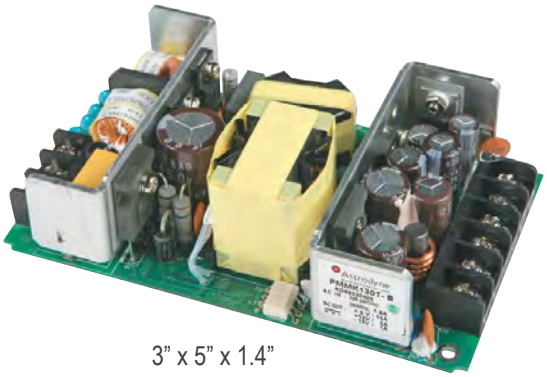
Astrodyne TDI
Now you have power.

130W Open Frame and U-Channel Power Supplies with PFC

PMK130 series



3" x 5" x 1.4"

- 130 Watts Output Power
- Single Output
- Universal 90-264VAC Input
- 5VDC to 48VDC Outputs
- 4242VDC Input to Output Isolation
- Active Power Factor Correction

Model Number	Output V	Output I max.	Ripple & Noise	Efficiency(min/nom)	Capacitive Load
SINGLE OUTPUT					
PMK130S-5 (U)(-A)	5 VDC	22 Amps	100mV pk-pk	75% / 80%	10,000uF
PMK130S-12 (U)(-A)	12 VDC	10.8 Amps	120mV pk-pk	80% / 82%	26,800uF
PMK130S-15 (U)(-A)	15 VDC	8.7 Amps	120mV pk-pk	80% / 85%	22,000uF
PMK130S-24 (U)(-A)	24 VDC	5.4 Amps	120mV pk-pk	82% / 85%	28,000uF
PMK130S-28 (U)(-A)	28 VDC	4.6 Amps	120mV pk-pk	82% / 85%	16,800uF
PMK130S-36 (U)(-A)	36 VDC	3.6 Amps	120mV pk-pk	82% / 85%	1,950uF
PMK130S-48 (U)(-A)	48 VDC	2.7 Amps	120mV pk-pk	82% / 85%	7,800uF

Note:

1. The PMK130 Series is offered in an optional U-Channel Chassis as well as with optional 3.96mm pitch 5 and 10 Pin Input and Output connectors (open frame construction and screw terminals are standard respectively). Simply add a "U" at the end of the Model Number to recieve the U-Channel configuration or a "-A" to receive the pins, or both if both are desired. For example: The Model Number "PMK130S-5U-A" represents a single output 5VDC U-Channel supply with 3.96 pitched pins (5 Input; 10 Output) . See the Mechanical Dimensions on pages 3 through 8 in this specification
2. All "U" options are not covered by UL Certification unless provided with more than 10 CFM forced air cooling applied 6-10cm above T1.
3. Derating curves acceptable up tp 40°C for UL certified products

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.

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INPUT SPECIFICATIONS

Input Voltage Range	90-264VAC (100-240VAC Nom.)
Input Frequency Range	47-63 Hz
Inrush Current, typ:	Cold Start, 60A @ 230VAC Input *
Input Current	2.3~0.8A (90-264VAC)
Power Factor (cold start)	PF > 0.96 @ 230VAC
Leakage Current	<3.5mA @ 264VAC, 50Hz

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Maximum Output Power	130 Watts
Preset Accuracy (Note 6)	1%
Line Regulation (Note 5)	0.5% nom / 1% max
Load Regulation (20% to FL)	0.5% nom / 1% max
Ripple/Noise (Notes 1,2,7)	See Selection Chart
Turn On	<4S, typ.
Hold Up Time	20mS, typ.
Rise Time	30mS, typ.
Short Circuit Protection	Auto recovery *
Over Voltage Protection	130% max., Auto recovery *
Over Current Protection	150% max., Auto recovery *
Transient Response	10mS
Over Shoot/Under Shoot	<10% of Nominal O/P VDC

GENERAL SPECIFICATIONS

Safety	UL/cUL:	UL60950-1 2nd ed./
		C22.2 60950-1 2nd ed.
	UL-EU:	EN60950-1 2nd ed.
	CE:	EN60601-1-2
	CB:	IEC60950-1 2nd ed.
Isolation (Note 3)		4242VDC I/P - O/P *
		2828 VDC I/P - GND *
		707VDC O/P - GND *
Insulation Resistance		≥ 20MΩ (500VDC, 1S I/P-O/P)
EMI		CISPR EN55011 class B
Efficiency		See Selection Chart

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature (Note 4)		-10°C to +70°C (See Derate Curve)
Storage Temperature		-25°C to +85°C
Relative Humidity		10 to +90%, non-cond *
EMS	Harmonics:	IEC61000-3-2 Class A
	Fluctuations:	IEC61000-3-3
	ESD:	IEC61000-4-2, 6KV Contact, 8KV Air
	RS:	IEC61000-4-3 FR: 80MHz-2.5GHz
		Field Strength: 3V/M
	EFT:	IEC61000-4-4 2KV on AC Line
	Surge:	IEC61000-4-5 1KV (L-L);
		2KV (L, N-PE)
	CS:	IEC61000-4-6 3V (EMF)
	Dips:	IEC61000-4-11 95% 250CY,
		70% 25CY, 40% 5CY, 5% 0.5CY
MTBF		197,000 Hrs min. MIL-HDBK-217F
Vibration		4G Pk, 50~500Hz, 3 Axes, 30 min*
Drop Test		Test Height 70cm *

PHYSICAL SPECIFICATIONS

Size	Open Frame:	76.2 x 127 x 35.5mm (3" x 5" x 1.4")
	U-Channel:	127 x 80.4 x 38mm
		(5" x 3.17" x 1.50")
Weight	Open Frame:	10.25 oz (291g)
	U-Channel:	13.38 oz (380g)

NOTES:

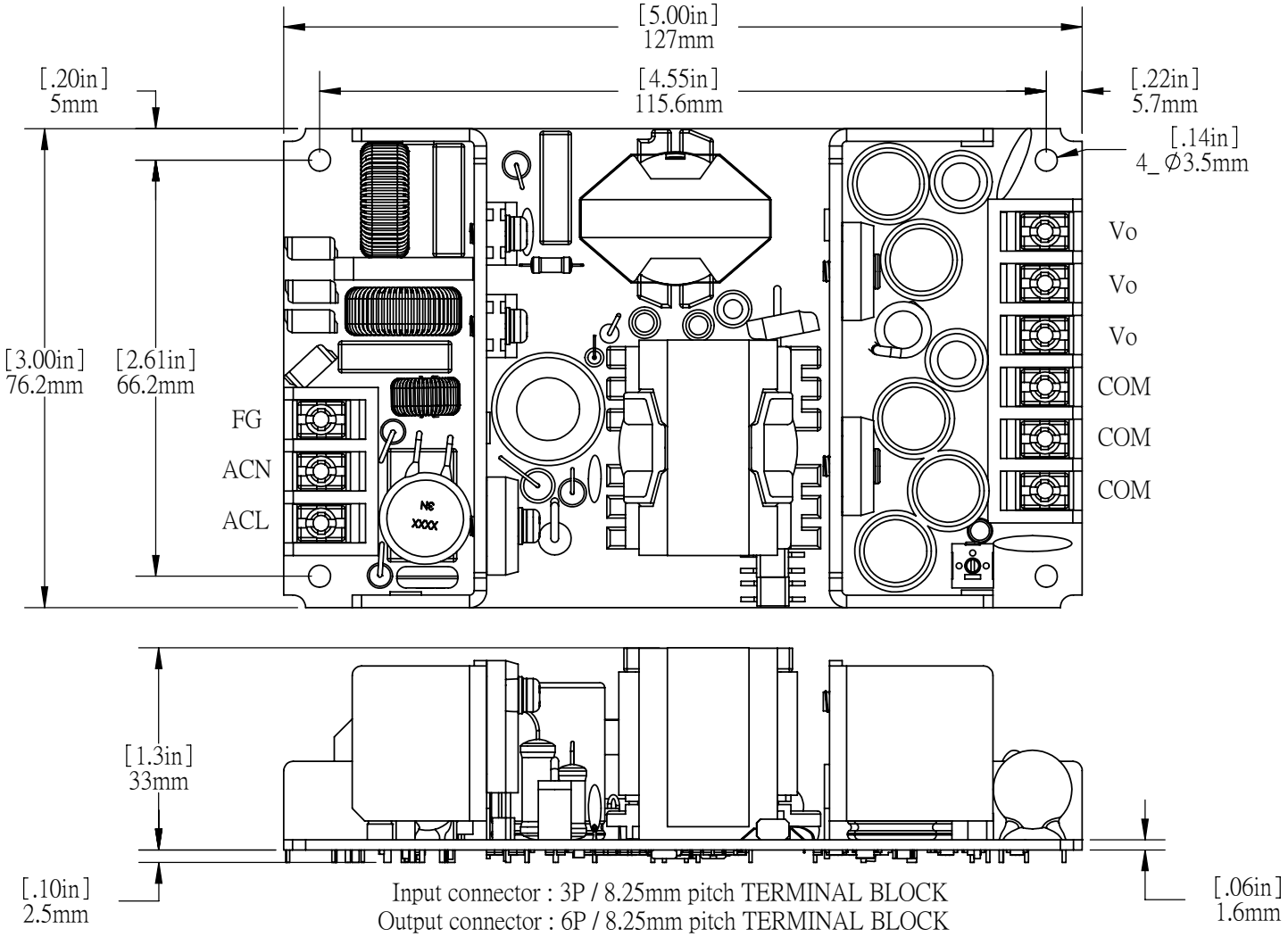
1. All measurements should be made directly at the terminals of the power supply.
2. Ripple and Noise depend upon output voltage a specified per particular model.
3. Isolation for up to 1min duration.
4. Specified for free-air convection cooling.
5. Line regulation measured from 90 - 264VAC/100VAC minimum required for full load start.
6. Preset accuracy measured at nominal load, 120VAC input.
7. O/P noise measured directly at pins/terminals @ nominal load, 0uF by pass and 47uF electrolytic, pk-pk@ 20MHz bandwidth.

Special EMC Notice: The end application shall provide an earth ground connection for conducted & radiated emission performance. Astrodyne is not liable for the end application without extra earth connection to PMMK130S Open Frame Power Supply.

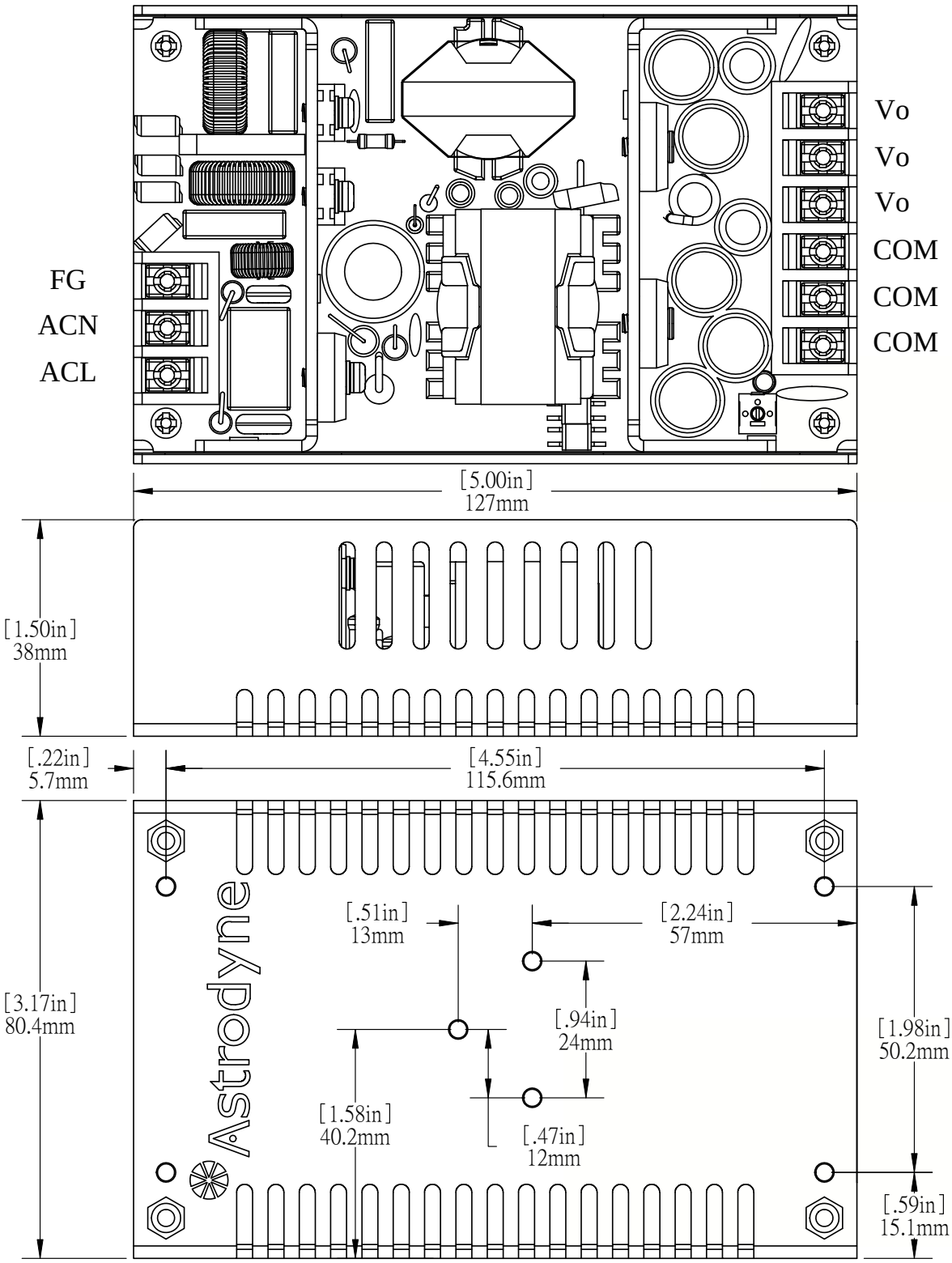
ASTRODYNE USA: 1-800-823-8082
ASTRODYNE PACIFIC: 886-2-26983458

MECHANICAL DIMENSIONS

Open Frame (PMK130S-xx)

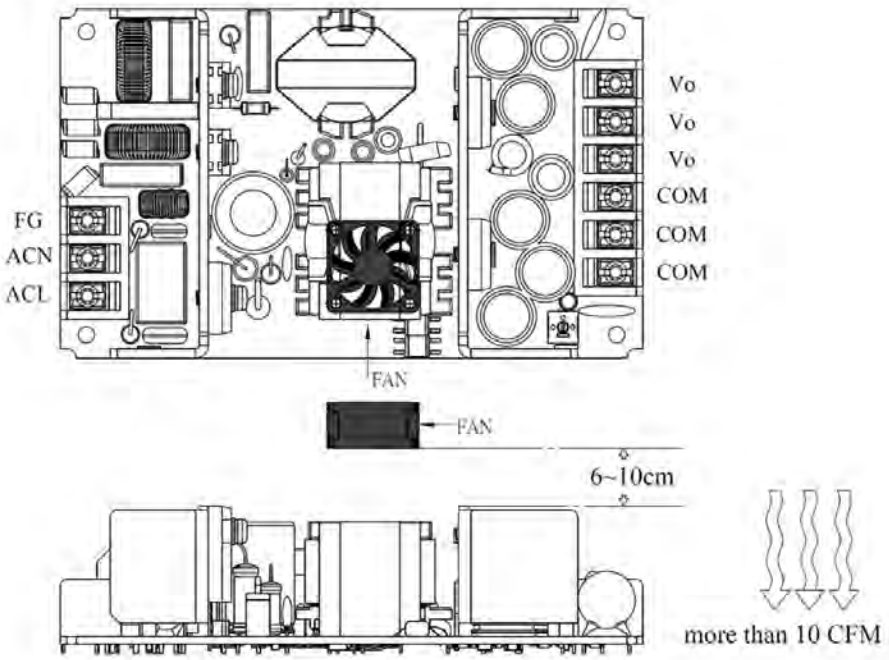


MECHANICAL DIMENSIONS U Bracket (PMK130S-xxU)

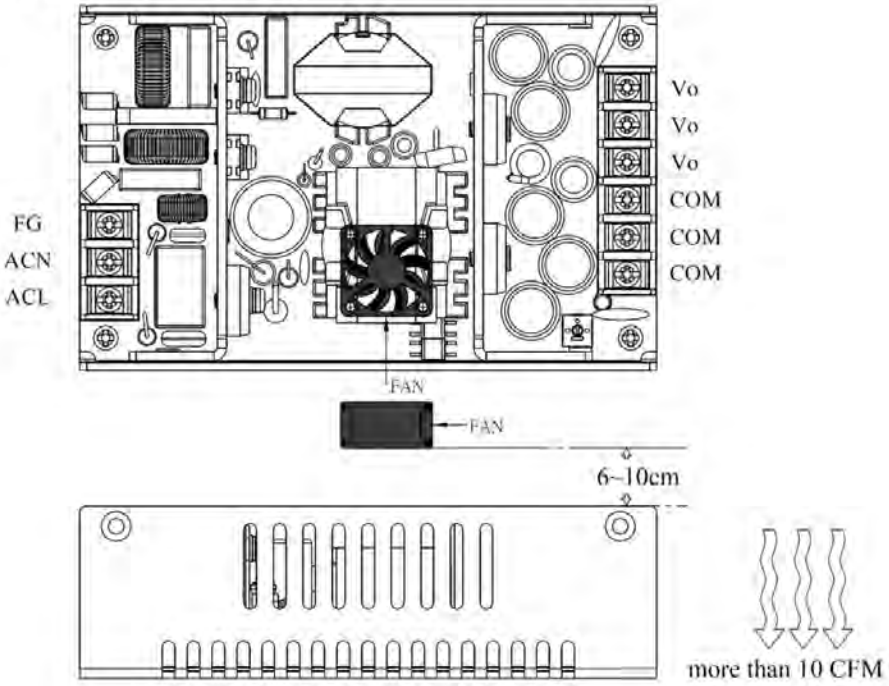


MECHANICAL DIMENSIONS - FAN PLACEMENT RECOMMENDATION

Open-Frame (PMK130S-xx) :

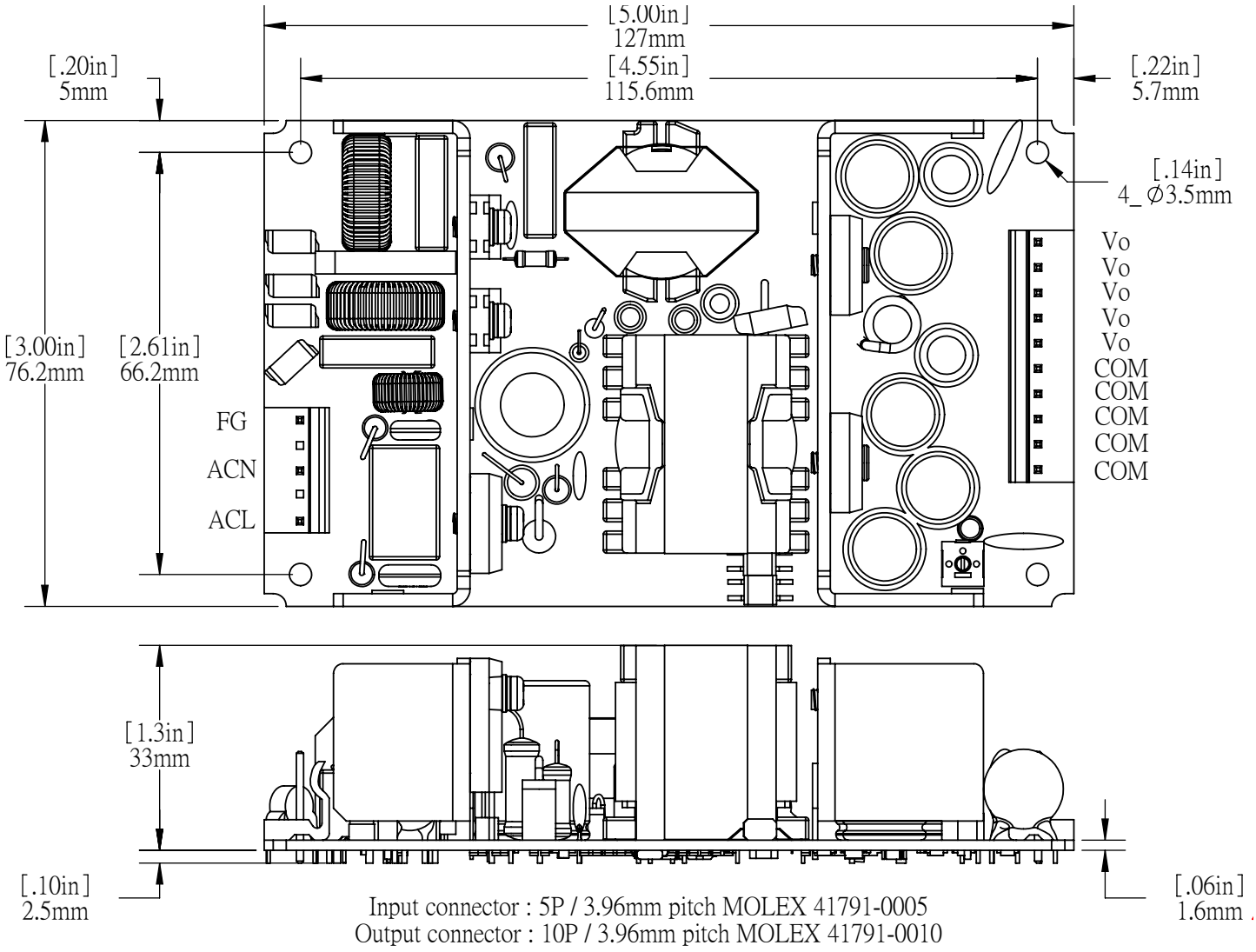


U-Bracket (PMK130S-xxU) :



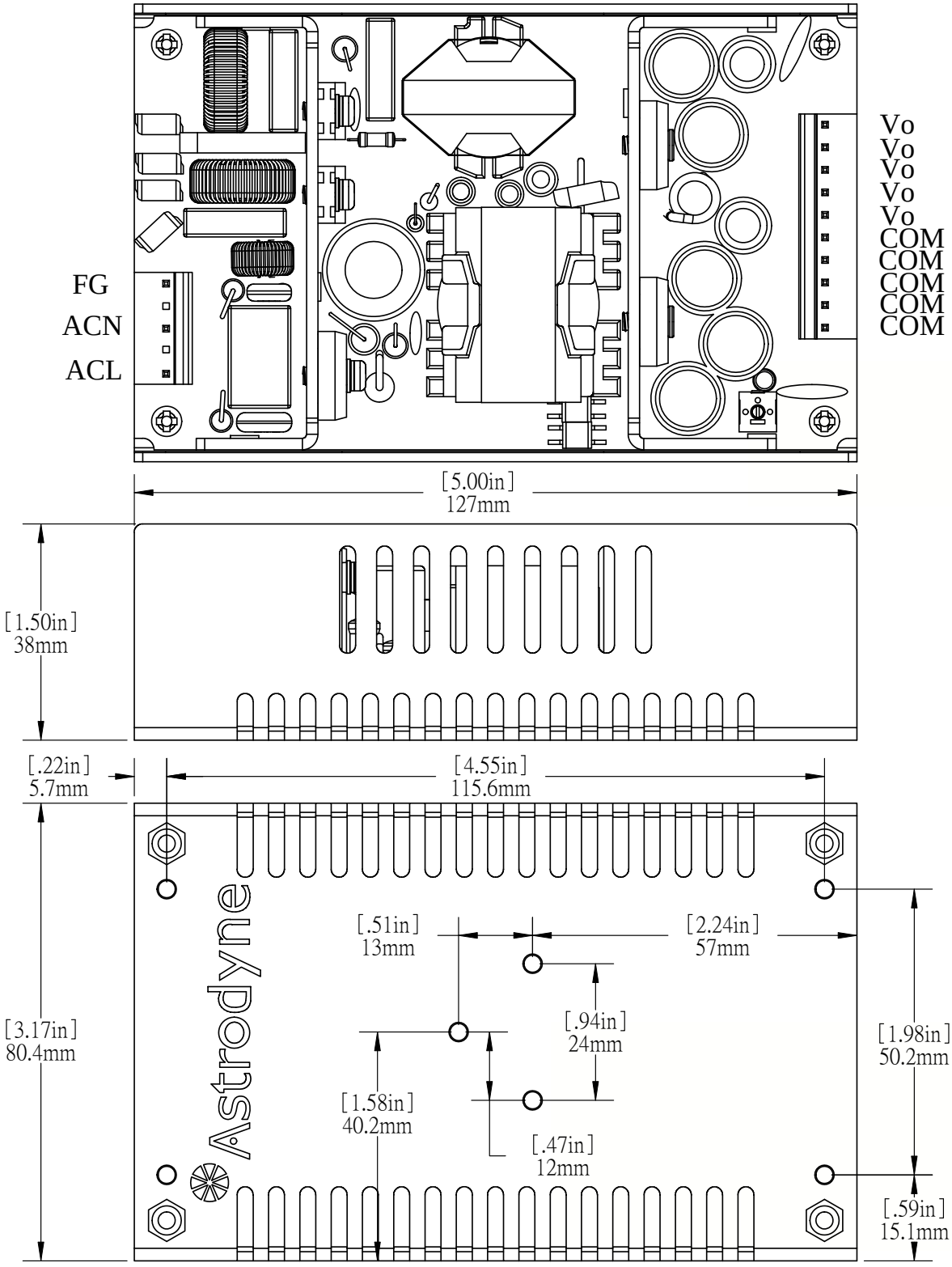
MECHANICAL DIMENSIONS

Open Frame (PMK130S-xx-A)



Input connector : 5P / 3.96mm pitch MOLEX 41791-0005
Output connector : 10P / 3.96mm pitch MOLEX 41791-0010

MECHANICAL DIMENSIONS U Bracket (PMK130S-xxU-A)



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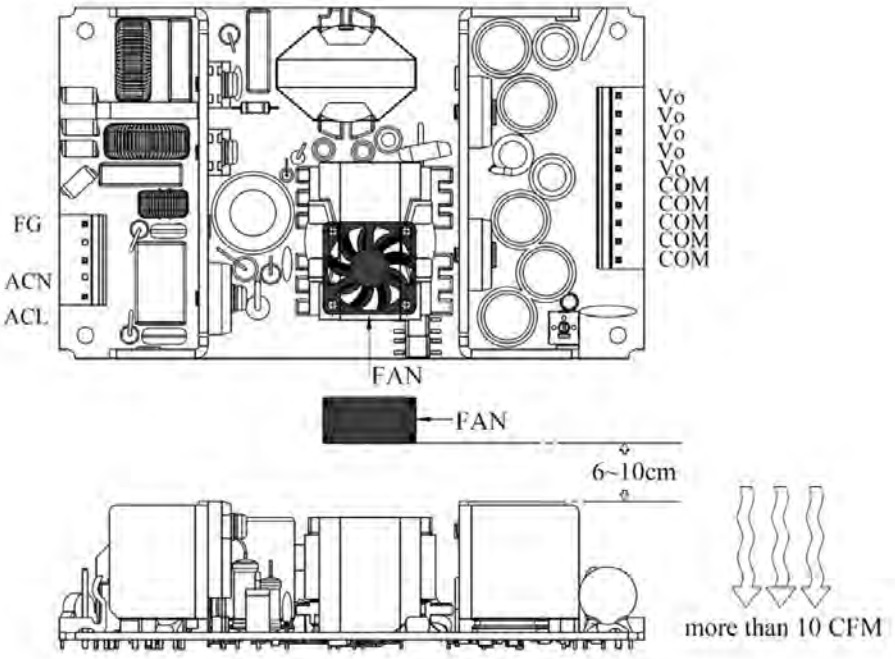
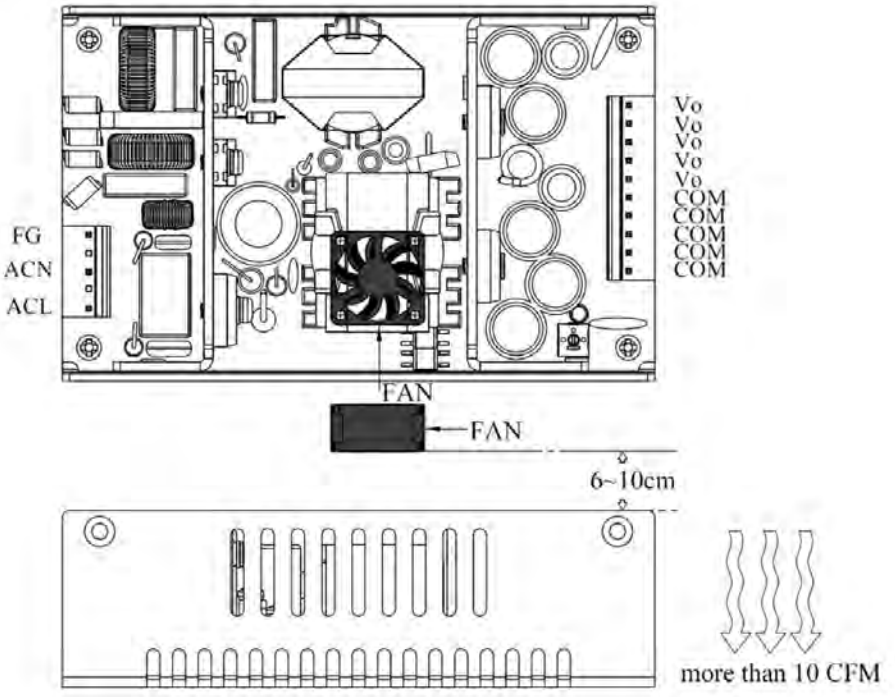
Open-Frame (PMK130S-xx-A) :

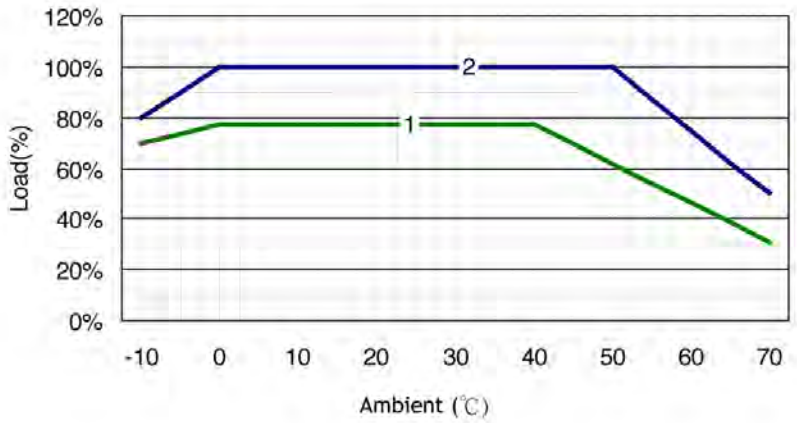


U-Bracket (PMK130S-xxU-A) :

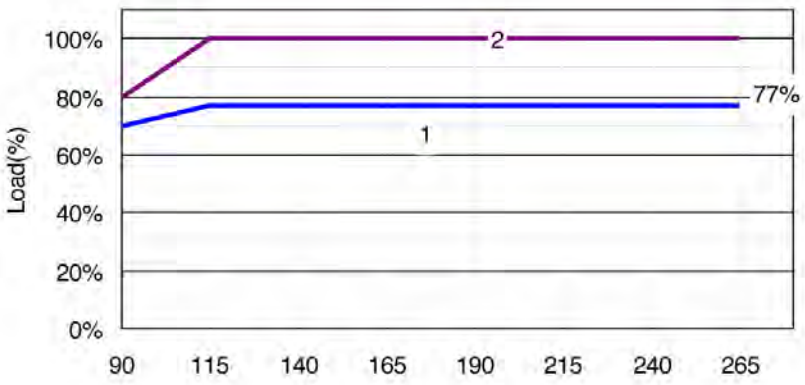


DERATE CURVES

Open-Frame (PMK130S-xx) :



1. Convection
2. Forced air cooling 10CFM



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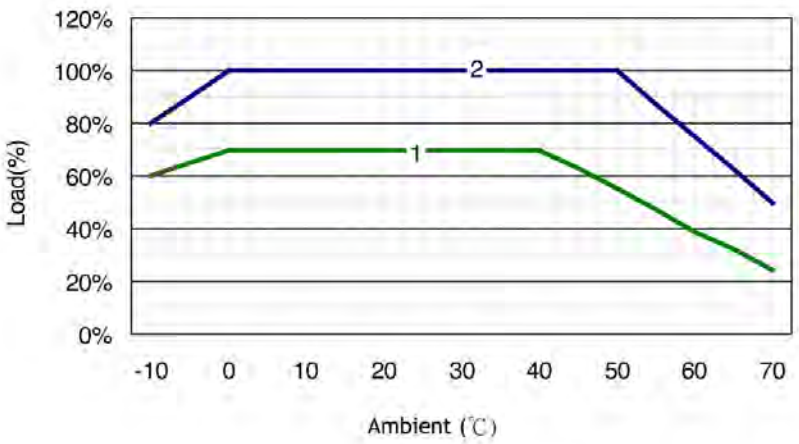
DERATE CURVES

U-Bracket (PMK130S-xxU) :



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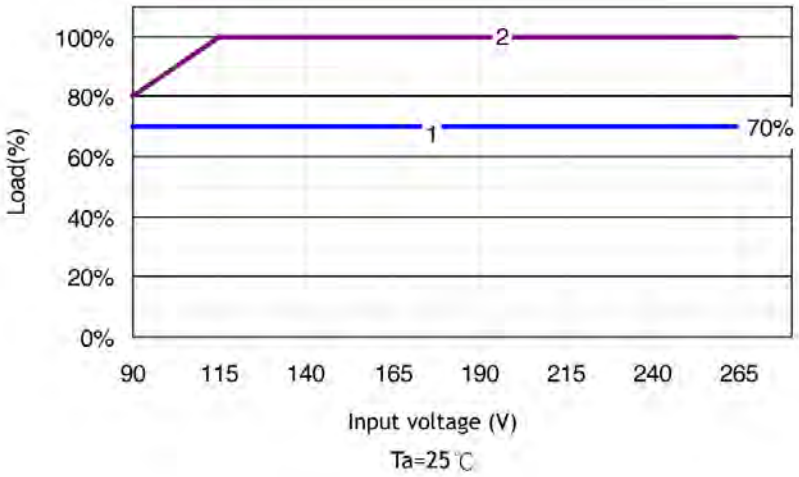

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