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TDK·Lambda CUS200LD Series

79-153W Single Output Power Supplies

Features

- Convection or Conduction Cooled
- Up to 206W Peak Power Capability
- Low 31mm Height
- -40°C Ambient temperature Start Up



Key Market Segments & Applications

Industrial LED Test COMM Broadcast

RoHS

Specifications

Model		CUS200LD
AC Input Voltage	VAC	85 - 265VAC (1)
Input Frequency	Hz	47 - 63Hz
Inrush Current (cold start)	A	20A at 115VAC, 40A at 230VAC
Power Factor	-	Meets EN61000-3-2 (Typical PF 0.95/0.9) (2)
Input Current	A	Varies by model, please see detailed specification on website
Temperature Coefficient	%/°C	<0.02%/°C
Overcurrent Protection	-	> 101% of peak current rating
Overvoltage Protection (3)	V	See model selector
Hold Up Time (115 / 230V input)	ms	20ms typical
Leakage Current	mA	<0.75mA at 265VAC, 60Hz
Ripple and Noise	%	3.3-7.5V: 120mV, 12-24V: 150mV, 28-48V: 200mV
Line and Load Regulation	%	See model selector
Remote Sense	-	No
Operating Temperature	°C	-25 to +70°C. Start up at -40°C Convection cooled: Derate linearly to 40% load from +40 to +70°C Conduction cooled: Derate linearly to 40% load from +45 to +70°C
Storage Temperature	°C	-40 to +85°C
Humidity (non condensing)	%RH	10 - 95%RH (Operating & Storage)
Cooling	-	Convection or Conduction Cooled (Mounted on a 2mm thick aluminium plate 400x400mm)
Withstand Voltage	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC
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/s^2 (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/EN 62368-1, IEC/UL/CSA/EN 60950-1, CE Mark
Conducted & Radiated EMI	-	EN55011-B, EN55032-B, FCC Class B
Weight (Typ)	g	430
Size (LxWxH)	mm (in)	160 x 62 x 31mm (6.3 x 2.44 x 1.22")
Warranty	yrs	Three Years

Notes:
See specification for conditions and test methods
(1) 4.2V model: Derate linearly to 90% load from 115 to 85VAC input. 5-48V models: Derate linearly to 80% load from 115 to 85VAC input
(2) 115 / 230VAC input
(3) Cycle AC to reset

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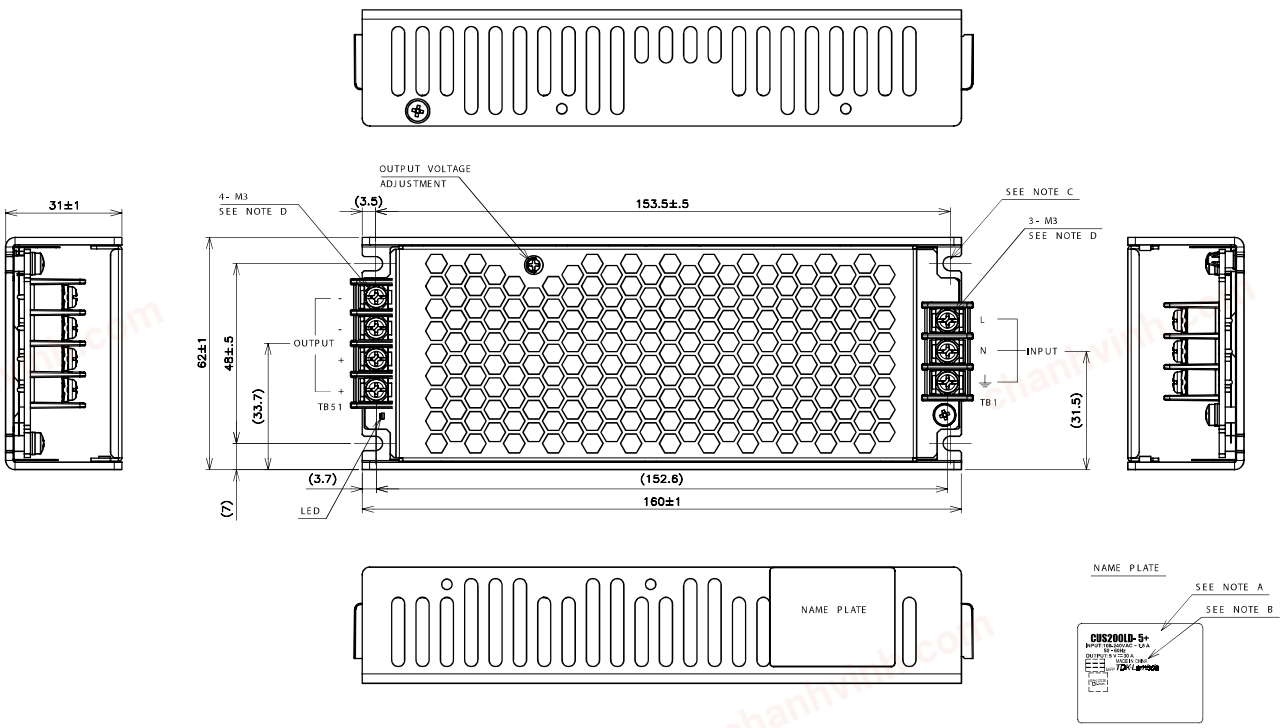
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Model Selector

Model	Output Voltage	Adjust Range (V)	Max Current Convection (A)	Max Power Convection (W)	Max Current Conduction (A)	Max Power Conduction (W)	Peak Current (4) (A)	Load Reg (mV)	Line Reg (mV)	Overvoltage	Efficiency (typ) % (5)
CUS200LD-3	3.3V	2.97 - 3.63V	24A	79.2W	30A	99W	40A	26mV	13mV	3.8 - 5.44V	82 / 83%
CUS200LD-4	4.2V	3.78 - 4.62V	24A	100.8W	30A	126W	40A	33mV	16mV	4.83 - 6.51V	85 / 87%
CUS200LD-5	5V	4.5 - 5.5V	24A	120W	30A	150W	40A	40mV	20mV	5.75 - 7.5V	87 / 89%
CUS200LD-7R5	7.5V	6.375 - 8.25V	16A	120W	20A	150W	26.6A	60mV	30mV	8.63 - 10.87V	88 / 90%
CUS200LD-12	12V	10.8 - 13.2V	10A	120W	12.5A	150W	16.7A	96mV	48mV	13.8 - 17.4V	87 / 89%
CUS200LD-15	15V	13.5 - 16.5V	8A	120W	10A	150W	13.4A	120mV	60mV	17.25 - 21.75V	87 / 89%
CUS200LD-24	24V	21.6 - 26.4V	5A	120W	6.3A	151.2W	8.4A	192mV	96mV	27.6 - 34.8V	87 / 89%
CUS200LD-28	28V	25.2 - 30.8V	4.3A	120.4W	5.4A	151.2W	7.2A	224mV	112mV	32.2 - 40.6V	87 / 90%
CUS200LD-48	48V	43.2 - 52.8V	2.5A	120W	3.15A	151.2W	4.2A	384mV	192mV	55.2 - 69.6V	88 / 90%

Notes:
See specification for conditions and test methods
(4) Convection cooling: Peak current for less than 10 seconds, with a duty cycle of <35%
Conduction cooling: Peak current for less than 5 seconds, with a duty cycle of <35%
(5) 115 / 230VAC input. Conduction cooled ratings

Outline Drawing



For additional information, please visit
https://product.tdk.com/en/power/