

Features :

- · Universal AC input / Full range
- Auto switch when power off (UPS function)
- **Built-in constant current limiting circuit**
- Alarm signal for AC OK and Battery low (TTL open collector output or Relay contact output)
- Protections: Short circuit / Over load / Over voltage **Brown-out (Low AC Input Voltage) Battery low protection Battery polarity protection** (by Resettable Fuses)
- Cooling by free air convection
- High efficiency, long life and high reliability
- Withstand 2G vibration test
- All using 105°c long life electrolytic capacitors
- 3 years warranty



CF

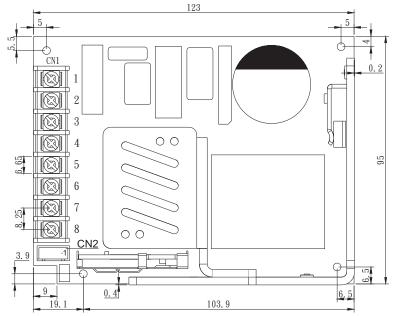
MODEL		QP-100-G		QP-100-GB		QP-	QP-100-L		QP-100-LB		
	Output Number	CH1	CH2	CH1	CH2	СНЗ	CH1	CH2	CH1	CH2	СНЗ
	DC Voltage Range	13.8V	13.8V	13.8V	13.8V	5V	27.6V	27.6V	27.6V	27.6V	5V
	Rated Current	5.3A	2A	4.2A	2A	3A	2.15A	1.5A	1.6A	1.5A	3A
	Current Range	0~7A		0~6.5A		0~3.2A	0~3.4A		0~3.3A		0~3.2
	Rated Power	100.74W		100.56W			100.74W		100.56W		
Output	Ripple & Noise (max.)	100mV		100mV		100mV	100mV		100mV		100m
	Voltage Adj. Range	CH1:10% CH1:10%									
	Voltage Tolerance	±1%		±1%		±3%	±1%		±1%		±3%
	Line Regulation	±0.5%		±0.5%		±0.5%	±0.5%		±0.5%		±0.5%
	Load Regulation	±0.5%		±0.5%		±1%	±0.5%		±0.5%		±1%
	Setup, Rise Time	800ms, 50ms/230VAC 800ms, 50ms/115VAC at full load									
	Hold up Time (Typ.)	50ms / 230VAC 10ms /115VAC at full load									
	Voltage Range	90 ~ 264	VAC 12	27 ~ 373VD	C (Withst	tand 300VA	AC surge f	or 5sec. \	Nithout d	amage)	
	Frequency Range	47Hz ~ 6	3Hz								
Input	Efficiency (Typ.) at 230Vac	86%		85%			87%	87% 85%			
iliput	AC Current (Typ.)	2A/115VAC 1.2A/230VAC									
	Inrush Current (Typ.)	Cold Start 35A / 115VAC 70A / 230VAC									
	Leakage Current	For earth <1mA/264VAC									
Over Load Above 110% rated output power Protection type: Hiccup mode, recovers automatically after fault				after fault	condition is	removed					
Protection	115% ~ 140% rated output voltage										
	Over Voltage	Protection type : latch-off mode									
	Battery cut off	10V±4%	<u> </u>				20V±5%				
	AC OK TTL open collector output Relay contact output TTL open collector output Re				Relay conta	act output					
Function	BAT Low	Battery low voltage <12V±3% Battery low voltage <22V±3%									
	Working Temp.	-20°C ~ +	-70°C (Refe	r to output	load de-rat	ing curve)					
	Working Humidity	20 ~ 90% RH non-condensing									
			-40~+85°C, 10~90%								
	Temp. Coefficient	±0.03%/°C (0~50°C) on CH1									
	Vibration	10 ~ 500Hz, 2G 10min./1 cycle, period for 60 min. each along X,Y,Z axes									
	Safety Standards	Meet UL60950-1 / TUV EN60950-1 Approved									
	Withstand Voltage	I/P - O/P : 3KVAC									
afety & EMC	Isolation Resistance	I/P - O/P: 100M Ω / 500VDC									
arety & EIVIC	EMI Conduction & Radiation	EN55022 : 2006+A1:2007 Class B									
	Harmonic Current	EN61000-3-2:2006 Class A, EN61000-3-3:1995+A1:2005									
	EMS Immunity	EN61000-4-2,3,4,5,6,8,11; ENV50204; EN55024									
	MTBF										
Others	Dimension (L*W*H)(mm)	123x95x31mm									
	Packing										
Note	Ripple & noise are measured at 20 Tolerance: includes set up tolerand Line regulation is measured from Load regulation is measured from	eters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor. includes set up tolerance, line regulation and load regulation. lation is measured from low line to high line at rated load. ulation is measured from 0% to 100% rayed load. or supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still includes.									

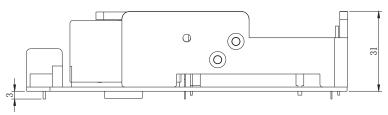
7. Length of aet up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.

100W 1~3 Output with battery Charger

Mechanical Specification

Unit:mm





Terminal Pin No. Assignment(CN1)

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC output V+
2	AC/N	6	BAT+
3	FG≟	7	BAT-
4	DC Output com	8	DC/DC Output +5V (GB/LB only)

QP-100-G/L

Alarm output Connector(CN2): JST B3B-XH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC OK		
2	BAT LOW	JST XHP-3	JST SXH-001 T-P0.6
3	G (13.8V/20mA) L (27.6V/20mA)	or equivalent	or equivalent

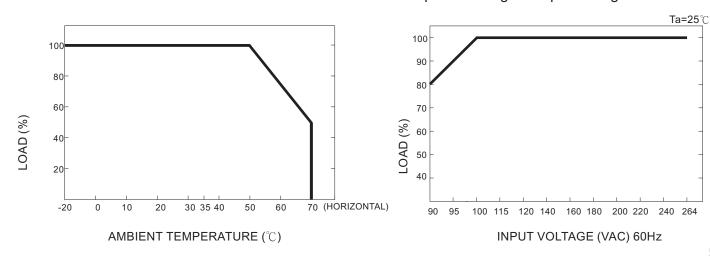
QP-100-GB/LB

Alarm output Connector(CN2): JST B4B-XH or equivalent

Pin No.	Assignment	Mating Housing	Terminal	
1 2	AC OK	JST XHP-4	JST SXH-001 T-P0.6	
3 4	Bat. Low	or equivalent	or equivalent	

Mechanical Specification

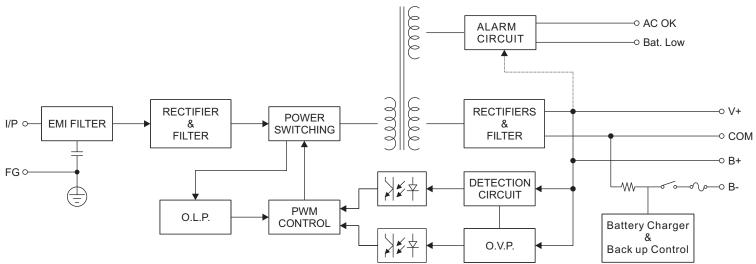
■ Output Derating VS Input Voltage



series

■ For QP-100-G/L

■ Block Diagram

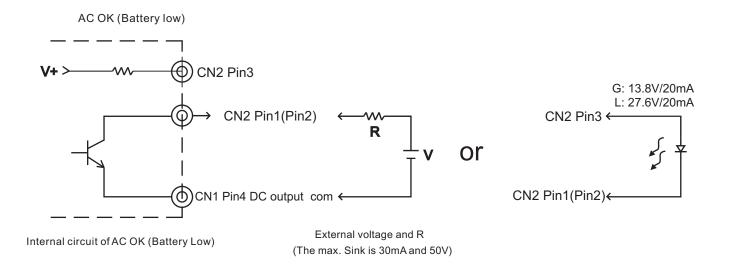


■ Alarm Signal for AC OK and Battery Low

- (1) Alarm Signal is sent out through "AC OK " & " Battery Low " pins.
- (2) An external voltage source is required for this function. The maximum applied voltage is 50V and the maximum sink current is 30mA.
- (3) Table 3.1 explain the alarm function built-in the power supply

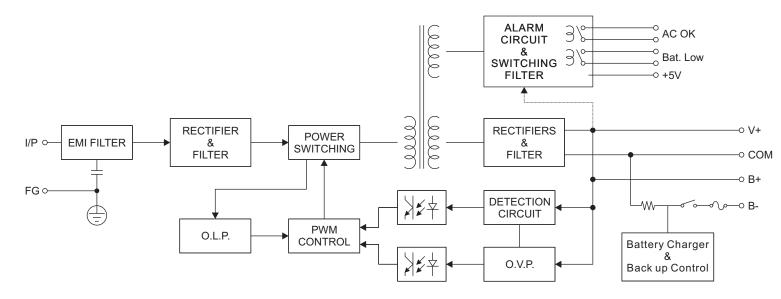
Function	Description	Output of alarm		
AC OK	The signal is "Low" when the power supply turns on	Low (0.3V max. at 30mA)		
ACOR	The signal turns to be "High" when the power supply turns OFF	High or open(External applied voltage 30mA max.)		
Battery	The signal is "Low" when the voltage of battery is under G:12V , L:22V	Low (0.3V max. at 30mA)		
Low	The signal is "High" when the voltage of battery is above G:12V , L:22V	High or open(External applied voltage 30mA max.)		

Table 3.1 Explanation of Alarm Signal



■ For QP-100-GB/LB

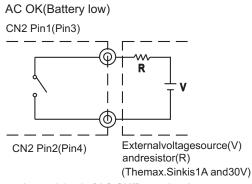
■ Block Diagram



- Alarm Signal for AC OK and Battery Low
- (1) Alarm Signal is sent out through "AC OK " & " Battery Low " pins. (relay contact type)
- (2) An external voltage source is required for this function. The maximum applied voltage is 30V and the maximum sink current is 1A.
- (3) Table 4.1 explain the alarm function built-in the power supply

Function	Description	Output of alarm		
AC OK	The signal is "Low" when the power supply turns on	Low or short		
ACOR	The signal turns to be "High" when the power supply turns OFF	High or open(External applied voltage 1A max.)		
Battery	The signal is "Low" when the voltage of battery is under GB:12V, LB:22V	Low or short		
Low	The signal is "High" when the voltage of battery is above GB:12V , LB:22V	High or open(External applied voltage 1A max.)		

Table 4.1 Explanation of Alarm Signal



Internalcircuitof AC OK(BatteryLow)