

# CSP-2 SWITCHING POWER SUPPLY

Low cost solution

## FEATURES

- A wide range selectable to meet various application
- 230K~300Khr. MTBF
- RoHS version in option
- Compact size with DIN rail mounting



## ORDERING INFORMATION

CSP-2- [Output Rating] - [Output Voltage]

CODE	OUTPUT RATING	CODE	OUTPUT VOLT
020	20 Watts	05	5V
025	25 Watts	12	12V
050 (040)	50 Watts, 5V output only 40 Watts, code: 040	24	24V
100	100 Watts	VO	Specify Voltage
150	150 Watts	Please refer to the table of power rating on right side for the capability of output current.	
300	300 Watts		
500	500 Watts		

Power Rating	5V	12V	24V
20 Watts	4A	X	X
25 Watts	X	2.08A	1.04A
50 Watts	* 8.0A	4.2A	2.1A
100 Watts	X	X	4.2A
150 Watts	X	X	6.25A
300 Watts	X	X	12.5A
500 Watts	X	X	20.8A

\* 50Watts 5V/8.0A output power rating of only 40Watts

## TECHNICAL SPECIFICATION

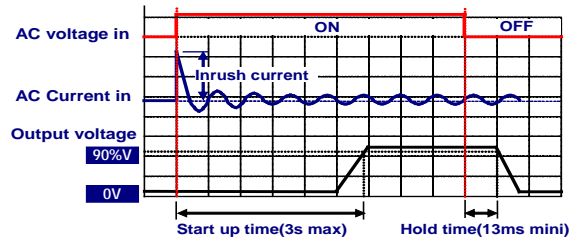
MODEL	20W	25W	50W	100W	150W	300W	500W
<b>INPUT</b>							
Voltage	AC 100~240V, 47~63Hz			AC 115 and 230V switchable by switch			
Efficiency (at 110V rated load)	5V	70%	--	72%	--	--	--
	12V	--	75%	75%	--	--	--
	24V	--	76%	78%	80%	76%	82%
Inrush Current	110V	20A		--	--	--	--
	220V	40A		40A	40A	40A	40A
<b>OUTPUT</b>							
Output indication	Green LED						
Voltage adjustment	-10% to 10% (with VR adjustment)						
Ripple (Vp-p)	5V	50mV	--	65mV	--	--	--
	12V	--	120mV	100mV	--	--	--
	24V	--	150mV	240mV	240mV	250mV	240mV
Voltage tolerance	±1.0% max., (with rated input, 0 to 100% load)						
Linearly	±1.0% max., (with rated input, 0 to 100% load)						
Load influence	±1.0% max., (with rated input, 0 to 100% load)						
Start up time	3 seconds max. (at rated input/output voltage)						
Hold time(at)	13ms						
Short protection	Auto reset in standard						
<b>ENVIRONMENTAL</b>							
Ambient temp.	Operating: -15°C ~ 50°C; Storage: -20°C ~ 85°C (Non-condensing)						
Ambient humidity	Operating: 5 to 95 % RH; Storage: 5 to 95 % RH						
Temp. influence	0.05%/°C max.(0~50°C)						
Voltage influence	0.5% max. (at 85 to 264 VAC input, 100% load)						
Vibration	10 to 500Hz, 2G, 10 min/cycle for 1 hour each in X, Y, and Z directions						
Shock resistance	150 m/s <sup>2</sup> (about 50g) 3 times each in X, Y, and Z directions						
<b>ELECTRICAL SAFETY</b>							
Dielectric strength	AC 2.0 kV for 1 min. (between input, output and housing; detection: 20 mA)						
Insulation resistance	100 MΩ min. (between input, output and housing) at 500 VDC						
EMC	EN55022 Class B, EN61000-3-2, EN61000-3-3, EN55024, IEC61000-4-2, -3, -4, -5, -6, -8, -11						
<b>MECHANICAL</b>							
Dimensions	104(H) x35(D) x45(W)	104(H) x76(D) x45(W)	100(H) x83(D) x49(W)	100(H) x100(D) x60(W)	100(H) x100(D) x90(W)		
Housing	Self-extinguishing, black ABS, UL94V0		Aluminum				
Terminals	Screw terminal, up to 2 x 2.5mm2 wire						
Mounting	35mm DIN rail (EN50022)						
Weight	190g	210g	380g	450g	600g	820g	

## DESCRIPTION OF TECHNICAL

### Short protection

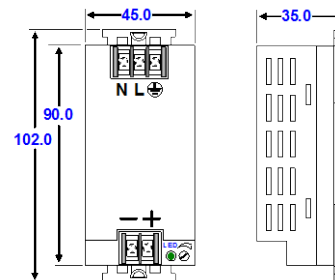
The short protection function of idea is same as over load protection with more strictly condition. That protects the power supply from possible damage by short current.

### Inrush Current, Start Up Time, Output Hold Time

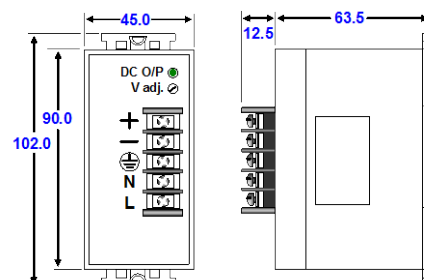


## DIMENSIONS

### CSP-2-20W/25W

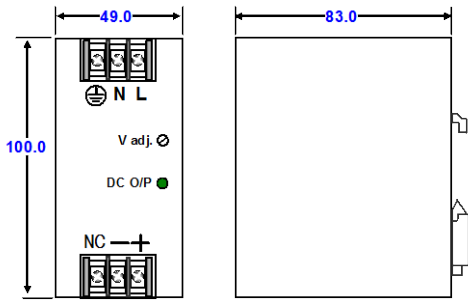


### CSP-2-50W

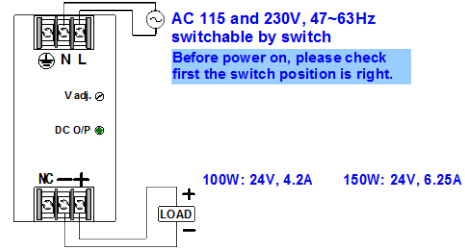


Errata: Housing: Aluminum for 100~500W

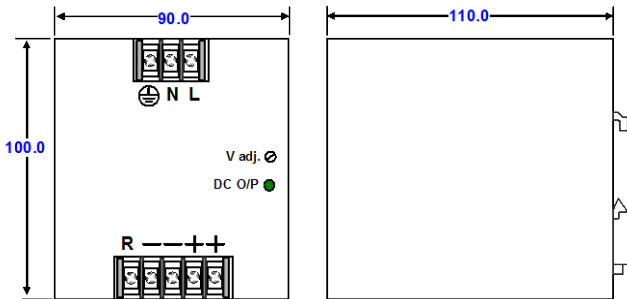
### CSP-2-100W/150W



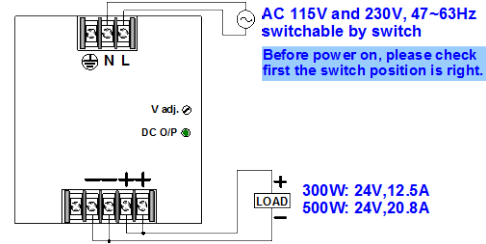
### CSP-2-100W/150W



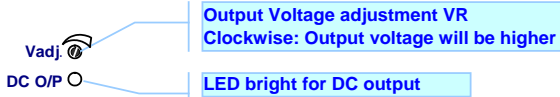
### CSP-2-300W/500W



### CSP-2-300W/500W



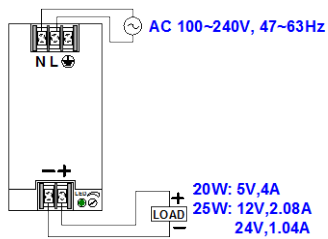
## OUTPUT VOLTAGE ADJUSTMENT



## CONNECTION DIAGRAM

Please check the voltage of power supplied first, and then connect to the specified terminals. It is recommended that power supplied to the meter be protected by a fuse or circuit breaker.

### CSP-2-20W/25W



### CSP-2-50W

