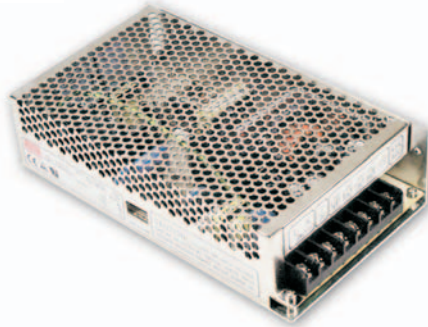


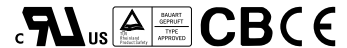
## 120W Quad Output Switching Power Supply

## Q-120 series



### ■ Features :

- AC input range selected by switch
- Protections: Short circuit/Over load/Over voltage
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- 2 years warranty

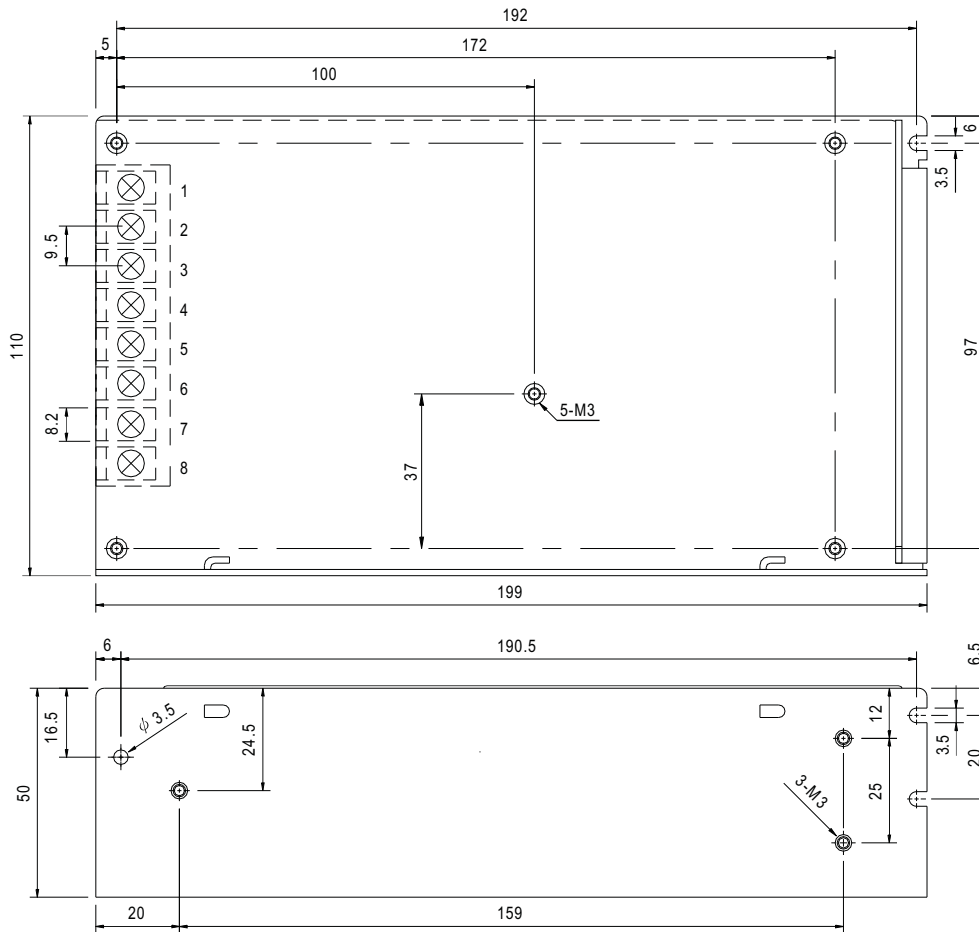


### SPECIFICATION

MODEL		Q-120B				Q-120C				Q-120D							
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4				
	DC VOLTAGE	5V	12V	-5V	-12V	5V	15V	-5V	-15V	5V	12V	24V	-12V				
	RATED CURRENT	11A	4A	1A	1A	10A	3.5A	1A	1A	8A	2A	2A	1A				
	CURRENT RANGE	2 ~ 12A	0.5 ~ 5A	0.2 ~ 1A	0.2 ~ 1A	2 ~ 12A	0.5 ~ 5A	0.2 ~ 1A	0.2 ~ 1A	2 ~ 12A	0.2 ~ 5A	0.2 ~ 2A	0.2 ~ 1A				
	RATED POWER	120W				122.5W				124W							
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	80mVp-p	120mVp-p	80mVp-p	150mVp-p	80mVp-p	150mVp-p	80mVp-p	120mVp-p	180mVp-p	120mVp-p				
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V															
	VOLTAGE TOLERANCE Note.3	±2.0%	±6.0%	±6.0%	±6.0%	±2.0%	+10,-5%	±6.0%	+10,-5%	±2.0%	±6.0%	±6.0%	±6.0%				
	LINE REGULATION	±0.5%	±1.0%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%	±1.0%				
	LOAD REGULATION	±0.5%	±5.0%	±5.0%	±5.0%	±0.5%	±6.0%	±5.0%	±6.0%	±0.5%	±5.0%	±5.0%	±5.0%				
SETUP, RISE, HOLD TIME	200ms, 50ms, 20ms at full load																
INPUT	VOLTAGE RANGE	88 ~ 132VAC/176 ~ 264VAC selected by switch				240 ~ 370VDC											
	FREQUENCY RANGE	47 ~ 63Hz															
	EFFICIENCY (Typ.)	77%				76%				80%							
	AC CURRENT	2.8A/115VAC		1.6A/230VAC													
	INRUSH CURRENT (max.)	COLD START 35A															
	LEAKAGE CURRENT	<3.5mA / 240VAC															
PROTECTION	OVER LOAD	105 ~ 135% rated output power Protection type : Shut down o/p voltage, re-power on to recover															
	OVER VOLTAGE	CH1:5.75 ~ 6.75VDC Protection type : Shut down o/p voltage, re-power on to recover															
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)															
	WORKING HUMIDITY	20 ~ 90% RH non-condensing															
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH															
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)															
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes															
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved															
	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:100M Ohms/500VDC															
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B															
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3															
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A															
OTHERS	MTBF	261.4K hrs min. MIL-HDBK-217F (25°C)															
	DIMENSION	199*110*50mm (L*W*H)															
	PACKING	0.86Kg; 16pcs/14.7Kg/0.95CUFT															
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol>																

**Mechanical Specification**

Case No. 906 Unit:mm

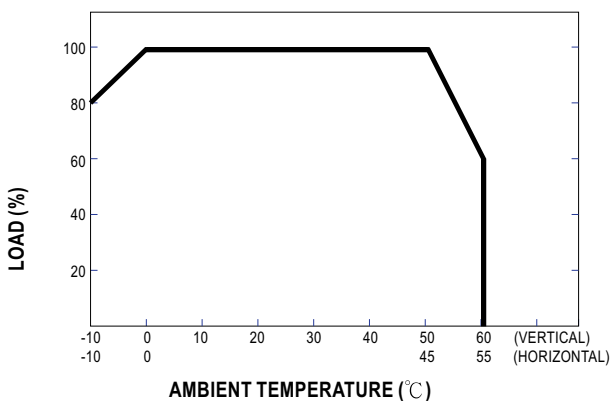


Terminal Pin. No Assignment

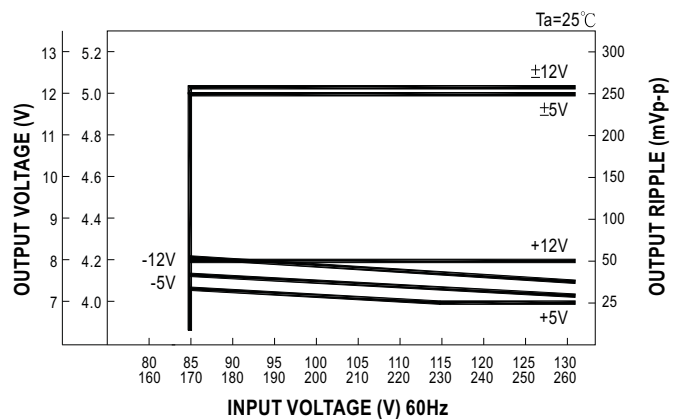
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	6	DC OUTPUT -V1
2	AC/N	7	DC OUTPUT COM
3	FG	8	DC OUTPUT +V1
4,5	DC OUTPUT		

MODEL	Q-120B	Q-120C	Q-120D
Pin No. 4	+12V	+15V	+24V
Pin No. 5	-12V	-15V	+12V

**Derating Curve**



**Static Characteristics (B)**



File Name:Q-120-SPEC 2004-11-30