

PMMK150E

MEDICAL GRADE 150 WATT ENCLOSED WITH PFC

The PMMK150E is a 150W medical-grade enclosed AC/DC power supply engineered for applications requiring enhanced protection, safety, and reliable performance. Designed with a fully enclosed chassis, universal 90–264VAC input, active power factor correction (PFC), and reinforced 5656VDC input-to-output isolation, the PMMK150E delivers dependable power conversion for demanding medical and industrial environments. Available in single and dual output configurations from 5VDC to 48VDC, this compact solution is ideal for medical devices, diagnostic equipment, laboratory systems, and other mission-critical applications requiring safe and efficient power delivery.



HOW TO ORDER

PMMK150S-5E

- E: ENCLOSED
- OUTPUT VOLTAGE
  - 5 = 5 VDC
  - 12 = 12 VDC
  - 15 = 15 VDC
  - 24 = 24 VDC
  - 48 = 48VDC
- S = SINGLE OUTPUT
  D = DOUBLE OUTPUT
- OUTPUT POWER: 150 W
- FAMILY: PMMK SERIES

FEATURES

UNIVERSAL INPUT VOLTAGE
90-264 VAC;
(110-240VAC Nominal.)

OUTPUT RANGE
150 Watts Output

OPERATING TEMPERATURE
-10 to +70° C (See Derate)

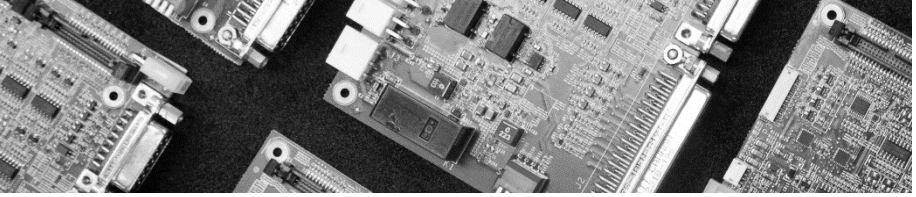
SAFETY APPROVALS
ANSI/AAMI ES60601-1 3rd ed.
CSA C22.2 No. 60601-1 3rd ed.
IEC60601-1 3rd ed.
CE: EN60601-1-2

HIGH EFFICIENCY

ISOLATION
5656 VDC

FULL EMI FILTERING

CONSTRUCTION
Enclosed

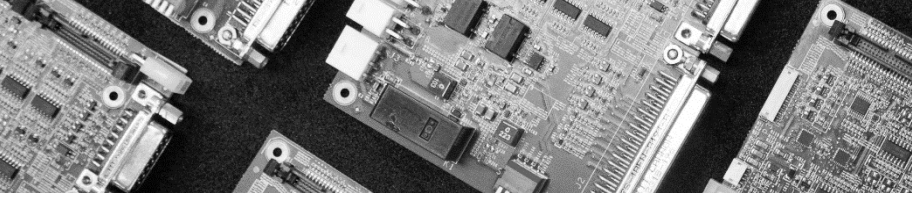


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PARAMETERS	PMMK150
Input Voltage, Nominal	90-264 VAC; (110-240VAC Nominal.)
Frequency Range	47-63 Hz
Power Factor Correction	0.96 min. at nom. Input
Inrush Current, typ:	30A @ 115VAC Input 60A @ 230VAC Input *
Leakage Current	<0.3mA @ 264VAC, 50Hz
Voltage and Current	See Selection Chart
Line Regulation	See Selection Chart
Load Regulation	Singles: ± 1% max.
Cross Regulation	Duals: ± 3/5%
Over Voltage Protection	130% max. of nom. Input Auto Recover after fault condition is removed
Over Current Protection	150% max. of FL at nom. input *
Preset Accuracy	±1%, typ
Short Circuit Protection	Auto-recovery after fault condition is removed •
Hold Up Time	20mS, typ (Norn I/P, FL)
Isolation (Note 4)	I/P-O/P: 5656VDC I/P-Ground: 2828VDC O/P-Ground: 707VDC
Efficiency	75%, min. at nom. input
Safety UL/cUL: **CB:** **CE**	ANSI/AAMI ES60601-1 3rd ed. CSA C22.2 No. 60601-1 3rd ed. IEC60601-1 3rd ed. EN60601-1-2
Oper. Temperature	-10 to +70° C (See Derate Curve)
Storage Temperature	-25 to +85 °C *
Relative Humidity	0% to +95%, non-cond •
EMC	EN55011 Class B
MTBF	270,000 Hrs Mil Std 217, 25° C
Size	3.17" X 5.5" X 1.6"
Construction	Enclosed
Weight	1.3 lb, (590g)

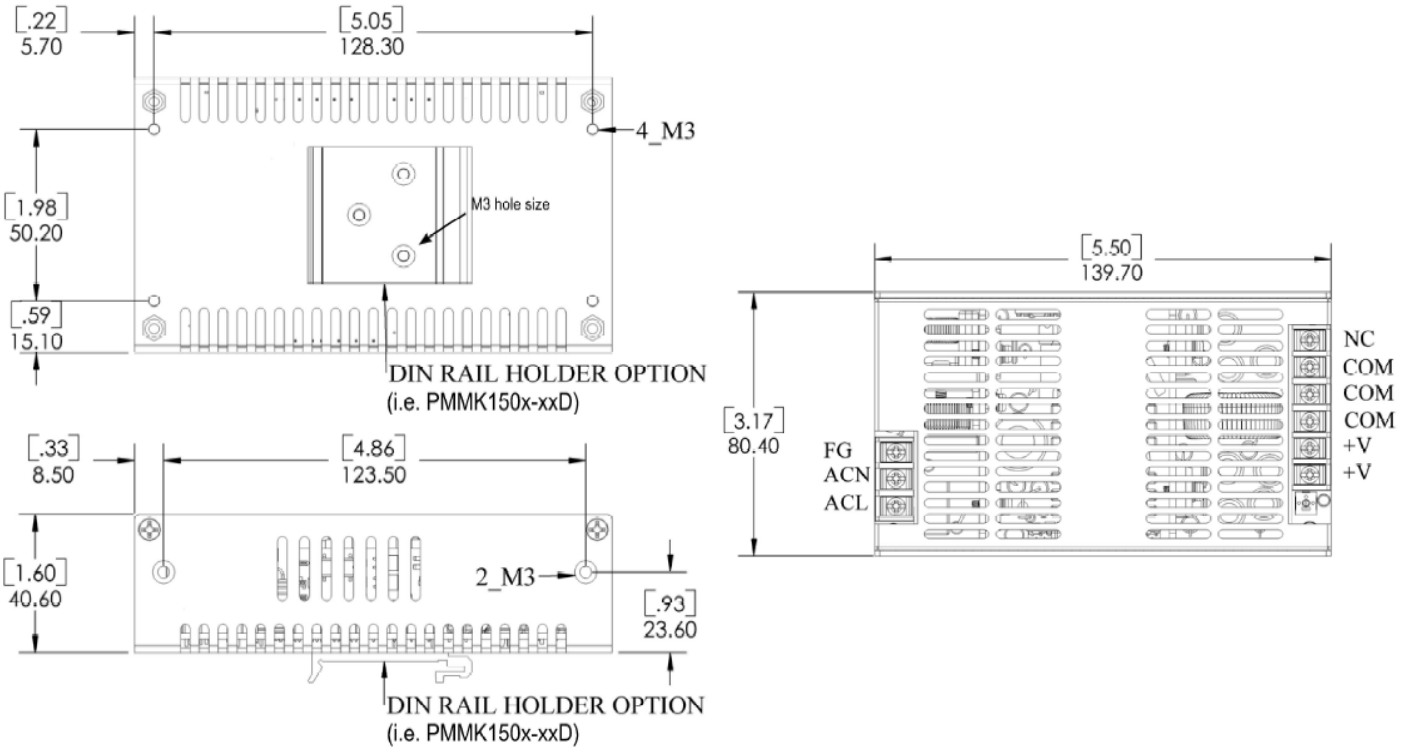
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted
** These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long-term reliability. Proper operation under conditions other than standard conditions is neither warranted nor implied.*



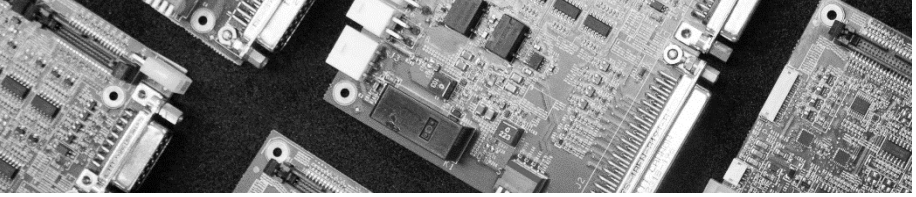
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MECHANICAL DIMENSIONS - SINGLE OUTPUT



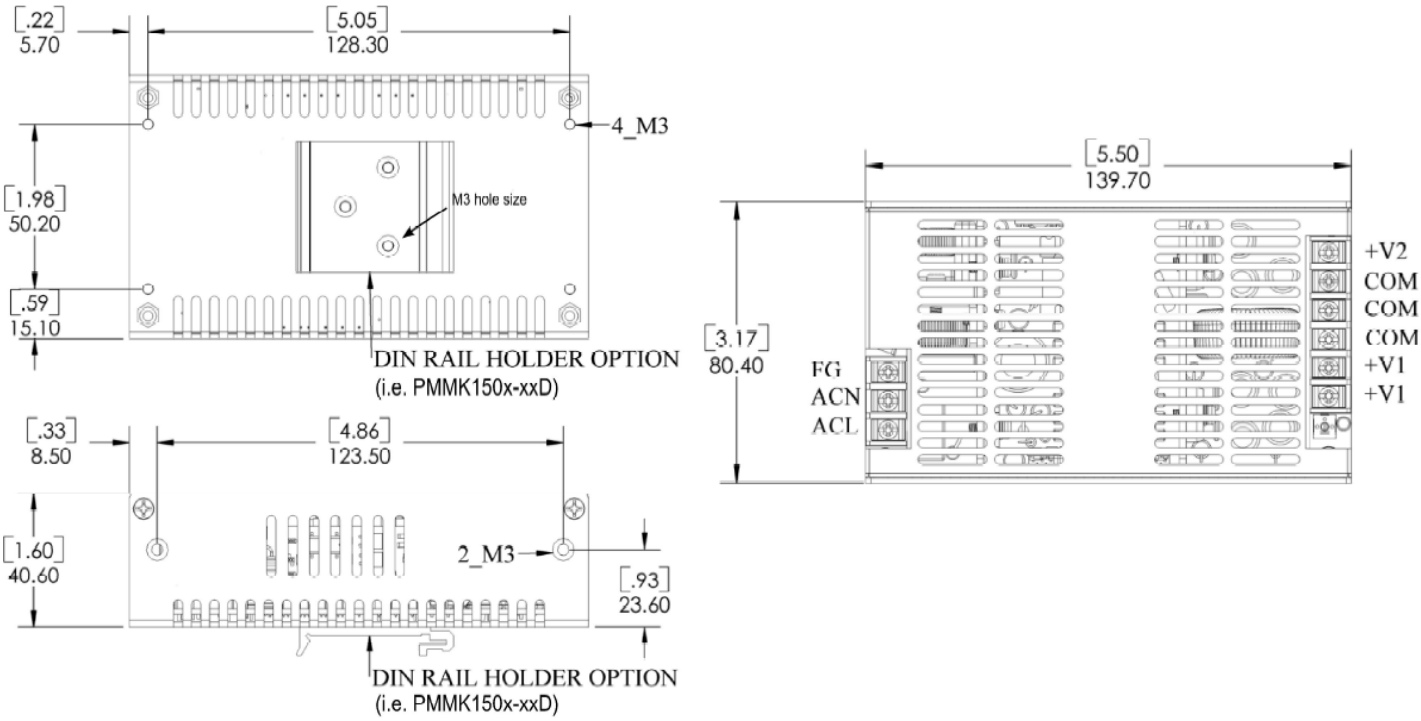
MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT AMPS (MAX)	LINE REGULATION (MAX)	RIPPLE/NOISE PP,TYP
PMMK150S-5E	5 VDC	30	±1%	150mv pk-pk
PMMK150S-12E	12 VDC	12.5	±1%	150mv pk-pk
PMMK150S-15E	15 VDC	10	±1%	150mv pk-pk
PMMK150S-24E	24 VDC	6.3	±1%	150mv pk-pk
PMMK150S-48E	48 VDC	3.2	±1%	250mv pk-pk



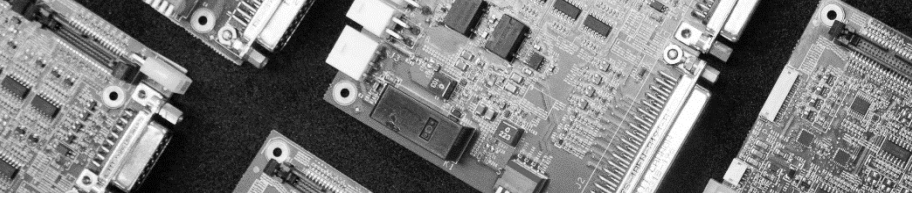
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MECHANICAL DIMENSIONS – DUAL OUTPUT



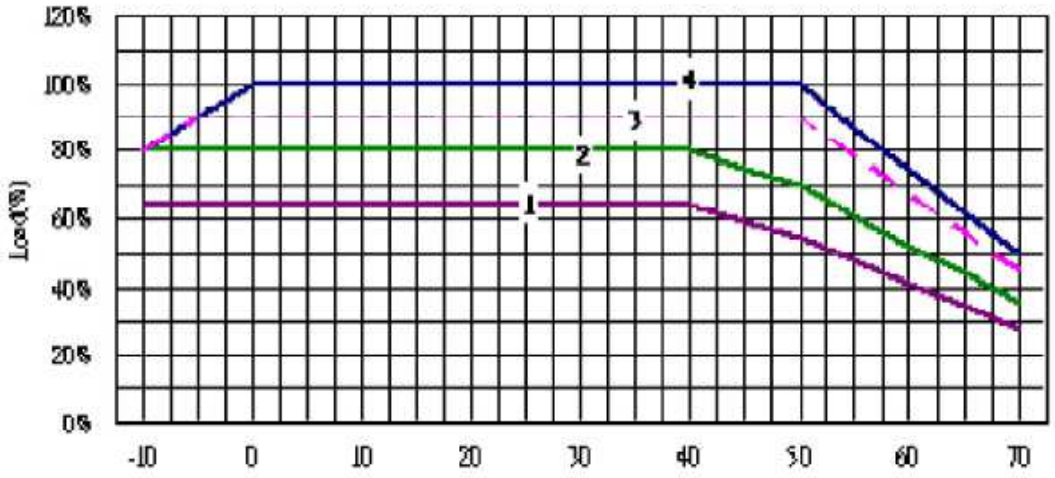
MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT AMPS (MAX)	LINE REGULATION (MAX)	RIPPLE/NOISE PP,TYP
PMMK150D-AE	5/12 VDC	15/7	±0.5/1%	50/100mv pk-pk
PMMK150D-BE	5/24 VDC	15/3.5	±0.5/2%	50/200mv pk-pk
PMMK150D-CE	12/24 VDC	7/3.5	±1/2%	100/200mv pk-pk
PMMK150D-DE	12/48 VDC	7/1.5	±1/4%	100/400mv pk-pk



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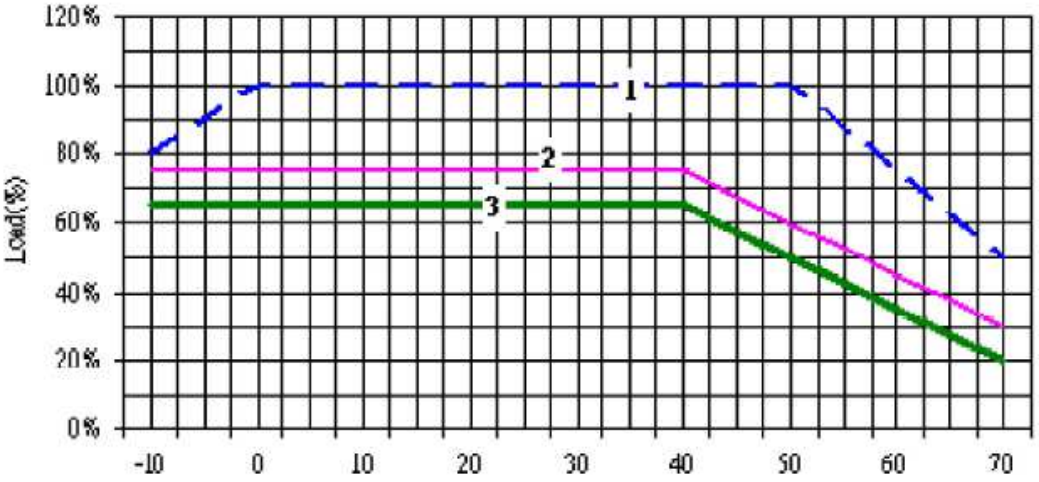
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OUTPUT DERATING CURVE – SINGLE OUTPUT

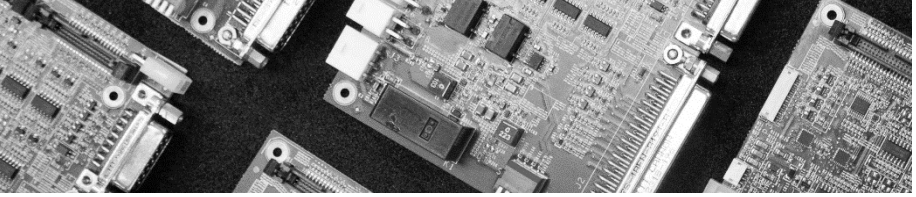


1. 5V convection
2. 12、15、24、48V convection
3. 5V Forced air cooling 10CFM
4. 12V、15V、24V、48V Forced air cooling 10CFM

OUTPUT DERATING CURVE – DUAL OUTPUT



1. Forced air colling 10 CFM
2. Free air convection
   - Open Frame, U-Channel
3. Free air convection
   - Enclosed



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NOTES

1. All measurements should be made directly at the terminals of the power supply.
2. All specifications typical@ 25°C, unless otherwise noted, at nominal line and load.
3. Ripple and noise are dependent upon the output voltage as specified for a particular model.
4. Isolation for up to 1 minute duration.
5. Specified for free air convection cooling.
6. Minimum load is not required for proper operation.
7. Load Regulation is measured by a change ±40% of measured output load from 60% full load, with the other output set to 60% full load.
8. Line Regulation measured from 90-264VAC. 100VAC minimum required for full load start.
9. Preset Accuracy measured at nominal load, 120VAC input.
10. O/P Noise measured directly at the pins/terminals at nominal load, 0.1 uF bypass and 47uF electrolytic, pk-pk@ 20MHz bandwidth.