temperature full load, no derating convectional cooling Non vented case	0° C to 40° C
Relative Humidity	Non-condensing	5% to 95%
Altitude		0-10,000 feet

### General Specifications

Topology		Switching-Fixed Frequency Flyback
Efficiency		Designed to Meet EISA Requirements — see reverse side
Hold-up Time	@115VAC	18ms min.
Dielectric Withstand		4,000VAC or 5,656VDC Primary - Secondary; 1,500VAC or 2,150VDC Primary-F.G; 500VDC Secondary-F.G
Storage Temp		-30° C to 85° C
Approvals and Safety Standards		UL60601-1 IEC/EN60601-1 EMC : EN60601-1-2/EN55024
MTBF		100,000 Calculated Hours
Case and Dimension		Desktop Style 3.3L x 1.81W x 1.26H (in) 77.7L x 46.0W x 33.0H (mm)
Case Material		Black 94V0 Polycarbonate
Cord and Connectors		18 AWG 1,800mm 2 Conductor. (5V Model: 1,500mm). Ault #3 Connector. Other connectors are also available.

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For the most current data and application support visit [www.sipower.com](http://www.sipower.com)

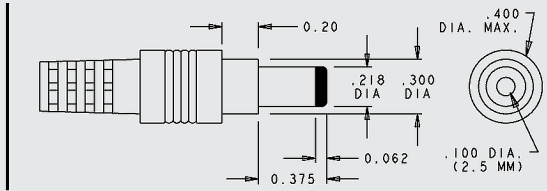
Ault Part Number	Output Voltage	Output Current Max	Max Watts	Ripple Vp-p max.
MW170KB05XX	5 V	2.00 A	10.0 W	50 mV
MW170KB06XX	6 V	1.67 A	10.0 W	60 mV
MW170KB09XX	9 V	1.50 A	13.5 W	90 mV
MW170KB12XX	12 V	1.20 A	14.4 W	120 mV
MW170KB15XX	15 V	1.00 A	15.0 W	150 mV
MW170KB18XX	18 V	0.84 A	15.1 W	180 mV
MW170KB24XX	24 V	0.63 A	15.1 W	240 mV

Ault Part Number Key				
MW170	K	B	03	XX
Product Family Name	Manufacturing Location	Design Revision Changes	Voltage DC	Connector Number

Input Configuration					
					
IEC320 w/ground C14 (F)	IEC320 w/o ground C18 (Q)	Shaver C8 (N)	N. America/ Japan (B)	Europe (M)	United Kingdom (G)
Specify the Input Configuration Code in your order.					

Optional AC Interchangeable Blade Kit - KT1027K		
		
Europe (M)	United Kingdom (G)	Australian (E)



Pin Connections	
3	
Pinout Code	Center contact: positive
Description	Switchcraft 760 plug or equivalent
Suggested Mating	Switchcraft 712A jack or equivalent
Other Connectors are available by special order	

**2007 Energy Independence and Security Act – EISA**

The Energy Independence and Security Act of 2007 was passed in December of 2007 and addresses minimum efficiency standards and standby levels for Class A external power supplies that are 250 watts and under. This law stipulates that external power supplies manufactured on July 1, 2008 and beyond meet certain minimum efficiency and standby criteria as defined below.

**Minimum Efficiency Criteria**  
Active mode is defined as when a power supply's input is connected to line voltage AC and its output is connected to a DC or AC load drawing a portion of the product's power output. Depending on the power rating for the power supply, it must meet the minimum efficiency criteria outlined below.

**Energy-Efficiency Criteria for Active Mode:**

output power on adapter label	minimum average efficiency percentage
0 to <math>\leq</math> less than 1 watt	$\geq 0.50 \times$ output power on adapter label
> 1 to $\leq$ 51 watts	$\geq [0.09 \times (\text{output power on adapter label})] + 0.50$
> 51 watts	$\geq 0.85$

The power supply must also meet a requirement for when its input is connected to a line voltage AC but its output is not connected to a load. Depending on the power output of the supply, it must keep its energy consumption below the following values.

**Energy Consumption Criteria for No Load Mode:**

output power on adapter label	maximum power consumption in no-load mode
0 to < 250 watts	$\leq 0.5$ watts