



### ■ Features

- Ultra slim design with 70mm(4SU) width
- Universal input 85~264VAC(277VAC available)
- No load power consumption<0.3W
- Isolation class II
- Pass LPS (Limited power source)
- DC output voltage adjustable
- Protections : Short circuit / Overload / Over voltage
- Cooling by free air convection (working temperature:-30~+70°C)
- DIN rail TS-35/7.5 or 15 mountable
- LED indicator for power on
- 3 years warranty

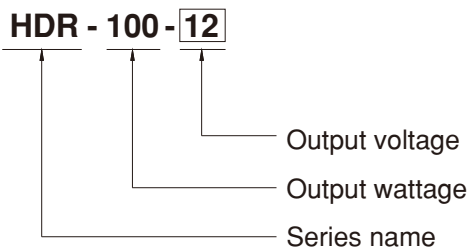
### ■ Applications

- Household control system
- Building automation
- Industrial control system
- Factory automation
- Electro-mechanical apparatus

### ■ Description

HDR-100 is one economical ultra slim 92W DIN rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 70mm(4SU) in width, which allows space saving inside the cabinets. The entire series adopts the full range AC input from 85VAC to 264VAC(277VAC also available) and conforms to EN61000-3-2, the norm the European Union regulates for harmonic current. HDR-100 is designed with plastic housing that it can effectively prevent user from electric hazards. With working efficiency up to 91%, the entire series can operate at the ambient temperature between -30°C and 70°C under air convection. It is equipped with constant current mode for over-load protection, fitting various inductive or capacitive applications. The complete protection functions and relevant certificates for home automations and industrial control apparatus (IEC60950-1,UL508, UL60950-1, EN61558-2-16) make HDR-100 a very competitive power supply solution for household and industrial applications.

### ■ Model Encoding

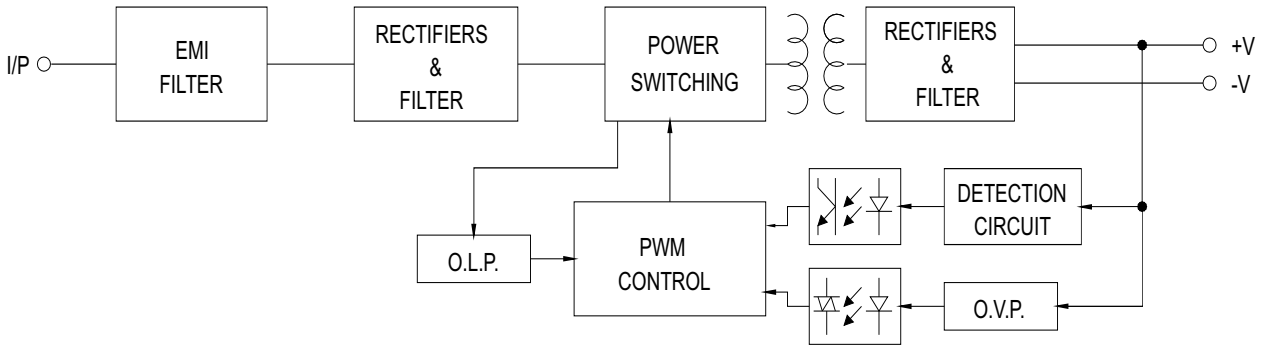




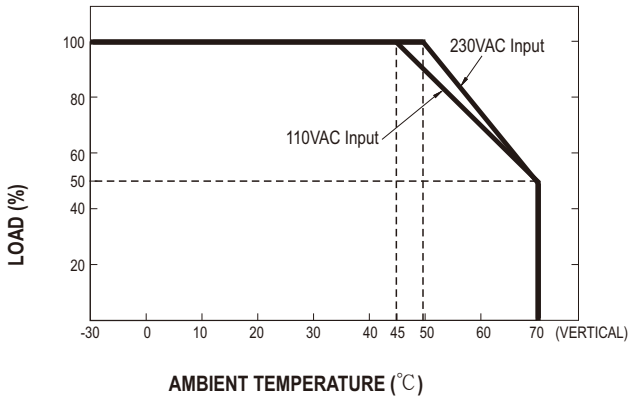
**SPECIFICATION**

MODEL		HDR-100-12	HDR-100-15	HDR-100-24	HDR-100-48	
OUTPUT	DC VOLTAGE	12V	15V	24V	48V	
	RATED CURRENT	7.5A	6.13A	3.83A	1.92A	
	CURRENT RANGE	0 ~ 7.31A	0 ~ 6.13A	0 ~ 3.83A	0 ~ 1.92A	
	RATED POWER	87.6W	92W	92W	92.2W	
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	10.8 ~ 13.8V	13.5 ~ 18V	21.6 ~ 29V	43.2 ~ 55.2V	
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 1.0%	± 1.0%	± 1.0%	
	LINE REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	SETUP, RISE TIME	500ms, 50ms/230VAC      500ms, 50ms/115VAC at full load				
HOLD UP TIME (Typ.)	30ms/230VAC      12ms/115VAC at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC (277VAC available)		120 ~ 370VDC (390VDC available)		
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	88%	89%	90%	91%	
	AC CURRENT (Typ.)	3A/115VAC      1.6A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC		50A/230VAC		
PROTECTION	OVERLOAD Note.4	102 ~ 110% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed				
	OVER VOLTAGE	14.2 ~ 16.2V	18.8 ~ 22.5V	30 ~ 36V	56.5 ~ 64.8V	
		Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing				
	TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 50°C) RH non-condensing				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6				
	OPERATING ALTITUDE	2000 meters				
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, UL508, TUV EN61558-2-16, IEC60950-1 approved; Design refer to EN50178, TUV EN60950-1				
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	EMC EMISSION	Parameter	Standard		Test Level / Note	
		Conducted	EN55022(CISPR22), EN55032(CISPR32)		Class B	
		Radiated	EN55022(CISPR22), EN55032(CISPR32)		Class B	
		Harmonic Current	EN61000-3-2		Class A	
		Voltage Flicker	EN61000-3-3		-----	
	EMC IMMUNITY	EN55024, EN55035, EN61000-6-2, EN61204-3				
		Parameter	Standard		Test Level / Note	
		ESD	EN61000-4-2		Level 3, 8KV air; Level 2, 4KV contact, criteria A	
		Radiated Susceptibility	EN61000-4-3		Level 3, criteria A	
		EFT/Burest	EN61000-4-4		Level 3, criteria A	
		Surge	EN61000-4-5		Level 4, 2KV/L-N, criteria A	
Conducted		EN61000-4-6		Level 3, criteria A		
Magnetic Field		EN61000-4-8		Level 4, criteria A		
Voltage Dips and interruptions		EN61000-4-11		>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
OTHERS	MTBF	K hrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	70*90*54.5mm (W*H*D)				
	PACKING	g				
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Constant current limiting operation within 50% ~ 100% rated output voltage; protection type for short circuit is hiccup mode, it will recover automatically after fault condition is removed.</p> <p>5. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p>					

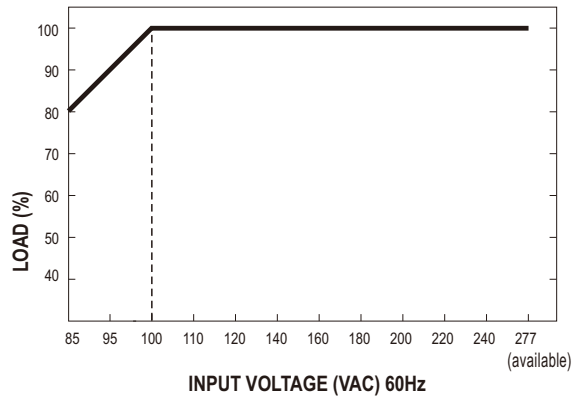
■ Block Diagram



■ Derating Curve VS Ambient Temperature

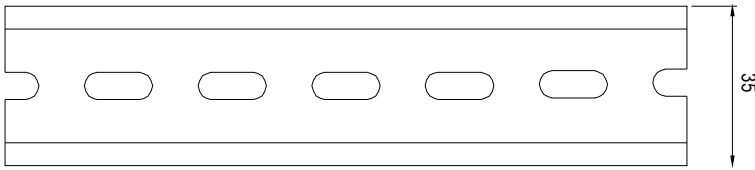
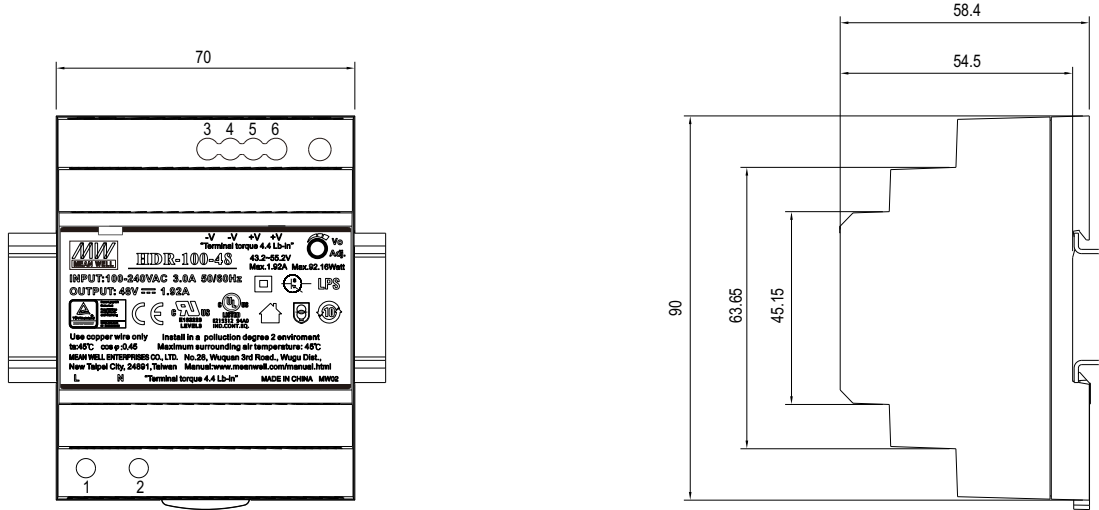


■ Output Derating VS Input Voltage



■ **Mechanical Specification**

(Unit: mm , tolerance  $\pm 0.5\text{mm}$ )



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	3,4	-V
2	AC/N	5,6	+V

■ **Installation Manual**

Please refer to : <http://www.meanwell.com/manual.html>