



# MEAN WELL LRS-200 Series 200W Single Output Switching Power Supply Owner's Manual

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**MEAN WELL LRS-200 Series 200W Single Output Switching Power Supply**



## Features

- AC input range selectable by switch
- Withstand 300VAC surge input for 5 second
- Protections: Short circuit/Overload/ Over voltage/ Over temperature
- Cooling by free air convection
- 1U low profile
- Withstand 5G vibration test
- LED indicator for power on
- No load power consumption<0.75W
- 100% full load burn-in test
- High operating temperature up to 70°C
- Operating altitude up to 5000 meters (Note.8)
- High efficiency, long life and high reliability
- 3 years warranty

## Applications

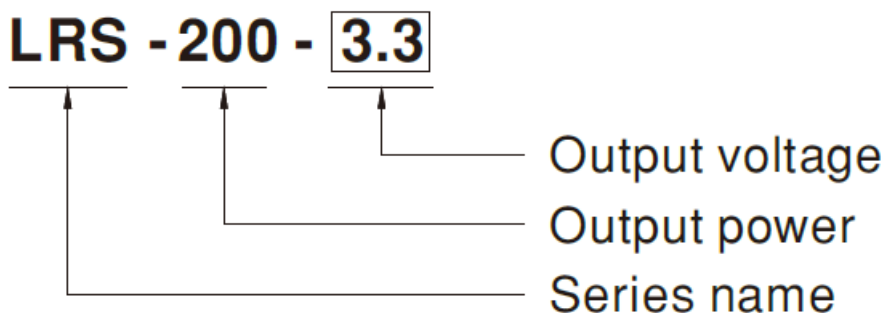
- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or apparatus

## GTIN GTIN CODE

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

## Description

## Model Encoding



## SPECIFICATION

MODEL		LRS-200-3.3	LRS-200-4.2	LRS-200-5	LRS-200-12	LRS-200-15	LRS-200-24	LRS-200-36	LRS-200-48	
OUTPUT	DC VOLTAGE	3.3V	4.2V	5V	12V	15V	24V	36V	48V	
	RATED CURRENT	40A	40A	40A	17A	14A	8.8A	5.9A	4.4A	
	CURRENT RANGE	0 ~ 40A	0 ~ 40A	0 ~ 40A	0 ~ 17A	0 ~ 14A	0 ~ 8.8A	0 ~ 5.9A	0 ~ 4.4A	
	RATED POWER	132W	168W	200W	204W	210W	211.2W	212.4W	211.2W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	2.97 ~ 3.6V	3.6 ~ 4.4V	4.5 ~ 5.5V	10.2 ~ 13.8V	13.5 ~ 18V	21.6 ~ 28.8V	32.4 ~ 39.6V	43.2 ~ 52.8V	
	VOLTAGE TOLERANCE <small>Note.3</small>	±3.0%	±4.0%	±3.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION <small>Note.4</small>	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION <small>Note.5</small>	±2.5%	±2.5%	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1300ms, 50ms/230VAC			1300ms,50ms/115VAC at full load					
HOLD UP TIME (Typ.)	16ms/230VAC			12ms/115VAC at full load						
INPUT	VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264VAC by switch					240 ~ 370VDC (switch on 230VAC)			
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	83%	86%	87%	87.5%	88%	89.5%	89.5%	90%	
	AC CURRENT (Typ.)	4A/115VAC		2.2A/230VAC						
	INRUSH CURRENT (Typ.)	COLD STAR 60A/115VAC			60A/230VAC					
	LEAKAGE CURRENT	<2mA / 240VAC								

PROTECTION	OVER LOAD	110 ~ 140% rated output power							
		3.3~36V Hiccup mode, recovers automatically after fault condition is removed. 48V Shut down and latch off o/p voltage, re-power on to recover.							
	OVER VOLTAGE	3.8 ~ 4.45V	4.6 ~ 5.4V	5.75 ~ 6.75V	13.8 ~ 16.2V	18 ~ 21V	28.8 ~ 33.6V	41.4 ~ 46.8V	55.2 ~ 64.8V
		3.3~36V Hiccup mode, recovers automatically after fault condition is removed. 48V Shut down and latch off o/p voltage, re-power on to recover.							
ENVIRONMENT	OVER TEMPERATURE	3.3~36V Hiccup mode, recovers automatically after fault condition is removed. 48V Shut down and latch off o/p voltage, re-power on to recover.							
	WORKING TEMP.	-25 ~ +70°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)							
SAFETY	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes							
	SAFETY STANDARDS	IEC/UL 62368-1, BSMI CNS14336-1, EAC TP TC 004, KC K60950-1(for LRS-200-12/24 only), BIS IS13252(Part1): 2010/IEC 60950-1: 2005, AS/NZS62368.1 approved; Design refer to BS EN/EN62368-1							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC 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 BSMI CNS13438, EAC TP TC 020, KC KN32, KN35(for LRS-200-12/24 only)							
	EMC IMMUNITY	Compliance to BS EN/EN55035, EAC TP TC 020, KC KN32, KN35(for LRS-200-12/24 only)							
OTHERS	MTBF	2346.6K hrs min. Telcordia SR-332 (Bellcore) ; 279.4Khrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	215*115*30mm (L*W*H)							
	PACKING	0.66Kg; 15pcs/10.9Kg/0.78CUFT							

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance :includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 0% to 100% rated load.
6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
7. The 150% peak load capability is built in for up to 1 second for 12-48V.LRS-200 will enter hiccup mode if the peak load is delivered for over 1 second and will recover once it resumes to the rated current level(115VAC/230VAC).
8. The ambient temperature derating of 5 C/1000m is needed for operating altitude greater than 2000m(6500ft).
9. This power supply does not meet the harmonic current requirements outlined by BS EN/EN61000-3-2. Please do not use this power supply under the following conditions:
  1. the end-devices is used within the European Union, and
  2. the end-devices is connected to public mains supply with 220Vac or greater rated nominal voltage, and
  3. the power supply is:
    1. installed in end-devices with average or continuous input power greater than 75W, or
    2. belong to part of a lighting system

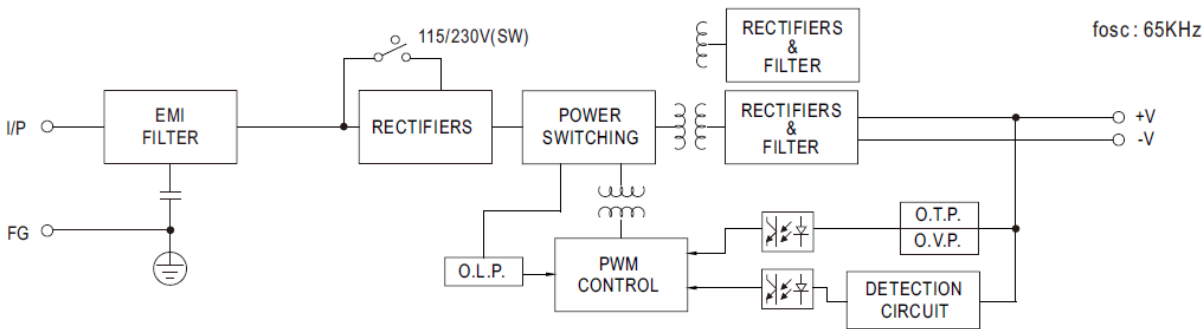
#### Exception:

Power supplies used within the following end-devices do not need to fulfill BS EN61000-3-2

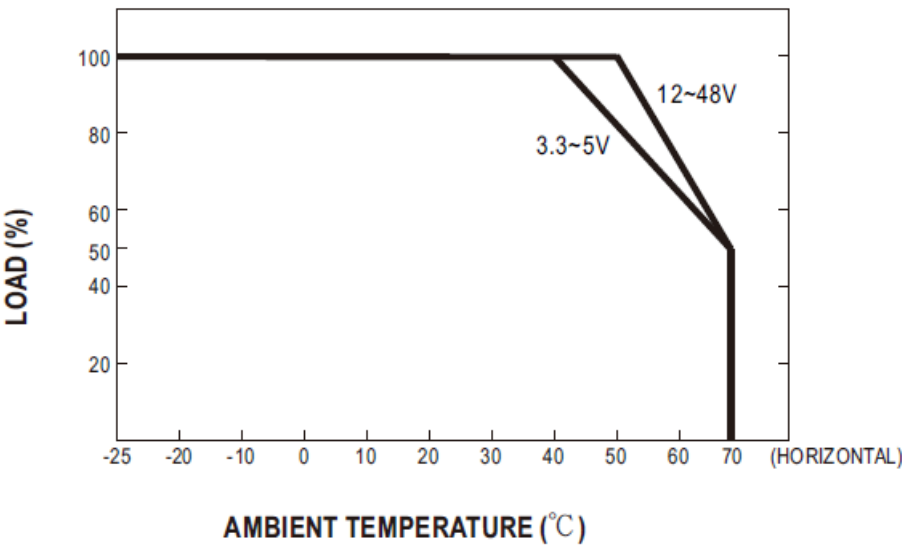
1. professional equipment with a total rated input power greater than 1000W;
2. symmetrically controlled heating elements with a rated power less than or equal to 200W

**Product Liability Disclaimer:** For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspXx>

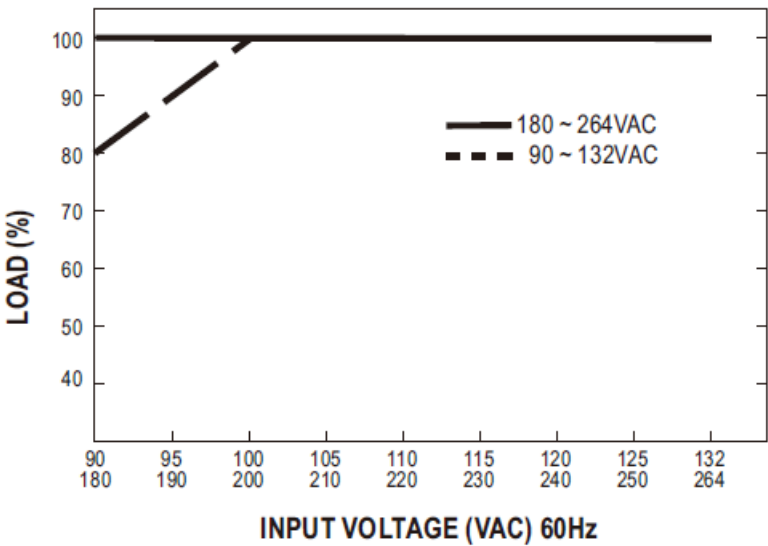
**Block Diagram**



**Derating Curve**



**Static Characteristics**



## Documents / Resources



[MEAN WELL LRS-200 Series 200W Single Output Switching Power Supply](#) [pdf] Owner's Manual  
LRS-200 Series, 200W Single Output Switching Power Supply, LRS-200 Series 200W Single Output Switching Power Supply, Single Output Switching Power Supply, Switching Power Supply, Power Supply

## References

- [MEAN WELL Installation Manual-MEAN WELL Switching Power Supply Manufacturer](#)