



MEAN WELL SD-200 Series 200W Single Output DC DC Converter Owner's Manual

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200W Single Output DC-DC Converter
SD – 200 series



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Features

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Cooling by free air convection
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty



https://www.meanwell.com/Upload/PDF/DC-DC_EN.pdf

■ GTIN CODE

MW Search• <https://www.meanwell.com/serviceGTIN.aspx>



(for SD-200C-5/12/24 type only)



SPECIFICATION

MODEL		SD-200B				SD-200C			
OUTP UT	DC VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V
	RATED CURRENT	34A	16.7A	8.4A	4.2A	40A	16.7A	8.4A	4.2A
	CURRENT RANGE	0 ~ 34A	0 ~ 16.7A	0 ~ 8.4A	0 ~ 4.2A	0 ~ 40A	0 ~ 16.7A	0 ~ 8.4A	0 ~ 4.2A
	RATED POWER	170W	200.4W	201.6W	201.6W	200W	200.4W	201.6W	201.6W
	RIPPLE & NOISE (max.) Note.2	100mV p-p	120mVp-p	150mVp-p	200mVp-p	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC

	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	300ms, 50ms at full load							
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC		C:36 ~ 72VDC		D:72 ~144VDC			
	EFFICIENCY (Typ.)	79%	82%	85%	86%	81%	84%	86%	86%
	DC CURRENT (Typ.)	10.8A/24V	10.6A/24V	10.4A/24V	10.4A/24V	5.4A/48V	5.2A/48V	6.7A/48V	5A/48V
	INRUSH CURRENT (Typ.)	C:45A/48VDC		D:45A/96VDC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power							
		Protection type : Shut down o/p voltage, re-power on to recover							
	OVER VOLTAGE	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover							
OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down								
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to “Derating Curve”)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +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	UL62368-1 approved (for SD-200C-5/12/24 type only), EAC TP TC 004 approved, design refer to AS/NZS 62368.1							
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH							
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020							
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8, light industry level, EAC TP TC 020							

OTHERS	MTBF	1919.7K hrs min. Telcordia SR-332 (Bellcore) ; 280.6K hrs min. MIL-HDBK-217F (25°C)
	DIMENSION	215*115*50mm (L*W*H)
	PACKING	1.1Kg; 12pcs/14.4Kg/0.9CUFT
NOTE	<p>1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>	



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Features

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Cooling by free air convection
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- 24V and 48V input voltage design refer to LVD
- 2 years warranty



AS/NZS62368-1 BS EN/EN62368-1 IEC62368-1 TPTC004

SPECIFICATION

MODEL		SD-200D			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V
	RATED CURRENT	40A	16.7A	8.4A	4.2A
	CURRENT RANGE	0 ~ 40A	0 ~ 16.7A	0 ~ 8.4A	0 ~ 4.2A
	RATED POWER	200W	200.4W	201.6W	201.6W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	300ms, 50ms at full load			
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC C:36 ~ 72VDC D:72 ~ 144VDC			
	EFFICIENCY (Typ.)	82%	82%	84%	90%
	DC CURRENT (Typ.)	3.5A/96V	3.5A/96V	3.5A/96V	3.5A/96V
	INRUSH CURRENT (Typ.)	C:45A/48VDC D:45A/96VDC			
PROT	OVERLOAD	105 ~ 135% rated output power			
		Protection type : Shut down o/p voltage, re-power on to recover			

ELECTRICAL	OVER VOLTAGE	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V
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	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down			
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	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC/BS EN/EN 62368-1, EAC TP TC 004 approved, design refer to AS/NZS 62368.1			
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	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH			
	EMC EMISSION	Compliance to BS EN/EN55022 (CISPR22) Class B, EAC TP TC 020			
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8, light industry level, EAC TP TC 020			
OTHERS	MTBF	1919.7K hrs min. Telcordia SR-332 (Bellcore) ; 280.6K hrs min. MIL-HDBK-217F (25°C)			
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Documents / Resources



[MEAN WELL SD-200 Series 200W Single Output DC DC Converter](#) [pdf] Owner's Manual SD-200 Series 200W Single Output DC DC Converter, SD-200 Series, 200W Single Output DC DC Converter, Single Output DC DC Converter, Output DC DC Converter, DC Converter, Converter

References

- [TÜV Rheinland - Home | US | TÜV Rheinland](#)
- [MEAN WELL Switching Power Supply Manufacturer](#)
- [Product Liability Disclaimer-MEAN WELL Switching Power Supply Manufacturer](#)