



Zhitao Group
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Industrial DIN rail power supply
product specification

HDR-60

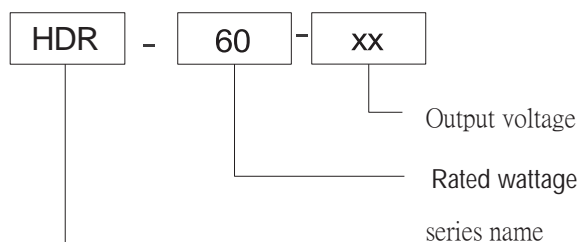
- Product Category: 60W Single Output Din Rail switching Power Supply
- Version No.: ZTAO3.0
- Release date: May 1st, 2025



Product Overview

HDR-60-XX series products for a 60W self-cooling rail industrial power supply, the whole series of products with a wide voltage AC and DC input, output voltage including 5V/12V/15V/24V/48V, etc., can be adapted to different Load application requirements to meet the needs of most industrial applications, with high conversion efficiency, compact housing design, good heat dissipation, as well as a full range of protection, to ensure the high reliability and stability of this series of products.

Model Encoding



Product Features

- Ultra-slim design: Width 52.5mm (3SU)
- International full range AC input
- Rail-mounted: TS35/7 or 15 with no-load power
- consumption <0.7W
- Protection type: short circuit / overload / overcurrent protection
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- 3-year warranty

Areas of Application

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



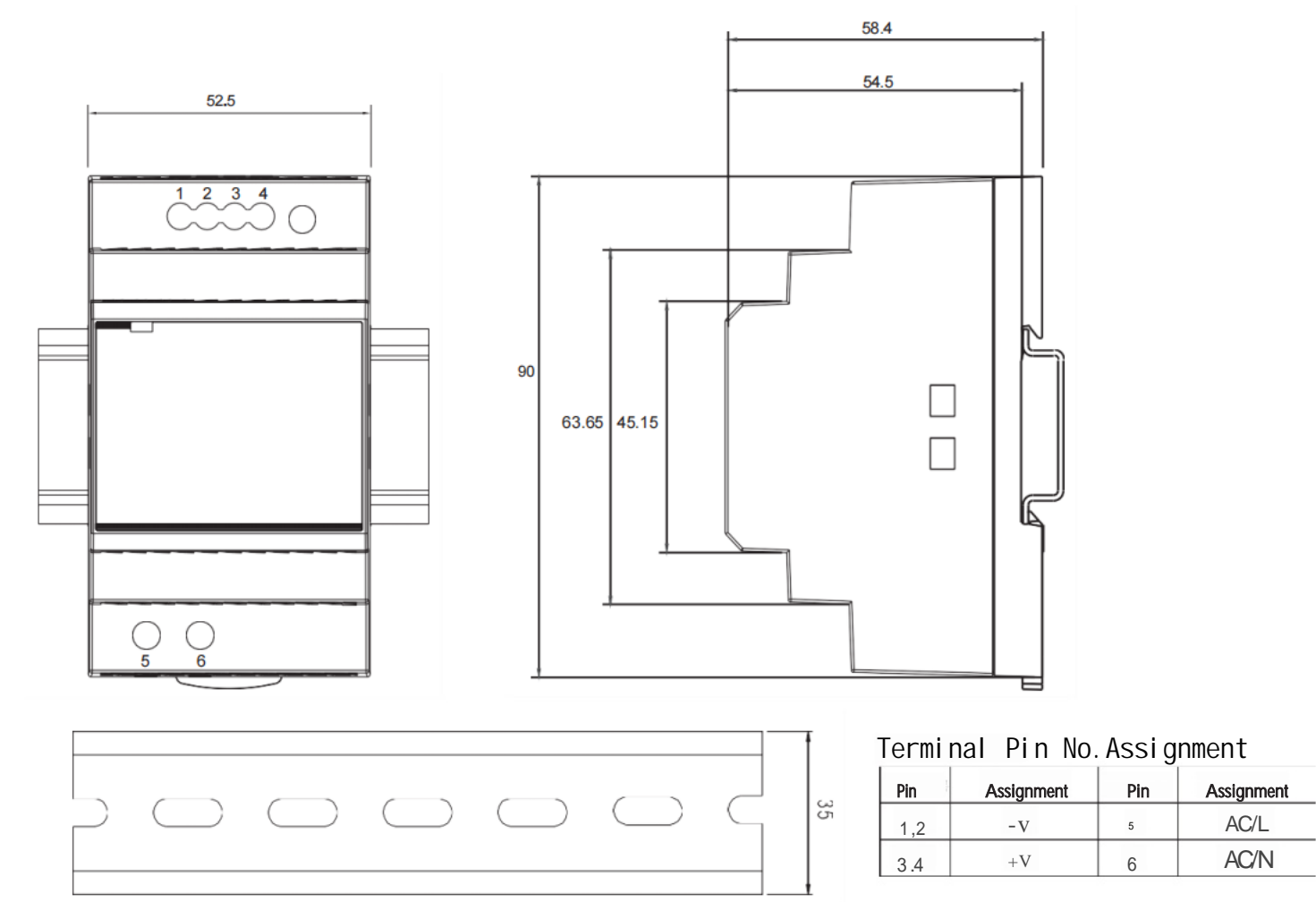
RoHS



Electrical Specifications

Model		HDR-60-5	HDR-60-12	HDR-60-15	HDR-60-24	HDR-60-36	HDR-60-48
Output	DC output voltage	5V	12V	15V	24V	36V	48V
	Rated current	6.5A	4.5A	4A	2.5A	1.7A	1.25A
	Current range	0~6.5A	0~4.5A	0~4A	0~2.5A	0~1.7A	0~1.25A
	Rated power	32.5W	54W	60W	60W	61.2W	60W
	Ripple & Noise (Max)	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p
	voltage adjustment range	4.5~5.5V	10.2~13.8V	13.5~16.5V	21.6~26.4V	32.4~39.6V	43.2~52.8V
	voltage accuracy	±1%	±1%	±1%	±1%	±1%	±1%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	start-up & rise time	500ms,50ms/230VAC 1000ms,50ms/115VAC(at full load)					
	Holding time	30mS/230VAC; 15mS/115VAC (at full load)					
Input	Input Voltage	88~264VAC 124~370VDC					
	Input frequency	50~60HZ					
	Efficiency	85%	88%	89%	90%	90%	91%
	Input current	1.2A/115VAC 0.8A/230VAC					
	Leakage current	< 1mA/240VAC					
Protection	overload protection	125~150% of rated power Protection mode: hiccup protection, automatic recovery after removal of abnormal conditions					
	Overvoltage protection	5.9~7.3V	13.8~16.2V	18.7~21.7V	28.8~33.6V	41.4~48.6V	55.2~64.8V
		Protect mode: shut down the output voltage, restart to recover					
Environment	Operating temperature	-20℃ ~+65℃					
	Operating humidity	20~90%RH No condensation					
	Storage temperature/humidity	-40~+80℃ 10~95%RH, no condensation					
	Vibration-resistant	10~500HZ, 5G 10 min/cycle, X, Y, Z 60 min each					
Security	pressure resistance	Input to Output :1.5KVAC					
	Insulation impedance	Input to Output :100 Ohms/500VDC/25℃ /70%RH					
Others	Product dimensions	52.5*90*54.5mm (W*H*D)					
	Packaging	0.08kg/pcs					
Remarks		<ol style="list-style-type: none"> All parameters are measured at 230VAC input, rated load and 25℃ when not otherwise specified. Ripple and noise voltages were measured on a 20MHz bandwidth oscilloscope with 0.1μ and 47μ capacitors at the end of a 12-inch twisted pair cable, measured at 20MHZ bandwidth. Accuracy: Includes setting error, linear adjustment ratio and load adjustment ratio. Linear Adjustment Ratio Measurement Method: Test from low voltage to high voltage at rated load Load Adjustment Ratio Measurement Method: From 0% to 100% of rated load Start-up time is measured at cold start, fast and frequent switching on and off may increase the start-up time. When operating at altitudes higher than 2000 metres (6500ft): the operating environment needs to be reduced by 5℃ / 1000 metres 					

Mechanical Specification and installation size (mm)



Pinout	Fmion	
L	AC LINE	screw :M2.5*8.5 Toque. 4Kgf.cm(0.4Nm)
N	AC NETURAL	
	EARTH	screw :M2.5*8.5 Torque: 4Kgf.cm(0.4N.m)
-V	DC output -	
-V	DC output -	
+V	DC output +	
+V	DC output +	

rail-guided customer system installation

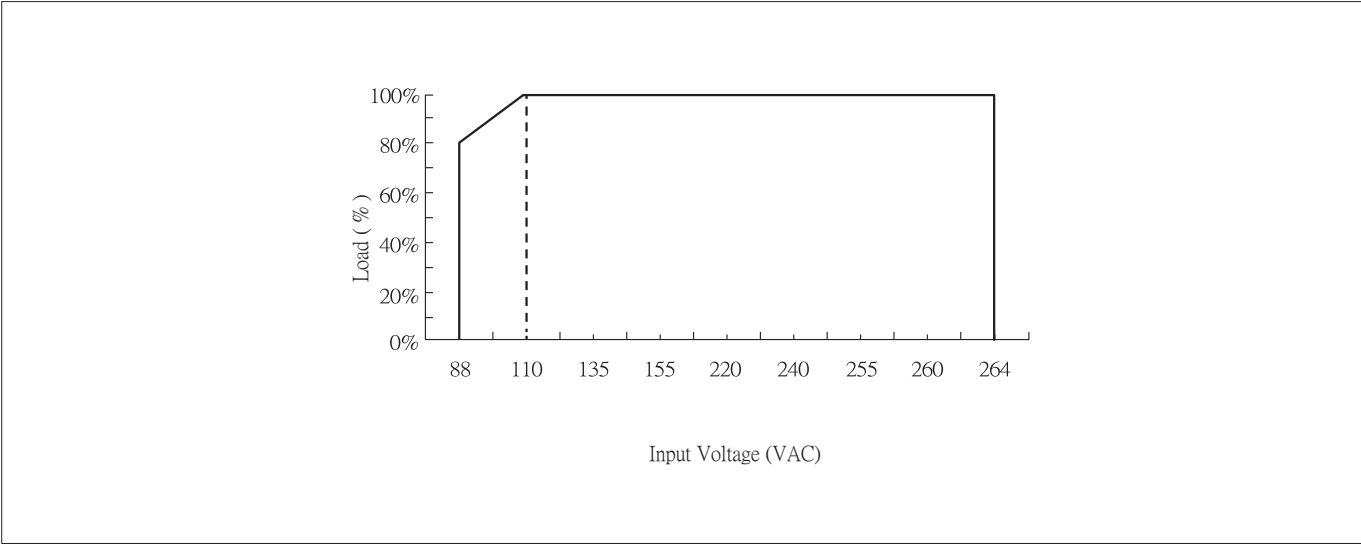
Rail mounting: TS35/7.5 or TS35/15

Remarks

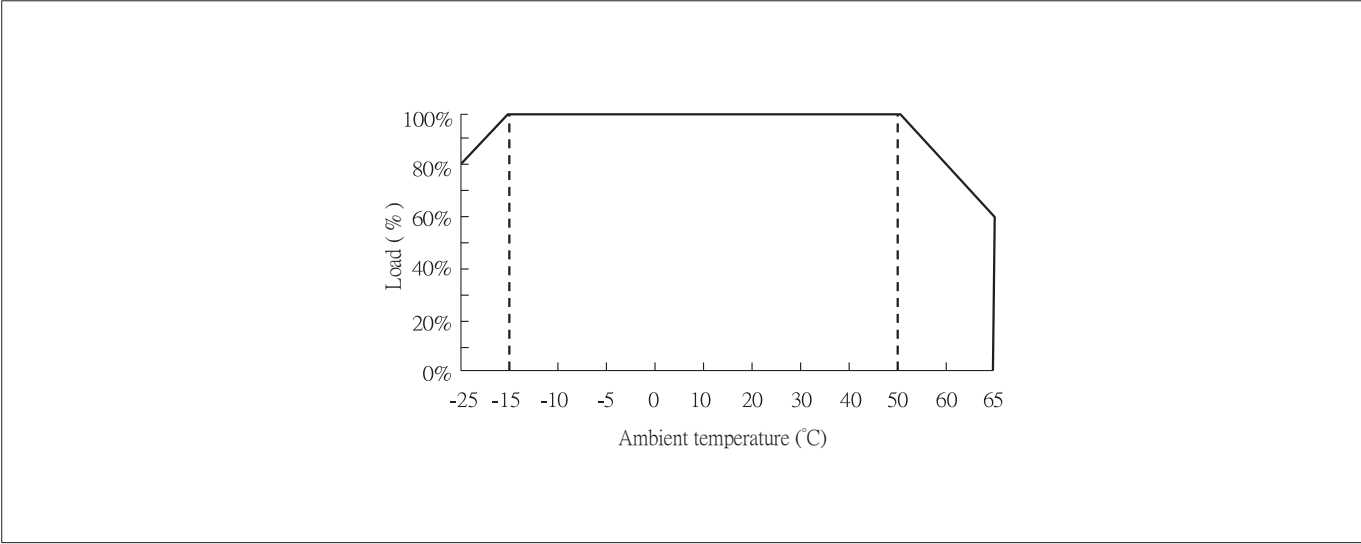
Unit: mm [inch]; unlabelled tolerances are ± 0.5 [± 0.020].

Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



- Note:
- 1.If you need more detailed test data, please contact our technical support to get the application notes of the corresponding products.
 - 2.This product is suitable for use in a natural air convection environment, if used in a closed environment, please contact our technical support staff.