

YSDN240-48005000

YSDN240-24010000

DIN rail industrial power supply

FEATURES:

- robust metal enclosure
- DC OK LED
- high energy efficiency
- low ripples and excellent voltage regulation
- wide temperature range
- double output connector

A series 48 V DIN rail power supplies in a robust metal housing with features such as DC voltage trimming with a potentiometer, and a DC OK LED signaling. These power supplies are designed for wide use in industrial automation and telecommunication systems. The series consists of single-phase power supplies with high efficiency and operating in a wide range of temperatures. The power supplies have a built-in a set of protection circuits against short circuit and overload. They provide high MTBF and a high degree of safety. They comply with international standards.

CE UK



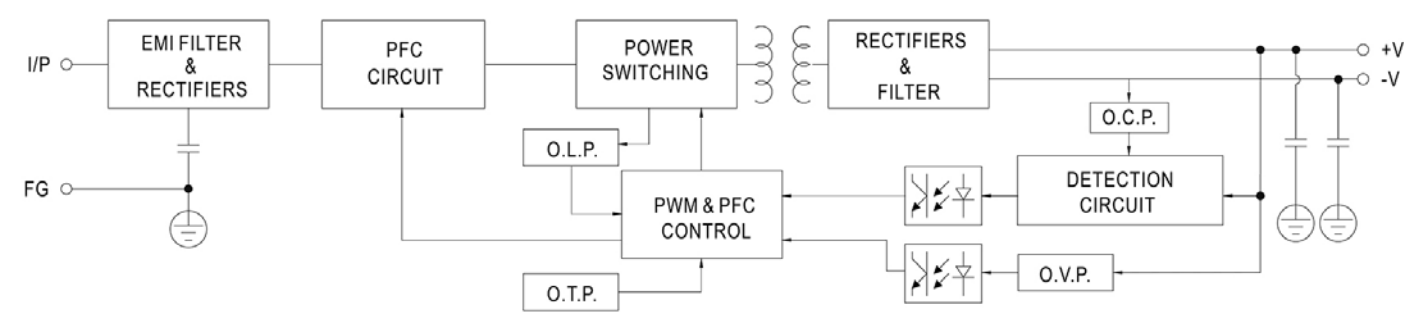
TECHNICAL SPECIFICATION

Group	Parameter	YSDN240-24010000	YSDN240-48005000	Notes
Input	Input voltage range	100-264VAC/120-370VDC		
	Mains frequency range	50/60Hz		
	AC current (max.)	2.8 A at 100 VAC		
	Inrush current (max.)	70 A		
	No load power consumption	4 W		
	Input leakage current (max.)	Max. 1 mA		At 240 VAC
	Power factor correction	0.97		Active PFC
Output	Rated output voltage	24 V (23-28 V)	48V (46-55 V)	
	Rated output power	240 W		
	Rated output current	10 A	5.0 A	
	Energy efficiency	88%	89%	
	DC "OK" LED	Yes		
	DC "OK" output signal	No		
	Line regulation	±1%		
	Load regulation	±1%		
	Ripple and noise	120 mVp-p	150 mVp-p	
	Minimal load	0 A		
	Hold up time (max.)	Over 20 ms		At 100 VAC and full load
	DC voltage rise time (max.)	Up to 50 ms		At 100 VAC and full load
	Turn on delay time (max.)	Up to 1 s		At 100 VAC and full load
Environmental	Working temperature	-20 to +70°C		See deration curve
	Working humidity	20% to 85% RH		Non-condensing
	Storage temperature	-40°C to +85°C		
	Cooling method	Free air circulation		
	MTBF	200,000 h		25°C
Protection safety and EMC	Short circuit	Yes		
	Over temperature	Yes		
	Over current	120-140% of rated lout		
	Automatic recovery on fault remove	Protection type: Hiccup Mode – recovers automatically after fault condition is removed		
	Output overvoltage	At 29-33 V	At 56-65 V	
	Withstand isolation voltage	3 kVAC (I-O), 2 kVAC (I/O-FG)		5 mA, 1 min
	Isolation resistance (min)	100 MΩ		500 VDC
	Insulation class	1		
	Safety compliance	EN62368-1		
	EMC compliance	EN55032, EN61000- 3-2, -3, EN61000-4-2, 3,4,5,6,8,11, EN61000-6-2 EN55024, EN61204-3		
Mechanical and features	Marking	RoHS, CE, UKCA		
	Enclosure	Metal housing, DIN TS35 mount		
	Dimension	63 × 125 × 113 mm		L × W × H
	Weight	880 g		
	Output connector	Terminal block, double connector		
	Input connector	Terminal block		
	Single package	155 × 100 × 155 mm		
	Packing	525 × 330 × 175 mm		10 items
	Manufacturing	China		
	Warranty	3 years		

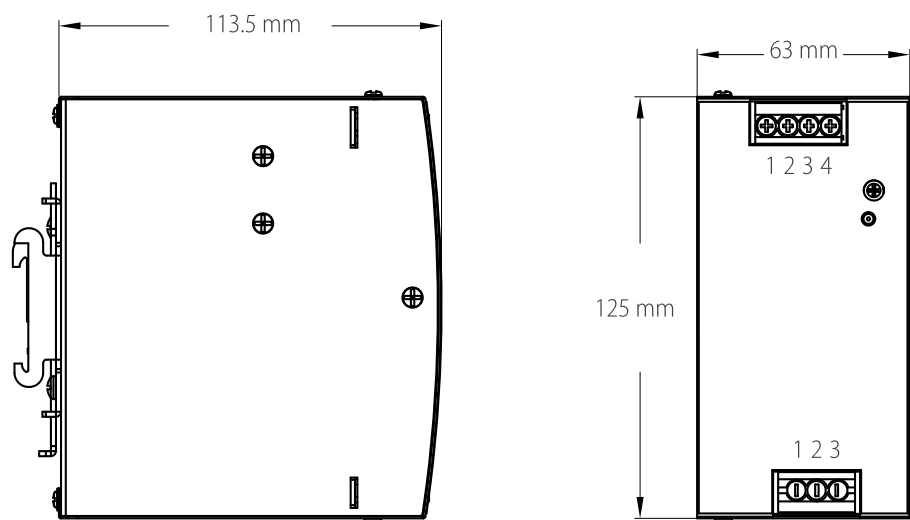
Notes:

Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, respectively. The power supply is considered as an independent unit, but the final equipment still need to reconfirm that the whole system complies with the EMC directives. If the PSU is installed in the final device as a subassembly, the tests should be repeated to verify that the system has been met compliance. Detailed technical data are available on request.

BLOCK DIAGRAM



MECHANICAL SPECIFICATION



DERATING CURVES

