Product Specification

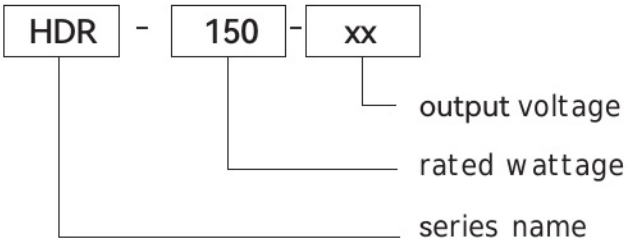
HDR-150

- Product category: 150W single-output Din rail switching power supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025

Product Overview

The HDR-150-XX series is a 150W self-cooling rail-mounted industrial power supply. The entire series features wide-voltage AC/DC input and output voltages including 12V, 15V, 24V, 36V, and 48V, which can be adapted to different load application requirements to meet the majority of industrial application needs. It boasts high conversion efficiency, a compact housing design, excellent heat dissipation, and comprehensive protection, ensuring the high reliability and stability of this series of products.

Product Naming



Product features

- Ultra-thin design: Width 105mm (6SU)
- International full-range A C input
- Install guide rails: TS35/7.5 or 15
- Protection types: Short circuit / Overload / Overvoltage
- Cooling by free air convection
- LED indicator for power on
- 100% full-load burn-in test
- Three-year warranty

CE FC RoHS ISO ISO9001

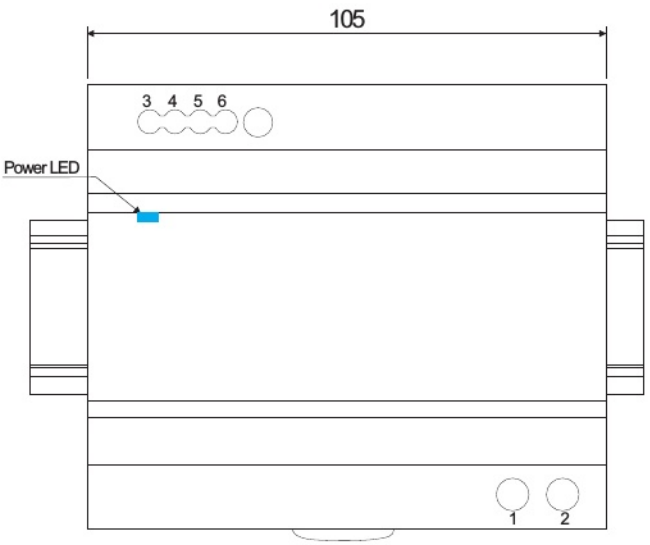
Application fields

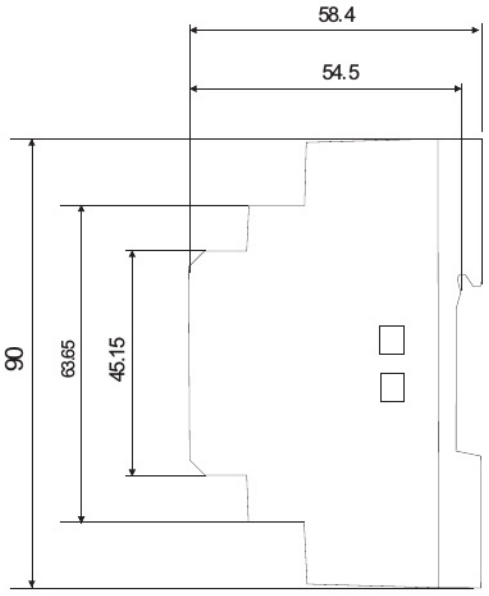
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)

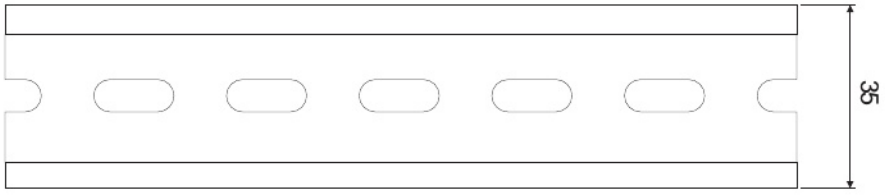
Electrical Specifications

	Model number	HDR-150-12	HDR-150-15	HDR-150-24	HDR-150-36	HDR-150-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current 115VAC	10A	8A	5.31A	3.5A	2.72A
	Rated current 230VAC	11.3A	9.5 A	6.25 A	4.2A	3.2A
	Current range 115VAC	0~10A	0~8A	0 to 5.31 A	0 to 3.5 A	0 to 2.72 A
	Current range 230VAC	0 to 11.3 A	0 to 9.5 A	0 to 6.25 A	0 to 4.2 A	0 to 3.2 A
	Rated power 115VAC	120W	120W	127.4 W	126W	130.6 W
	Rated power 230VAC	135.6W	142.5 W	150W	151.2W	153.6W
	Ripple & Noise (Max)	100mVp-p	100mVp-p	120mVp-p	150mVp-p	150mVp-p
	Voltage adj .range	10.2 to 13.8 volts	13.5 to 16.5 volts	21.6 to 26.4 volts	32.4 to 39.6 volts	43.2 to 52.8 volts
	Voltage accuracy	±1%	±1%	±1%	±1%	±1%
	Linear regulation rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Startup & Rise Time	500ms,60ms/230VAC	500 ms, 60 ms / 115 VAC (full load)			
	Retention time	16mS/230VAC	12 mS / 115 VAC (full load)			
Input	Input voltage	90~264VAC	127~370VDC			
	Input frequency	50~60HZ				
	efficiency	87%	88%	89%	89%	90%
	Input current	3A/115VAC	1.6A / 230VAC			
	Leakage current	< 1 mA / 240 VAC				
protection	Overload protection	120% to 150% of the rated power Protection mode: hiccup protection, which can automatically resume after the abnormal condition is removed.				
	Overvoltage protection	13.8 to 16.2 volts	18.7 to 21.7 volts	28.8 to 33.6 volts	41.4 to 48.6 volts	55.2 to 64.8 volts
		Protection mode: Turn off output voltage, restart to restore.				
Environmental working humidity	Working temperature	-20℃ to +65℃				
		20% to 90% RH No condensation				
	Storage temperature / humidity	-40 to +80℃, 10 to 95% RH, no condensation				
	Anti-vibration	10 - 500 Hz, 5G for 10 minutes per cycle, 60 minutes each for X, Y, and Z.				
Safety	Pressure resistance	Input to output: 1.5 kVAC				
	Insulation impedance	Input to output: 100 Ohms / 500 VDC / 25℃ / 70% RH				
Others	Product dimensions	105*90*54.5mm （W*H*D）				
	Packaging	0.3 k g / per piece				
Note		1.All parameters, unless otherwise specified, are measured values obtained under the conditions of 230VAC input voltage , rated load and 25℃. 2.The ripple and noise voltages were measured at the end of a 12-inch twisted pair with 0.1F and 47F capacitors attached, using a 20 MHz bandwidth oscilloscope. The measurements were taken at a 20 MHz bandwidth. Ripple and noise 3.Accuracy: It includes setting error, linearity adjustment rate and load adjustment rate. 4. Linear regulation measurement method: Test from low voltage to high voltage under rated load. 5.Load regulation measurement method: from 0% to 100% of rated load 6.The startup time is measured under cold start conditions. Frequent and rapid power on and off may increase the startup time. 7.When operating at an altitude above 2000 meters (6500 ft), the operating environment temperature needs to be reduced by 5°C for every 1000 meters.				

Mechanical Specification and installation size (mm)







Pin definitions of terminals

Pin number	Pin function	Pin number	Pin function
1	AC/N	3,4	-V
2	AC/L	5,6	+V

Pin	Function	
L	AC LINE	Screw: M2.5*8.5 Torque: 4Kgf·cm (0.4N·m)
N	AC NETURAL	
⏚	EARTH	
-Vo	DC output -	Screw: M2.5*8.5 Torque: 4Kgf·cm (0.4N·m)
-Vo	DC output -	
+Vo	DC output +	
+Vo	DC output +	

Guide rail type customer system installation hole

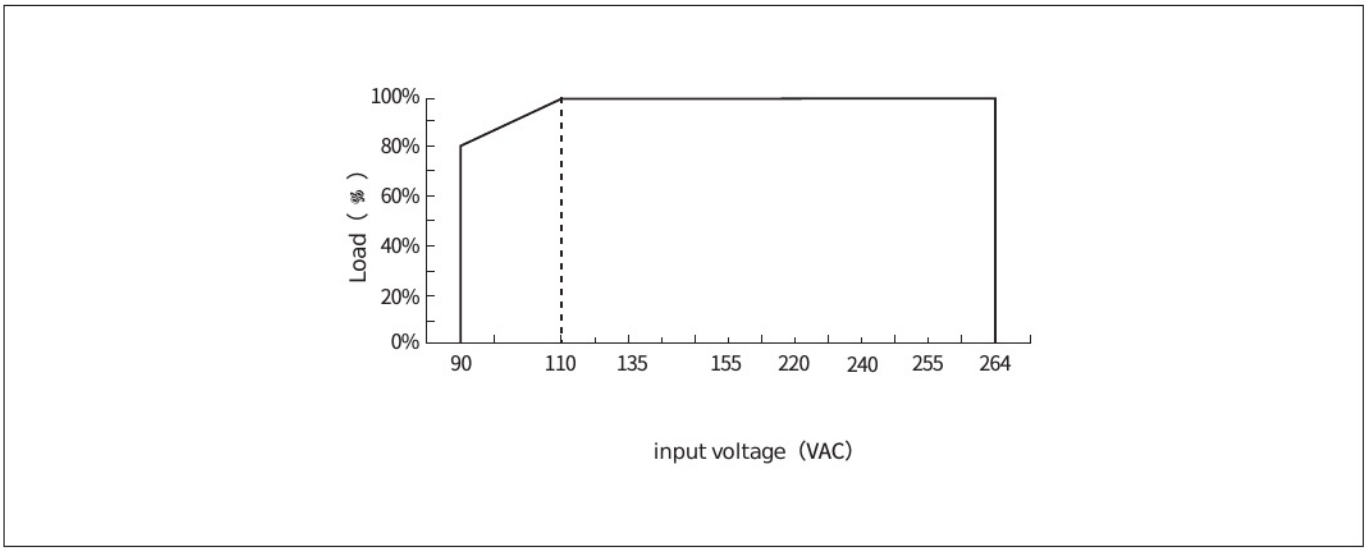
Guide rail installation: TS35/7.5 or TS35/15

Note:

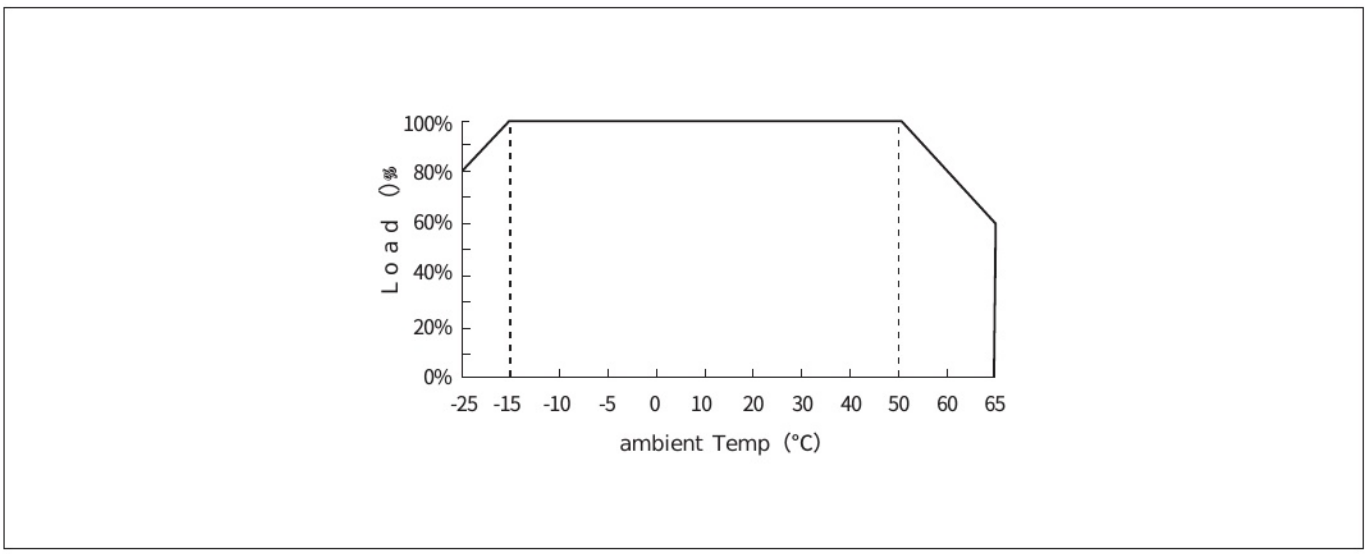
Unit: mm [inch]; Unmarked tolerance is ±0.5 [±0.020]

Characteristic curve

Input voltage VS Output load



Ambient Temperature vs Output Load



Note:

1.If you need to know more detailed test data when applying please contact our technical support to obtain the application notes for the corresponding product

.2. This product is suitable for use in a natural air convection environment. If it is to be used in a closed environment, please contact our technical support staff

.