

MMK40S

MEDICAL GRADE 40 WATT ENCLOSED SWITCHING POWER SUPPLIES

The MMK40S series is a medical grade 40-watt enclosed switching power supply with a universal input range of 90-264 VAC, making it suitable for a wide variety of global applications. This power supply series features a compact footprint, allowing it to fit into tight spaces, and boasts high efficiency, ensuring minimal energy loss and reduced heat generation. The regulated outputs available in this series include 5, 12, 15, and 24-volt DC, providing versatility for different medical devices and equipment. All MMK40S series power supplies come equipped with built-in EMI filters, which help to minimize electromagnetic interference, ensuring the smooth operation of sensitive medical equipment.

HOW TO ORDER

MMK40S-5

OUTPUT VOLTAGE

5 = 5 VDC
12 = 12 VDC
15 = 15 VDC
24 = 24 VDC

S = SINGLE OUTPUT
D = DOUBLE OUTPUT

OUTPUT POWER: 40 W

FAMILY: MMK SERIES



FEATURES

UNIVERSAL INPUT VOLTAGE

90-264 VAC;
(110-240VAC Nominal.)

OUTPUT RANGE

40 Watts Output

OPERATING TEMPERATURE

0 to +60°C (See Derate)

SAFETY APPROVALS

UL/cUL: ANSI/AAMI ES60601-1 3rd ed.
CSA C22.2 No. 60601-1 3rd ed.
UL-EU: EN60601-1 3rd ed.
CB: IEC60601-1 3rd ed.
CE: EN60601-1-2

HIGH EFFICIENCY

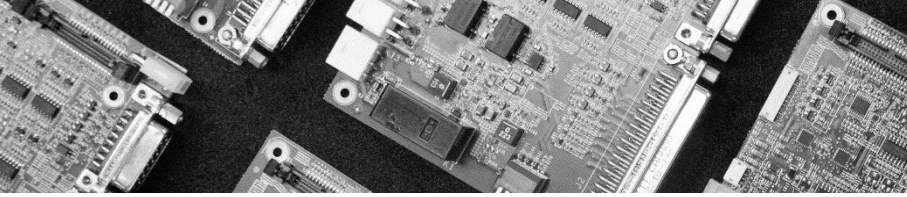
ISOLATION

5656 VDC

FULL EMI FILTERING

CONSTRUCTION

Enclosed



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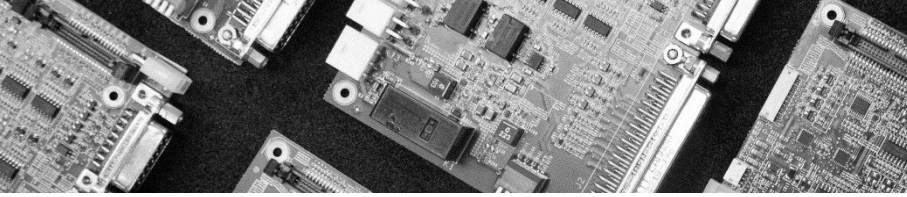
PARAMETERS

MMK40S

Input Voltage, Nominal	90-264 VAC; (110-240VAC Nominal.)
Frequency Range	47-63 Hz
Inrush Current, typ:	20A @ 115VAC Input * 40A @ 230VAC Input *
Leakage Current	<0.3mA @ 240VAC, 50Hz
Voltage and Current	See Selection Chart
Load Regulation	5V: $\pm 2\%$ of FS, typ
(0% to 100% Load)	All Others: $\pm 0.5\%$, typ
Line Regulation	± 0.5 , typ
Preset Accuracy	1%, typ
DC Voltage Adjust (typ)	$\pm 6\%$ of FS
Temperature Coefficient	$\pm 0.03\%/^{\circ}\text{C}$
Ripple/Noise	See Selection Chart
Over Voltage Protection	145% max. auto-recovery *
Short Circuit Protection	Auto-recovery
Hold Up Time	16mS, typ (Nom I/P, FL)
Turn On Time	≤ 1.0 sec, typ
Rise Time	≤ 20 msec, typ
Over/Under Shoot	$< 10\%$ of FS
Leakage Current	≤ 0.3 mA @ 240VAC, 50 Hz
Isolation	I/P-O/P: 5656VDC I/P-Ground: 2121VDC O/P-Ground: 707VDC
Efficiency	80%, typ 5V:74%
Safety	UL/cUL: ANSI/AAMI ES60601-1 3rd ed. CSA C22.2 No. 60601-1 3rd ed. UL-EU: EN60601-1 3rd ed. CB: IEC60601-1 3rd ed. CE: EN60601-1-2
Oper. Temperature	0 to $+60^{\circ}\text{C}$ (See Derate)
Storage Temperature	-25 to $+85^{\circ}\text{C}$ *
Relative Humidity	10% to $+95\%$, non-cond *
EMI (Designed to Meet)	EN55011, Class B
MTBF	100 kHrs Mil Std 217, 25°C
Size	4.75" x 2.5" x 1.5"
Construction	Enclosed
Weight	9.6 oz, (272g)

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

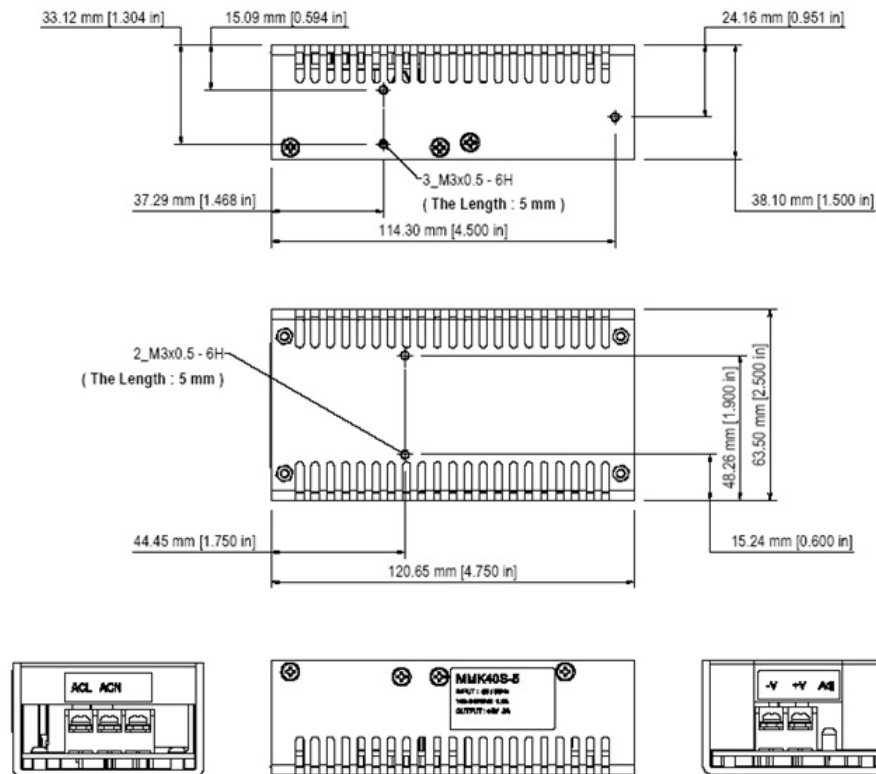
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long-term reliability. Proper operation under conditions other than standard conditions is neither warranted nor implied.



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MECHANICAL DIMENSION

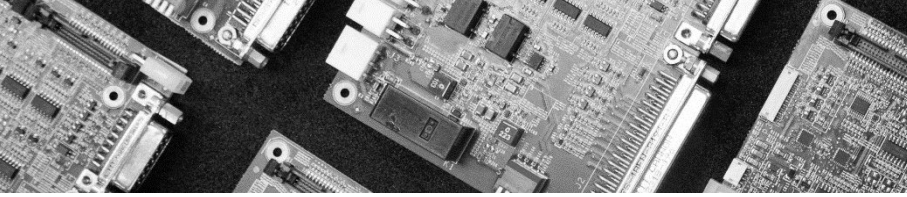


PLEASE NOTE:

To improve specifications and safety isolation, connection designations may have changed from prior revisions. Please verify connections per product labels on input and output connections before applying power to the unit

Note: For our M3 x 0.5 aluminum threaded holes:
Recommended torque: 2.5 in-lbs, 3 in-lbs maximum (2.9 kgf-cm/3.5 kgf-cm max)

MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT AMPS (MAX)	RIPPLE/NOISE PP,TYP
MMK40S-5	5 VDC	8	50 mv
MMK40S-12	12 VDC	3.5	120 mv
MMK40S-15	15 VDC	2.8	150 mv
MK40S-24	24 VDC	1.8	240 mv



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OUTPUT DERATING CURVE

