



Product Specifications

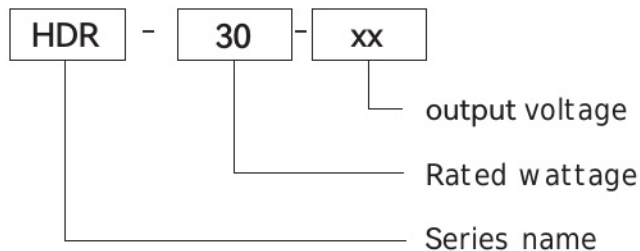
HDR-30

- Product category: 30W single-output rail-mounted switching power supply
- Version Number: ZTAO3.0
- Release Date: May 1, 2025

Product Overview

The HDR-30-XX series is a 30W self-cooling rail-mounted industrial power supply. The entire series features wide-voltage AC/DC input and output voltages including 5V, 12V, 15V, 24V, and 48V, which can be adapted to different load application requirements to meet the majority of industrial application needs. It has good conversion efficiency, a compact housing design, good heat dissipation, and comprehensive protection, ensuring the reliability and stability of this series of products.

Model Encoding



Product features

- Ultra-thin design: 35mm (2SU)
- International full-range A C input
- Guide rail installation: TS35/7.5 or T S 35/15
- No-load power consumption < 0.7W
- Protection types: Short circuit / Overload / Overcurrent, etc.
- Cooling by free air convection
- Power-on LED indicator light
- 100% full-load burn-in test
- Three-year warranty

Application fields

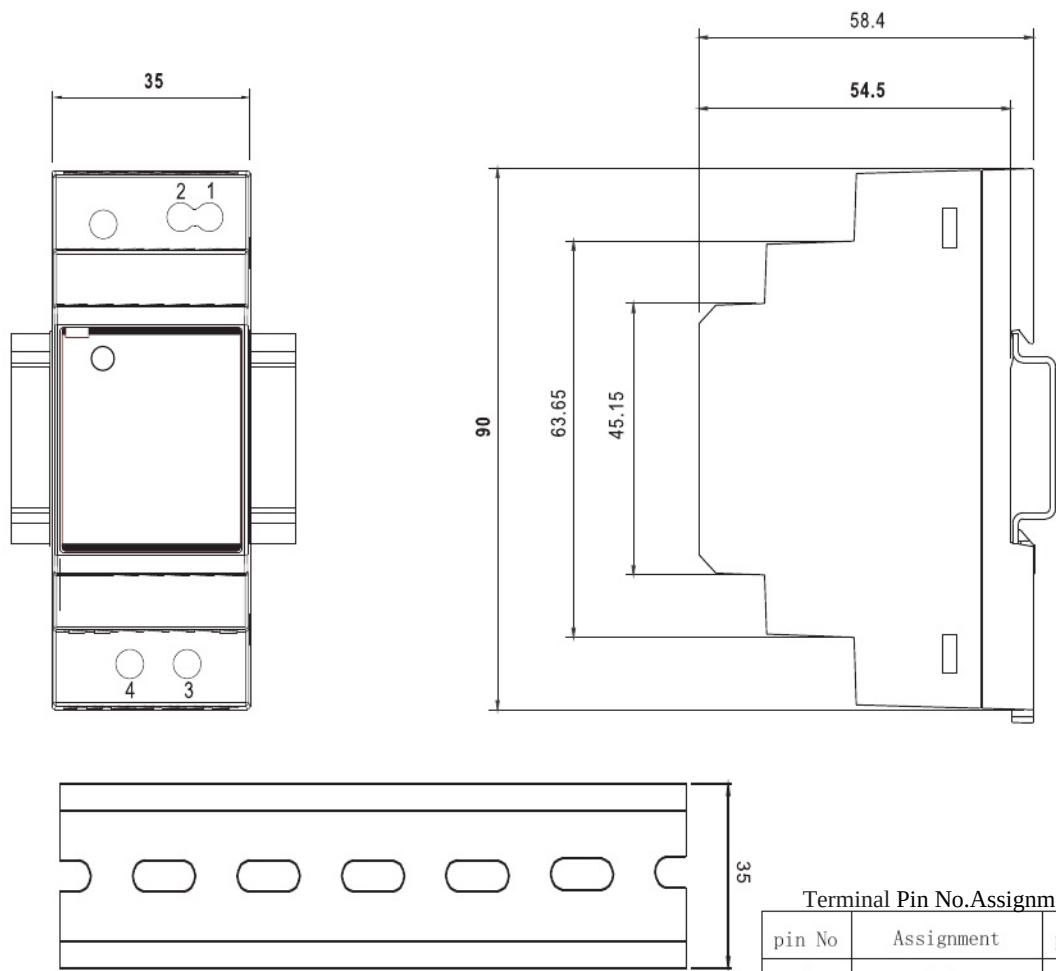
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)



Electrical Specifications

Model number		HDR-30-5	HDR-30-12	HDR-30-15	HDR-30-24	HDR-30-36	HDR-30-48
Output	DC output voltage	5V	12V	15V	24V	36V	48V
	Rated current	3A	2A	2A	1.5 A	1A	0~0.75A
	Current range	0~3A	0~2A	0~2A	0 ~ 1.5 A	0~1A	0 ~ 0.75 A
	Rated power	15W	24W	30W	36W	36W	36W
	Ripple & Noise (Max)	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p
	Voltage adj. range	4.5 to 5.5 volts	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%	±1%
	Linear regulation rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Startup & Rise Time	500ms,50ms/230VAC 500 ms, 50 ms / 115 VAC (under full load)					
	Duration of retention	30mS/230VAC; 15mS/115VAC (under full load)					
Input	Input voltage	88~264VAC 124~370VDC					
	Input frequency	50~60HZ					
	efficiency	80%	86%	86%	87.5%	88%	89%
	Input current	0.88A / 115VAC 0.48A / 230VAC					
	Leakage current	< 1 mA / 240 VAC					
protection	Overload protection	125% to 150% of the rated power Protection mode: hiccup protection, which can automatically resume after the abnormal condition is removed.					
	Overvoltage protection	5.9 to 7.3 volts	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 temperature	-20°C to +65°C					
	Environmental working humidity	No condensation at 20% to 90% RH					
	Storage temperature / humidity	-40 to +80°C, 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°C / 70% RH					
Others	Product dimensions	35*90*54.5mm (W*H*D)					
	Packaging	0.08 kilograms per piece					
Note		All parameters, unless otherwise specified, are measured values obtained under the conditions of 230VAC input voltage, rated load and 25°C. The ripple and noise voltages were measured at the end of a 12-inch twisted pair with 0.1μF and 47μF capacitors attached, using a 20 MHz bandwidth oscilloscope. The measurements were taken at a 20 MHz bandwidth. 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 The startup time is measured under cold start conditions. Frequent and rapid on/off cycles 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	Function	
L	AC LINE	Screw: M2.5*8.5 Torque: 4Kgf.cm (0.4N.m)
N	AC NETURAL	
⏏	EARTH	
-V	DC output -	Screw: M2.5*8.5 Torque: 4Kgf.cm (0.4N.m)
+V	DC output +	

Installation of rail-type customer system

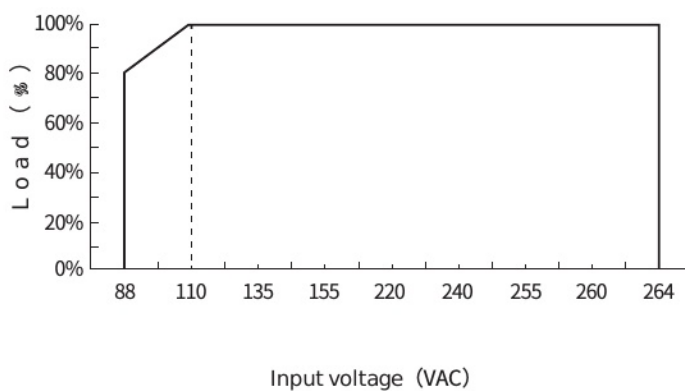
Guide rail installation: TS35/7.5 or TS35/15

Note:

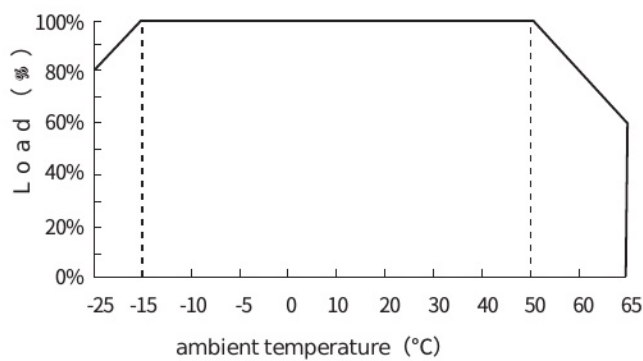
Unit: mm [inch]; Unmarked tolerance is ± 0.5 [± 0.020]

Characteristic curve

Input voltage VS output load



Ambient Temperature vs Output Load



Note:

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

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