TDK·Lambda

CUS250LD Series

250W Single Output Low Profile Power Supplies

Features

- ♦ High Efficiency, up to 90%
- ◆ 1.18" high
- Wide Range AC Input
- Convection Cooled
- Coated pcb as standard
- Three year warranty

Key Market Segments & Applications







Specifications						
Model CUS250LD						
AC Input Voltage (300VAC for 5s)	VAC	85 - 265VAC				
Input Frequency	Hz	47 - 63Hz				
DC Input Voltage	VDC	120 - 370VDC (No safety certification)				
Inrush Current (cold start)	Α	20A at 115VAC, 40A at 230VAC				
Power Factor	-	Meets EN61000-3-2 (Typical PF 0.98/0.95)(1)				
Input Current (115/230VAC)	Α	2.8 / 1.4				
Temperature Coefficient	-	<0.02%/°C (0 - 50°C)				
Overcurrent Protection	-	> 105%				
Overvoltage Protection (2)	V	3.3V: 4 - 5.25V, 4.2V: 5 - 6.5V, 5V: 5.75 - 7.5V, 12V: 13.8 - 16.2V, 24V: 27.6 - 32.4V				
Hold Up Time	ms	20ms				
Leakage Current (240VAC 60Hz)	mA	<0.75mA				
Remote Sense	-	No				
LED Indicator	-	Green LED = On				
		U Channel: -25 to +70°C. Full load at 40°C. Derate to 50% load at 70°C				
Operating Temperature (3)	°C	With Cover: -25 to +70°C. Full load at 40°C. Derate to 40% load at 70°C				
Storage Temperature	°C	-30 to +75°C				
Operating Humidity (non condensing)	%	30 - 90% RH				
Storage Humidity (non condensing)	%	10 - 90% RH				
Cooling	-	Convection				
Withstand Voltage	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.				
Isolation Resistance	MΩ	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC				
Vibration (non operating)	-	10 - 55Hz: 19.6m/s ² constant sweep 1 min X, Y, Z for 1 hour				
Shock	-	< 196.1 m/s² (20G)				
Immunity	-	IEC61000-4-2 (lv 2, 3), -3 (lv3), -4 (lv 3), -5 (lv3, 4), -6 (lv 3), -8 (lv 4), -11				
Safety Agency Certifications	-	IEC/UL/CSA/EN62368-1, 60950-1 (cTUVus), CE Mark				
Conducted & Radiated EMI	-	EN55022-B, FCC-B				
Weight (Typ)	g	700				
	_	U Channel: 7.8 x 4 x 1.18" (198 x 102 x 30)				
Size (LxWxH)	in(mm)	With Cover: 7.8 x 4 x 1.34" (198 x 102 x 34)				
Warranty	yrs	Three Years				

Notes:

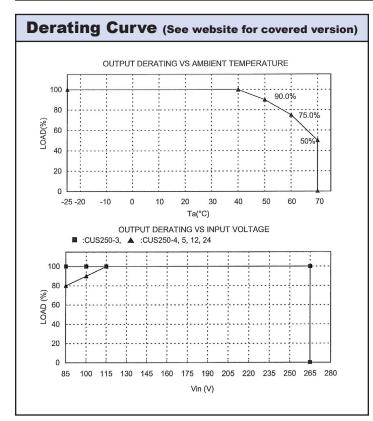
(1) 115 / 230VAC input

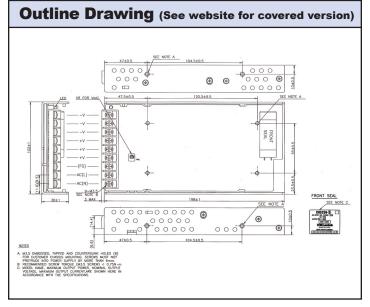
(2) Cycle AC to reset

(3) See derating curves on page 2. Derates linearly to 80% load from 115VAC to 85VAC input (excluding 3.3V model). -40°C start up above 88VAC input.

CUS250LD Series

Model Selector								
Model	Voltage	Adjust Range (V)	Max Current (A)	Max Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % ⁽¹⁾
CUS250LD-3	3.3V	2.97 - 3.63	50	165	40	20	120	86 / 88
CUS250LD-4	4.2V	3.78 - 4.62	50	210	40	20	120	87 / 89
CUS250LD-5	5V	4.5 - 5.5	50	250	40	20	120	88 / 90
CUS250LD-12	2 12V	10.8 - 13.2	21	252	96	48	120	88 / 90
CUS250LD-24	24V	21.6 - 26.4	10.5	252	192	96	150	88 / 90





Options				
Suffix	Description			
Blank	No cover			
/A	Cover			

For Additional Information, please visit https://product.tdk.com/info/en/products/power/index.html



Mouser Electronics

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TDK-Lambda:

CUS250LD-3 CUS250LD-4 CUS250LD-5 CUS250LD-24 CUS250LD-12 CUS250LD-5/A