YSDN75-1206300
YSDN75-2403200

YINGJIAO®
Electrical

DIN rail industrial power supplies

FEATURES:

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

A series 12 V and 24 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 control 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.

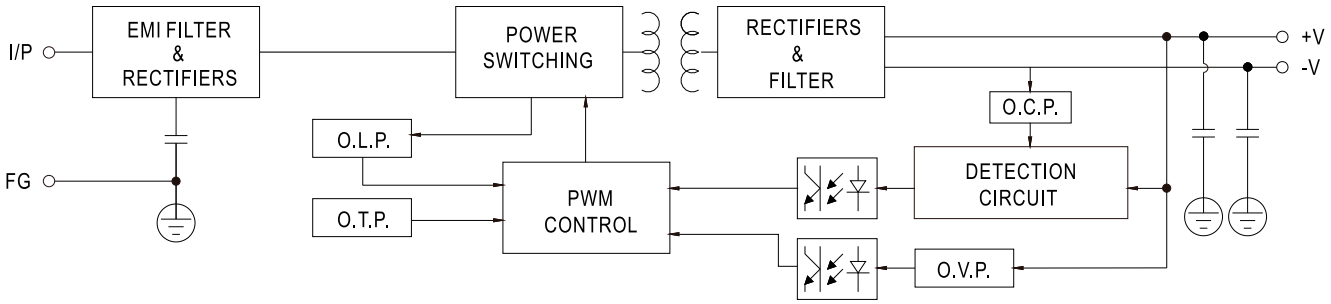
TECHNICAL SPECIFICATION

Group	Parameter	YSDN75-1206300	YSDN75-2403200	Notes
Input	Input voltage range	100–240 VAC/120–370 VDC		
	Mains frequency range	50/60 Hz		
	AC current (max.)	1.6 A at 100 VAC		
	Inrush current (max.)	60 A		
	No load power consumption	0.35 W		
	Input leakage current (max.)	Max. 0.75 mA		At 240 VAC
	Power factor correction	0.55		
Output	Rated output voltage	12 V (11-14 V)	24V (23-28 V)	
	Rated output power	75 W	75 W	
	Rated output current	6.3 A	3.2 A	
	Energy efficiency	84%	87%	
	DC “OK” LED	Yes		
	DC “OK” output signal	No		
	Line regulation	±0.5%		
	Load regulation	±1%		
	Ripple and noise	100 mVp-p	120 mVp-p	
	Minimal load	0 A		
	Hold up time (max.)	Over 5 ms		At 100 VAC and full load
	DC voltage rise time (max.)	Up to 30 ms		At 100 VAC and full load
	Turn on delay time (max.)	Up to 0.5 s		At 100 VAC and full load
Environmental	Working temperature	-20 to +70℃		See deration curve
	Working humidity	20% to 85% RH		Non-condensing
	Storage temperature	-40℃ to +85℃		
	Cooling method	Free air circulation		
	MTBF	200,000 h		25℃
Protection safety and EMC	Short circuit	Yes		
	Over temperature	Yes		
	Over current	110-130% of rated Iout		
	Automatic recovery on fault remove	Protection type: Hiccup Mode– recovers automatically after fault condition is removed		
	Output overvoltage	At 14-17 V	At 29-33 V	
	Withstand isolation voltage	3 kVAC (I-O), 2 kVAC (I/O-FG) Operating altitude up to 2000 m		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		
	Marking	RoHS, CE, UKCA		
Mechanical and features	Enclosure	Metal housing, DIN TS35 mount		
	Dimension	32 × 125 × 114 mm		L × W × H
	Weight	410 g		
	Output connector	Terminal block, double connector		
	Input connector	Terminal block		
	Single package	150 × 60 × 140 mm		
	Packing	315 × 300 × 300 mm		20 items
	Manufacturing	China		
	Warranty	3 years		

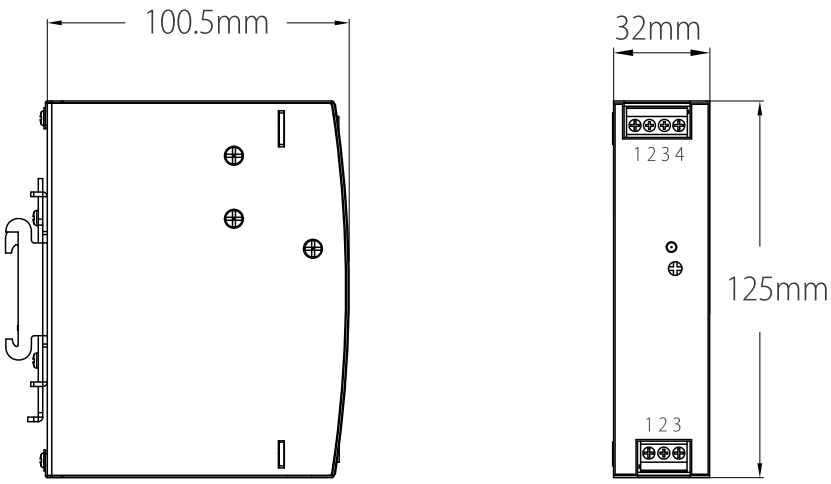
Notes:

Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25℃ 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