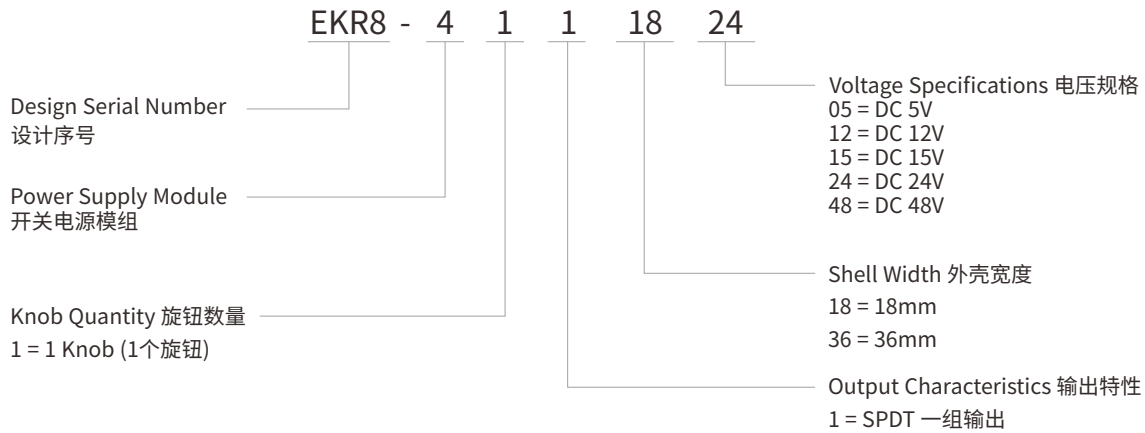


## Model Naming Rules 型号命名规则



## Product Description 产品描述

EKR8-4 series is an economical and ultra-thin rail-type power supply that meets German industrial standards. It is suitable for installation on 35/7.5 or 35/15 rails. In order to save space, the body is designed to be 18mm (1SU) and 36mm (2SU) width. The entire series uses a full range of AC input from 85VAC to 264VAC (277VAC is also applicable), and all comply with the EN61000-3-2 standard on the harmonic current specifications specified by the European Union.

EKR8-4 series is designed with a plastic shell, which can effectively prevent users from electrical hazards. The work efficiency is as high as 87%. Under air circulation, the entire series can work at an ambient temperature of -30 to 70 degrees. It has complete protection functions and complies with relevant certification standards for home automation and industrial control equipment (IEC62368-1, EN61558-2-16), making EKR8 series a highly competitive home and industrial application Power solutions.

EKR8-4系列是一款经济超薄型符合德国工业标准的导轨型电源供应器, 适合安装在35/7.5或35/15的导轨上, 在允许节约空间机柜内本体被设计为18mm(1SU)和36mm(2SU)宽度, 整个系列都采用从85VAC到264VAC全范围交流输入(277VAC也适用), 并均符合EN61000-3-2标准关于欧盟指定的谐波电流规范。

EKR8-4系列是用塑料外壳设计, 可以有效的防止用户电气危害, 工作效率高达87%, 在空气循环条件下整个系列能工作在-30度到70度环境温度中, 它具备完整的保护功能且符合家庭自动化、工业控制设备(IEC62368-1, EN61558-2-16)相关认证标准, 使EKR8系列成为一个极具竞争力的家庭和工业应用的电源解决方案。

## Remark 备注

1. Unless otherwise specified, all specification parameters shall be measured at 230VAC input, rated load and ambient temperature of 25 degrees.
  2. Ripple and noise measurement method: a 12mm<sup>2</sup> twisted pair wire is used, and the terminals are connected in parallel with the capacitors of 0.1uF and 47uF, and the measurement is conducted at the bandwidth of 20MHz.
  3. Accuracy: including setting error, linear adjustment rate and load adjustment rate.
- 1、如没有特别说明, 所有规格参数均在输入为230VAC、额定负载、25度环境温度下进行量测。  
 2、纹波和噪声测量方法: 使用一条12mm<sup>2</sup>双绞线, 同时终端要并联0.1uF和47uF的电容, 在20MHz带宽下进行量测。  
 3、精度: 包含设定误差, 线性调整率和负载调整率。

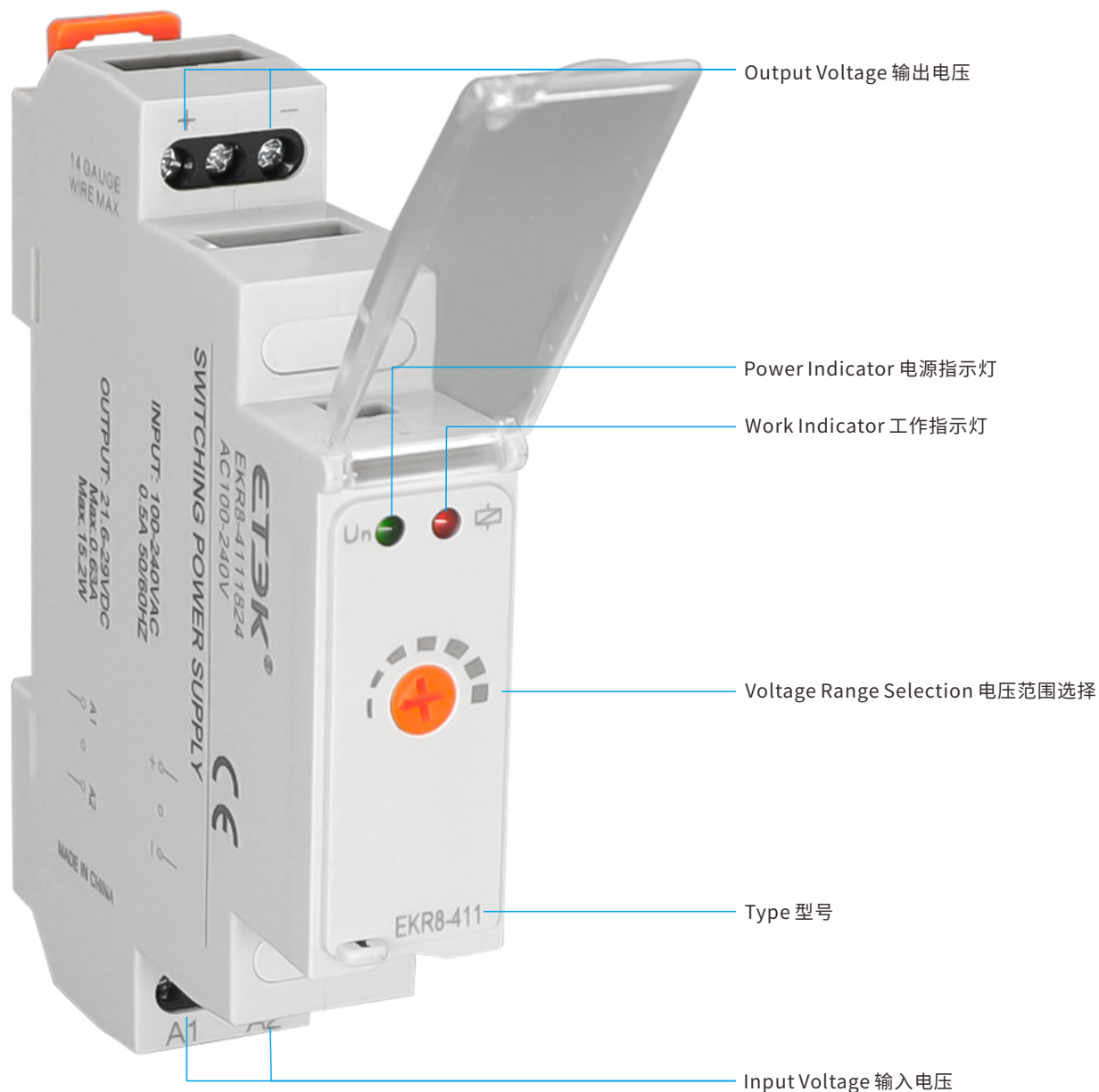
# EKR8-4 Series Switching Power Supply



开关电源

Front view: function selector and regulators




前视图：功能选择器和调节器



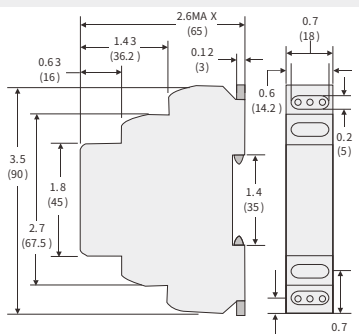
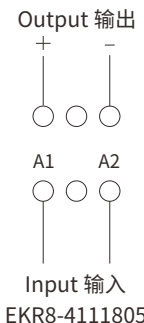
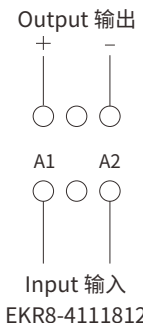
# EKR8-4 Series Switching Power Supply






开关电源

Switching Power Supply 开关电源	EKR8-4 Series	
<p><b>Product Characteristics 产品特性</b>                      Ultra-thin design: width 18mm(1SU) / 36mm(2SU)                      International universal input: 85-264VAC (277VAC available)                      No-load loss: &lt;0.3W                      Isolation level: II                      Pass LPS (Limited Power Supply)                      Adjustable DC output voltage                      Natural air cooling (working temperature:-30°C~ +70°C)                      Can be installed on 35/7.5 or 35/15 Rail                      Overvoltage level: III                      LED indicates power on</p> <p><b>超薄设计:宽度18mm(1SU) / 36mm(2SU)</b>  <b>国际通用输入85-264VAC(277VAC可用)</b>  <b>空载损耗&lt;0.3W</b>  <b>隔离等级:II</b>  <b>通过LPS(限功率电源)</b>  <b>直流输出电压可调</b>  <b>保护种类:短路/过载/过电压</b>  <b>自然风冷(工作温度:-30°C~ +70°C)</b>  <b>可以装在35/7.5或35/15导轨上</b>  <b>过电压等级:III</b>  <b>LED指示电源启动</b></p> <p><b>Application 应用领域:</b>                      Home control system 家居控制系统                      Building automation 建筑自动化                      Industrial control system 工业控制系统                      Industrial automation 工业自动化                      Mechanical and electrical equipment 机电设备</p>		
		

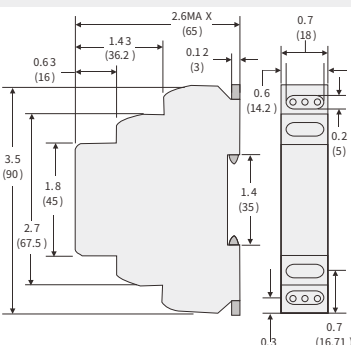
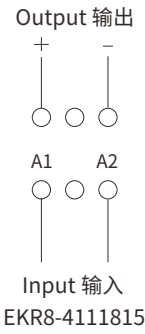
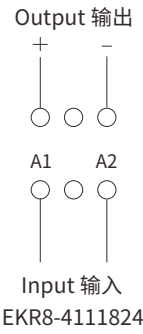
Technical Data 技术数据	EKR8-4111805	EKR8-4111812	
Output 输出	DC Voltage 直流电压	5V	12V
	Rated Current 额定电流	2.4A	1.25A
	Rated Power 额定功率	12W	15W
	Ripple and Noise (max) 纹波与噪声(最大)	80mVp-p	120mVp-p
	Voltage Adjustment Range 电压调整范围	4.5-5.5V	10.8-13.8V
	Voltage Accuracy 电压精度	±2.0%	±1.0%
	Linear Adjustment Rate 线性调整率	±1.0%	±1.0%
	Load Adjustment Rate 负载调整率	±1.0%	±1.0%
Input 输入	Start and Rise Time 启动、上升时间	2000ms,80ms/230VAC	2000ms,80ms/1 15VAC(Under Full Load 满载时)
	Hold Time 保持时间(Typ.)	300ms/230VAC	12ms/115VAC(Under Full Load 满载时)
	Voltage Range 电压范围	85-264VAC(277VAC Available 可用)	120-370VDC(390VDC Available 可用)
	Frequency Range 频率范围	47-63Hz	
	Efficiency 效率(Typ.)	80%	85%
Protection 保护	Alternating Current 交流电流(Typ.)	0.5A/115VAC	0.25A/230VAC
	Surge Current 浪涌电流(Typ.)	Cold start 冷启动 25A/115VAC	45A/230VAC
	Overload 过载	110-145% of rated output power 额定输出功率 When the output voltage is less than 50%, it is in hiccup mode, and it can automatically recover after the abnormal load condition is removed. When the output voltage is 50%-100%, it is in constant current mode, and it can automatically recover after the abnormal load condition is removed. 输出电压<50%时为打嗝模式,负载异常条件移除后可自动恢复。 输出电压50%-100%时为恒定电流模式,负载异常条件移除后可自动恢复。	
Over-voltage 过压	5.75 - 6.75V	14.2 - 16.2V	
Protection mode: Turn off the output, clamp by the Zener diode 保护模式:关断输出,通过齐纳二极管钳位			

Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图	
	 <p>EKR8-4111805</p>	 <p>EKR8-4111812</p>

## 开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p><b>Product Characteristics 产品特性</b></p> <p>Ultra-thin design: width 18mm(1SU) / 36mm(2SU)                      International universal input: 85-264VAC (277VAC available)                      No-load loss: &lt;0.3W                      Isolation level: II                      Pass LPS (Limited Power Supply)                      Adjustable DC output voltage                      Natural air cooling (working temperature:-30°C~ +70°C)                      Can be installed on 35/7.5 or 35/15 Rail                      Overvoltage level: III                      LED indicates power on</p> <p><b>超薄设计:宽度18mm(1SU) / 36mm(2SU)</b>  <b>国际通用输入85-264VAC(277VAC可用)</b>  <b>空载损耗&lt;0.3W</b>  <b>隔离等级:II</b>  <b>通过LPS(限功率电源)</b>  <b>直流输出电压可调</b>  <b>保护种类:短路/过载/过电压</b>  <b>自然风冷(工作温度:-30°C~ +70°C)</b>  <b>可以装在35/7.5或35/15导轨上</b>  <b>过电压等级:III</b>  <b>LED指示电源启动</b></p> <p><b>Application 应用领域:</b>                      Home control system 家居控制系统                      Building automation 建筑自动化                      Industrial control system 工业控制系统                      Industrial automation 工业自动化                      Mechanical and electrical equipment 机电设备</p>	
	 

Technical Data 技术数据		EKR8-4111815	EKR8-4111824
Output 输出	DC Voltage 直流电压	15V	24V
	Rated Current 额定电流	1A	0.63A
	Rated Power 额定功率	15W	15.2W
	Ripple and Noise (max) 纹波与噪声(最大)	120mVp-p	150mVp-p
	Voltage Adjustment Range 电压调整范围	13.5 - 18V	21.6 - 29V
	Voltage Accuracy 电压精度	±1.0%	±1.0%
	Linear Adjustment Rate 线性调整率	±1.0%	±1.0%
Input 输入	Load Adjustment Rate 负载调整率	±1.0%	±1.0%
	Start and Rise Time 启动、上升时间	2000ms,80ms/230VAC	2000ms,80ms/115VAC(Under Full Load 满载时)
	Hold Time 保持时间(Typ.)	300ms/230VAC	12ms/115VAC(Under Full Load 满载时)
	Voltage Range 电压范围	85 - 264VAC(277VAC Available 可用)	120 - 370VDC(390VDC Available 可用)
	Frequency Range 频率范围	47 - 63Hz	
Protection 保护	Efficiency 效率(Typ.)	85.5%	86%
	Alternating Current 交流电流(Typ.)	0.5A/115VAC	0.25A/230VAC
	Surge Current 浪涌电流(Typ.)	Cold start 冷启动 25A/115VAC	45A/230VAC
	Overload 过载	110-145% of rated output power 额定输出功率 When the output voltage is less than 50%, it is in hiccup mode, and it can automatically recover after the abnormal load condition is removed. When the output voltage is 50%-100%, it is in constant current mode, and it can automatically recover after the abnormal load condition is removed. 输出电压<50%时为打嗝模式,负载异常条件移除后可自动恢复。 输出电压50%-100%时为恒定电流模式,负载异常条件移除后可自动恢复。	
Over-voltage 过压	18.8 - 22.5V	30 - 36V	
Protection mode: Turn off the output, clamp by the Zener diode 保护模式:关断输出,通过齐纳二极管钳位			

Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图	
	 <p>EKR8-4111815</p>	 <p>EKR8-4111824</p>

## 开关电源

### Switching Power Supply

#### 开关电源

##### Product Characteristics 产品特性

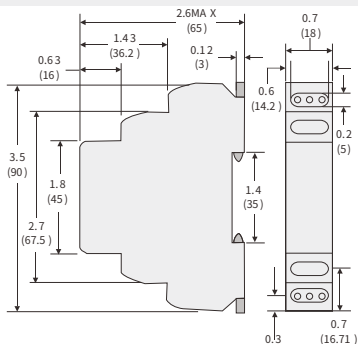
Ultra-thin design: width 18mm(1SU) / 36mm(2SU)  
 International universal input: 85-264VAC (277VAC available)  
 No-load loss: <0.3W  
 Isolation level: II  
 Pass LPS (Limited Power Supply)  
 Adjustable DC output voltage  
 Natural air cooling (working temperature:-30°C~ +70°C)  
 Can be installed on 35/7.5 or 35/15 Rail  
 Overvoltage level: III  
 LED indicates power on  
 超薄设计:宽度18mm(1SU) / 36mm(2SU)  
 国际通用输入85-264VAC(277VAC可用)  
 空载损耗<0.3W  
 隔离等级:II  
 通过LPS(限功率电源)  
 直流输出电压可调  
 保护种类:短路/过载/过电压  
 自然风冷(工作温度:-30°C~ +70°C)  
 可以装在35/7.5或35/15导轨上  
 过电压等级:III  
 LED指示电源启动  
 Application 应用领域:  
 Home control system 家居控制系统  
 Building automation 建筑自动化  
 Industrial control system 工业控制系统  
 Industrial automation 工业自动化  
 Mechanical and electrical equipment 机电设备

### EKR8-4 Series



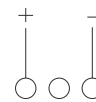
Technical Data 技术数据		EKR8-411848	
Output 输出	DC Voltage 直流电压	48V	
	Rated Current 额定电流	0.32A	
	Rated Power 额定功率	15.4W	
	Ripple and Noise (max) 纹波与噪声(最大)	240mVp-p	
	Voltage Adjustment Range 电压调整范围	43.2 - 55.2V	
	Voltage Accuracy 电压精度	±1.0%	
	Linear Adjustment Rate 线性调整率	±1.0%	
Input 输入	Load Adjustment Rate 负载调整率	±1.0%	
	Start and Rise Time 启动、上升时间	2000ms,80ms/230VAC	2000ms,80ms/115VAC(Under Full Load 满载时)
	Hold Time 保持时间(Typ.)	300ms/230VAC	12ms/115VAC(Under Full Load 满载时)
	Voltage Range 电压范围	85-264VAC(277VAC Available 可用)	120-370VDC(390VDC Available 可用)
	Frequency Range 频率范围	47 - 63Hz	
Protection 保护	Efficiency 效率(Typ.)	87%	
	Alternating Current 交流电流(Typ.)	0.5A/115VAC	0.25A/230VAC
	Surge Current 浪涌电流(Typ.)	Cold start 冷启动 25A/115VAC	45A/230VAC
	Overload 过载	110-145% of rated output power 额定输出功率 When the output voltage is less than 50%, it is in hiccup mode, and it can automatically recover after the abnormal load condition is removed. When the output voltage is 50%-100%, it is in constant current mode, and it can automatically recover after the abnormal load condition is removed. 输出电压<50%时为打嗝模式,负载异常条件移除后可自动恢复。 输出电压50%-100%时为恒定电流模式,负载异常条件移除后可自动恢复。	
Over-voltage 过压	56.5 - 64.8V	Protection mode: Turn off the output, clamp by the Zener diode 保护模式:关断输出,通过齐纳二极管钳位	

### Dimensions外形尺寸图:in 英寸 (mm 毫米)



### Wiring Diagrams 接线图

#### Output 输出



A1 A2



Input 输入

EKR8-411848

## 开关电源

### Switching Power Supply

#### 开关电源

##### Product Characteristics 产品特性

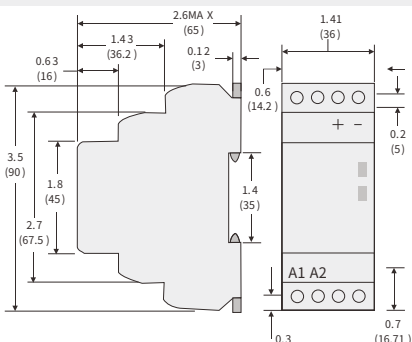
Ultra-thin design: width 18mm(1SU) / 36mm(2SU)  
 International universal input: 85-264VAC (277VAC available)  
 No-load loss: <0.3W  
 Isolation level: II  
 Pass LPS (Limited Power Supply)  
 Adjustable DC output voltage  
 Natural air cooling (working temperature:-30°C~ +70°C)  
 Can be installed on 35/7.5 or 35/15 Rail  
 Overvoltage level: III  
 LED indicates power on  
 超薄设计:宽度18mm(1SU) / 36mm(2SU)  
 国际通用输入85-264VAC(277VAC可用)  
 空载损耗<0.3W  
 隔离等级:II  
 通过LPS(限功率电源)  
 直流输出电压可调  
 保护种类:短路/过载/过电压  
 自然风冷(工作温度:-30°C~ +70°C)  
 可以装在35/7.5或35/15导轨上  
 过电压等级:III  
 LED指示电源启动  
 Application 应用领域:  
 Home control system 家居控制系统  
 Building automation 建筑自动化  
 Industrial control system 工业控制系统  
 Industrial automation 工业自动化  
 Mechanical and electrical equipment 机电设备

### EKR8-4 Series

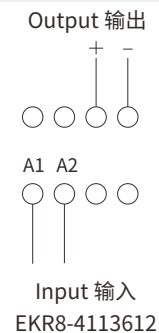
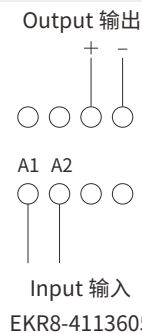


Technical Data 技术数据		EKR8-4113605	EKR8-4113612
Output 输出	DC Voltage 直流电压	5V	12V
	Rated Current 额定电流	3A	2A
	Rated Power 额定功率	15W	24W
	Ripple and Noise (max) 纹波与噪声(最大)	80mVp-p	120mVp-p
	Voltage Adjustment Range 电压调整范围	4.5 - 5.5V	10.8 - 13.8V
	Voltage Accuracy 电压精度	±2.0%	±1.0%
	Linear Adjustment Rate 线性调整率	±1.0%	±1.0%
	Load Adjustment Rate 负载调整率	±1.0%	±1.0%
Input 输入	Start and Rise Time 启动、上升时间	2000ms,80ms/230VAC	2000ms,80ms/115VAC(Under Full Load 满载时)
	Hold Time 保持时间(Typ.)	300ms/230VAC	12ms/115VAC(Under Full Load 满载时)
	Voltage Range 电压范围	85-264VAC(277VAC Available 可用)	120-370VDC(390VDC Available 可用)
	Frequency Range 频率范围	47 - 63Hz	
	Efficiency 效率(Typ.)	82%	88%
Protection 保护	Overload 过载	110-145% of rated output power 额定输出功率 When the output voltage is less than 50%, it is in hiccup mode, and it can automatically recover after the abnormal load condition is removed. When the output voltage is 50%-100%, it is in constant current mode, and it can automatically recover after the abnormal load condition is removed. 输出电压<50%时为打嗝模式,负载异常条件移除后可自动恢复。 输出电压50%-100%时为恒定电流模式,负载异常条件移除后可自动恢复。	
	Over-voltage 过压	5.75-7.5V	15-18V
Protection mode: Turn off the output, clamp by the Zener diode 保护模式:关断输出,通过齐纳二极管钳位			

#### Dimensions外形尺寸图:in 英寸(mm 毫米)





#### Wiring Diagrams 接线图



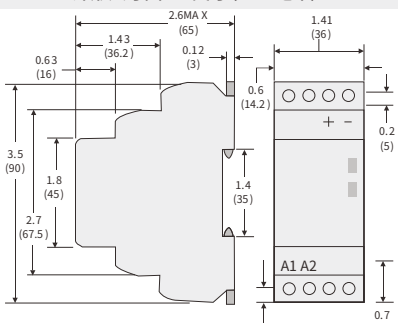
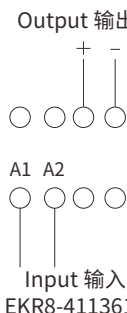
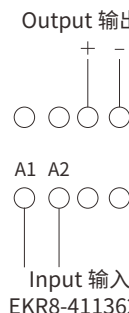
# EKR8-4 Series Switching Power Supply



开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p><b>Product Characteristics 产品特性</b></p> <p>Ultra-thin design: width 18mm(1SU) / 36mm(2SU) International universal input: 85-264VAC (277VAC available) No-load loss: &lt;0.3W Isolation level: II Pass LPS (Limited Power Supply) Adjustable DC output voltage Natural air cooling (working temperature:-30°C~ +70°C) Can be installed on 35/7.5 or 35/15 Rail Overvoltage level: III LED indicates power on</p> <p><b>超薄设计:宽度18mm(1SU) / 36mm(2SU)</b> <b>国际通用输入85-264VAC(277VAC可用)</b> <b>空载损耗&lt;0.3W</b> <b>隔离等级:II</b> <b>通过LPS(限功率电源)</b> <b>直流输出电压可调</b> <b>保护种类:短路/过载/过电压</b> <b>自然风冷(工作温度:-30°C~ +70°C)</b> <b>可以装在35/7.5或35/15导轨上</b> <b>过电压等级:III</b> <b>LED指示电源启动</b></p> <p><b>Application 应用领域:</b> Home control system 家居控制系统 Building automation 建筑自动化 Industrial control system 工业控制系统 Industrial automation 工业自动化 Mechanical and electrical equipment 机电设备</p>	 <div style="text-align: right;">  </div>



Technical Data 技术数据		EKR8-4113615	EKR8-4113624
Output 输出	DC Voltage 直流电压	15V	24V
	Rated Current 额定电流	2A	1.5A
	Rated Power 额定功率	30W	36W
	Ripple and Noise (max) 纹波与噪声(最大)	120mVp-p	150mVp-p
	Voltage Adjustment Range 电压调整范围	13.5 - 18V	21.6 - 29V
	Voltage Accuracy 电压精度	±1.0%	±1.0%
	Linear Adjustment Rate 线性调整率	±1.0%	±1.0%
Input 输入	Load Adjustment Rate 负载调整率	±1.0%	±1.0%
	Start and Rise Time 启动、上升时间	2000ms,80ms/230VAC	2000ms,80ms/115VAC(Under Full Load 满载时)
	Hold Time 保持时间(Typ.)	300ms/230VAC	12ms/115VAC(Under Full Load 满载时)
	Voltage Range 电压范围	85-264VAC(277VAC Available 可用) 120-370VDC(390VDC Available 可用)	
	Frequency Range 频率范围	47 - 63Hz	
Protection 保护	Efficiency 效率(Typ.)	89%	89%
	Alternating Current 交流电流(Typ.)	0.5A/115VAC	0.25A/230VAC
	Surge Current 浪涌电流(Typ.)	Cold start 冷启动 25A/115VAC	45A/230VAC
	Overload 过载	110-145% of rated output power 额定输出功率 When the output voltage is less than 50%, it is in hiccup mode, and it can automatically recover after the abnormal load condition is removed. When the output voltage is 50%-100%, it is in constant current mode, and it can automatically recover after the abnormal load condition is removed. 输出电压<50%时为打嗝模式,负载异常条件移除后可自动恢复。 输出电压50%-100%时为恒定电流模式,负载异常条件移除后可自动恢复。	
Over-voltage 过压	18.8 - 22.5V	30-36V	
		Protection mode: Turn off the output, clamp by the Zener diode 保护模式:关断输出,通过齐纳二极管钳位	

Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Output 输出</p>  <p>Input 输入</p> <p>EKR8-4113615</p> </div> <div style="text-align: center;"> <p>Output 输出</p>  <p>Input 输入</p> <p>EKR8-4113624</p> </div> </div>

# EKR8-4 Series Switching Power Supply



开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p><b>Product Characteristics 产品特性</b>                      Ultra-thin design: width 18mm(1SU) / 36mm(2SU)                      International universal input: 85-264VAC (277VAC available)                      No-load loss: &lt;0.3W                      Isolation level: II                      Pass LPS (Limited Power Supply)                      Adjustable DC output voltage                      Natural air cooling (working temperature: -30°C~ +70°C)                      Can be installed on 35/7.5 or 35/15 Rail                      Overvoltage level: III                      LED indicates power on                      超薄设计:宽度18mm(1SU) / 36mm(2SU)                      国际通用输入85-264VAC(277VAC可用)                      空载损耗&lt;0.3W                      隔离等级:II                      通过LPS(限功率电源)                      直流输出电压可调                      保护种类:短路/过载/过电压                      自然风冷(工作温度:-30°C~ +70°C)                      可以装在35/7.5或35/15导轨上                      过电压等级:III                      LED指示电源启动</p> <p><b>Application 应用领域:</b>                      Home control system 家居控制系统                      Building automation 建筑自动化                      Industrial control system 工业控制系统                      Industrial automation 工业自动化                      Mechanical and electrical equipment 机电设备</p>	 <p>CE RoHS</p> 

Technical Data 技术数据		EKR8-4113648	
Output 输出	DC Voltage 直流电压	48V	
	Rated Current 额定电流	0.75A	
	Rated Power 额定功率	36W	
	Ripple and Noise (max) 纹波与噪声(最大)	240mVp-p	
	Voltage Adjustment Range 电压调整范围	43.2 - 55.2V	
	Voltage Accuracy 电压精度	±1.0%	
	Linear adjustment Rate 线性调整率	±1.0%	
Input 输入	Load Adjustment Rate 负载调整率	±1.0%	
	Start and Rise Time 启动、上升时间	2000ms,80ms/230VAC	2000ms,80ms/115VAC(Under Full Load 满载时)
	Hold Time 保持时间(Typ.)	300ms/230VAC	12ms/115VAC(Under Full Load 满载时)
	Voltage Range 电压范围	85-264VAC(277VAC Available 可用)	120-370VDC(390VDC Available 可用)
	Frequency Range 频率范围	47 - 63Hz	
Protection 保护	Efficiency 效率(Typ.)	90%	
	Alternating Current 交流电流(Typ.)	0.5A/115VAC	0.25A/230VAC
	Surge Current 浪涌电流(Typ.)	Cold start 冷启动 25A/115VAC	45A/230VAC
	Overload 过载	110-145% of rated output power 额定输出功率 When the output voltage is less than 50%, it is in hiccup mode, and it can automatically recover after the abnormal load condition is removed. When the output voltage is 50%-100%, it is in constant current mode, and it can automatically recover after the abnormal load condition is removed. 输出电压<50%时为打嗝模式,负载异常条件移除后可自动恢复。 输出电压50%-100%时为恒定电流模式,负载异常条件移除后可自动恢复。	
Over-voltage 过压	56.5 - 64.8V Protection mode: Turn off the output, clamp by the Zener diode 保护模式:关断输出,通过齐纳二极管钳位		

Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图
	 <p>Output 输出</p> <p>Input 输入</p> <p>EKR8-41148W3</p>