



3.5"W x 6"L x 1.75"H

- 90-264VAC Auto Ranging Input
- Compact Footprint
- High Efficiency
- Regulated Outputs
- 5656VDC Isolation
- Built in EMI Filter



| <u>Model Number</u> | <u>Output Voltage</u> | <u>Output Amps (max)</u> | <u>Ripple/Noise pp.typ</u> |
|---------------------|-----------------------|--------------------------|----------------------------|
| MMK150S-5 | 5 VDC | 30 | 100mv |
| MMK150S-12 | 12 VDC | 12.5 | 100mv |
| MMK150S-15 | 15 VDC | 10 | 100mv |
| MMK150S-24 | 24 VDC | 6.25 | 100mv |

INPUT SPECIFICATIONS

| | |
|----------------------|------------------------------|
| Input Voltage Range | 90-132/176-264 VAC |
| | 100-120 / 200-240VAC Nominal |
| Frequency Range | 47-63 Hz |
| Inrush Current, typ: | 20A @ 100VAC * |
| | 40A @ 200VAC * |
| Leakage Current | <0.3mA @ 264VAC, 50Hz |

OUTPUT SPECIFICATIONS

| | |
|------------------------------|----------------------------|
| Voltage and Current | See Selection Chart |
| Line/Load Regulation (NL-FL) | ± 0.5%, typ |
| Voltage Tolerance | ± 1%, typ |
| DC Voltage Adjust (typ) | ± 6%, typ |
| Temperature Coefficient | ± 0.03%/°C |
| Ripple/Noise | 100mV, typ |
| Over Voltage Protection | 130% max. Auto recovery * |
| Over Current Protection | 160% max., Auto-recovery * |
| Short Circuit Protection | Auto-recovery |
| Hold Up Time | 20mS, typ (Nom I/P, FL) |
| Turn On Time | ≤ 1.5 sec, typ |
| Rise Time | ≤ 250mS, typ |
| Over/Under Shoot | < 10% of FS |

GENERAL SPECIFICATIONS

| | |
|---------------------|-------------------------------------|
| Isolation | I/P-O/P: 5656VDC |
| | I/P-Ground: 2121VDC |
| | O/P-Ground: 707VDC |
| Efficiency | 77~80%, typ |
| Switching Frequency | 100Khz, (fixed, typical) |
| Safety | UL/cUL: ANSI/AAMI ES60601-1 3rd ed. |
| | CSA C22.2 No.60601-1 3rd ed. |
| | UL-EU: EN60601-1 3rd ed. |
| | CB: IEC 60601-1 3rd ed. |
| | CE: EN60601-1-2 |

ENVIRONMENTAL SPECIFICATIONS

| | |
|------------------------|------------------------|
| Oper. Temperature | 0 to +60°C |
| | (See Derate Curve) |
| Storage Temperature | -25 to +85°C * |
| Relative Humidity | 10% to 90%, non-cond * |
| EMI (Designed to Meet) | EN55011, Class B |
| MTBF | 100,000 Hrs |
| | Mil Std 217, 25°C |

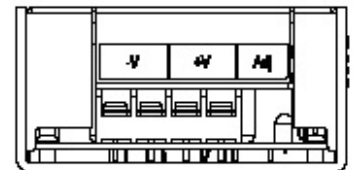
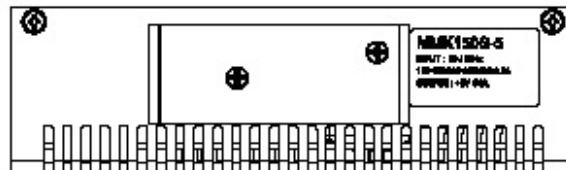
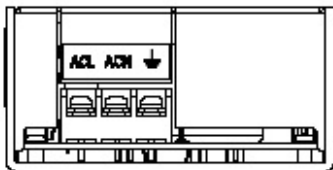
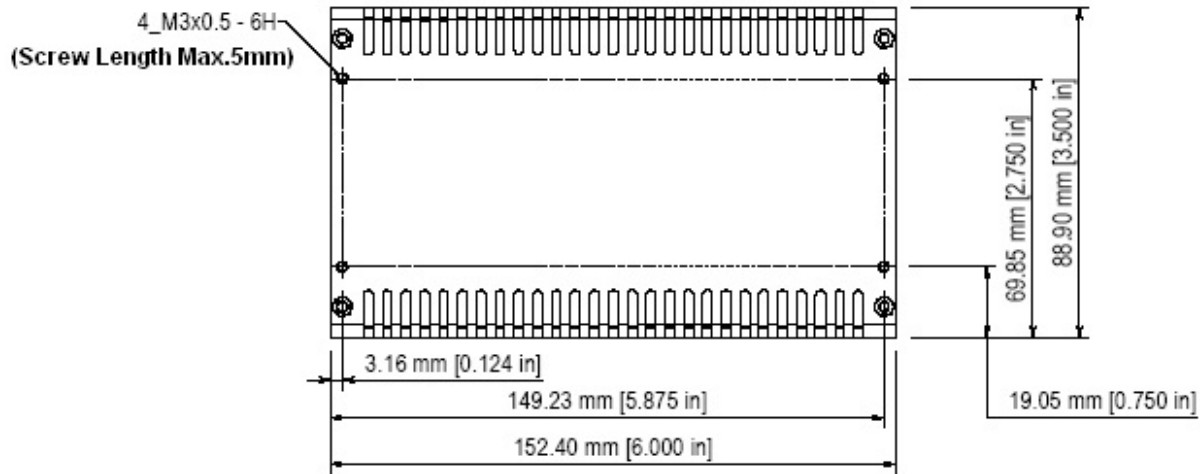
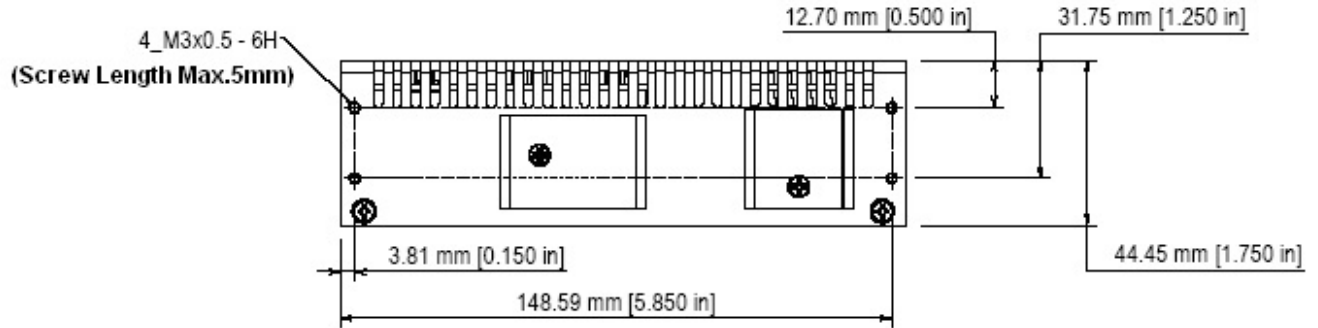
PHYSICAL SPECIFICATIONS

| | |
|--------------|-------------------|
| Size | 6" x 3.5" x 1.75" |
| Construction | Enclosed |
| Weight | 1.37 lb, (630g) |

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 the standard operating conditions is neither warranted nor implied.

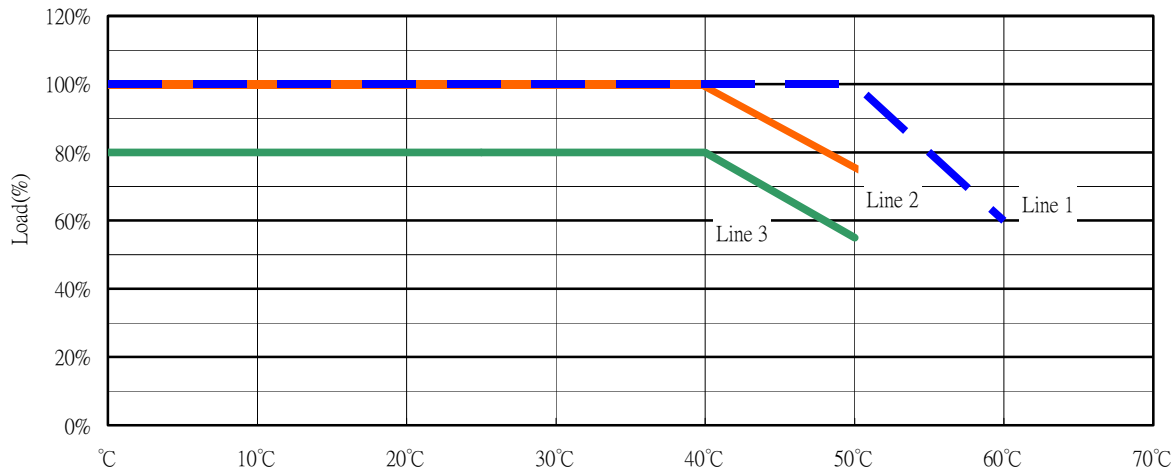
MECHANICAL DIMENSIONS



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 prior to 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)

OUTPUT DERATING CURVE



1. Line 1 : Force air cooling.
2. Line 2 : 12V,15V & 24V convection cooling.
3. Line 3 : 5V convection cooling.