AC/DC Converter



SLI24 Series

24W, SINGLE OUTPUT DIN-RAIL POWER SUPPLIES

SLI24 is a series of DIN-Rail green power supplies with high efficiency and excellent price/performance ratio provided by SCHMID-M. This series provide stability and high immunity against electrical disturbance for loads in industrial process controls, machine tools and other equipment exposed to a difficult industrial environment. Compact size, light weight, standard Din Rail installation (35mm) and other features of these power supplies, which saves a lot of space for your design. Build-in large capacitor provides for you enough hold-up time.







PRODUCT FEATURES

- 1. Standard Din Rail installation
- 2. AC and DC all in one (input from the same terminal)
- 3. Universal input voltage: 90~264VAC
- 4. Output voltage adjustable
- 5. Low ripple & noise
- 6. Input under voltage lockout
- 7. Overload and short-circuit protection

- 8. Efficiency: 85% (Typ)
- 9. Heat dissipation: natural
- 10. Switching frequency: 60kHz
- 11.MTBF>300,000 hours
- 12. Meet product standards of industrial class
- 13. Redundancy Module

PRODUCT PROGRAM							
Model	Output power	Input voltage range	Output voltage	Output current	Ripple & noise (Typ)	Efficiency (%,Typ)	
SLI24-10B05	24W	100 ~ 240VAC (90 ~ 264VAC) 50/60Hz	5V	4±0.1 A	50mV	75	
SLI24-10B12			12VA	2±0.1A		85	
SLI24-10B24			24V	1±0.05A		87	

Note:

- Ripple and Noise were measured by a method with twisted-pair wires;
 Unless otherwise specified, all specifications above are measured at rated input voltage and rated output load, TA=25°C, humidity < 75%;
- 3. All specifications stated in this datasheet are subject to the above listed models only. For specifications of non-standard models, please contact our technical

GENERAL SPECIFICATIONS					
	operating:	-25°C ~ +70°C (max)			
Temperature ranges	storage:	-25°C ~ +85°C (max)			
remperature ranges	power derating above 55°C:	3.75% /°C			
	(SLI24-10B05 derating above 50°C)				
humidity		95% (max)			
Temperature coefficient		0.02%/°C			
Switching frequency		60kHz			
Isolation voltage Input/Output		3000VAC			
MTBF		300,000h @ 25°C			
EMI		EN55022, level B FCC Part 15, level B			
	Electrostatic discharge ESD	IEC/EN 61000-4-2 4kV/8kV			
EMS	RF field susceptibility	IEC/EN 61000-4-3 3V/m			
LIVIO	Electrical fast transients/bursts on mainsline	IEC/EN 61000-4-4 1kV			
	Surge	IEC/EN 61000-4-5 level 3 1kV/2kV			
Safety standards		UL60950, IEC60950, EN60950			
Safety approval		UL60950, IEC60950, EN60950			
Safety class		Class 1			
Case protection		IP 20			
Mounting		35mm DIN-Rail			
Package		114X99.5X22.5mm			

INPUT SPECIFICATIONS	
Input voltage range	100~240VAC (90~264VAC) 14 ~340VDC (120~370VDC)

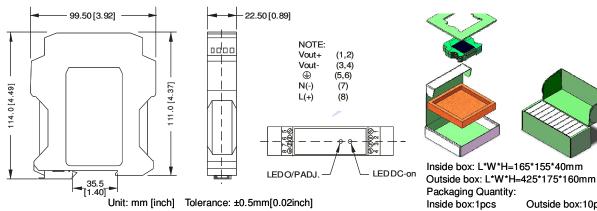
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Input frequency	47~63Hz
Input current(full load)	115VAC 230VAC 450mA 220mA
Inrush(<2ms)	115VAC 230VAC 16A 30A
Input under voltage lockout	80VAC (±10%)
Input under voltage return difference	≤20VAC
External fuse(recommended)	3.15A/250V slow blow

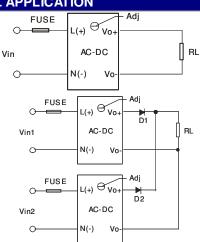
OUTPUT SPECIFICATIONS	3				
Output voltage	SLI24-10B05 SLI24-10B12 SLI24-10B24	Regulate range(typ) 5.0~5.5VDC 12~14VDC 24~28VDC	12~14VDC		
Voltage set accuracy		±2%			
Input variation		±0.5%			
Load variation (10% - 90%)		±1%			
Output ripple & noise(peak-peak)	20MHz Bandwidth	50mV (Typ)	100mV (Max)		
Short circuit protection		Continuous and auto resume			
SLI24-10B05 Over current protection SLI24-10B12 SLI24-10B24		4.4A (typ) 2.4A (typ) 1.3A (typ)			
Over voltage protection	SLI24-10B05 SLI24-10B12 SLI24-10B24	6.5V (max) 20V (max) 30V (max)	20V (max)		
Hold-up time Vin=230Vac		80ms (typ)			

OUTLINE DIMENSIONS

PACKAGING DIAGRAM



TYPICAL APPLICATION



General Application

- 1. Vin: 90 264VAC or 120 370VDC;
- 2. Adj: Adjusting terminal of output voltage. Users can adjust any load freely within the range of output voltage according to your own need.

Outside box:10pcs

Parallel connection Application

- 1. Two same Din Rail power supplies are in use of parallel connection application, Vin1 and Vin2 are both 90-264VAC or 120-370VDC;
- 2. Adj: Adjusting terminal of output voltage. Users can adjust any load freely within the range of output voltage according to your own need.
- 3. When AC-DC2's output voltage is a little lower than AC-DC1's, AC-DC2 is becoming a spare power supply for load, as Vin1 is off or AC-DC1 is in fault.
- 4. When Vin1 and Vin2 are supplying power to Din Rail power supply alternately, Din Rail power supply will work alternately and supply power to load sostenuto.

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