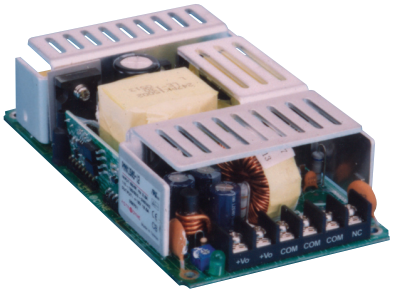
Astrodyne

Medical Grade 150 Watt Open Frame with PFC

PMMK150 series



3"W x 5.5"L x 1.4"H

- 150 Watts Output Power
- Single and Dual Outputs
- Universal 90-264VAC Input
- 5VDC to 48VDC Outputs
- 4000VAC Input to Output Isolation
- Active Power Factor Correction

Model Number	Output Voltage	Output Amps (max)	Line Regulation	Ripple & Noise
SINGLE OUTPUT				
PMMK150S-5	5 VDC	30	±0.5%	100mV pk-pk
PMMK150S-12	12 VDC	12.5	±0.5%	100mV pk-pk
PMMK150S-15	15 VDC	10	±0.5%	100mV pk-pk
PMMK150S-24	24 VDC	6.3	±0.5%	100mV pk-pk
PMMK150S-48	48 VDC	3.2	±0.5%	100mV pk-pk
DUAL OUTPUT				
PMMK150D-A	5/12 VDC	15/7	±0.5/1%	50/100mV pk-pk
PMMK150D-B	5/24 VDC	15/3.5	±0.5/2%	50/200mV pk-pk
PMMK150D-C	12/24 VDC	7/3.5	±1/2%	100/200mV pk-pk
PMMK150D-D	12/48 VDC	7/1.5	±1/4%	100/400mV pk-pk

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INPUT SPECIFICATIONS

Input Voltage Range	90-264 VAC
Frequency Range	47-63 Hz
Power Factor Correction	0.96 to 0.98
Inrush Current, typ:	30A @ 115VAC
	60A @ 230VAC *

OUTPUT SPECIFICATIONS

Voltage and Current (Note 6)	See Selection Chart
Line Regulation (Note 8)	See Selection Chart
Load Regulation (10%-FL, Note 7)	
Singles:	± 0.5%, typ
Duals:	±3/5%, typ
Preset Accuracy (Note 9)	±1%, typ
DC Voltage Adjust (typ)	±6%, typ
Temperature Coefficient	±0.05%/°C
Ripple/Noise (Notes 1, 3, 10)	See Selection Chart
Over Voltage Protection	Latching, Auto Recover after fault
	condition is removed *
Short Circuit Protection	Latching, Auto Recover after fault
	condition is removed *
Hold Up Time	20mS, typ (Nom I/P, FL)

GENERAL SPECIFICATIONS

Isolation (Note 4)	I/P-O/P: 4000VAC
	I/P-Ground: 2000VAC
	O/P-Ground: 500 VAC
Efficiency	75%, min.
Switching Frequency	67Khz, (fixed, typical)
Safety	UL,TUV, CB, CE

ENVIRONMENTAL SPECIFICATIONS

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

PHYSICAL SPECIFICATIONS

Size	3" x 5.5" x 1.4"
Construction	Open Frame
Weight	1.0 lb, (454g)

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 dependent upon output voltage as specified per 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 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, 0.1uF bypass and 47uF electrolytic, pk-pk @ 20MHz bandwidth.

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 warranteed nor implied.

Astrodyne products are not authorized or warranteed for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

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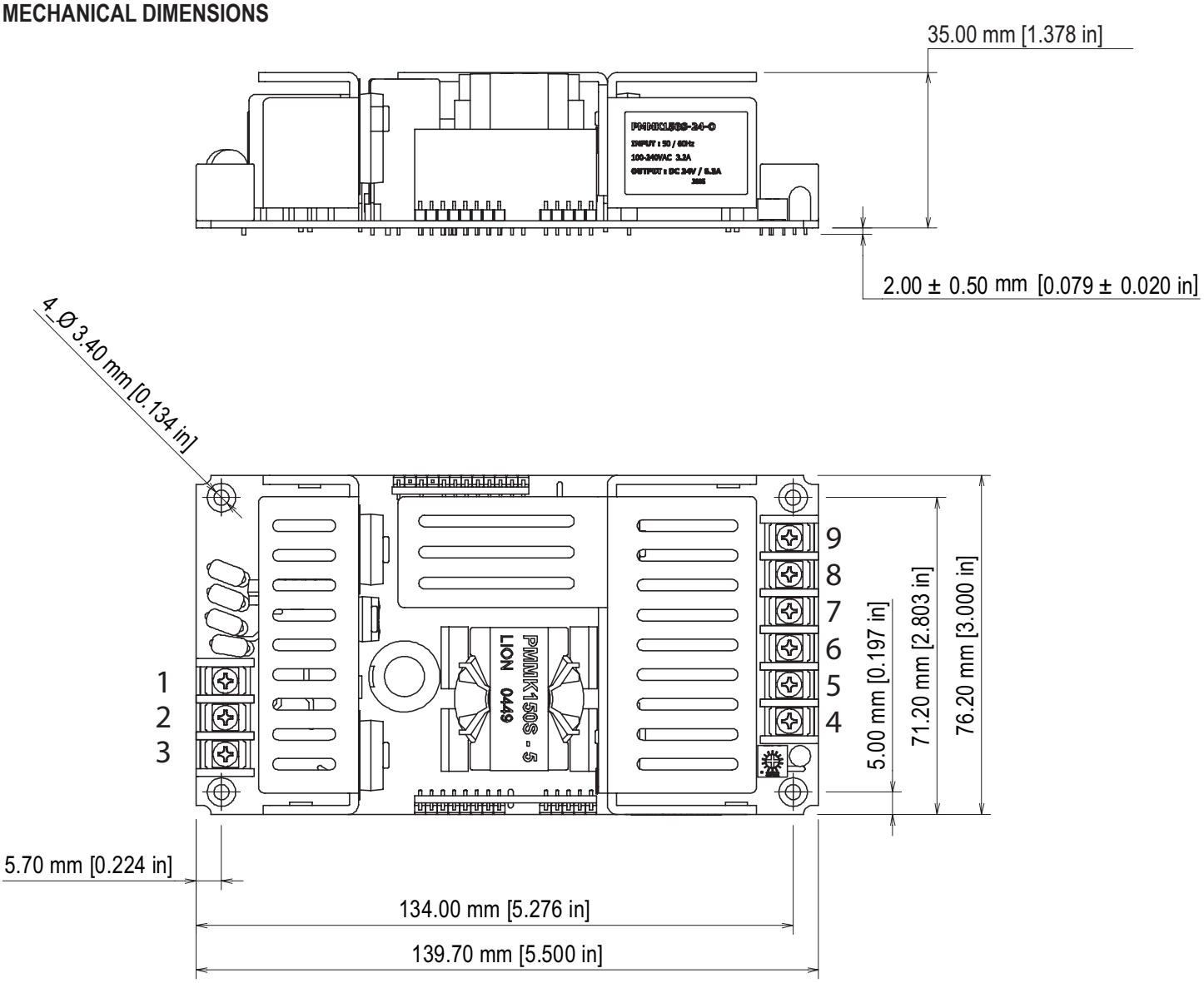
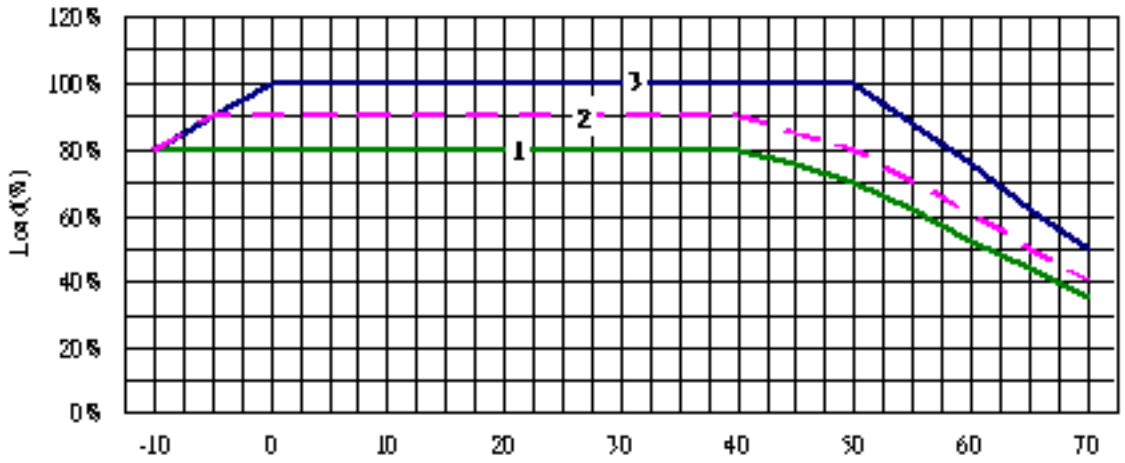
MECHANICAL DIMENSIONS



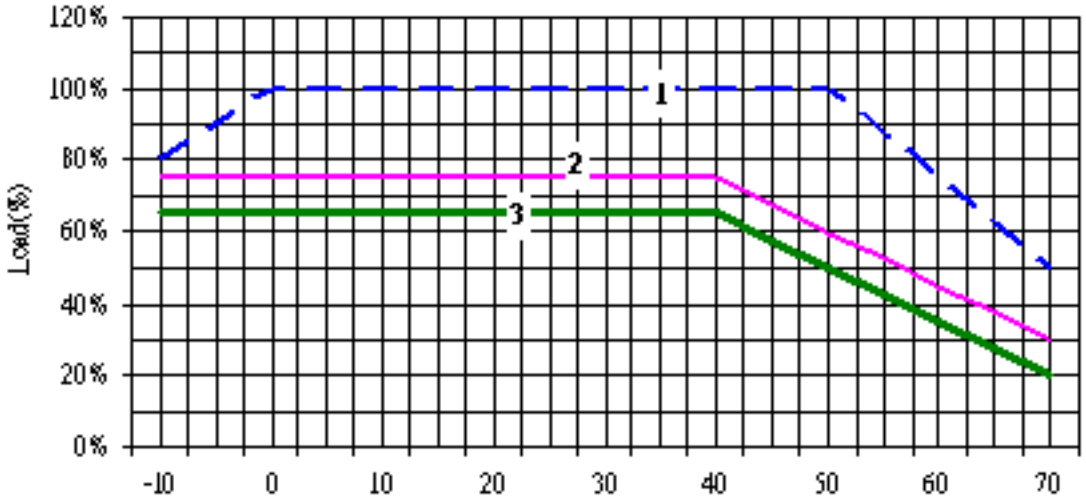
Pin #	SINGLE	DUAL
1	GND	GND
2	ACN	ACN
3	ACL	ACL
4	V1	V1
5	V1	V1
6	Common	Common
7	Common	Common
8	Common	Common
9	N/C	V2

OUTPUT DERATING CURVE - SINGLE OUTPUT



1. 5V convection
2. 12、15、24、48V convection
3. 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