Usage Manual



SWITCHING POWER SUPPLY

No.288th. Wei 17 Road, Economic Development Zone, Yueqing City Zhejiang China. Tel: 0086-577-62718777 Fax: 0086-577-62774090 Email: sales@etek-china.com Thank you for choosing EKR8-4 Series Switching Power Supply. Please read this manual before installation, operation and maintenance.

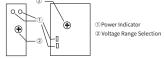
STANDARD AND QUALITY CERTIFICATES

(€ RoHS

EKR8-4 series is an economical ultra thin DIN Rail type power supply conforming to 15W German working standards, which is suitable for installation on TS-35/7.5 or TS-35/15 rails. The products uses

AC85-264V full range AC input (AC277V is applicable), and conforms to EN61000-3-2 standard the harmonic current specification for the European Union.

Model & Explanation



FKR8-41136**

Characteristic:

International standard input: 85-264VAC(277VAC available)

No-load Consumption<0.3W

Isolation Level: Class II

Pass LPS(Limited power supply)

DC output voltage can be adjusted

Protection type: short circuit/overload/over-voltage

Natural air cooling (Working temperature: -30~+70°C)

FKR8-41118**

Mounted on TS-35/7.5 or TS-35/15 rails

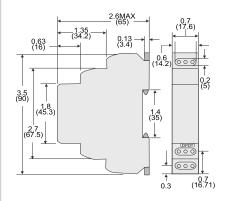
Over-voltage: Class III

LED indicates power ON

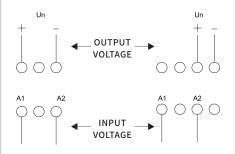
Application:

Home control system Building automation Industrial control system Automated Industry Electrical equipment

Dimensions Inches(Millimeters)



Wiring Diagrams



o.	EKR8- 4111805	EKR8- 4111812	EKR8- 4111815	EKR8- 4111824	EKR8- 4111848			
DC Voltage	5V	12V	15V	24V	48V			
Rated Current	2.4A	1.25A	1A	0.63A	0.32A			
Rated Power	12W	15W	15W	15.2W	15.4W			
Ripple& Noise(Max.)*2	80mVp-P	120mVp-P	120mVp-P	150mVp-P	240mVp-P			
Vol. Adj. Rang	4.5-5.5V	10.8-13.8V	13.5-18V	21.6-29V	43.2-55.2V			
Voltage Accuracy*3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%			
Linear Adjusted Rate	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%			
Load Adjusted Rate	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%			
Start & Rise Time	2000ms,80ms/230VAC 2000ms,80ms/115VAC (Fully Loaded)							
Maintain Time (Typ.)	30	ms/230VAC	12ms/115V/	AC (Fully Load	ed)			
Voltage Range	85-264VAC (277VAC Available) 120-370VDC (390VDC Available) 47-63Hz							
Frequency Range								
Efficiency (Typ.)	80%	85%	85.5%	86%	87%			
AC Current (Typ.)	0.5A/115VAC 0.25A/230VAC							
Surge Current (Typ.)	Cold Start 25A/115VAC 45A/230VAC							
Overload Overvoltage	110-145% of Rated Output Power							
	it's Hiccup Mode when output voltage less than 50%.							
	load condition is removed.							
	5.75-6.75V	14.2-16.2V	18.8-22.5V	30-36V	56.5-64.8V			
	Protection Mode: Turn off output and clamped it through Zener diode							
Working Temperature	-30°C~+70°C							
	-40°C~+85°C, 10%-95%RH, No condensation							
temperature. *2. Ripple&Noise measuring: Using a	a 12" twisted-	pair cables, a	nd 0.1uf and	17uf capacito	rs should be			
	DC Voltage Rated Gurent Rated Fourer Ripples Viscos/Max 12 Voltage Recursor Ripples Viscos/Max 12 Voltage Recursor Rated Fourer Voltage Recursor Rated Fourer Voltage Recursor Rate Rate Rate Rate Sart & Rose Time Rated Rate Rat	A A A A	A11885	A 11805				

DC Voltage Rated Current Rated Power Ripples Noise(Max.)*2 Vol. Adj. Rang Voltage Accuracy*3 Linear Adjusted Rate Load Adjusted Rate Start & Rise Time Maintain Time (Trp.)	5V 3A 15W 80mVp-P 4.5-5.5V ±2.0% ±1.0% ±1.0% 2000ms,80	12V 2A 24W 120mVp-P 10.8-13.8V ±1.0% ±1.0%	15V 2A 30W 120mVp-P 13.5-18V ±1.0% ±1.0%	24V 1.5A 36W 150mVp-P 21.6-29V ±1.0%	48V 0.75A 36W 240mVp-P 43.2-55.2V ±1.0%		
Rated Power Ripple& Noise(Max.)*2 Vol. Adj. Rang Voltage Accuracy*3 Linear Adjusted Rate Load Adjusted Rate Start & Rise Time	15W 80mVp-P 4.5-5.5V ±2.0% ±1.0%	24W 120mVp-P 10.8-13.8V ±1.0% ±1.0% ±1.0%	30W 120mVp-P 13.5-18V ±1.0% ±1.0%	36W 150mVp-P 21.6-29V ±1.0%	36W 240mVp-P 43.2-55.2V ±1.0%		
Ripple& Noise(Max.)*2 Vol. Adj. Rang Voltage Accuracy*3 Linear Adjusted Rate Load Adjusted Rate Start & Rise Time	80mVp-P 4.5-5.5V ±2.0% ±1.0% ±1.0%	120mVp-P 10.8-13.8V ±1.0% ±1.0% ±1.0%	120mVp-P 13.5-18V ±1.0% ±1.0%	150mVp-P 21.6-29V ±1.0%	240mVp-P 43.2-55.2V ±1.0%		
Vol. Adj. Rang Voltage Accuracy*3 Linear Adjusted Rate Load Adjusted Rate Start & Rise Time	4.5-5.5V ±2.0% ±1.0% ±1.0%	10.8-13.8V ±1.0% ±1.0% ±1.0%	13.5-18V ±1.0% ±1.0%	21.6-29V ±1.0%	43.2-55.2V ±1.0%		
Voltage Accuracy*3 Linear Adjusted Rate Load Adjusted Rate Start & Rise Time	±2.0% ±1.0% ±1.0%	±1.0% ±1.0% ±1.0%	±1.0% ±1.0%	±1.0%	±1.0%		
Linear Adjusted Rate Load Adjusted Rate Start & Rise Time	±1.0% ±1.0%	±1.0% ±1.0%	±1.0%				
Load Adjusted Rate Start & Rise Time	±1.0%	±1.0%		±1.0%	±1.0%		
Start & Rise Time							
	2000ms,80		±1.0%	±1.0%	±1.0%		
Maintain Time (Typ.)		ns/115VAC (Fu	lly Loaded)				
	30ms/230VAC 12ms/115VAC (Fully Loaded)						
Voltage Range	85-264VAC (277VAC Available) 120-370VDC (390VDC Available						
Frequency Range	47-63Hz						
Efficiency (Typ.)	82%	88%	89%	89%	90%		
AC Current (Typ.)	0.5A/115VAC 0.25A/230VAC						
Surge Current (Typ.)	Cold Start 25A/115VAC 45A/230VAC						
Overload Over voltage	110-145% of Rated Output Power						
	it's Hiccup Mode when output voltage less than 50%.						
	It can automatically recover after the abnormal						
	load condition is removed.						
	5.75-7.5V	15-18V	18.8-22.5V	30-36V	57.6-67.2V		
	Protection Mode: Turn off output and clamped it through Zener diod						
Working Temperature	-30°C~+70°C						
Working Humidity	20%-90%RH. No condensation						
Storaget emperature & Humidity	-40°C~+85°C. 10%-95%RH. No condensation						
Temperature coefficient Coefficient							
temperature. *2. Ripple&Noise measuring: Using a connected in parallel at the term bandwidth.	12" twisted- inal. The mea	pair cables, a suring should	nd 0.1uf and 4 I be performe	17uf capacito d under the 2	rs should be		
	Frequency Bange Efficiency (Typ.) AC Current (Typ.) AC Current (Typ.) Surge Current (Typ.) Overload Over voltage Working Femperature Working Femperature Frequency Company Sociage Emperature & Humidity Frequency Company 1. Without special mark, all specific temperature. 2. Without special mark, all specific temperature. 2. RipopleAlvoice measuring: Using connected in parallel at the term handwidth.	Frequency Bange Efficiency (Typ.) AC Current (Typ.) Surge Current (Typ.) Overload It's His It's Over voltage S-75-7.5V Protection M Working Femmelature Working fet humidity Stonage Hamildity -4 Temperature ceeding Hamildity -1. Without special mark, all specifications are me temperature. 2. RippleANoise measuring: Using a 12" twisted-connected in parallel at the terminal. The mea bandwidth.	Frequency Bange	Frequency Range	Frequency Barge		