Astrodyne TDI
Now you have power.

Medical Grade 150 Watt U-Channel with PFC

PMMK150U series

3.17"W x 5.5"L x 1.6"H

- 150 Watts Output Power
- Single and Dual Outputs
- Universal 90-264VAC Input
- 5VDC to 48VDC Outputs
- 5656VDC Input to Output Isolation
- Active Power Factor Correction

cRUus   UL EU   CB   CE

Model Number	Output Voltage	Output Amps (max)	Line Regulation (max)	Ripple & Noise
SINGLE OUTPUT				
PMMK150S-5U	5 VDC	30	±1%	150mV pk-pk
PMMK150S-12U	12 VDC	12.5	±1%	150mV pk-pk
PMMK150S-15U	15 VDC	10	±1%	150mV pk-pk
PMMK150S-24U	24 VDC	6.3	±1%	150mV pk-pk
PMMK150S-48U	48 VDC	3.2	±1%	250mV pk-pk
DUAL OUTPUT				
PMMK150D-AU	5/12 VDC	15/7	±0.5/1%	50/100mV pk-pk
PMMK150D-BU	5/24 VDC	15/3.5	±0.5/2%	50/200mV pk-pk
PMMK150D-CU	12/24 VDC	7/3.5	±1/2%	100/200mV pk-pk
PMMK150D-DU	12/48 VDC	7/1.5	±1/4%	100/400mV pk-pk

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ASTRODYNE USA: 1-800-823-8082
ASTRODYNE PACIFIC: 886-2-26983458

INPUT SPECIFICATIONS

Input Voltage Range	90-264 VAC (100-240VAC nom.)
Frequency Range	47-63 Hz
Power Factor Correction	0.96 min. at nom. Input
Inrush Current, typ at cold start:	30A @ 115VAC
	60A @ 230VAC *
Leakage Current	<0.3mA @ 264VAC, 50Hz

OUTPUT SPECIFICATIONS

Voltage and Current (Note 6)	See Selection Chart
Line Regulation (Note 8)	See Selection Chart
Load Regulation (20%-FL)	Singles: ± 1%, max.
Cross Regulation (note 7)	Duals: ±3/5%
Preset Accuracy (Note 9)	±1%, typ
Ripple/Noise (Notes 1, 3, 10)	See Selection Chart
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
Short Circuit Protection	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: 5656VDC
		I/P-Ground: 2828VDC
		O/P-Ground: 707VDC
Efficiency		75%, min. at nom. input
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

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.

ENVIRONMENTAL SPECIFICATIONS

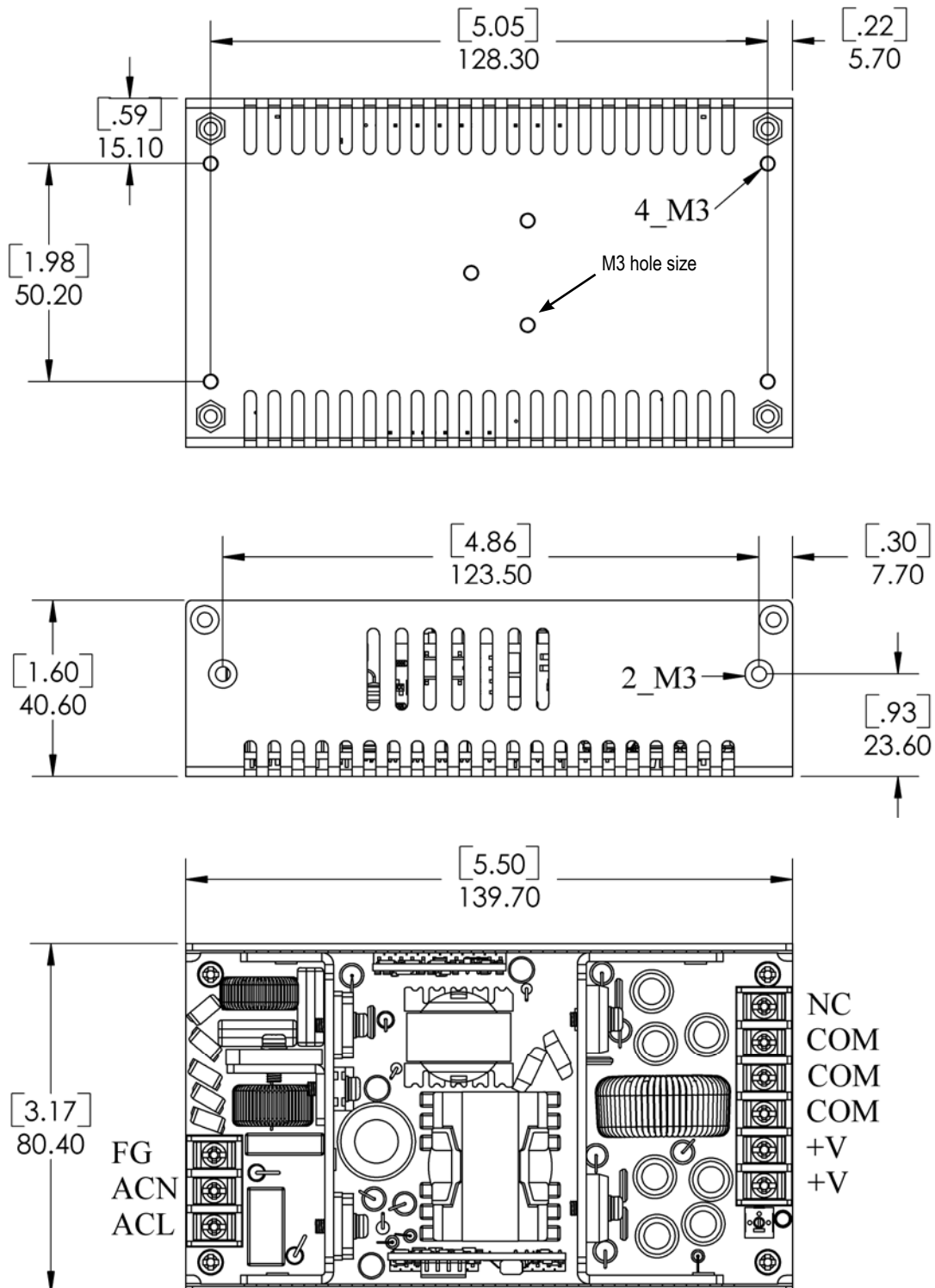|	
Oper. Temperature	-10 to +70°C
	(See Derate Curve)
Storage Temperature	-25 to +85°C *
Relative Humidity	0% to +95%, non-cond *
EMC	EN55011 Class B
MTBF	270,000 Hrs
	Mil Std 217, 25°C

PHYSICAL SPECIFICATIONS

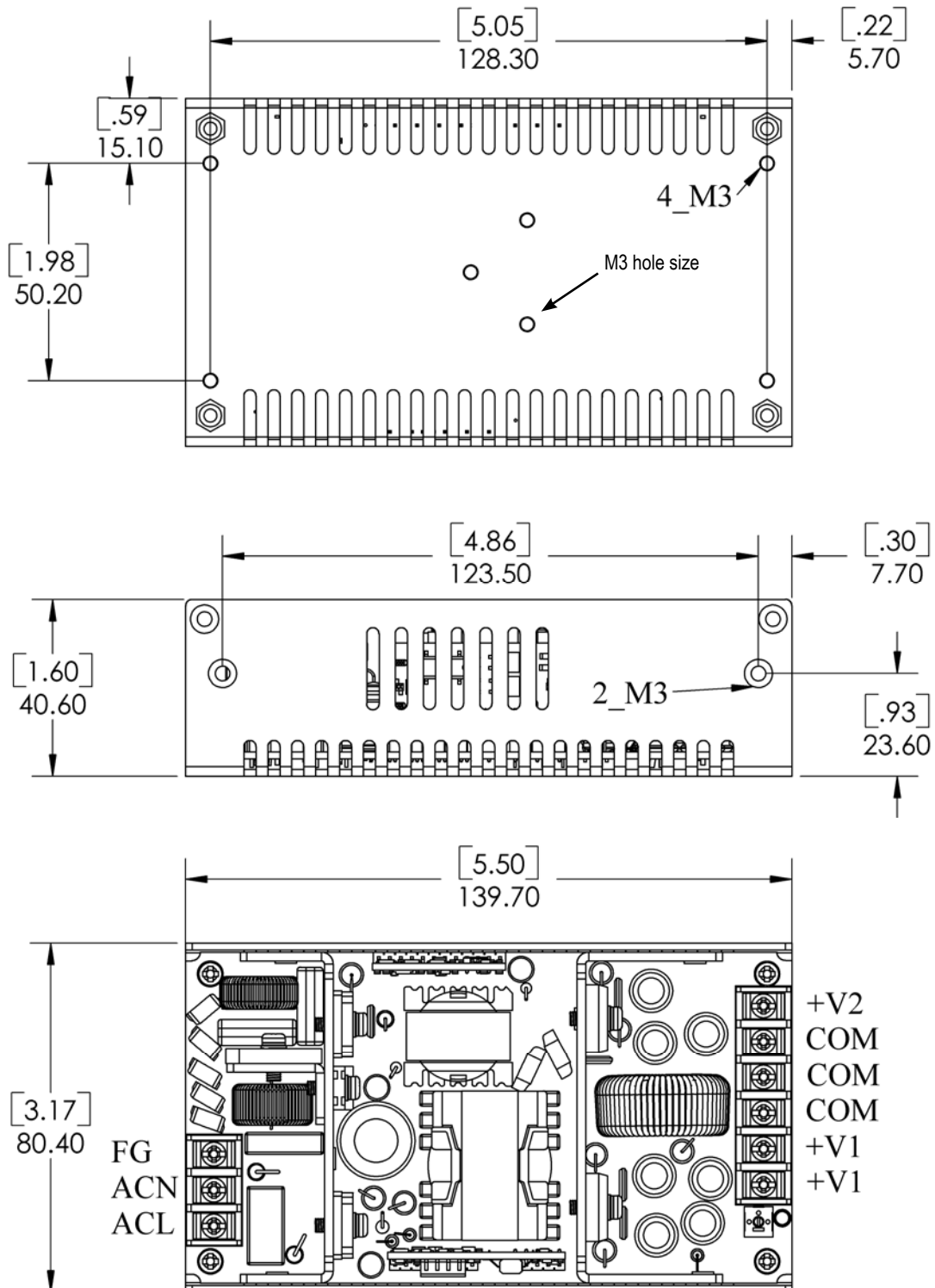|	
Size	3.17" x 5.5" x 1.6"
Construction	U-Channel
Weight	1.2 lb, (544g)

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.
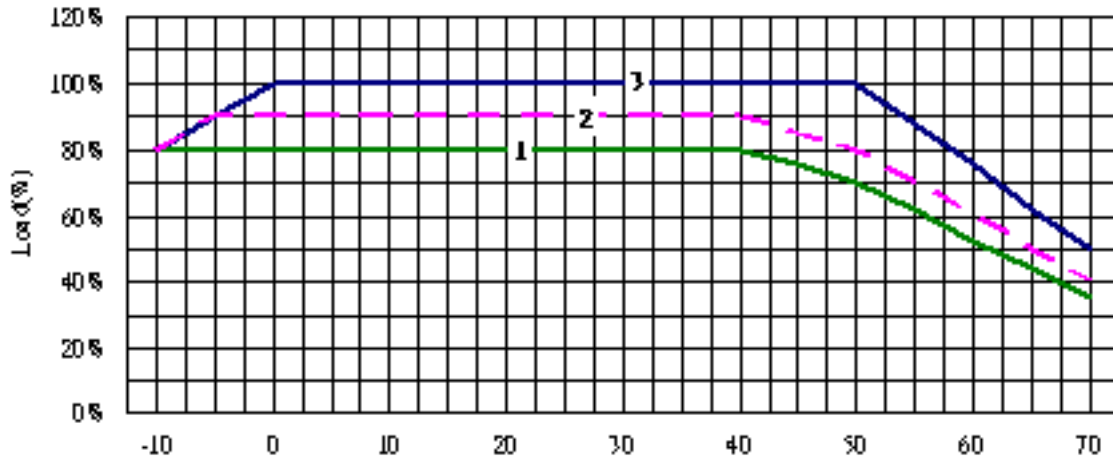
MECHANICAL DIMENSIONS - SINGLE OUTPUT

MECHANICAL DIMENSIONS - DUAL OUTPUT

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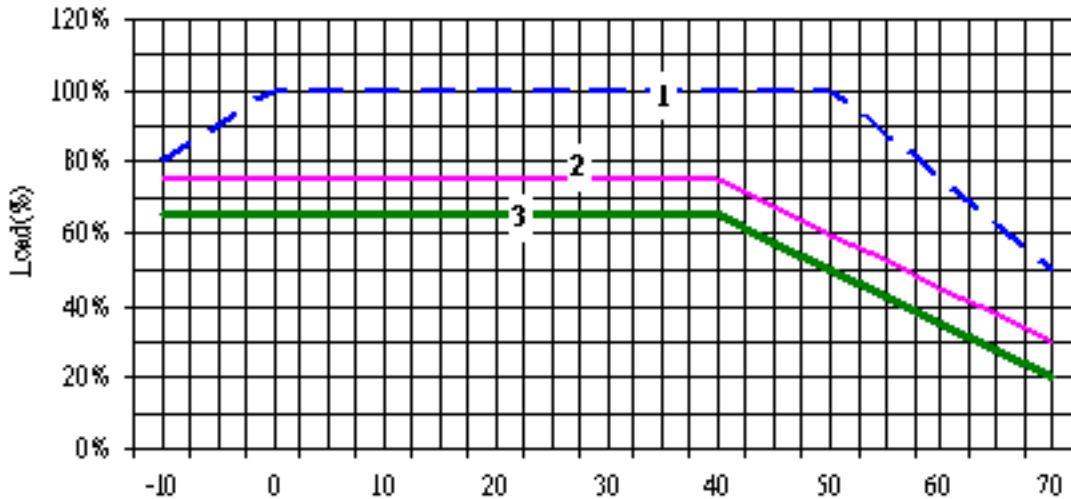**ASTRODYNE PACIFIC: 886-2-26983458**

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