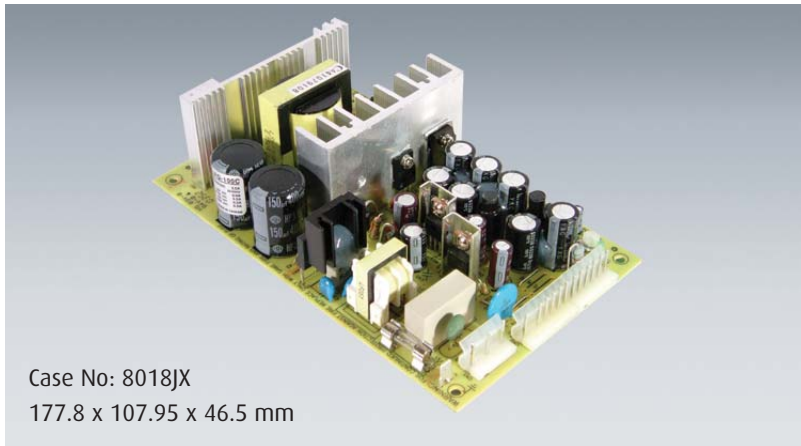


PQ-100 Series

100W Quad Output Open Frame Power Supply



Case No: 8018JX
177.8 x 107.95 x 46.5 mm

Features

- Universal AC input/ Full range
- Protections: Short circuit, Overload and Over voltage
- Cooling by free air convection
- With power good signal output (Optional)
- 100% full load burn-in test
- Fixed switching frequency at 45KHz



Specification

INPUT	Voltage	100V ~ 264VAC universal full range or 141V ~ 370VDC (90~100VAC 90% load max.)							
	Frequency	47 ----- 63 Hz							
	Current	<3A@115VAC; 1.5A@230VAC full load							
	Inrush Current	Cold start 50A							
	Leakage Current	<1mA@240VAC							
OUTPUT	MODEL No.	PQ-100B				PQ-100C			
	Channel	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
	Voltage	5V	12V	-5V	-12V	5V	15V	-5V	-15V
	Rated Current	10A	3.5A	0.5A	0.5A	8A	3.5A	0.5A	0.5A
	Current Range	2~10A	0.5~4.5A	0~1A	0~1A	2~8A	0.5~4A	0~1A	0~1A
	Output Tolerance	± 3%	± 12%	± 6%	± 6%	± 2%	± 6%	± 6%	± 6%
	Line Regulation	± 1%	± 5%	± 1%	± 1%	± 1%	± 3%	± 1%	± 1%
	Load Regulation	± 2%	± 5%	± 1%	± 1%	± 2%	± 5%	± 1%	± 1%
	Ripple Noise MAX.	80mV	250mV	80mV	120mV	80mV	150mV	80mV	150mV
	Efficiency (TYP.)	72%				74%			
PROTECTION	Rated Power	100.5W				102.5W			
	Over Voltage	CH1:5.75~6.75V				CH1:5.75~6.75V			
	Over Load	105~135% rated output power Hiccup mode; recovers automatically after fault condition is removed							
ELEC. CHAR.	Rise Time	<50mS@115~230VAC, full load							
	Hold up Time	>80mS@115~230VAC, full load							
	Setup Time	<1.2 Sec@115~230VAC, full load							
ENVIRONMENT	Temperature	Operating: -10 ~ +50°C ; Storage: -20~ +85°C							
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH							
SAFETY	Withstand Voltage	I/P-O/P3KVAC; I/P-FG:1.5KVAC; O/P-FG:0.5KVAC							
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG 100MΩ/500VDC							
	Safety Standard	UL60950-1, TUV EN60950-1 Approved							
EMC	EMI	EN55022 (CISPR22) Class B, EN61000-3-2,3							
	EMS	EN61000-4-2,3,4,5,6,8,11; Light industry level, criteria A							
OTHERS	Cooling	Cooling by free air convection							
	M.T.B.F.	258.6K hrs min. MIL-HDBK-217F (°C)							
	Packing	0.56Kg; 24pcs/14.5Kg/1.19 CUFT							

1 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature

2 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor

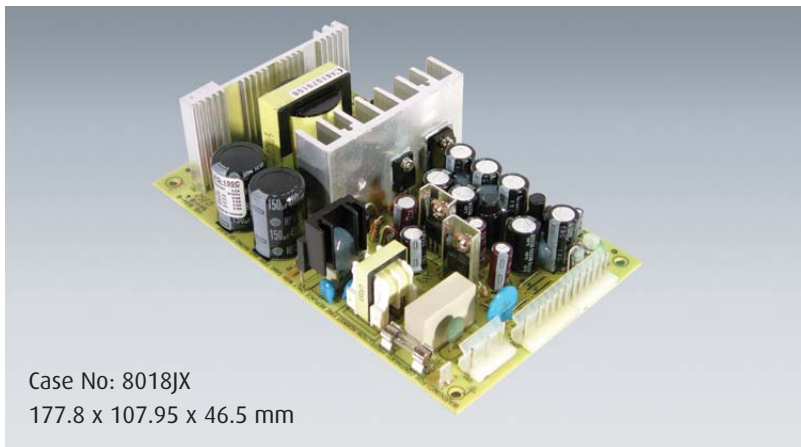
3 Tolerance: includes set up tolerance, line regulation and load regulation

4 The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives

5 Heat sink HS1, HS2 can not be shorted

PQ-100 Series

100W Quad Output Open Frame Power Supply



Case No: 8018JX
177.8 x 107.95 x 46.5 mm

Features

- Universal AC input/ Full range
- Protections: Short circuit, Overload and Over voltage
- Cooling by free air convection
- With power good signal output (Optional)
- 100% full load burn-in test
- Fixed switching frequency at 45KHz



Specification

INPUT	Voltage	100V ~ 264VAC universal full range or 141V ~ 370VDC (90~100VAC 90% load max.)							
	Frequency	47 ----- 63 Hz							
	Current	<3A@115VAC; 1.5A@230VAC full load							
	Inrush Current	Cold start 50A							
	Leakage Current	<1mA@240VAC							
OUTPUT	MODEL No.	PQ-100D				PQ-100E			
	Channel	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
	Voltage	5V	12V	24V	-12V	5V	12V	15V	24V
	Rated Current	5A	2A	2A	0.5A	8A	3A	0.6A	0.6A
	Current Range	2~5A	0.5~4.5A	0.4~2A	0~1A	2~8A	0.5~3A	0~1A	0~1A
	Output Tolerance	± 2%	± 6%	± 10%	± 6%	± 2%	± 6%	± 6%	± 6%
	Line Regulation	± 1%	± 3%	± 1%	± 1%	± 1%	± 3%	± 1%	± 1%
	Load Regulation	± 1%	± 5%	± 5%	± 1%	± 1%	± 5%	± 1%	± 1%
	Ripple Noise MAX.	80mV	120mV	180mV	120mV	80mV	120mV	150mV	120mV
	Efficiency (TYP.)	77%				74%			
	Rated Power	103W				99.4W			
PROTECTION	Over Voltage	CH1:5.75~6.75V				CH1:5.75~6.75V			
	Over Load	105~135% rated output power Hiccup mode; recovers automatically after fault condition is removed							
	Rise Time	<50mS@115~230VAC, full load							
ELEC. CHAR.	Hold up Time	>80mS@115~230VAC, full load							
	Setup Time	<1.2 Sec@115~230VAC, full load							
	Temperature	Operating: -10 ~ +50°C ; Storage: -20~ +85°C							
ENVIRONMENT	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH							
	Withstand Voltage	I/P-O/P:3KVAC; I/P-FG:1.5KVAC; O/P-FG:0.5KVAC							
SAFETY	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG 100MΩ/500VDC							
	Safety Standard	UL60950-1, TUV EN60950-1 Approved							
	EMI	EN55022 (CISPR22) Class B, EN61000-3-2,3							
EMC	EMS	EN61000-4-2,3,4,5,6,8,11; Light industry level, criteria A							
	Cooling	Cooling by free air convection							
OTHERS	M.T.B.F.	258.6K hrs min. MIL-HDBK-217F (°C)							
	Packing	0.56Kg; 24pcs/14.5Kg/1.19 CUFT							

1 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature

2 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor

3 Tolerance: includes set up tolerance, line regulation and load regulation

4 The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives

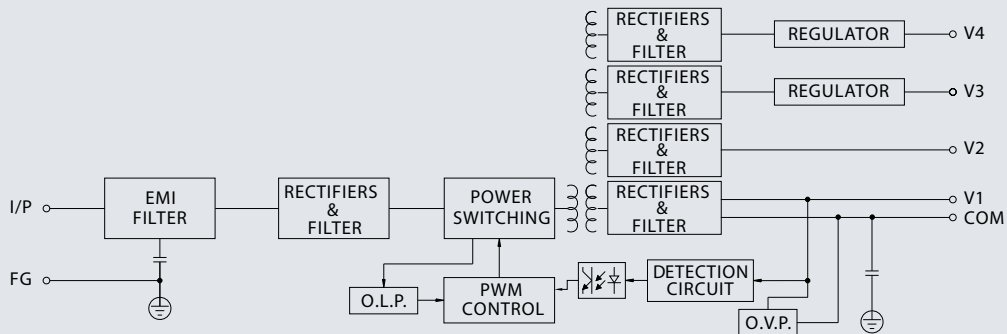
5 Heat sink HS1, HS2 can not be shorted

PQ-100 Series

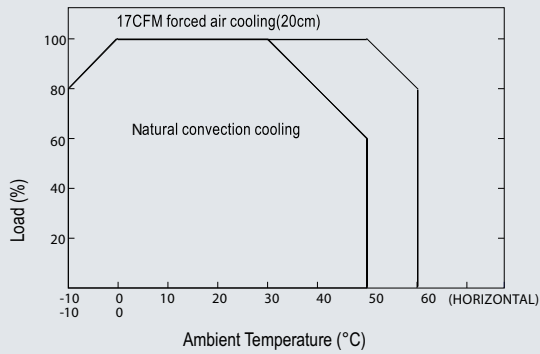
100W Quad Output Open Frame Power Supply



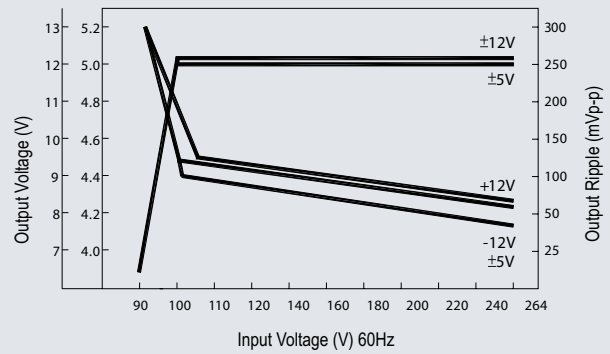
Block Diagram



De-Rating Curve



Output Derating Vs Input Voltage



Dimensions

AC Input Connector (CN1): Molex 5273-05 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG	Molex 5195 or equivalent	Molex 5194 or equivalent
2,4	No Pin	Molex 5195 or equivalent	Molex 5194 or equivalent
3	AC/N	Molex 5195 or equivalent	Molex 5194 or equivalent
4	AC/L	Molex 5195 or equivalent	Molex 5194 or equivalent

DC Output Connector (CN2): Molex 5273-06,07 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2,3	V1	Molex 5195 or equivalent	Molex 5194 or equivalent
4,5,6,7	COM	Molex 5195 or equivalent	Molex 5194 or equivalent
8,9	V2	Molex 5195 or equivalent	Molex 5194 or equivalent
10	Power	Molex 5195 or equivalent	Molex 5194 or equivalent
Good (Option)			
11	V3	Molex 5195 or equivalent	Molex 5194 or equivalent
12	No Pin	Molex 5195 or equivalent	Molex 5194 or equivalent
13	v4	Molex 5195 or equivalent	Molex 5194 or equivalent

