



MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

QP-100 SERIES

- .LOW COST, HIGH RELIABILITY
 - .105°C OUTPUT CAPACITOR
 - .INTERNATIONAL AC INPUT RANGE
 - .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
 - .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
 - .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .CH4:±POLARITY IS SELECTABLE



SPECIFICATION	QP-100-3A				QP-100-3B				QP-100-3C			
	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
DC OUTPUT VOLTAGE	5V	3.3V	12V	-5V	5V	3.3V	12V	-12V	5V	3.3V	15V	-15V
OUTPUT V. TOLERANCE	±3%	±3%	±6%	±5%	±3%	±3%	±6%	±5%	±3%	±3%	+8, -6%	±5%
OUTPUT RATED CURRENT	8A	8A	2.5A	0.6A	8A	8A	2.2A	0.6A	8A	8A	1.7A	0.6A
OUTPUT CURRENT RANGE	2-10A	0-10A	0.3-3A	0-1A	2-10A	0-10A	0.3-3A	0-1A	2-10A	0-10A	0.3-2A	0-1A
RIPPLE & NOISE (p-p)	100mV	100mV	150mV	150mV	100mV	100mV	150mV	150mV	100mV	100mV	150mV	150mV
LINE REGULATION	±1%	±1%	±2%	±1%	±1%	±1%	±2%	±1%	±1%	±1%	±2%	±1%
LOAD REGULATION	±2%	±2%	±6%	±2%	±2%	±2%	±6%	±2%	±2%	±2%	±6%	±2%
DC OUTPUT POWER	99.4W				100W				100.9W			
EFFICIENCY	74%				74%				75%			
DC VOLTAGE ADJ.	CH1,2:+10,-5%											
INPUT VOLTAGE RANGE	90-264VAC 47-63Hz; 120-370VDC											
AC CURRENT	1.5A/115V 0.75A/230V											
INRUSH CURRENT	COLD START<=40A/230V											
LEAKAGE CURRENT	<3.5mA/240VAC											
OVERLOAD PROTECTION	105%-150% RESET:AUTO RECOVERY											
OVER VOLTAGE PROTECTION	CH1:5.75-6.75V CH2:3.8-4.4V TYPE:SHUTDOWN RESET:RE POWER ON											
OVER TEMP.PROTECTION(OPTION)	95°C±5°C TSW1 TYPE:SHUTDOWN RESET:AUTO RECOVERY											
TEMP. COEFFICIENT	±0.03% / °C (0-50°C)											
SETUP, RISE, HOLD UP TIME	800ms, 50ms, 16ms / 115, 230VAC											
POWER FACTOR	PF>0.95/230VAC, PF>0.98/115VAC											
VIBRATION	10-500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES											
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC											
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms											
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%-90% RH											
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%-95% RH											
DIMENSION	199*99*50mm (L*W*H) CASE:916A											
WEIGHT	730gs											
SAFETY STANDARDS	MEET UL1950, TUV EN60950											
EMC STANDARDS	MEET EN55022 (CISPR22) CLASS B, EN50082,EN55024											

- NOTE :
- 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
 - 2.TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
 - 3.OUTPUT PROVIDE UP TO MAXIMUM CURRENT, BUT TOTAL OUTPUT CAN NOT EXCEED MAX. OUTPUT MAXIMUM OUTPUT POWER.
 - 4.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
 - 5.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
 - 6.LOAD REGULATION IS MEASURED FROM 20% TO 100% RATED LOAD, AND OTHER OUTPUT AT 60% RATED LOAD.
 - 7.EACH OUTPUT PROVIDE UP TO MAXIMUM CURRENT, BUT TOTAL LOAD CAN NOT EXCEED MAX. OUTPUT POWER.

2002-02-19

[NEXT \(MECHANICAL INFO\)](#)



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QP-100 SERIES

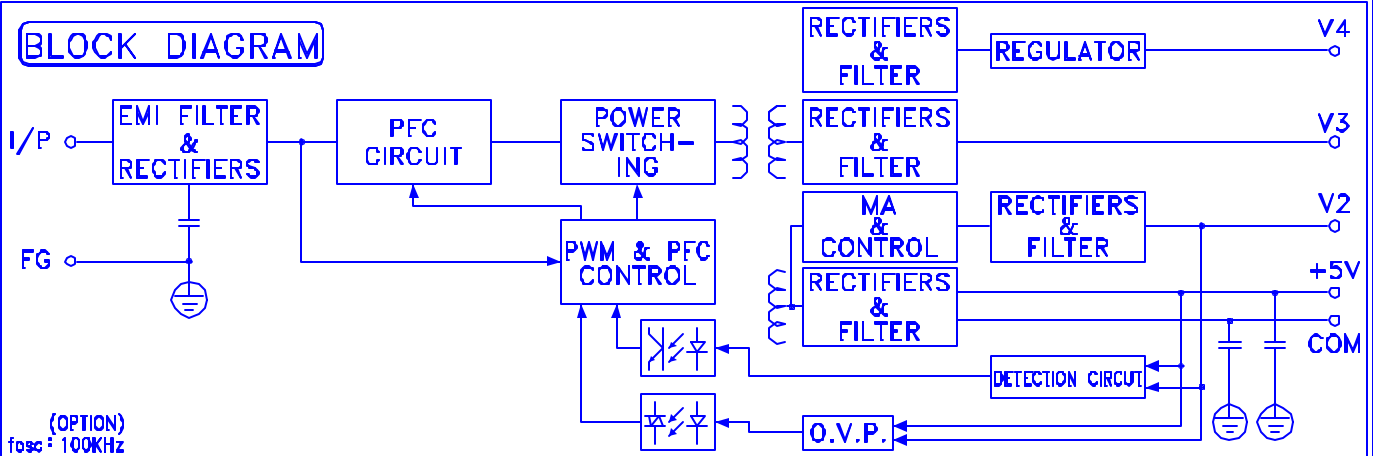
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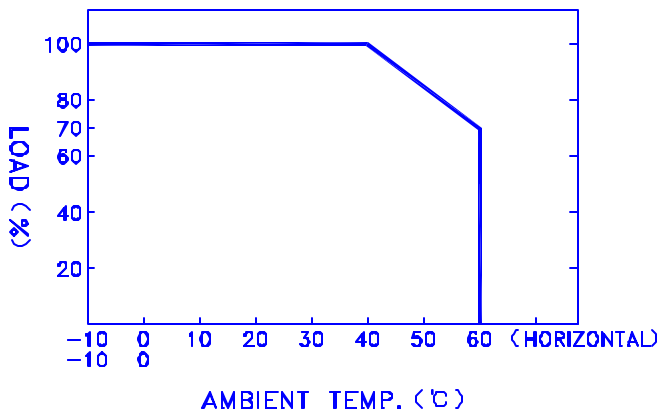
MODEL	QP-100-3D				QP-100D				QP-100F			
	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
SPECIFICATION												
DC OUTPUT VOLTAGE	5V	3.3V	24V	-12V	5V	12V	24V	-12V	5V	15V	24V	-15V
OUTPUT V. TOLERANCE	±3%	±3%	±6%	±5%	±3%	±3%	±6%	±5%	±3%	±3%	±6%	±5%
OUTPUT RATED CURRENT	8A	8A	1.3A	0.6A	8A	2.4A	1A	0.6A	8A	2A	1A	0.6A
OUTPUT CURRENT RANGE	2-10A	0-10A	0.3-2A	0-1A	2-10A	0-3A	0.3-2A	0-1A	2-10A	0-3A	0.3-2A	0-1A
RIPPLE & NOISE (p-p)	100mV	100mV	150mV	150mV	120mV	150mV	200mV	150mV	120mV	180mV	200mV	150mV
LINE REGULATION	±1%	±1%	±2%	±1%	±1%	±1%	±2%	±1%	±1%	±1%	±2%	±1%
LOAD REGULATION	±2%	±2%	±6%	±2%	±2%	±2%	±6%	±2%	±2%	±2%	±6%	±2%
DC OUTPUT POWER	100.6W				100W				103W			
EFFICIENCY	75%				78%				78%			
DC VOLTAGE ADJ.	CH1,2:±10,-5%											
INPUT VOLTAGE RANGE	90-264VAC 47-63Hz; 120-370VDC											
AC CURRENT	1.5A/115V 0.75A/230V											
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OVERLOAD PROTECTION	105%-150% RESET:AUTO RECOVERY											
OVER VOLTAGE PROTECTION	CH1:5.75-6.75V CH2:3.8-4.4V				CH1:5.75-6.75V CH2:13.8-16.2V				CH1:5.75-6.75V CH2:17.25-20.25V			
	TYPE:SHUTDOWN RESET:RE POWER ON											
OVER TEMP.PROTECTION(OPTION)	95°C±5°C TSW1 TYPE:SHUTDOWN RESET:AUTO RECOVERY											
TEMP. COEFFICIENT	±0.03% / °C (0-50°C)											
SETUP, RISE, HOLD UP TIME	800ms, 50ms, 16ms / 115,230VAC											
POWER FACTOR	PF>0.95/230VAC, PF>0.98/115VAC											
VIBRATION	10-500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES											
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC											
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms											
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%-90% RH											
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DIMENSION	199*99*50mm (L*W*H) CASE:916A											
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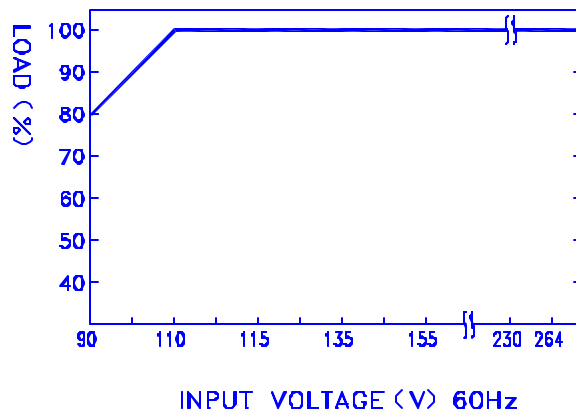
BLOCK DIAGRAM



OUTPUT DERATING VS T_a



OUTPUT DERATING VS INPUT VOLTAGE



DIMENSION (mm)

☒ CASE : 916A

☒ TERMINAL PIN NO. ASSIGNMENT

- ☒ PIN 1,2 : AC INPUT
- ☒ PIN 3 : FG \perp
- ☒ PIN 4 : DC OUTPUT V4
- ☒ PIN 5 : DC OUTPUT V3
- ☒ PIN 6,7 : DC OUTPUT V1
- ☒ PIN 8,9 : DC OUTPUT COM
- ☒ PIN 10 : DC OUTPUT V2

