





























Features

- · Ultra slim design with 70mm(4SU) width
- Universal input 85~264VAC(277VAC operational)
- No load power consumption<0.3W
- Isolation class II
- · Pass LPS (Limited power source) for Blank type
- · 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
- Over voltage category III
- · LED indicator for power on
- · 3 years warranty

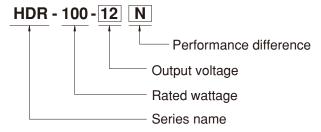
Applications

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

Description

HDR-100 is one economical ultra slim 100W 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 operational) 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 90%, 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



Туре	Description	Note
Blank	92W max, Pass LPS with a narrower output adjustable range	In stock
N	100W max, Non-LPS with a wider output adjustable range	In stock

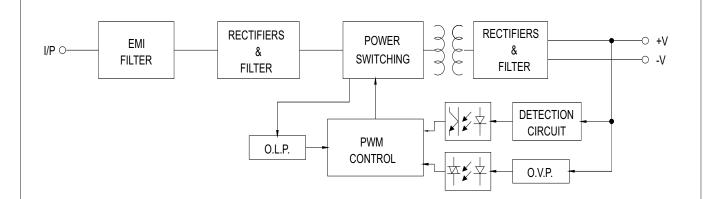


SPECIFICATION

MODEL		HDR-100-12	HDR-100-12N	HDR-100-15	HDR-100-15N	HDR-100-24	HDR-100-24N	HDR-100-48	HDR-100-48N	
	DC VOLTAGE	12V	1	15V		24V		48V		
	RATED CURRENT	7.1A	7.5A	6.13A	6.5A	3.83A	4.2A	1.92A	2.1A	
	CURRENT RANGE	0 ~ 7.1A	0 ~ 7.5A	0 ~ 6.13A	0 ~ 6.5A	0 ~ 3.83A	0 ~ 4.2A	0 ~1.92A	0 ~ 2.1A	
	RATED POWER	85.2W	90W	92W	97.5W	92W	100.8W	92.2W	100.8W	
	RIPPLE & NOISE (max.) Note.2				31.300	-	100.000			
OUTPUT	, ,	120mVp-p 12 ~ 13V		120mVp-p		<u> </u>		240mVp-p		
OUIFUI	VOLTAGE ADJ. Pass LPS RANGE Non LPS	12~ 13.8V		15 ~ 17V		24 ~ 25.5V 21.6 ~ 29V		48 ~ 48.7V		
	Non Er o	1.2.21		13.5 ~ 18V		±1.0%		43.2 ~ 55.2V ±1.0%		
	VOLTAGE TOLERANCE Note.3	±1.0%		±1.0% ±1.0%		±1.0%		±1.0%		
	LINE REGULATION			±1.0%		±1.0%		±1.0%		
	LOAD REGULATION	±1.0%		***		⊥ 1.0%		⊥ 1.0 /0		
	SETUP, RISE TIME			ns, 60ms/115VAC at full load						
	HOLD UP TIME (Typ.)	30ms/230VAC 12ms/115VAC at full load								
	VOLTAGE RANGE	85 ~ 264VAC (277VAC operational) 120 ~ 370VDC (390VDC operational)								
	FREQUENCY RANGE	47 ~ 63Hz		ı		I		ı		
INPUT	EFFICIENCY (Typ.)	88%	88% 89% 90%		90%	90%				
	AC CURRENT (Typ.)	3A/115VAC	1.6A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START	35A/115VAC	70A/230VAC						
	OVERLOAD Note 4		~ 110% rated out							
PROTECTION	OVERLOAD Note.4	Protection type	: Constant curren	t limiting, recove	rs automatically af	ter fault condition	n is removed			
ROIECHUN	OVED VOLTACE	14.2 ~ 16.2V		18.8 ~ 22.5V		30 ~ 36V		56.5 ~ 64.8V		
	OVER VOLTAGE	Protection type	: Shut down o/p v	oltage, re-power	on to recover					
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH n	on-condensing							
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	$\pm 0.03\%$ °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								
	OVER VOLTAGE CATEGORY	III ; According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters								
	SAFETY STANDARDS	UL60950-1, UL508, TUV EN61558-2-16, IEC60950-1, EAC TP TC 004, BSMI CNS14336-1 approved; Design refer to TUV EN60950-1								
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC		70 2 10, 120000	., _,	.,		, 2 co.g roio. to		
	ISOLATION RESISTANCE		Ohms / 500VDC / 2	25°C / 70% RH						
	TOOL WIGHT NEEDS IN WIND	Parameter	5111107 000 4 150 7 2	Standard			Test Level / Note			
		Conducted			PISDR32\ CNS13	2/38	Class B			
	EMC EMISSION			//						
	EINIC EINISSION	Radiated	ant (Note 5)	,	, ,,		Class B			
SAFETY &		Harmonic Curr		EN61000-3-2 Class A		Class A				
EMC		Voltage Flicker EN61000-3-3								
(Note 6)		EN55024, EN61000-6-2, EN61204-3								
		Parameter		Standard Test Level //						
		ESD		EN61000-4		Level 3, 8KV air; Level 2, 4KV			ontact, criteria	
		Radiated Susc	eptibility	EN61000-4						
	EMC IMMUNITY	EFT/Burest		EN61000-4	EN61000-4-4 Level 3, criteria A		ı A			
		Surge		EN61000-4	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 a	nd interruptions	EN61000-4	l-11		>95% dip 0. 5 periods, 30% dip 25 period >95% interruptions 250 periods			
OTHERS	MTBF	856.5K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	70*90*54.5mm (W*H*D)								
	PACKING	0.27Kg; 48pcs/14Kg/1.10CUFT								
NOTE	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ f & 47 μ f parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. Constant current limiting operation within 50% ~100% rated output voltage; protection type for short ciruit is hiccup mode,it will recover automatically after fault condition is removed. Harmonic current test at 90% load for HDR-100-xxN. 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 http://www.meanwell.com) 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)									

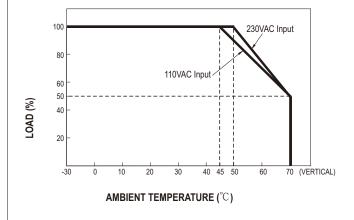


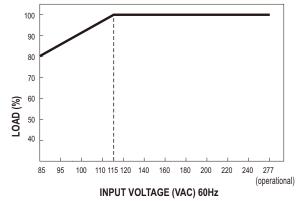
■ Block Diagram



■ Derating Curve VS Ambient Temperature

■ Output Derating VS Input Voltage

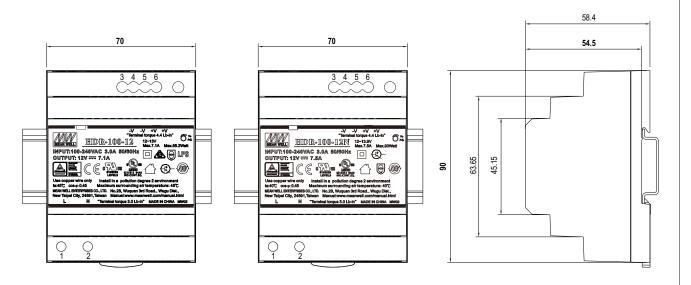


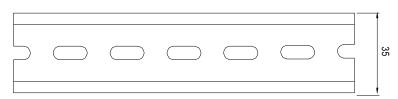




■ Mechanical Specification

(Unit: mm , tolerance ± 0.5mm)





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