

- Universal AC input
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Fixed switching frequency at 45KHz
- With power good signal output(Optional)



Model Number	Output Volts	Output Amps	Ripple & Noise	Line Reg	Load Reg	Volt Tolerance	Min Load
Quad OUTPUT							
PQ-100B	5 Volts(DC)	10 Amps	80mVpk-pk	±1.0%	±2.0%	±3.0%	2~10Amps
	12 Volts(DC)	3.5Amps	250mVpk-pk	±5.0%	±5.0%	±12%	0.5~4.5Amps
	-5 Volts(DC)	0.5 Amps	80mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
	-12Volts(DC)	0.5 Amps	120mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
PQ-100C	5 Volts(DC)	8.0 Amps	80mVpk-pk	±1.0%	±1.0%	±2.0%	2.0~8.0Amps
	15 Volts(DC)	3.5 Amps	150mVpk-pk	±3.0%	±5.0%	±6.0%	0.5~4.0Amps
	-5 Volts(DC)	0.5 Amps	80mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
	-15 Volts(DC)	0.5 Amps	150mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
PQ-100D	5 Volts(DC)	5 Amps	80mVpk-pk	±1.0%	±1.0%	±2.0%	2.0~5.0Amps
	12 Volts(DC)	2 Amps	120mVpk-pk	±3.0%	±5.0%	±6.0%	0.5~4.5Amps
	24 Volts(DC)	2 Amps	180mVpk-pk	±1.0%	±5.0%	±10%	0.4~2.0Amps
	-12 Volts(DC)	0.5 Amps	120mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
PQ-100E	5 Volts(DC)	8.0 Amps	80mVpk-pk	±1.0%	±1.0%	±2.0%	2.0~8.0Amps
	12 Volts(DC)	3.0 Amps	120mVpk-pk	±3.0%	±5.0%	±6.0%	0.5~3.0Amps
	15 Volts(DC)	0.6 Amps	150mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
	24 Volts(DC)	0.6 Amps	120mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps



100W Quad Output Switching Power Supply

PQ100 series

INPUT SPECIFICATIONS

Input Voltage Range	100-264VAC / 141-370 Volts(DC) (90~100VAC 90% load max)
Frequency Range	47~63Hz
Inrush Current, typ: (cold start)	50 Amps
Input Current	3.0Amps @115VAC 1.5Amps @230VAC
Leakage current	< 1.0mAmps / 240VAC
Power Factor	PF >0.95 / 230VAC > 0.98 / 115VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	See Selection Chart
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	See Selection Chart
Ripple/Noise (Note 1)	See Selection Chart
Hold Up Time @ FL	80mS
Setup, Rise Time @ FL	1200mS, 50mS
Over Voltage Protection	5Volts(DC): 5.75~6.75Volts(DC) Hiccup mode, auto-recover
Over Current Protection	105~135% rated output power Hiccup mode, auto-recover
DC Voltage Adjust	5Vols(DC): 4.75~5.5Volts(DC)

GENERAL SPECIFICATIONS

Safety	UL60950-1 TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022B (CISPR22B)
Harmonic Current	Compliance to EN61000-3-2,-3

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

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Efficiency	72%: PQ-100B 74%: PQ-100C/E 77%: PQ-100D
Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground
EMS	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, light industry level, criteria A
Power Good	≥1 mS

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +50°C, 60°C with cooling FAN
Storage Temperature	-20°C to +85°C, 10~95% RH
Relative Humidity	20 to +90% RH non cond
Temperature Coefficient	±0.03% / °C (0-50°C)
MTBF	258.6K Hrs min, MIL-HDBK-217F (25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	Millimeters 177.8 x 107.95 x 46 Inches 7" x 4.25" x 1.81"
Weight	19.75 oz (560g)

NOTE

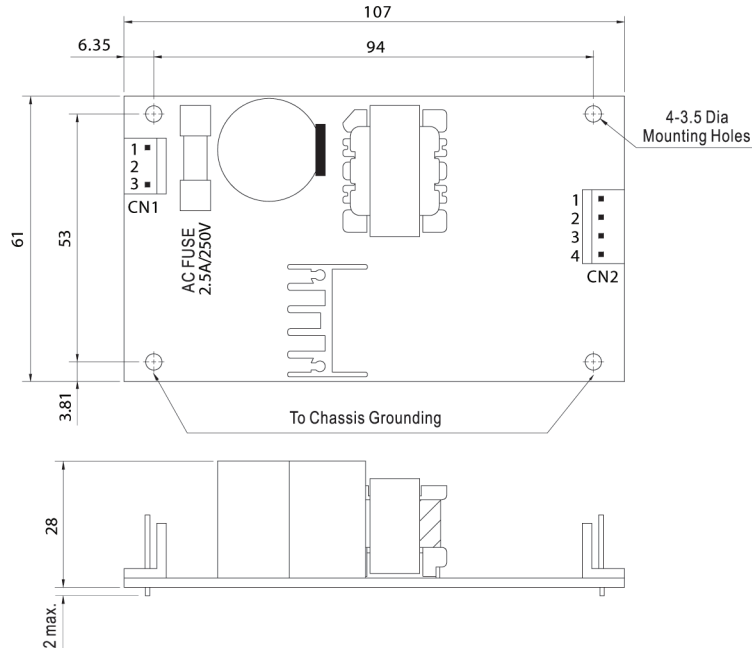
1. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.
2. Tolerance: includes set up tolerance, line regulation and load regulation.

Astrodyne products are not authorized or warranted 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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ASTRODYNE PACIFIC: 886-2-26983458

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 41791-03 or equivalent

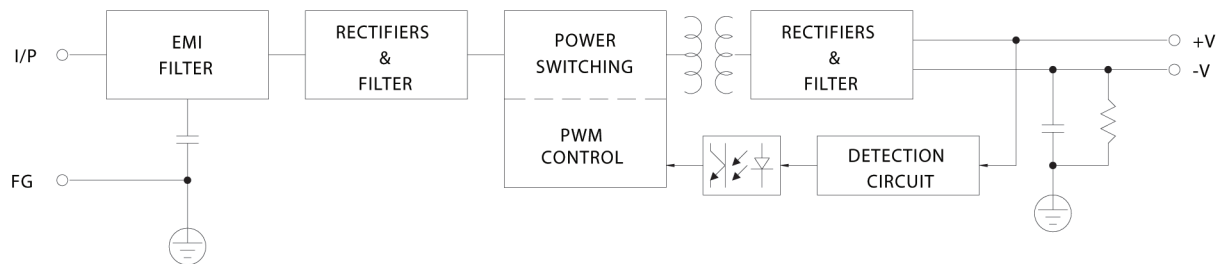
Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	Molex 2139 or equivalent	Molex 2478 or equivalent
2	No Pin		
3	AC/N		

DC Output Connector (CN2) : Molex 41791-04 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	+V	Molex 2139 or equivalent	Molex 2478 or equivalent
3,4	-V		

Block Diagram

fosc : 100KHz



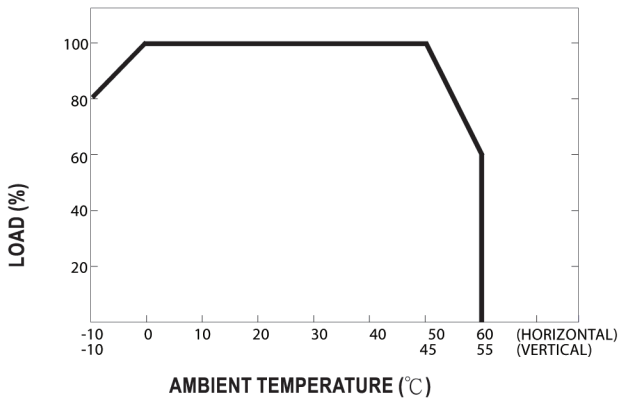


Astrodyne

100W Quad Output Switching Power Supply

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Derating Curve



Static Characteristics (24V)

