





























Features

- · Ultra slim design with 105mm(6SU) width
- Universal input 85~264VAC(277VAC operational)
- No load power consumption<0.3W
- Isolation class ${
 m II}$
- DC output voltage adjustable
- · Protections : Short circuit / Overload / Over voltage
- · Cooling by free air convection
- 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

■ GTIN CODE

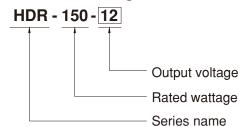
MW Search: https://www.meanwell.com/serviceGTIN.aspx

Description

HDR-150 is an economical ultra slim 150W DIN rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 105mm(6SU) 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 BS EN/EN61000-3-2, the norm the European Union regulates for harmonic current.

HDR-150 is designed with plastic housing that it can effectively prevent user from electric hazards. With working efficiency up to 90.5%, the entire series can operate at the ambient temperature between -30°C and 70°C under air convection. The complete protection functions and relevant certificates for home automations and industrial control apparatus (IEC62368-1,UL62368-1,UL61010, BS EN/EN61558-2-16) make HDR-150 a very competitive power supply solution for household and industrial applications.

■ Model Encoding





SPECIFICATION

MODEL		HDR-150-12	HDR-150-15	HDR-150-24		HDR-150-48	
	DC VOLTAGE		12V	15V	24V		48V
ОИТРИТ		115VAC	10.2A	8.55A	5.31A		2.72A
	RATED CURRENT	230VAC	11.3A	9.5A	6.25A		3.2A
		115VAC	122.4W	128.3W	127.4W		130.6W
	RATED POWER	230VAC	135.6W	142.5W	150W		153.6W
	RIPPLE & NOISE (max.) Note.2		100mVp-p	120mVp-p	150mVp-p		200mVp-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, 60ms/230VAC 500ms, 60ms/115VAC at full load				
	HOLD UP TIME (Typ.)		30ms/230VAC 12ms/115VAC at full load				
INPUT	VOLTAGE RANGE		85 ~ 264VAC (277VAC operational) 120 ~ 370VDC (390VDC operational)				
	FREQUENCY RANGE		47 ~ 63Hz				
	EFFICIENCY (Typ.)		89%	89.5%	90.5%		90.5%
	AC CURRENT (Typ.)		3A/115VAC 1.6A/230	/AC	,		
	INRUSH CURRENT (Typ.)		COLD START 35A/115VAC 70A/230VAC				
PROTECTION	OVERLOAD		105 ~ 135% rated output power				
			Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed				
			Constant current limiting within 50% ~100% rated output voltage, 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				
	WORKING TEMP.		-30 ~ +70°C (Refer to "Derating Curve")				
ENVIRONMENT	WORKING HUMIDITY		20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY		-40 ~ +85°C, 10 ~ 95% RH non-condensing				
	TEMP. COEFFICIENT		$\pm 0.03\%^{\circ}$ C (0 ~ 45°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 (Note 4)				
	OVER VOLTAGE CATEGORY						
	SAFETY STANDARDS		IEC62368-1, UL62368-1, UL61010, TUV BS EN/EN61558-2-16, BS EN/EN61558-1, EAC TP TC 004 approved; Design refer to BS EN/EN50178, TUV BS EN/EN62368-1				
	WITHSTAND VOLTAGE		I/P-O/P:4KVAC				
	ISOLATION RESISTANCE		I/P_O/P·100M Ohms / 500V				
			1/1 -O/1 . 1001VI OIII113 / 300 V	DC / 25°C / 70% RH			
		ANCE	Parameter	DC / 25°C / 70% RH Standard		Test Level / Note	9
		ANCE			SPR32)	Test Level / Note	9
	EMC EMISSION	ANCE	Parameter	Standard	,		
	EMC EMISSION	ANCE	Parameter Conducted	Standard BS EN/EN55032(CIII BS EN/EN55032(CIIII	SPR32)	Class B	
SAFETY &	EMC EMISSION	ANCE	Parameter Conducted Radiated Harmonic Current (Note 6	Standard BS EN/EN55032(CIII BS EN/EN55032(CIIII	SPR32) 2	Class B (note 5)	
EMC	EMC EMISSION	ANCE	Parameter Conducted Radiated	Standard BS EN/EN55032(CIST) BS EN/EN61000-3-2 BS EN/EN61000-3-3-3	SPR32) 2	Class B Class B (note 5) Class A	
EMC	EMC EMISSION	ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker	Standard BS EN/EN55032(CIST) BS EN/EN61000-3-2 BS EN/EN61000-3-3-3	SPR32) 2	Class B Class B (note 5) Class A	
EMC	EMC EMISSION	ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E	Standard BS EN/EN55032(CI) BS EN/EN55032(CI) BS EN/EN61000-3-3 BS EN/EN61000-3-3 N61000-6-2 Standard	SPR32) 2 3	Class B Class B (note 5) Class A Test Level /Note	9
EMC	EMC EMISSION	ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD	Standard BS EN/EN55032(CIST) BS EN/EN61000-3-3 BS EN/EN61000-3-3 N61000-6-2	SPR32) 2 3	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air	e ; Level 2, 4KV contact, criteria
EMC		ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter	Standard BS EN/EN55032(CIST) BS EN/EN61000-3-2 BS EN/EN61000-3-3 N61000-6-2 Standard BS EN/EN61000-4-2	SPR32) 2 3 3	Class B Class B (note 5) Class A Test Level /Note	e ; Level 2, 4KV contact, criteria A
EMC	EMC EMISSION	ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD Radiated Susceptibility EFT/Burest	Standard BS EN/EN55032(CIST) BS EN/EN65032(CIST) BS EN/EN61000-3-3 BS EN/EN61000-3-3 N61000-6-2 Standard BS EN/EN61000-4-3 BS EN/EN61000-4-3 BS EN/EN61000-4-3 BS EN/EN61000-4-4	SPR32) 2 3 3 2 3 4	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air Level 3, criteria Level 3, criteria	e ; Level 2, 4KV contact, criteria A
EMC		ANUE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD Radiated Susceptibility	Standard BS EN/EN55032(CIS BS EN/EN61000-3-2 BS EN/EN61000-3-2 BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-3 BS EN/EN61000-4-3 BS EN/EN61000-4-3 BS EN/EN61000-4-3 BS EN/EN61000-4-3	SPR32) 2 3 4 5	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air Level 3, criteria	e ; Level 2, 4KV contact, criteria A A J, criteria A
SAFETY & EMC (Note.7)		ANUE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD Radiated Susceptibility EFT/Burest Surge Conducted	Standard BS EN/EN55032(CI) BS EN/EN55032(CI) BS EN/EN61000-3-3 BS EN/EN61000-3-3 N61000-6-2 Standard BS EN/EN61000-4-3 BS EN/EN61000-4-4	SPR32) 2 3 4 5 6	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air Level 3, criteria Level 4,2KV/L-N Level 3, criteria	e ; Level 2, 4KV contact, criteria A A N, criteria A
EMC		ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD Radiated Susceptibility EFT/Burest Surge	Standard BS EN/EN55032(CIS BS EN/EN55032(CIS BS EN/EN61000-3-2 BS EN/EN61000-3-2 N61000-6-2 Standard BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-3	SPR32) 2 3 3 4 5 6 8 8	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air Level 3, criteria Level 4,2KV/L-N Level 3, criteria Level 4, criteria Level 4, criteria >95% dip 0. 5	e; Level 2, 4KV contact, criteria A A N, criteria A A A periods, 30% dip 25 periods,
EMC		ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD Radiated Susceptibility EFT/Burest Surge Conducted Magnetic Field Voltage Dips and interrupt	Standard BS EN/EN55032(CIS BS EN/EN55032(CIS BS EN/EN61000-3-2 BS EN/EN61000-3-2 N61000-6-2 Standard BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-4 BS EN/EN61000-4-4 BS EN/EN61000-4-6 BS EN/EN61000-4-6	SPR32) 2 3 4 5 6 3 111	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air Level 3, criteria Level 4, 2KV/L-N Level 3, criteria Level 4, criteria Level 4, criteria >95% dip 0. 5 >95% interrup	e ; Level 2, 4KV contact, criteria A A N, criteria A A A periods, 30% dip 25 periods, tions 250 periods
EMC	EMC IMMUNITY	ANCE	Parameter Conducted Radiated Harmonic Current (Note 6 Voltage Flicker BS EN/EN55024, BS EN/E Parameter ESD Radiated Susceptibility EFT/Burest Surge Conducted Magnetic Field Voltage Dips and interrupt	Standard BS EN/EN55032(CIS BS EN/EN55032(CIS BS EN/EN61000-3-2 BS EN/EN61000-3-2 N61000-6-2 Standard BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-2 BS EN/EN61000-4-3	SPR32) 2 3 4 5 6 3 111	Class B Class B (note 5) Class A Test Level /Note Level 3, 8KV air Level 3, criteria Level 4,2KV/L-N Level 3, criteria Level 4, criteria Level 4, criteria >95% dip 0. 5	e ; Level 2, 4KV contact, criteria A A N, criteria A A A periods, 30% dip 25 periods, tions 250 periods

- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 \(\mu f \) & 47 \(\mu f \) parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. 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).

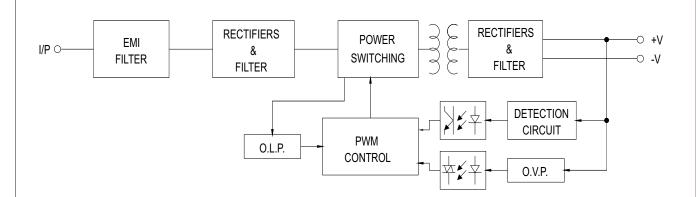
 5. When the input voltage is 230VAC, delivers EMI Class B for radiated emission for the power supply; When the input voltage is 110VAC, delivers EMI Class A for radiated emission for the power supply.
- 6. Harmonic current test at 70% load .

NOTE

- 7. 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."
- X Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

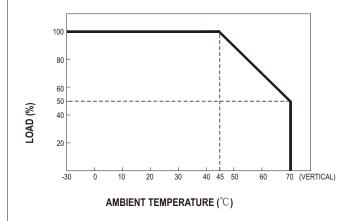


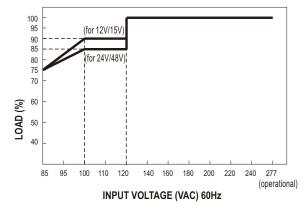
■ Block Diagram



■ Derating Curve VS Ambient Temperature

■ Output Derating VS Input Voltage

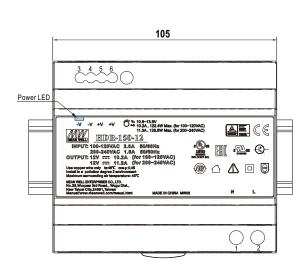


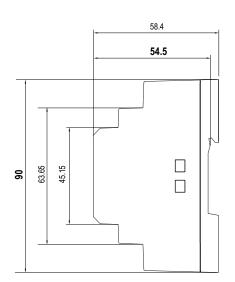


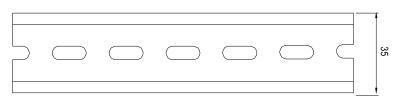


■ Mechanical Specification

(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/N	3,4	-V
2	AC/L	5,6	+V

■ Installation Manual

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