

RELAY SERIES PRODUCT SELECTION GUIDE

» *Always for your safety*



Always for your safety



RoHS

COMPANY INTRODUCTION

Zhejiang ETEK Electrical Technology Co., Ltd. (Abbreviation: ETEK Electric) is a professional manufacturing company dedicated to the research, development, production, and sales of low-voltage electrical appliances. The company was established in 2011 and is located in Wenzhou City, Zhejiang Province. At present, the company has 40K sqm of modern manufacturing bases in Wenzhou and Wuhu with over 500 employees, including over 50 R&D and technical personnel. ETEK Electric has multiple production workshops for mold design, parts manufacturing, welding, and assembly. Additionally, they have multiple automated production lines for MCB and RCCB. Our products include MCB, RCCB, RCBO, AFDD, MCCB, ACB, EV Chargers, Photovoltaic DC products, etc., which can meet the needs of different countries and are widely used in fields such as residential, commercial, and industrial.

ETEK Electric has passed ISO9001 quality management system and environmental management system certification. The company have built our own low-voltage electrical testing center, and most of the testing items can meet the requirements of international IEC standards, in addition, our products have obtained international CB, TUV, VDE, CE, RoHS and other quality certificates.

ETEK Electric constantly masters and breaks through the core technology of circuit breakers, with more than 100 national patents. Focusing on independent brand construction is crucial for the company's development. The "ETEK" trademark is registered in over 80 countries. Products are exported to over 60 countries and regions including the European Union, South America, the Middle East, Africa, and Southeast Asia.

We also support OEM, ODM, OBM, SKD, CKD and other business cooperation models, and provide customers with a full range of services covering market cultivation, technical training, and factory construction.

ETEK Electric has been adhering to the business policy of "Growth", "Quality", "Efficiency", and "Innovation". In 2023, ETEK Electric has formulated the fifth 3-year strategic plan, which specifies the three major initiatives of expanding the production scale, enhancing the new energy market share, and expanding the independent brand, to realize the annual revenue target of \$50 million by 2026.

Looking forward to the future, ETEK Electric will be committed to becoming a globally renowned manufacturer in the power distribution and electrical industry, safeguarding the power safety of global customers, and helping the development of green and digital energy.



Wenzhou Factory

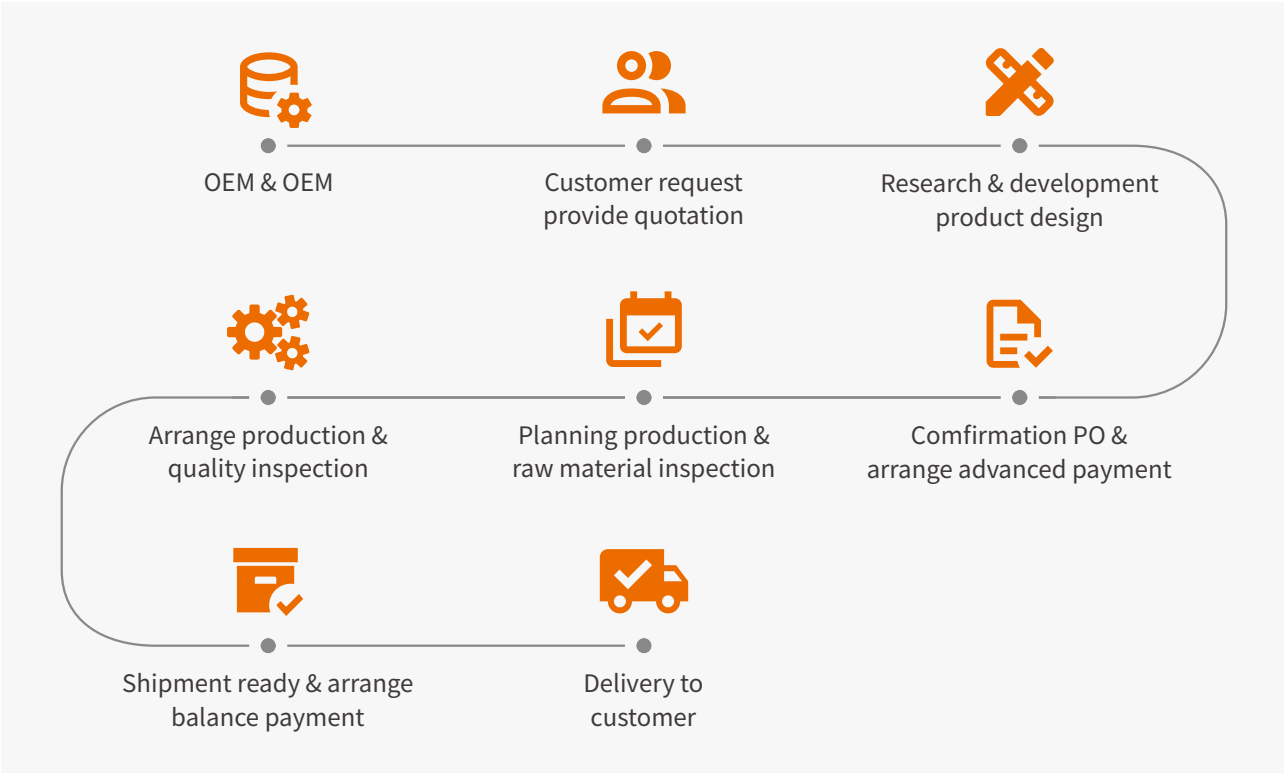


Wuhu Factory

WORKSHOPS



OEM & ODM BUSINESS



APPLICATION FIELD



EKR8-10 Series WiFi Intelligent Relay
WiFi 智能继电器



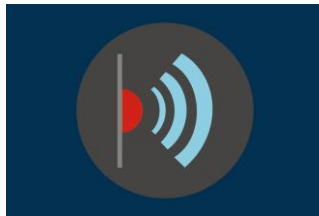
Intelligent Industry
智能工业



Smart Home
智能家居



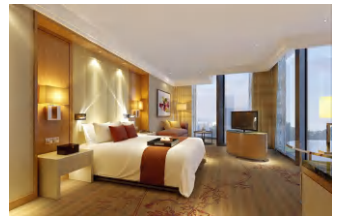
EKR8-2 Series Step / Monostable & Call / Reset Relay
步进/单稳态&呼叫/复位继电器



Call Alarm
呼叫报警



Automated Production Line
自动化生产线



Home Appliance Control
家电控制



EKR8-3 Series Light Activated Switch / Staircase Light Time Switch
光敏开关/楼道延时开关



Daylighting Control
采光控制



Outdoor Lighting
户外照明



EKR8-4 Series Switching Power Supply
开关电源



Industrial Control System
工业控制系统

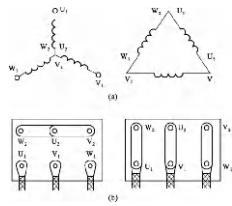


Building Appliance System
建筑家电系统

APPLICATION FIELD



EKR8-5 Series Time Relay
时间继电器



Star-delta Start
星三角启动



Packaging Machinery Equipment
包装机械设备



Advertising Neon Control
广告霓虹控制



Industrial Control Cabinet
工业控制柜



EKR8-6 Series Floatless Level Switch
液位开关



Water Supply & Drainage System
供水、排水系统



Chemical Plant Liquid Supply System
化工厂液体供给系统



EKR8-7 Series Voltage Protection Relay
电压保护继电器系列



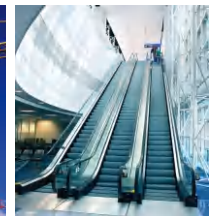
Power Distribution Control Cabinet
配电控制柜



Compressor
压缩机



Crane
起重机



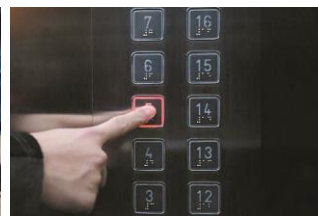
Escalator
自动扶梯



EKR8-8 Series Current Monitoring Relay
电流监控继电器



Electric Motor
电动机



Elevator
电梯

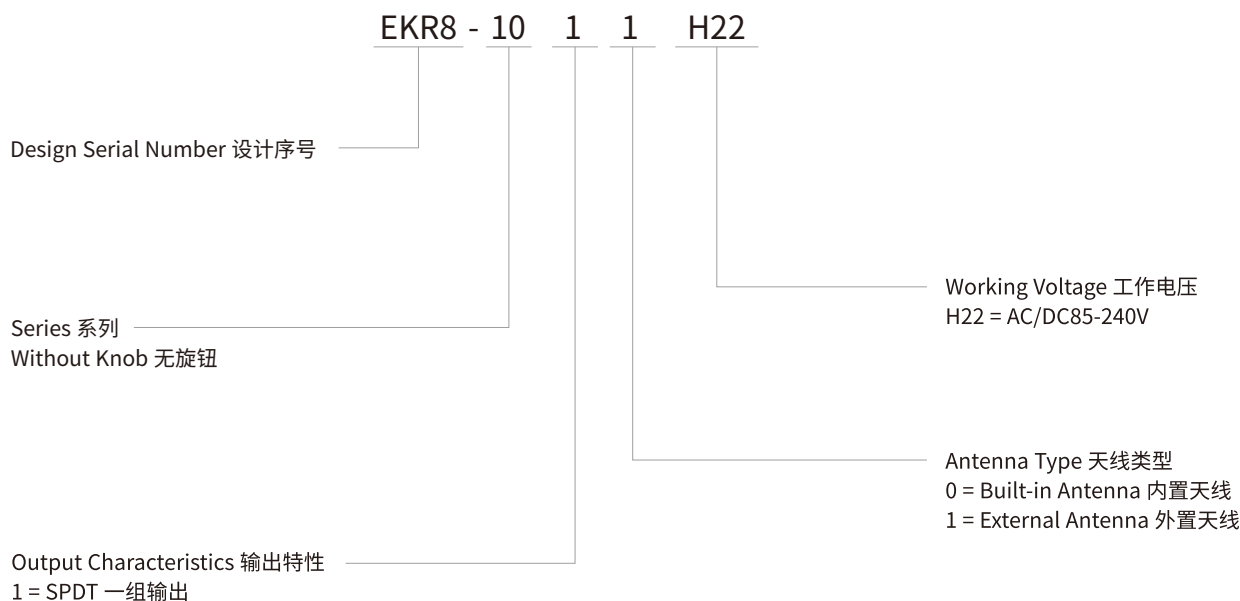


Conveyor
输送带

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Model Naming Rules 型号命名规则



Product Description 产品描述

EKR8-10 series is a WiFi control relay module specially designed and developed by our company for the field of intelligent control. It is widely used in smart home and industrial intelligent control. It adopts the most popular WiFi 2.4GHz control chip, and cooperates with powerful APP and mainstream voice assistants. Realize WLAN local control (even if the network is disconnected, you can also use APP local control) and remote control, allowing users to fully experience the convenient life brought by modern intelligent technology.

Using mobile phone APP or voice control device to control ON and OFF of the output of this product to realize the purpose of remotely starting or turning off the load electrical appliances.

EKR8-10 系列是我公司为智能控制领域专业设计开发的WiFi控制继电器模组, 广泛应用于智能家居和工业智能化控制, 采用当下最流行的WiFi 2.4GHz控制芯片, 配合强大的APP和主流语音助手, 实现WLAN本地控制(即使网络断开, 也可以通过APP本地控制)和远程控制, 让用户充分体验现代智能科技带来的便利生活。

通过手机APP或者语音控制设备来控制本产品输出的接通与断开, 来实现远程启动或者关闭负载电器的目的。

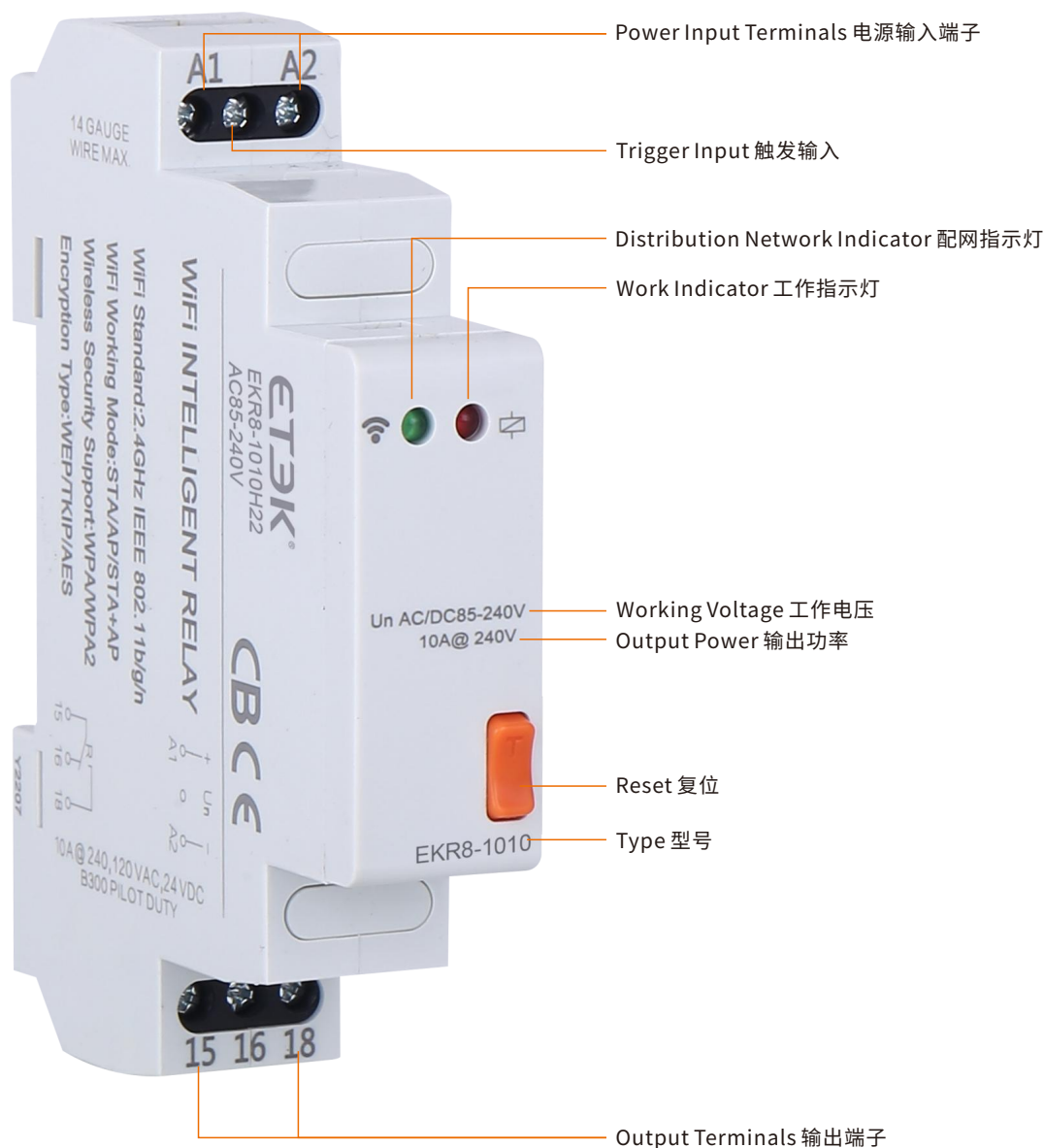
EKR8-10 Series WiFi Intelligent Control Relay



WiFi智能控制继电器

Front view: function selector and regulators

前视图：功能选择器和调节器



EKR8-10 Series WiFi Intelligent Control Relay



WiFi智能控制继电器

WiFi Intelligent Control Relay WiFi智能控制继电器

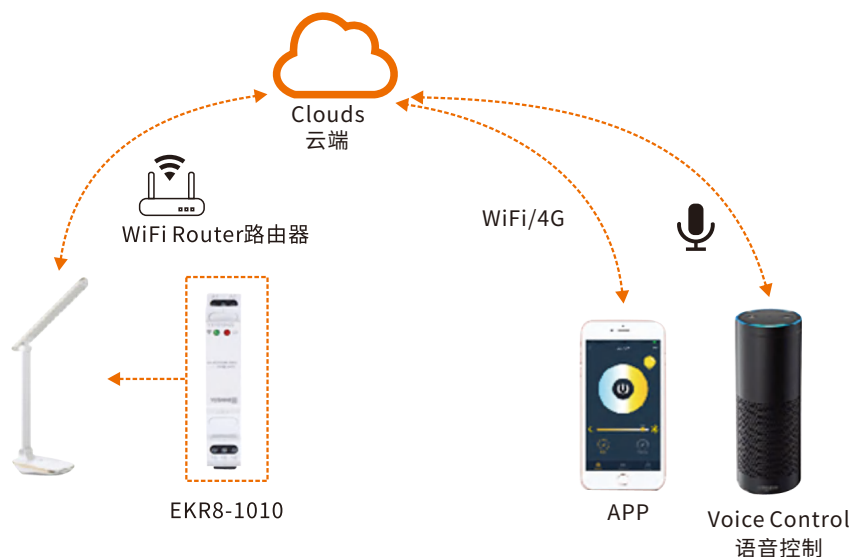
The product cooperates with the corresponding APP to realize the following functions:
 Support Smart Config for fast networking
 Support multiple control types: switch, timing start and stop, cycle control, etc.
 Support WLAN local control and remote control
 Access to mainstream voice assistants such as Tmall Genie, DuerOS, Xiao Ai (Xiao Mi), Alexa, Google, etc., voice control
 Intranet device sharing and cloud account device sharing function
 APP supports Android and iOS systems
 产品配合相应的APP可实现以下功能:
 支持Smart Config实现快速连网
 支持多种控制类型: 开关、定时启停、循环控制等控制方式
 支持WLAN本地控制和远程控制
 接入天猫精灵、DuerOS、小爱同学(小米)、Alexa、Google等主流语音助手, 语音控制
 局域网内设备共享和云端账号设备分享功能
 APP支持Android和iOS系统
 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

EKR8-10 Series

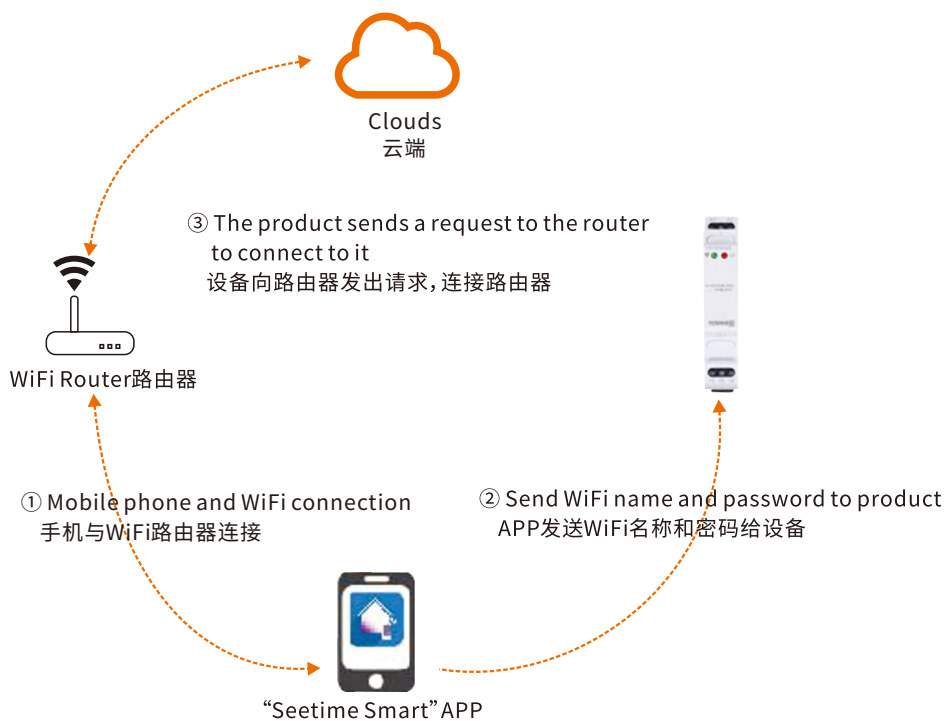


Technical Data 技术数据		EKR8-1010H22	EKR8-1011H22
WiFi Characteristic WiFi特性	Standard 标准	IEEE 802.11b/g/n	
	Working Mode 工作模式	STA/AP/STA+AP	
	Wireless Security Support 无线安全支持	WPA/WPA2	
	Encryption Type 加密类型	WEP/TKIP/AES	
WiFi RF Parameters (Typical Values) WiFi 射频参数 (典型值)	Working Frequency 工作频率	2.4GHz-2.5GHz (2400M-2483.5M)	
	Transmit Power 发射功率	802.11b (CCK): 19+/-1dBm 802.11g (OFDM): 14+/-1dBm 802.11n(HT20@MCS7): 13+/-1dBm	
	Wireless Transmission Distance 无线传输距离	General Indoor: 45M, Outdoor: 150M (Note: It depends on the environment.) 一般室内: 45m, 室外: 150m (注: 具体因环境而定)	
	Standby Power Consumption 待机功耗	Less than 0.5W 小于0.5W	
Working Condition 工作条件	Working Temperature 工作温度	-10°C-60°C	
	Storage Temperature 储存温度	Normal Temperature 常温	
	Working Humidity 工作湿度	5%-95% (Non-condensing) (不凝结)	
Physical Parameter 物理参数	Antenna Type 天线类型	Built-in Antenna 内置天线 External Antenna 外置天线	
	Rated Current 额定电流	10A	
Control Method 控制方式/Working Mode 工作模式	WiFi Control 控制	No WiFi Control 无WiFi连接	
APP Local Control 本地控制	Yes	Yes	
APP Remote Control 远程控制	Yes	N/A	
Alexa/Google Home/Tmall Genie 天猫精灵 /DuerOS/Xiao Ai (Xiao Mi) Voice platform Support 小爱同学(小米)语音平台支持	Yes	N/A	
SCCP Control 信令连接控制	Yes	Yes	
Dimensions 外形尺寸图: in 英寸 (mm 毫米)	Wiring Diagrams 接线图	Product Wiring Diagram 产品接线图	

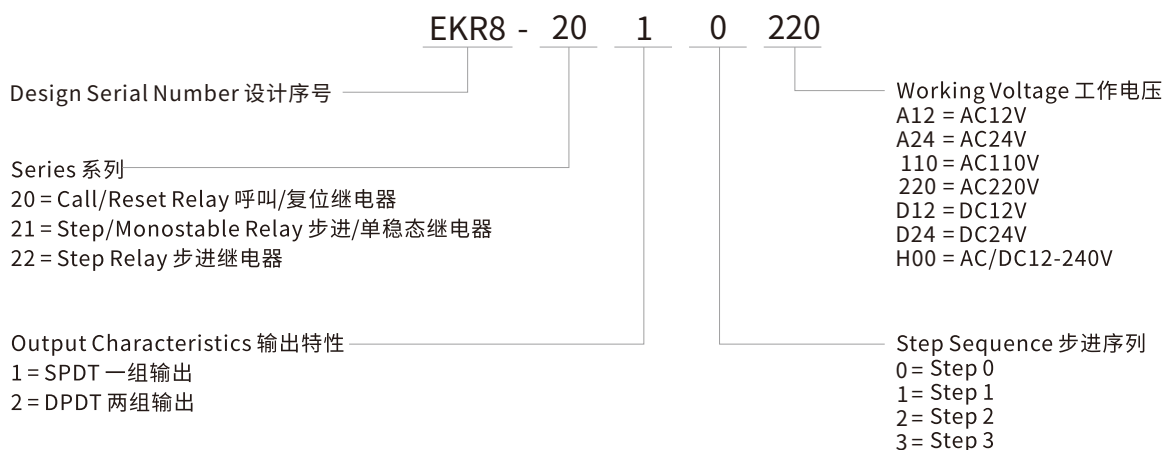
Structure Block Diagram of Intelligent Control System:
智能控制系统结构框图:



Distribution Network Block Diagram of Standard Configuration:
标准配置配网框图:



Model Naming Rules 型号命名规则



Specifications 规格

	EKR8-2010	EKR8-2020	EKR8-2110	EKR8-2210
Supply System Type 供应系统类型	Call / Reset	Call / Reset	Step / Monostable	Step
Power Indicator (Green LED) 电源指示灯	•	•	•	•
Rated Current 额定电流	5A / 16A	5A / 16A	5A / 16A	5A / 16A
Work Indicator (Red LED) 工作指示灯	•	•	•	•
Output Characteristics 输出特性	SPDT	DPDT	SPDT	SPDT
Working Voltage 工作电压(AC12V or DC12V)	•	•	•	•
Working Voltage 工作电压(AC24V or DC24V)	•	•	•	•
Working Voltage 工作电压(AC110V)	•	•	•	•
Working Voltage 工作电压(AC220V)	•	•	•	•
Working Voltage 工作电压(AC/DC12V~240V)	•	•	•	•
Step Sequence 步进序列	-	-	-	Step 0

	EKR8-2220	EKR8-2221	EKR8-2222	EKR8-2223
Supply System Type 供应系统类型	Step	Step	Step	Step
Power Indicator (Green LED) 电源指示灯	•	•	•	•
Rated Current 额定电流	5A / 16A	5A / 16A	5A / 16A	5A / 16A
Work Indicator (Red LED) 工作指示灯	•	•	•	•
Output Characteristics 输出特性	DPDT	DPDT	DPDT	DPDT
Working Voltage 工作电压(AC12V or DC12V)	•	•	•	•
Working Voltage 工作电压(AC24V or DC24V)	•	•	•	•
Working Voltage 工作电压(AC110V)	•	•	•	•
Working Voltage 工作电压(AC220V)	•	•	•	•
Working Voltage 工作电压(AC/DC12V~240V)	•	•	•	•
Step Sequence 步进序列	Step 0	Step 1	Step 2	Step 3

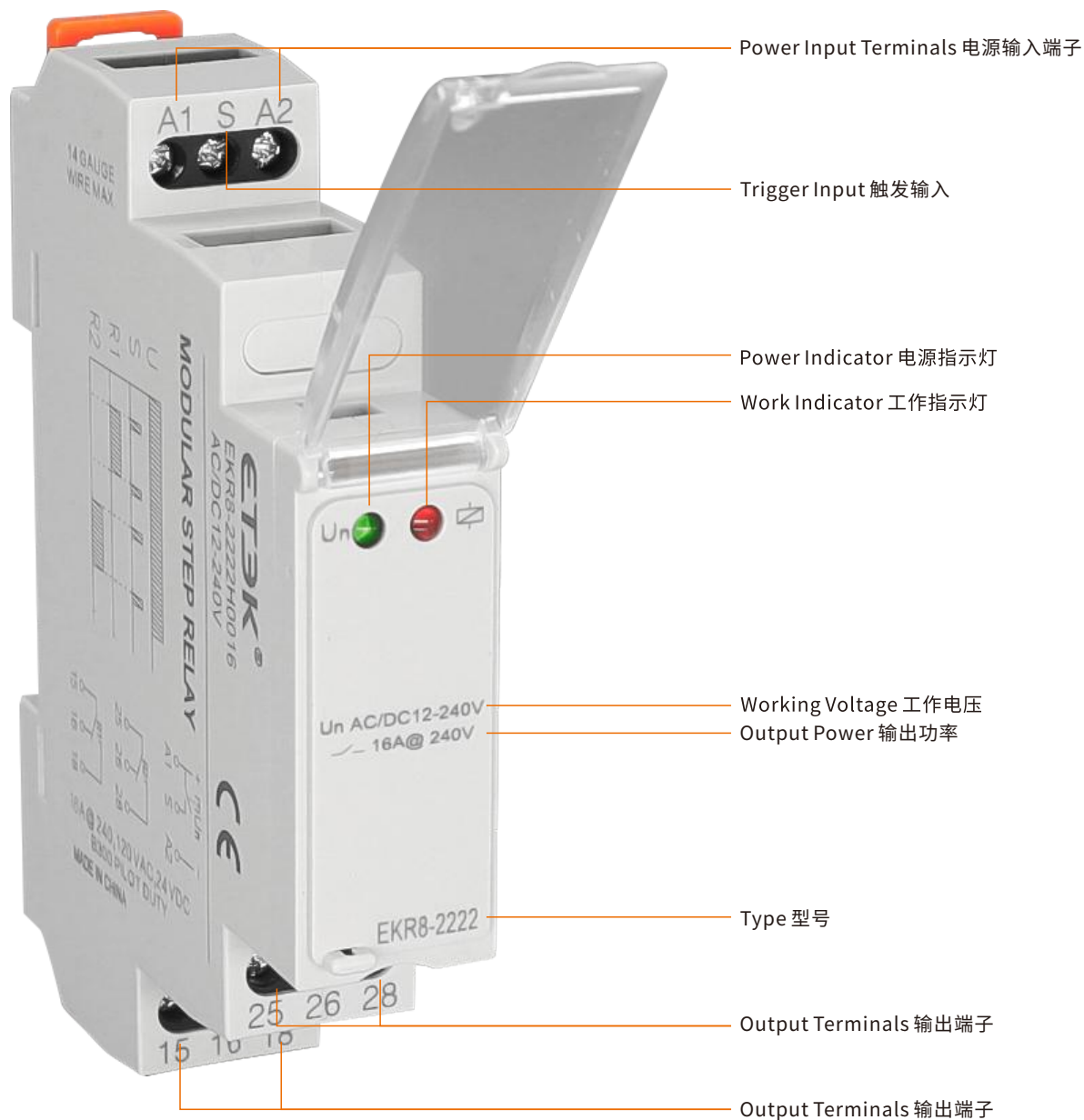
EKR8-2 Series Step / Monostable & Call / Reset Relay



步进/单稳态 & 呼叫/复位继电器

Front view: function selector and regulators

前视图: 功能选择器和调节器



呼叫/复位继电器

Call/Reset Relay 呼叫/复位继电器

Floor fire safety alarm system (The fire alarm switch on each floor is the call switch, which can only be turned on but can't be turned off. The reset switch is installed in the control room and supervised by a specially assigned person.)
楼层消防安全报警系统(每层的火警开关,就是呼叫开关,只能开,不能关。复位开关安装在控制室,并由专人监管。)

There's also small-scale call system with low cost (Community hospitals, welfare homes, or some small-scale places that need constant supervision. Each room or each bed is equipped with a call switch for emergency use. Reset switch is installed in designated place under supervision.)
小范围低成本呼叫系统(社区医院、福利院或者一些需要时刻监管的小范围场所。每个房间或者每个床位配置一个呼叫开关,以备紧急情况用。复位开关安装在受监管下的指定场所。)

EKR8-2 Series



Technical Data 技术数据	EKR8-2010	EKR8-2020
Output Characteristics 输出特性	SPDT	DPDT
Rated Current 额定电流	5A/16A	5A/16A
Working Voltage 工作电压	Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V Wide Voltage 宽电压: AC/DC12-240V	
Functions 功能		
Dimensions 外形尺寸图: in 英寸 (mm 毫米)		
Wiring Diagrams 接线图	<p>EKR8-2010</p>	<p>EKR8-2020</p>

步进/单稳态继电器

Step/Monostable Relay 步进/单稳态继电器

To control the overturn of working state for the device.
控制设备工作状态的翻转

Control input can be continuously applied.
控制输入可连续应用

Longer mechanical and electrical life, and much quieter than electromechanical step relays.
机械和电气寿命更长,比传统机电步进继电器更安静

Suitable for installation on 35mm rail (in accordance with EN 60715 standard)
适合安装在35mm导轨上(符合 EN60715标准)

EKR8-2 Series



Technical Data 技术数据

EKR8-2110

Output Characteristics 输出特性

SPDT

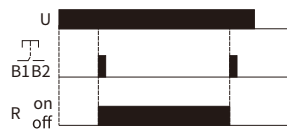
Rated Current 额定电流

5A/16A

Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
Wide Voltage 宽电压: AC/DC12-240V

Functions 功能

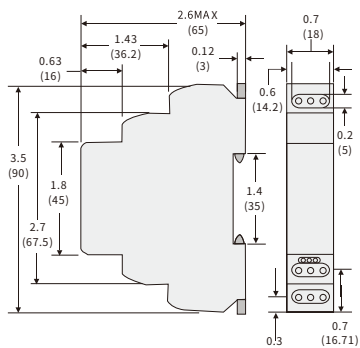


Step 步进

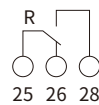
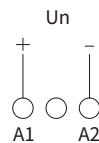


Monostable 单稳态

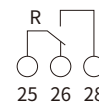
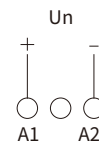
Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



Step 步进



Monostable 单稳态

EKR8-2110

步进继电器

Step Relay

步进继电器

The self-resetting switch is used to replace traditional mechanical structure wall switch.

Mains power and lower safety voltage can be used.

It has high safety and long life. It can easily realize multi-point control and get rid of the embarrassment of dual switches.

采用自复位开关替代传统机械结构的墙壁开关。

可采用市电和更低的安全电压，安全性高，寿命长。可轻松实现多点控制，摆脱双联开关的尴尬。

Suitable for installation on 35mm rail (in accordance with EN 60715 standard)

适合安装在35mm导轨上(符合 EN60715标准)

EKR8-2 Series



Technical Data 技术数据	EKR8-2210	EKR8-2220
Output Characteristics 输出特性	SPDT	DPDT
Rated Current 额定电流	5A/16A	5A/16A
Working Voltage 工作电压	Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V Wide Voltage 宽电压: AC/DC12-240V	
Functions 功能	<p style="text-align: center;">Step0</p>	<p style="text-align: center;">Step0</p>
Dimensions 外形尺寸图: in 英寸 (mm 毫米)	Wiring Diagrams 接线图	
	<p style="text-align: center;">EKR8-2210</p>	<p style="text-align: center;">EKR8-2220</p>

步进继电器

Step Relay 步进继电器

The state of output switch can be combined from many different ways, similar to universal change-over switch, combination types can be customized according to clients requirement;

输出开关状态转换组合, 类似万能转换开关, 组合类型可根据客户需求订制。

Suitable for installation on 35mm rail (in accordance with EN 60715 standard)

适合安装在35mm导轨上(符合 EN60715标准)

EKR8-2 Series



Technical Data 技术数据

Output Characteristics 输出特性

EKR8-2221

DPDT

EKR8-2222

DPDT

Rated Current 额定电流

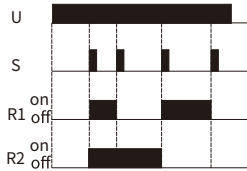
5A/16A

5A/16A

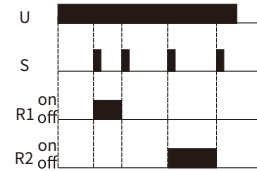
Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
Wide Voltage 宽电压: AC/DC12-240V

Functions 功能

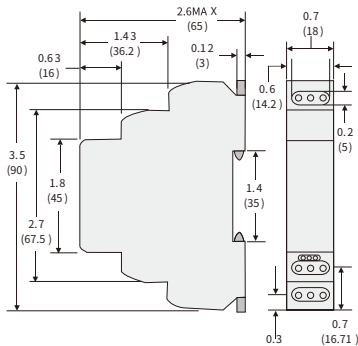


Step1

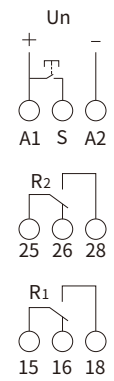


Step2

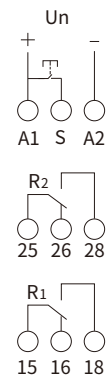
Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-2221



EKR8-2222

步进继电器

Step Relay 步进继电器

The state of output switch can be combined from many different ways, similar to universal change-over switch, combination types can be customized according to clients requirement;
输出开关状态转换组合, 类似万能转换开关, 组合类型可根据客户需求订制。
Suitable for installation on 35mm rail (in accordance with EN 60715 standard)
适合安装在35mm导轨上(符合 EN60715标准)

EKR8-2 Series



Technical Data 技术数据

EKR8-2223

Output Characteristics 输出特性

DPDT

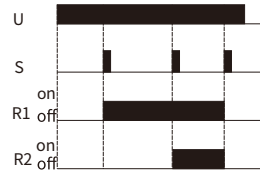
Rated Current 额定电流

5A/16A

Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
Wide Voltage 宽电压: AC/DC12-240V

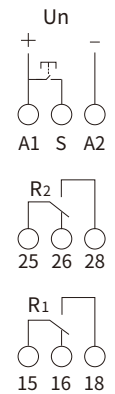
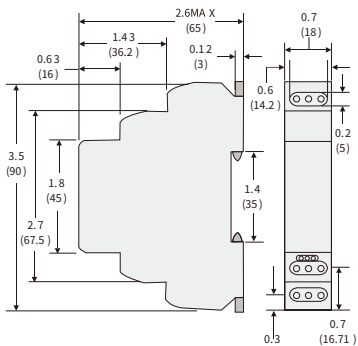
Functions 功能



Step3

Dimensions 外形尺寸图: in 英寸 (mm 毫米)

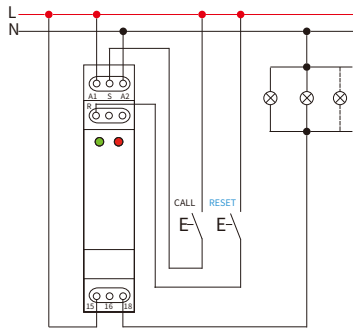
Wiring Diagrams 接线图



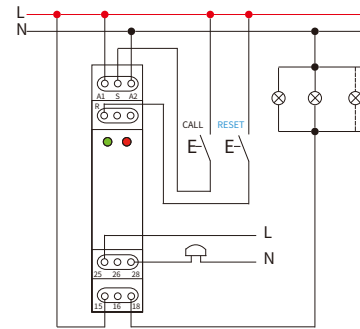
EKR8-2223

Wiring Diagram 接线图

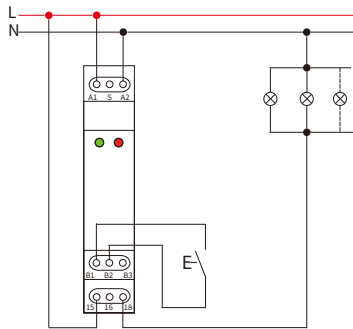
EKR8-2010系列 Working Wiring Diagram 工作接线图(SPDT)



EKR8-2020系列 Working Wiring Diagram 工作接线图(DPDT)

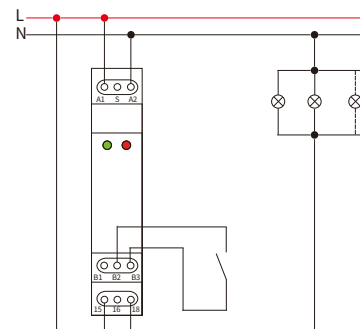


EKR8-2110系列 Working Wiring Diagram 工作接线图(SPDT)



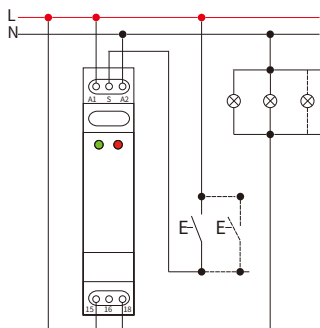
Step 步进

EKR8-2110系列 Working Wiring Diagram 工作接线图(SPDT)

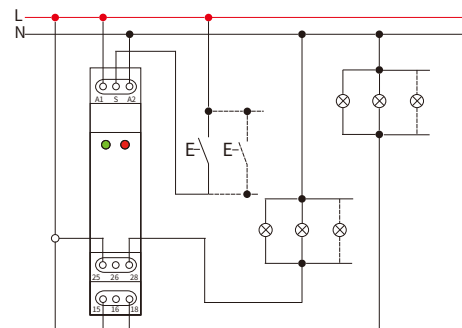


Monostable 单稳态

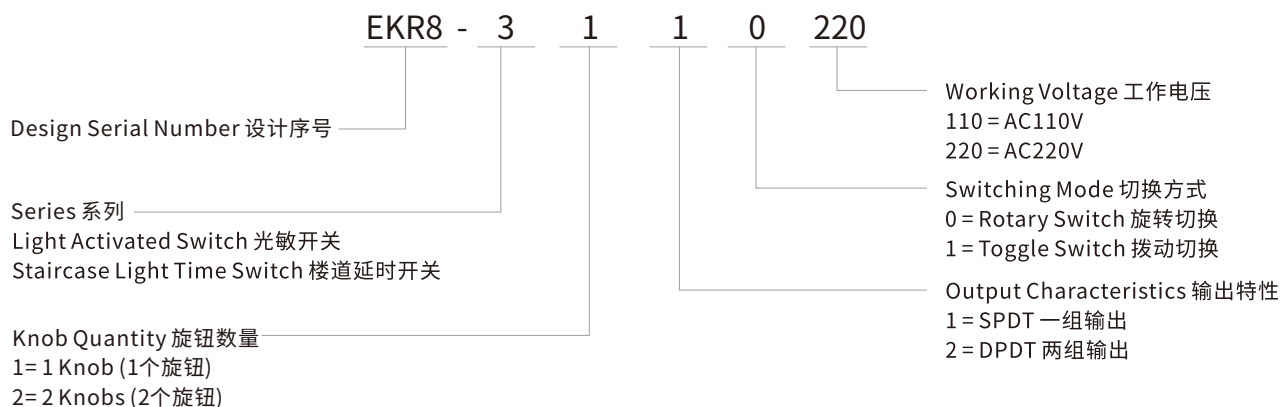
EKR8-2210系列 Working Wiring Diagram 工作接线图(SPDT)



EKR8-2220 EKR8-2221 EKR8-2222 EKR8-2223系列 Working Wiring Diagram 工作接线图(DPDT)



Model Naming Rules 型号命名规则



Specifications 规格

	EKR8-3110	EKR8-3210	EKR8-3220
Supply System Type 供应系统类型	Light Activated Switch	Staircase Light Time Switch	Staircase Light Time Switch
Power Indicator (Green LED) 电源指示灯	•	•	•
Rated Current 额定电流	16A	5A / 16A	5A / 16A
Work Indicator (Red LED) 工作指示灯	•	•	•
Output Characteristics 输出特性	SPDT	SPDT	DPDT
Working Voltage 工作电压 (AC12V or DC12V)	-	-	-
Working Voltage 工作电压 (AC24V or DC24V)	-	-	-
Working Voltage 工作电压 (AC110V)	•	•	•
Working Voltage 工作电压 (AC220V)	•	•	•
Working Voltage 工作电压 (AC/DC12V~240V)	-	-	-
Step Sequence 步进序列	-	-	-

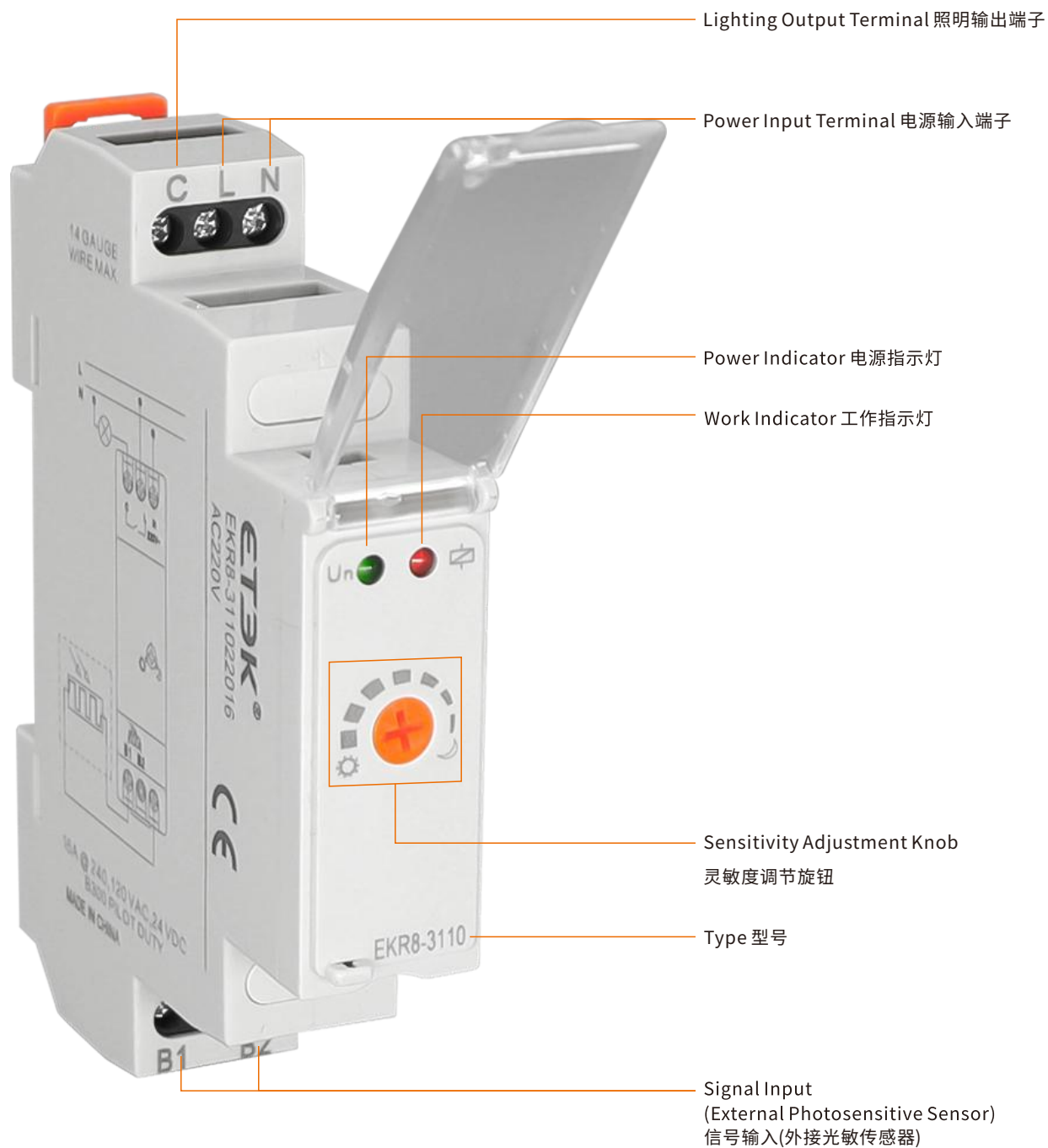
	EKR8-3211	EKR8-3221
Supply System Type 供应系统类型	Staircase Light Time Switch	Staircase Light Time Switch
Power Indicator (Green LED) 电源指示灯	•	•
Rated Current 额定电流	5A / 16A	5A / 16A
Work Indicator (Red LED) 工作指示灯	•	•
Output Characteristics 输出特性	SPDT	DPDT
Working Voltage 工作电压 (AC12V or DC12V)	-	-
Working Voltage 工作电压 (AC24V or DC24V)	-	-
Working Voltage 工作电压 (AC110V)	•	•
Working Voltage 工作电压 (AC220V)	•	•
Working Voltage 工作电压 (AC/DC12V~240V)	-	-
Step Sequence 步进序列	-	-

EKR8-3 Series Light Activated Switch

光敏开关

Front view: function selector and regulators

前视图：功能选择器和调节器



光敏开关

Light Activated Switch

光敏开关

Turn on or turn off electrical equipment according to the change of light intensity.

The action threshold can be set according to the demand.

根据光照强度的变化而对应开启或者关闭电气

设备。动作阈值可根据需求设定。

When the ambient brightness decreases and drops below the selected threshold, the control contact is closed; when the ambient brightness increases and rises above the selected threshold, the control contact opens.

当环境亮度降低并低于所选阈值时，控制触点闭合；当环境亮度增加并高于所选阈值时，控制触点断开。

Suitable for installation on 35mm rail (in accordance with EN 60715 standard)

适合安装在35mm导轨上(符合 EN60715标准)

Lighting or lighting control system

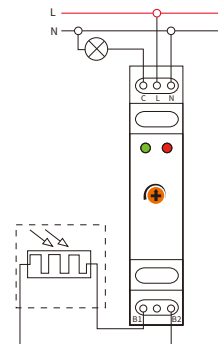
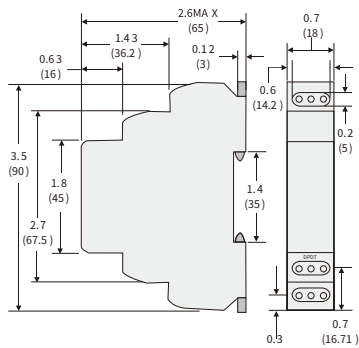
灯光照明或采光控制系统。

EKR8-3 Series



Technical Data 技术数据	EKR8-3110
2300W	Incandescent Lamp 230V 白炽灯230V
2300W	Halogen Lamp 230V 卤素灯230V
2300VA	Fluorescent Tube 荧光灯管
8×40W(4.7μF)	Parallel Compensated Fluorescent Tube,Max. 400W(42μF)
6×58W(7μF)	
2×100W(18μF)	
12×7W,8×11W,4×20W	Compact Fluorescent Lamp(CFL),Max.90W
1 000VA,	Non-corrected Mercury Vapour Lamp
400VA(42μF)	Parallel-corrected Mercury Vapour Lamp
1000VA	Non-corrected Sodium Vapour Lamp
400VA(42μF)	Parallel-corrected Sodium Vapour Lamp
20W	LED Up to 2W
55W	LED Between 2W and 8W
Output Characteristics 输出特性	SPDT
Contact Load Output 触点负载输出	16A/250VAC
Working Voltage 工作电压	Single Voltage 单电压:AC110V,AC220V

Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图
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EKR8-3 Series Staircase Light Time Switch

楼道延时开关

Front view: function selector and regulators

前视图：功能选择器和调节器



楼道延时开关

Staircase Light Time Switch 楼道延时开关

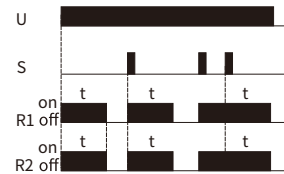
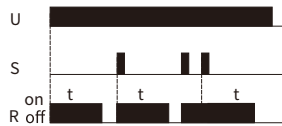
When the switch is triggered, the control contact is closed, the lighting is on, and the delay begins.
When the specified time is up, the control contact is disconnected and the lighting is off.
当开关被触发的时候,控制触点闭合,照明灯点亮,开始延时,指定的时间到了以后,控制触点断开,照明灯光熄灭。
Suitable for installation on 35mm rail (in accordance with EN 60715 standard)
适合安装在35mm导轨上(符合 EN60715标准)
Lighting or lighting control system
灯光照明或采光控制系统。

EKR8-3 Series

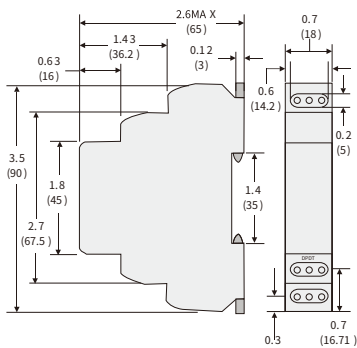


Technical Data 技术数据	EKR8-3210	EKR8-3220
Output Characteristics 输出特性	SPDT	DPDT
Rated Current 额定电流	5A/16A	5A/16A
Working Voltage 工作电压	Single Voltage 单电压:AC110V,AC220V	
Time Range 时间范围	1S,2S...1M,2M...1H,...,30H Customized according to clients&aposts; requirements 可根据客户要求定制	

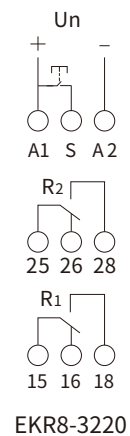
Functions 功能



Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图

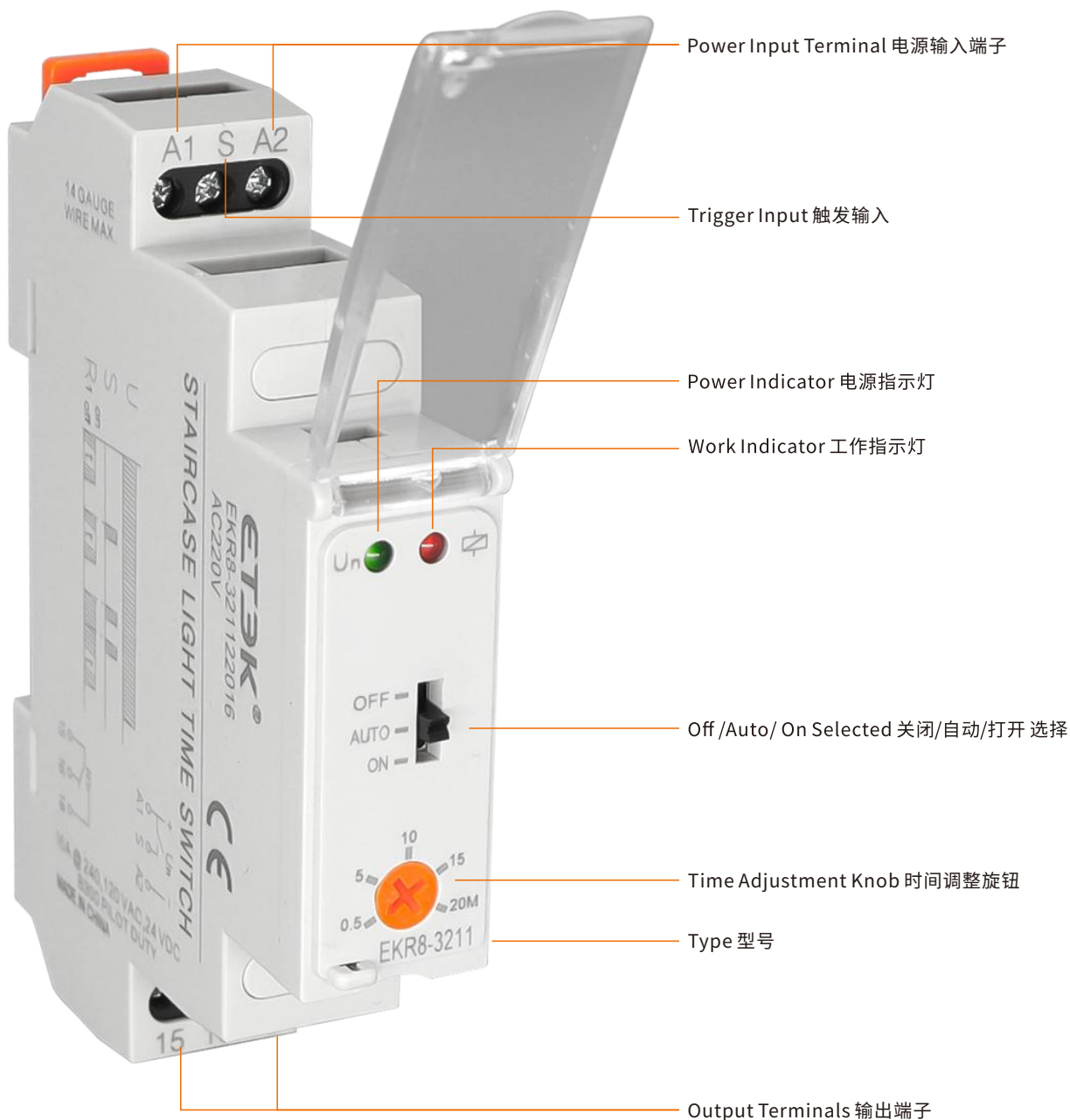


EKR8-3 Series Staircase Light Time Switch

楼道延时开关

Front view: function selector and regulators

前视图：功能选择器和调节器



楼道延时开关

Staircase Light Time Switch 楼道延时开关

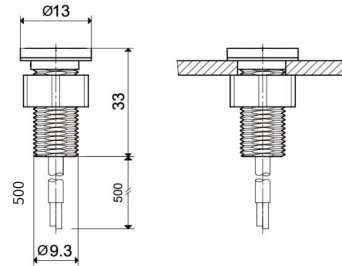
When the switch is triggered, the control contact is closed, the lighting is on, and the delay begins.
When the specified time is up, the control contact is disconnected and the lighting is off.
当开关被触发的时候,控制触点闭合,照明灯点亮,开始延时,指定的时间到了以后,控制触点断开,照明灯光熄灭。
Suitable for installation on 35mm rail (in accordance with EN 60715 standard)
适合安装在35mm导轨上(符合 EN60715标准)
Lighting or lighting control system
灯光照明或采光控制系统。

EKR8-3 Series



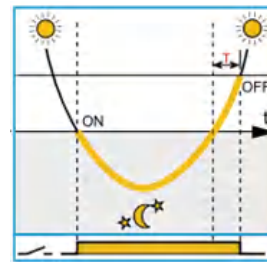
Technical Data 技术数据	EKR8-3211	EKR8-3221
Output Characteristics 输出特性	SPDT	DPDT
Rated Current 额定电流	5A/16A	5A/16A
Working Voltage 工作电压	Single Voltage 单电压:AC110V,AC220V	
Functions 功能		
Dimensions外形尺寸图:in 英寸 (mm 毫米)		
	<p>EKR8-3211</p>	<p>EKR8-3221</p>

EKR8-3110系列 Optical Sensor Dimensions 光传感器尺寸图



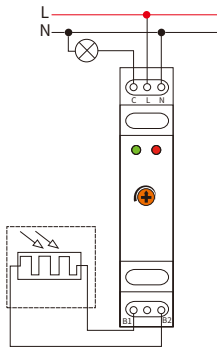
EKR8-3110系列 Working Diagram 工作示意图

Night 夜晚		:2 LUX
Rains 雨天		:20LUX
Overcast 阴天		:35LUX
Cloudy 多云		:100LUX

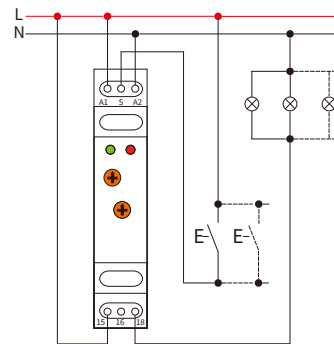


Wiring Diagram 接线图

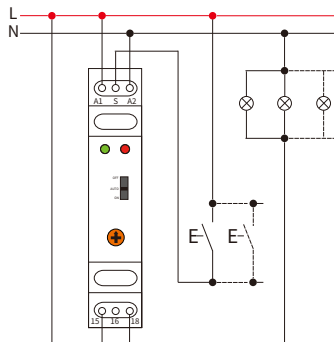
EKR8-3110系列 Working Wiring Diagram 工作接线图(SPDT)



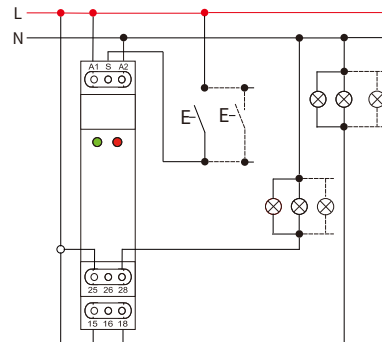
EKR8-3210系列 Working Wiring Diagram 工作接线图(SPDT)



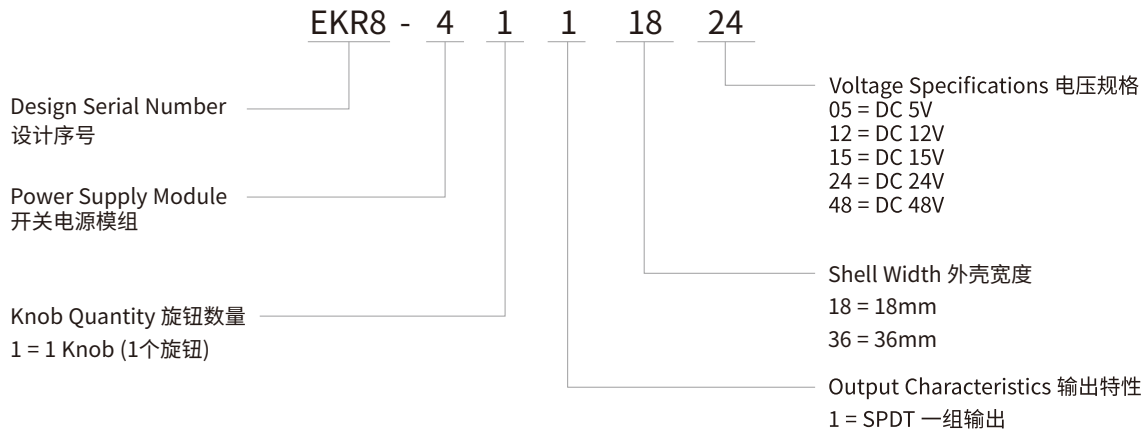
EKR8-3211系列 Working Wiring Diagram 工作接线图(SPDT)



EKR8-3220/3221系列 Working Wiring Diagram 工作接线图(DPDT)



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

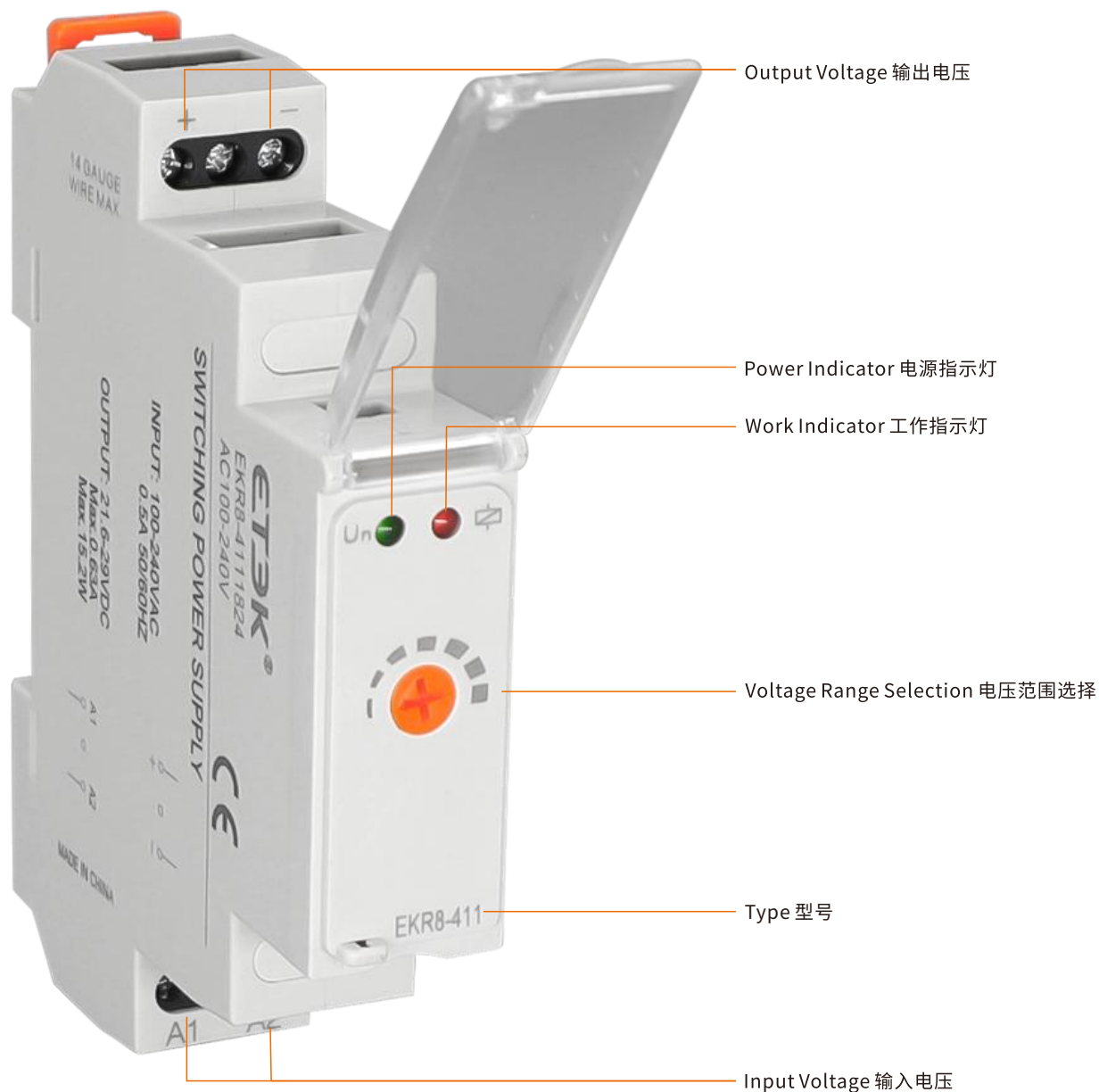
1. Unless otherwise specified, all specification parameters shall be measured at 230VAC input, rated load and ambient temperature of 25 degrees.
 2. Ripple and noise measurement method: a 12mm² twisted pair wire is used, and the terminals are connected in parallel with the capacitors of 0.1uF and 47uF, 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12mm²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

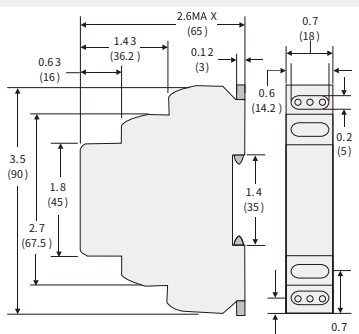
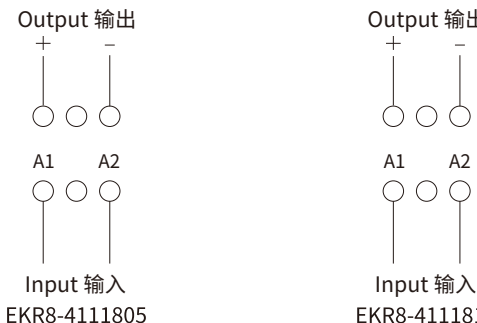
前视图：功能选择器和调节器



开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p>Product Characteristics 产品特性</p> <p>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</p> <p>Application 应用领域:</p> <p>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/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.)	80%	85%
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 - 6.75V	14.2 - 16.2V

Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图
	

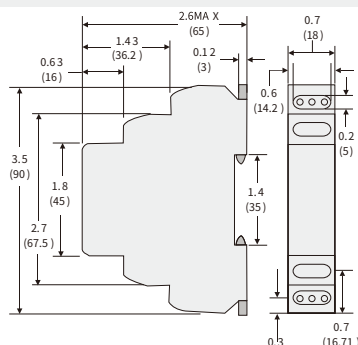
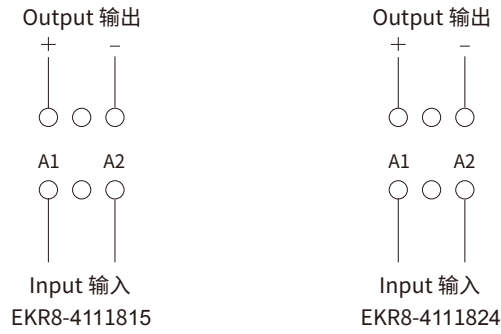
EKR8-4 Series Switching Power Supply



开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p>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</p> <p>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</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%
	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.)	85.5%	86%
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	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
	

开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p>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</p> <p>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</p>	




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)
Protection 保护	Frequency Range 频率范围	47 - 63Hz	
	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

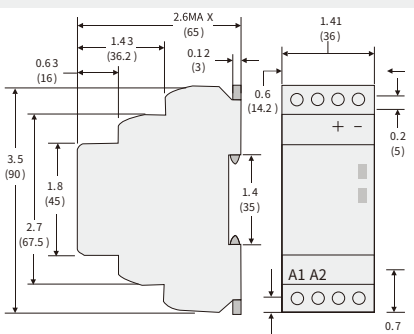
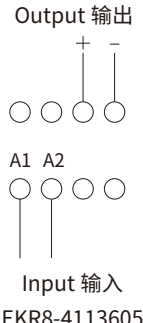
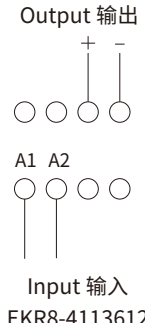
EKR8-4 Series Switching Power Supply



开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p>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</p> <p>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</p>	
	 




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	
		

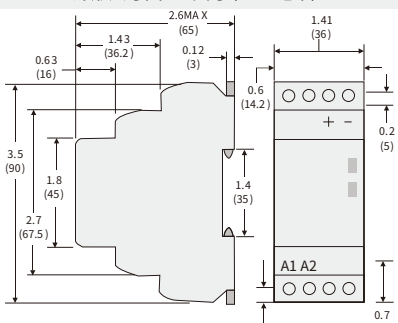
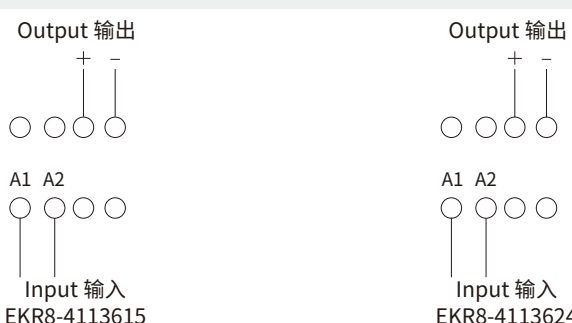
EKR8-4 Series Switching Power Supply



开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p>Product Characteristics 产品特性</p> <p>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</p> <p>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</p> <p>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</p>	
	 




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%
	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.)	89%	89%
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	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
	

EKR8-4 Series Switching Power Supply



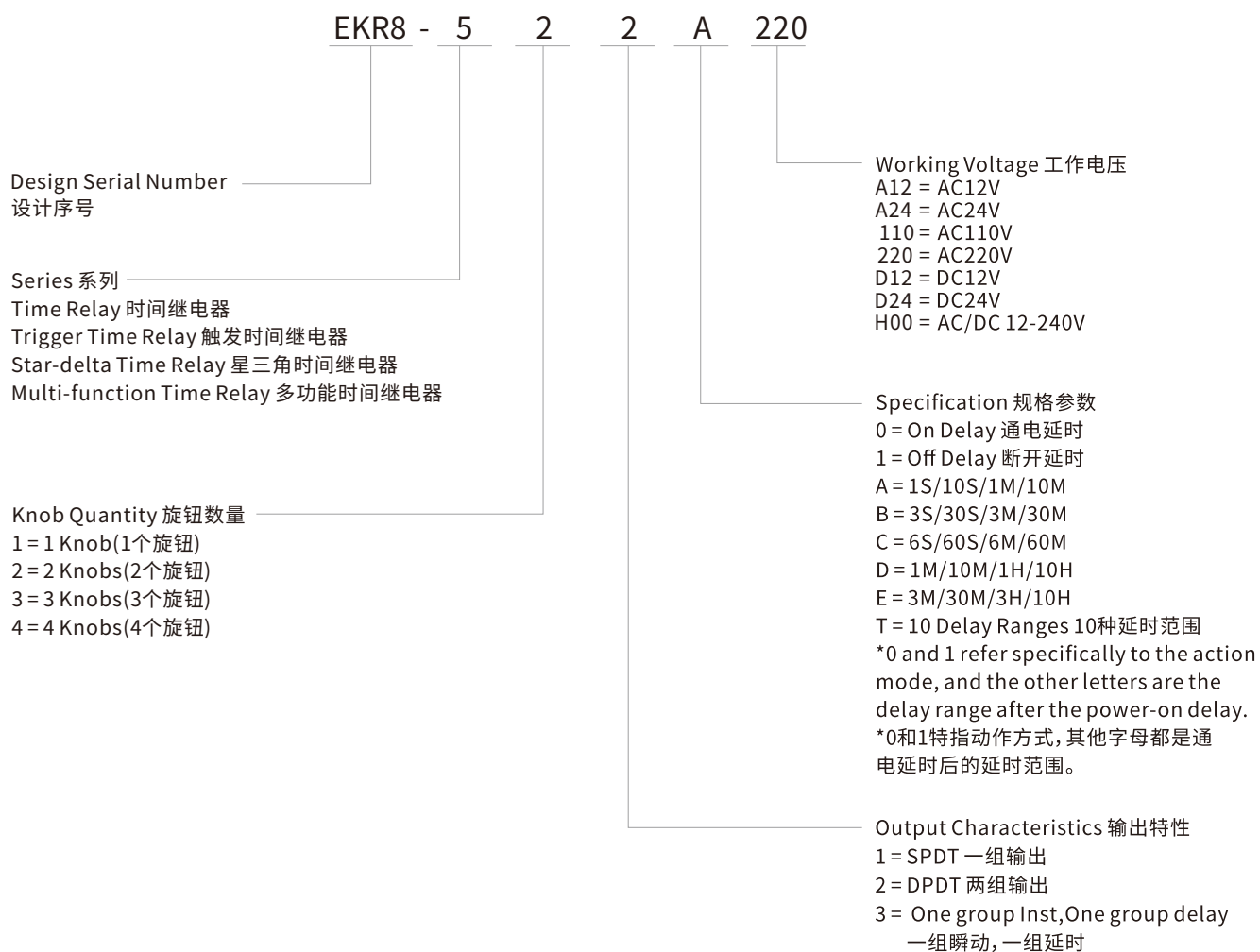
开关电源

Switching Power Supply 开关电源	EKR8-4 Series
<p>Product Characteristics 产品特性</p> <p>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</p> <p>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</p> <p>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</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%	
	Load Adjustment Rate 负载调整率	±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.)	90%	
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	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
	

Model Naming Rules 型号命名规则



EKR8-5 Series Time Relay

时间继电器

Front view: function selector and regulators
前视图: 功能选择器和调节器



时间继电器

Time Relay

时间继电器

Time relay is an automatic control unit, which can be combined with various other electrical equipment to realize automatic control of the running circuit.

When a preset time is over, the contact output will be closed or opened, so that the terminal electrical equipment can run or stop automatically.

时间继电器是一种自动化控制单元,可以结合其他各种电器设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:

Industrial machinery 工业机械

Illumination 照明

Manufacturing 制造业

HVAC system 暖通空调系统

Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据	EKR8-521T	EKR8-522T
Output Characteristics 输出特性	Multi-period SPDT Output 多时段一组输出	Multi-period DPDT output 多时段两组输出
Rated Current 额定电流	5A/16A	
Working Voltage 工作电压	Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V Wide Voltage 宽电压: AC/DC12-240V	
Time Range 时间范围	0.1S~10D (0.1秒~10天)	
Functions 功能	<p style="text-align: center;">SPDT</p>	<p style="text-align: center;">DPDT</p>
Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图	
	<p style="text-align: center;">EKR8-521T</p>	<p style="text-align: center;">EKR8-522T</p>

时间继电器

Time Relay

时间继电器

Time relay is an automatic control unit, which can be combined with various other electrical equipment to realize automatic control of the running circuit. When a preset time is over, the contact output will be closed or opened, so that the terminal electrical equipment can run or stop automatically.

时间继电器是一种自动化控制单元,可以结合其他各种电器设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:
 Industrial machinery 工业机械
 Illumination 照明
 Manufacturing 制造业
 HVAC system 暖通空调系统
 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据	EKR8-541T	EKR8-542T
Output Characteristics 输出特性	Multi-period Circulation,SPDT 一组循环延时,多时段,SPDT	Multi-period Circulation,DPDT 两组循环延时,多时段,DPDT
Rated Current 额定电流	5A/16A	
Working Voltage 工作电压	Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V Wide Voltage 宽电压: AC/DC12-240V	
Time Range 时间范围	0.1S~1D (0.1秒~1天)	
Functions 功能	<p>SPDT</p>	<p>DPDT</p>
Dimensions外形尺寸图:in 英寸 (mm 毫米)		
	<p>Wiring Diagrams 接线图</p> <p>EKR8-541T</p>	<p>EKR8-542T</p>

时间继电器

Time Relay

时间继电器

Time relay is an automatic control unit, which can be combined with various other electrical equipment to realize automatic control of the running circuit.

When a preset time is over, the contact output will be closed or opened, so that the terminal electrical equipment can run or stop automatically.

时间继电器是一种自动化控制单元,可以结合其他各种电器设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:

Industrial machinery 工业机械

Illumination 照明

Manufacturing 制造业

HVAC system 暖通空调系统

Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

Output Characteristics 输出特性

EKR8-510

SPDT (On Delay)
一组通电延时

EKR8-511

SPDT (Off Delay)
一组断开延时

Rated Current 额定电流

5A/16A

Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
Wide Voltage 宽电压: AC/DC12-240V

Time Range 时间范围

1S, 3S, 6S, 10S, 30S, 60S, 3M, 6M, 10M, 30M, 60M, 3H, 6H, 10H, 30H
Customized according to clients' requirements 可根据客户要求定制

Functions 功能

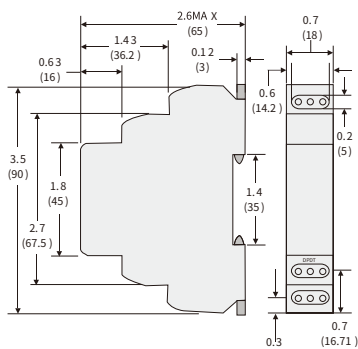


SPDT
(On Delay)

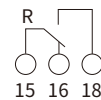
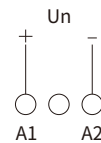


SPDT
(Off Delay)

Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-510

EKR8-511

时间继电器

Time Relay

时间继电器

Time relay is an automatic control unit, which can be combined with various other electrical equipment to realize automatic control of the running circuit.

When a preset time is over, the contact output will be closed or opened, so that the terminal electrical equipment can run or stop automatically.

时间继电器是一种自动化控制单元,可以结合其他各种电器设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:

Industrial machinery 工业机械

Illumination 照明

Manufacturing 制造业

HVAC system 暖通空调系统

Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

Output Characteristics 输出特性

EKR8-5120

DPDT(On Delay)
两组通电延时

EKR8-5121

DPDT(Off Delay)
两组断开延时

Rated Current 额定电流

5A/16A

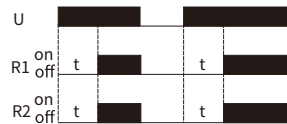
Working Voltage 工作电压

Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V
Wide Voltage 宽电压: AC/DC12-240V

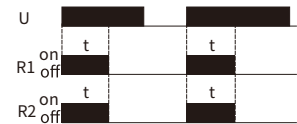
Time Range 时间范围

1S,3S,6S,10S,30S,60S,3M,6M,10M,30M,60M,3H,6H,10H,30H
Customized according to clients' requirements 可根据客户要求定制

Functions 功能

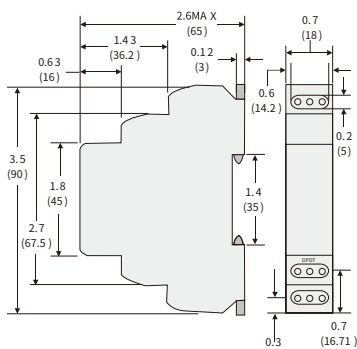


DPDT
(On Delay)

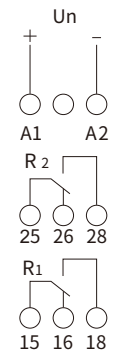


DPDT
(Off Delay)

Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5120

EKR8-5121

时间继电器

Time Relay

时间继电器

Time relay is an automatic control unit, which can be combined with various other electrical equipment to realize automatic control of the running circuit.

When a preset time is over, the contact output will be closed or opened, so that the terminal electrical equipment can run or stop automatically.

时间继电器是一种自动化控制单元,可以结合其他各种电器设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:

Industrial machinery 工业机械

Illumination 照明

Manufacturing 制造业

HVAC system 暖通空调系统

Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

EKR8-5130

Output Characteristics 输出特性

One Group Inst,One Group Delay, 一瞬一延, DPDT

Rated Current 额定电流

5A/16A

Working Voltage 工作电压

Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V
Wide Voltage 宽电压: AC/DC12-240V

Time Range 时间范围

1S,3S,6S,10S,30S,60S,3M,6M,10M,30M,60M,3H,6H,10H,30H
Customized according to clients' requirements 可根据客户要求定制

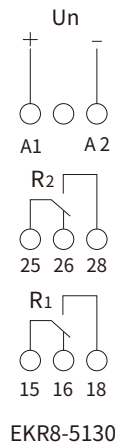
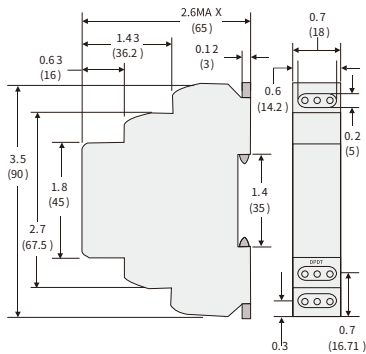
Functions 功能



DPDT
(One Inst.One Delay Output)
一瞬一延

Dimensions外形尺寸图:in 英寸(mm 毫米)

Wiring Diagrams 接线图



时间继电器

Time Relay

时间继电器

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Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据	EKR8-521★	EKR8-522★
Output Characteristics 输出特性	Multi-period Time-delay 多时段, 通电延时, SPDT	Multi-period Time-delay 多时段, 通电延时, DPDT
Rated Current 额定电流	5A/16A	
Working Voltage 工作电压	Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V Wide Voltage 宽电压: AC/DC12-240V	
Time Range 时间范围	★ :A,B,C,D,E A:1S/10S/1M/10M B:3S/30S/3M/30M C:6S/60S/6M/60M D:1M/10M/1H/10H E:3M/30M/3H/30H	
Functions 功能	<p>SPDT</p>	<p>DPDT</p>
Dimensions外形尺寸图:in 英寸(mm 毫米)		
Wiring Diagrams 接线图	<p>EKR8-521□</p>	<p>EKR8-522□</p>

时间继电器

Time Relay

时间继电器

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Illumination 照明

Manufacturing 制造业

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EKR8-5 Series



Technical Data 技术数据

EKR8-532★

Output Characteristics 输出特性

Multi-period, Time-delay, A/B mode can be switched
多时段, 通电延时, A/B模式可切换

Rated Current 额定电流

5A/16A

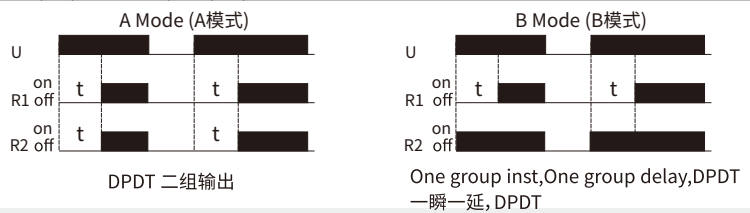
Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
Wide Voltage 宽电压: AC/DC12-240V

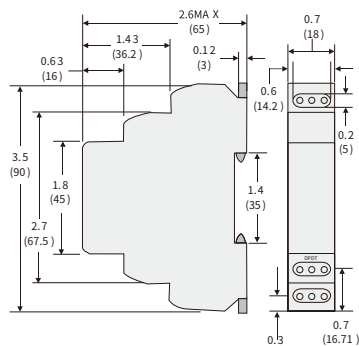
Time Range 时间范围

★ :A,B,C,D,E
A:1S/10S/1M/10M B:3S/30S/3M/30M C:6S/60S/6M/60M
D:1M/10M/1H/10H E:3M/30M/3H/30H

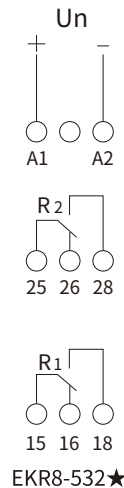
Functions 功能



Dimensions 外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5 Series Multi-function Time Relay



多功能时间继电器

Front view: function selector and regulators

前视图：功能选择器和调节器



多功能时间继电器

Multi-function Time Relay 多功能时间继电器

Time relay is an automatic control unit, that can be combined with various other electrical equipment to achieve automatic control of the operating circuit. After a preset time expires, the contact output will be closed or opened, which will enable the terminal electrical equipment to automatically run or stop.

时间继电器是一种自动化控制单元,可以结合其他各种电气设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

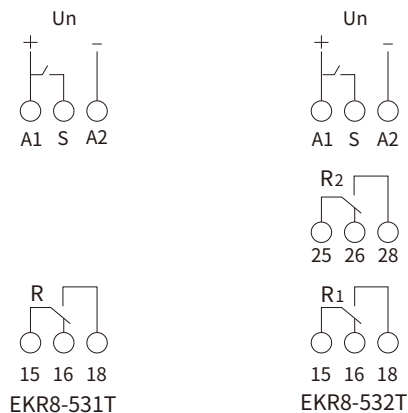
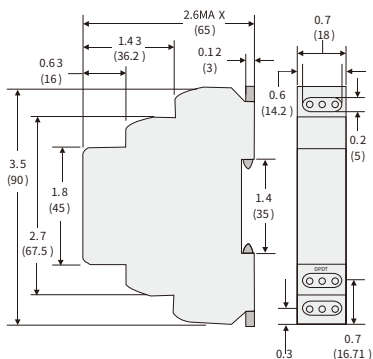
本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:
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Illumination 照明
Manufacturing 制造业
HVAC system 暖通空调系统
Food and agriculture 食品和农业

EKR8-5 Series



Output Characteristics 输出特性	EKR8-531T	EKR8-532T
Output Characteristics 输出特性	SPDT	DPDT
Contact Material 触点材料	Silver Alloy 银合金	
Current Rating 额定电流	16A@240VAC,24VDC	
Minimum Switching Requirement 最低转换要求	100mA	
Input Characteristics 输入特性		
Voltage Range 电压范围	12-240VAC/DC	
Contact Material 触点材料	Silver Alloy 银合金	
Operating Range(% of Nominal) 工作范围.	85% - 110%	
Timing Characteristics 时间特性		
Functions Available 可用的功能	10	
Time Scales 时间尺度	10	
Time Ranges 时间范围	0.1s-10D(0.1秒~10天)	
Minimum Switching Requirement 最低转换要求	100mA	
Tolerance(Mechanical Setting) 公差(机械设置)	5%	
Reset Time 重置时间	150ms	
Trigger Pulse Length(Minimum) 触发脉冲长度(最小)	50ms	
Environment 环境		
Ambient Temperature around the device 设备周围环境温度	Storage 存储温度:-30°C ~ +70°C (-22°F ~ +158°F) Operation 操作温度:-20°C ~ +55°C (-4°F ~ +131°F)	
Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图	

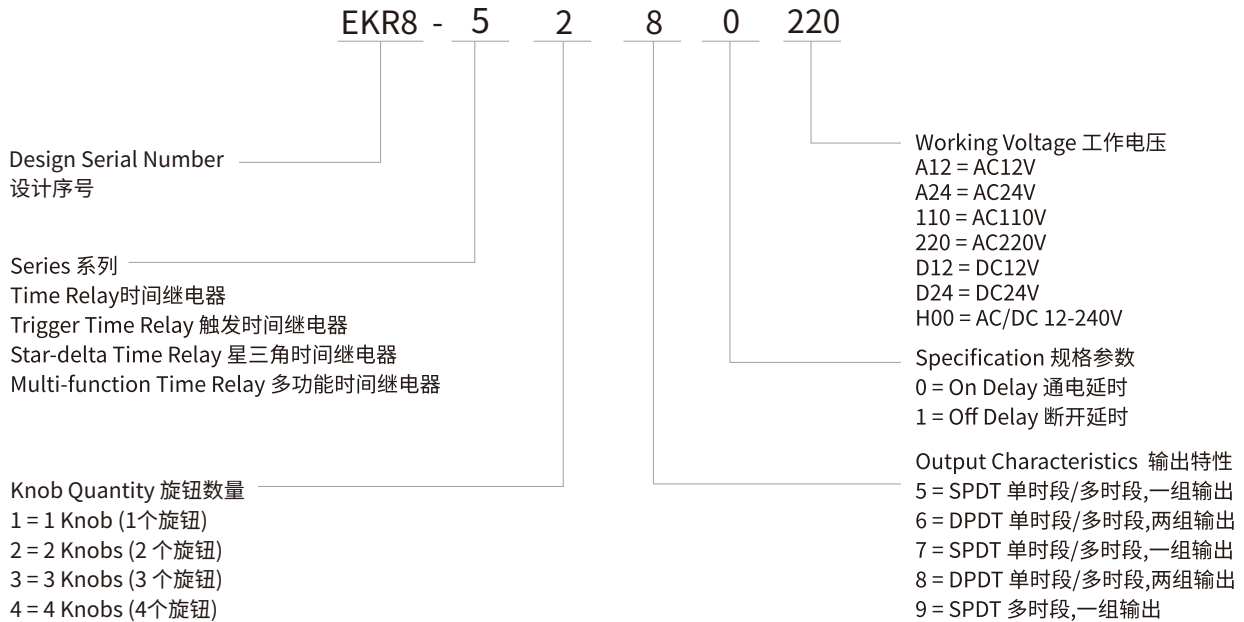


多功能时间继电器

Function 功能	Operation 描述	Timing Chart 时序图
A On Delay Power On 通电延时	When the input voltage U is applied, timing delay t begins. Relay contacts R change state after time delay is complete. Contacts R return to their shelf state when input voltage U is removed. Trigger switch is not used in this function. 输入电压 U , 设定的延时 t 开始工作, 当延时完成, 继电器触点 R 吸合, 直到切断电源, 继电器触点 R 复位。	
B Repeat Cycle Starting Off 循环模式1	When the input voltage U is applied, timing delay t begins. When time delay t is complete, relay contacts R change state for time delay t . This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function. 输入电压 U , 设定的延时 t 开始工作, 当延时完成, 继电器触点 R 吸合, 重复延时 t , 继电器触点 R 释放, 重复此过程。	
C Interval Power On 断开延时	When input voltage U is applied, relay contacts R change state immediately and timing cycle begins. When time delay is complete, contacts return to their shelf state. When input voltage U is removed, contacts will also return to their state. Trigger switch is not used in this function. 输入电压 U , 继电器触点 R 吸合, 设定的延时 t 开始工作, 当延时完成, 继电器触点 R 复位。	
D Off Delay S Break 触发模式1	Input voltage U must be applied continuously. When trigger S is closed, relay contacts R change state. When trigger S is opened, delay t begins. When delay t is complete, contacts R return to their shelf state. If trigger S is closed before time delay t is complete, then time is reset. When trigger S is opened, the delay begins again, and relay contacts remain in their energized state, if input voltage U is removed, relay contacts R return to their shelf state. 输入电压 U , 当触发开关 S 闭合, 继电器触点 R 吸合, S 断开, 延时 t 开始工作, 当延时完成, 继电器触点 R 释放复位, 如果在延时 t 未完成之前, 而触发开关 S 再次闭合, 延时设定 t 会复位。	
E Retriggerable One Shot 触发模式2	Upon application of input voltage U , the relay is ready to accept trigger signal S . Upon application of the trigger signal S , the relay contacts R transfer and the preset time t begins. At the end of the preset time t , the relay contacts R return to their normal condition unless the trigger signal S is opened and closed prior to time out t (before preset time elapses). Continuous cycling of the trigger signal S at a rate faster than the preset time will cause the relay contacts R to remain closed. If input voltage U is removed, relay contacts R return to their shelf state. 输入电压 U , 当触发开关 S 闭合, 继电器触点 R 吸合, 延时 t 开始工作, 不管 S 是否断开, t 完成, 继电器触点 R 释放。如果在延时 t 未完成之前, 而触发开关 S 再次闭合, 延时设定 t 会复位。	
F Repeat Cycle Starting ON 循环模式2	When input voltage U is applied, relay contacts R change state immediately and time delay t begins. When time delay t is complete, contacts return to their shelf state for time delay t . This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function. 输入电压 U , 继电器触点 R 吸合, 延时 t 开始工作, 当延时完成, 继电器触点 R 释放, 重新延时 t , 完成后继电器触点 R 吸合, 重复此过程。	
G Pulse Generator 脉冲模式	Upon application of input voltage U , a single output pulse of 0.5 seconds is delivered to relay offer time delay t . Power must be removed and reapplied to repeat pulse. Trigger switch S is not used in this function. 输入电压 U , 延时 t 开始工作, 当延时完成, 输出0.5S的脉冲信号给继电器。	
H One Shot 触发模式3	Upon application of input voltage U , the relay is ready to accept trigger signal S . Upon application of the trigger signal S , the relay contacts R trasher and the preset time t begins. During time-out, the trigger signal S is ignored. The relay resets by applying the trigger signal S when the relay is not energized. 输入电压 U , 当触发开关 S 闭合, 继电器触点 R 吸合, 延时 t 开始, 不管 S 是否断开, 当延时完成, 继电器触点 R 释放, 此模式和E模式区别在于, 忽略延时过程中触发开关是否重新触发信号, 延时设定不会复位。	
I On/Off Delay S Make/Break 触发模式4	Input voltage U must be applied continuously. When trigger S is closed, time delay t begins. When time delay t is complete, relay contacts R change state and remain transferred until trigger S is opened. If input voltage U is removed, relay contacts R return to their shelf state. 输入电压 U , 当触发开关 S 闭合, 延时 t 开始工作, 延时 t 完成, 继电器触点 R 吸合, 当触发开关 S 断开, 重新开始延时 t , 当延时 t 完成, 继电器触点 R 释放。	
J Memory Latch S Make 双稳态模式	Input voltage U must be applied continuously. Output changes state with every trigger S closure. If input voltage U is removed, relay contacts R return to their shelf state. 输入电压 U , 每次触发开关 S 都会相应改变继电器触点 R 的状态, 此过程延时 t 不起作用。	

Relay Contact 16A	Load								
						AC 1	AC 3	AC1 5	DC1(24/110/220V)
AgN i	1000 W			70μF		4000V A	0.9kW	750VA	16A/0.5A/0.35A

Model Naming Rules 型号命名规则



Output Code 输出代号	Timing Chart 时序图		Timing Chart 时序图	
5 SPDT				
	EKR8-5150	EKR8-5151	EKR8-5250	EKR8-5251
6 DPDT				
	EKR8-5160	EKR8-5161	EKR8-5260	EKR8-5261
7 SPDT				
	EKR8-5170	EKR8-5171	EKR8-5270	EKR8-5271
8 DPDT				
	EKR8-5180	EKR8-5181	EKR8-5280	EKR8-5281
9 SPDT				EKR8-5290

EKR8-5 Series Trigger Time Relay

触发时间继电器

Front view: function selector and regulators
前视图: 功能选择器和调节器



触发时间继电器

Trigger Time Relay

触发时间继电器

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 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

EKR8-5150

EKR8-5151

Output Characteristics 输出特性

Single-period SPDT Output 单时段一组输出

Rated Current 额定电流

5A/16A

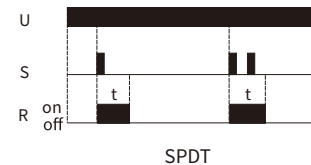
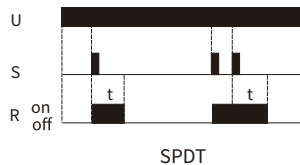
Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
 Wide Voltage 宽电压: AC/DC12-240V

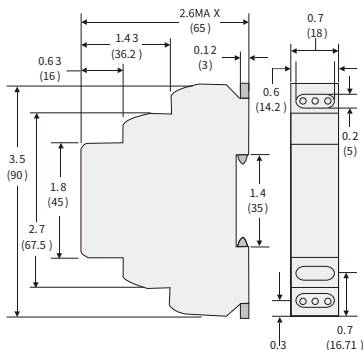
Time Range 时间范围

1S, 3S, 6S, 10S, 30S, 60S, 3M, 6M, 10M, 30M, 60M, 3H, 6H, 10H, 30H
 Customized according to clients' requirements 可根据客户要求定制

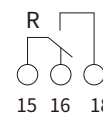
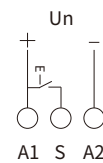
Functions 功能



Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5150
 EKR8-5151

触发时间继电器

Trigger Time Relay

触发时间继电器

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 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

EKR8-5160

EKR8-5161

Output Characteristics 输出特性

Single-period DPDT Output 单时段两组输出

Rated Current 额定电流

5A/16A

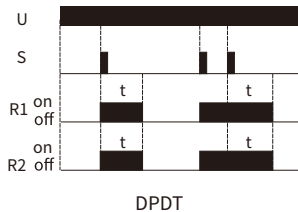
Working Voltage 工作电压

Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V
 Wide Voltage 宽电压: AC/DC12-240V

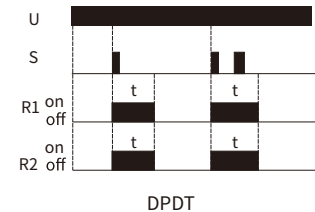
Time Range 时间范围

1S,3S,6S,10S,30S,3M,6M,10M,30M,60M,3H,6H,10H,30H
 Customized according to clients' requirements 可根据客户要求定制

Functions 功能

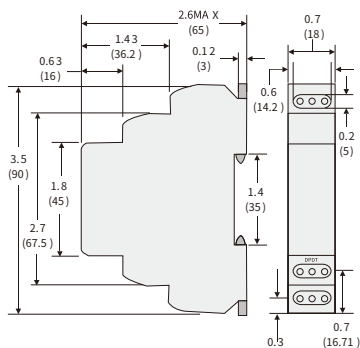


DPDT

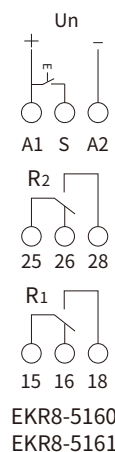


DPDT

Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



触发时间继电器

Trigger Time Relay

触发时间继电器

Time relay is an automatic control unit, that can be combined with various other electrical equipment to achieve automatic control of the operating circuit. After a preset time expires, the contact output will be closed or opened, which will enable the terminal electrical equipment to automatically run or stop.

时间继电器是一种自动化控制单元,可以结合其他各种电器设备,实现自动控制运行线路,在一个预设定的时间结束后,闭合或者断开触点输出,使终端电器实现自动运行或者停止。

This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc.

本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

Application 应用领域:
 Industrial machinery 工业机械
 Illumination 照明
 Manufacturing 制造业
 HVAC system 暖通空调系统
 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据	EKR8-5250	EKR8-5251
Output Characteristics 输出特性	Multi-period SPDT Output 多时段一组输出	
Rated Current 额定电流	5A/16A	
Working Voltage 工作电压	Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V Wide Voltage 宽电压: AC/DC12-240V	
Time Range 时间范围	0.1S~10D (0.1秒~10天)	
Functions 功能		
Dimensions 外形尺寸图: in 英寸 (mm 毫米)	Wiring Diagrams 接线图	
	<p>EKR8-5250 EKR8-5251</p>	

触发时间继电器

Trigger Time Relay

触发时间继电器

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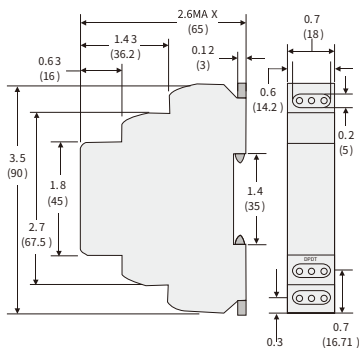
Application 应用领域:
 Industrial machinery 工业机械
 Illumination 照明
 Manufacturing 制造业
 HVAC system 暖通空调系统
 Food and agriculture 食品和农业

EKR8-5 Series

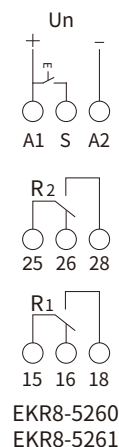


Technical Data 技术数据	EKR8-5260	EKR8-5261
Output Characteristics 输出特性	Multi-period DPDT output 多时段两组输出	
Rated Current 额定电流	5A/16A	
Working Voltage 工作电压	Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V Wide Voltage 宽电压: AC/DC12-240V	
Time Range 时间范围	0.1S~10D (0.1秒~10天)	
Functions 功能	<p>DPDT</p>	<p>DPDT</p>

Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



触发时间继电器

Trigger Time Relay

触发时间继电器

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EKR8-5 Series



Technical Data 技术数据

EKR8-5170

EKR8-5171

Output Characteristics 输出特性

Single-period SPDT Output 单时段一组输出

Rated Current 额定电流

5A/16A

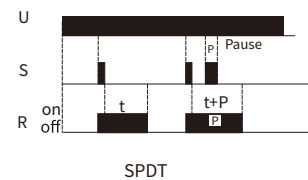
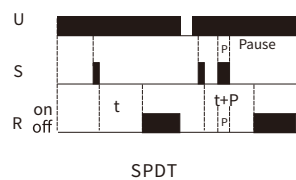
Working Voltage 工作电压

Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V
 Wide Voltage 宽电压: AC/DC12-240V

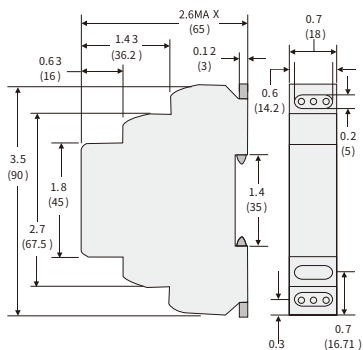
Time Range 时间范围

1S,3S,6S,10S,30S,60S,3M,6M,10M,30M,60M,3H,6H,10H,30H
 Customized according to clients' requirements 可根据客户要求定制

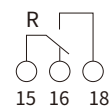
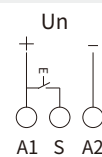
Functions 功能



Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5170
 EKR8-5171

触发时间继电器

Trigger Time Relay

触发时间继电器

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EKR8-5 Series



Technical Data 技术数据

EKR8-5180

EKR8-5181

Output Characteristics 输出特性

Single-period DPDT Output 单时段两组输出

Rated Current 额定电流

5A/16A

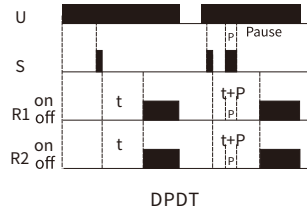
Working Voltage 工作电压

Single Voltage 单电压: AC12V,AC24V,AC110V,AC220V,DC12V,DC24V
 Wide Voltage 宽电压: AC/DC12-240V

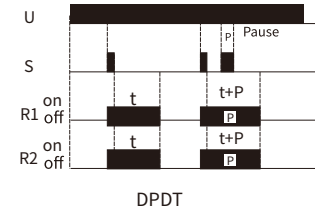
Time Range 时间范围

1S,3S,6S,10S,30S,60S,3M,6M,10M,30M,60M,3H,6H,10H,30H
 Customized according to clients' requirements 可根据客户要求定制

Functions 功能

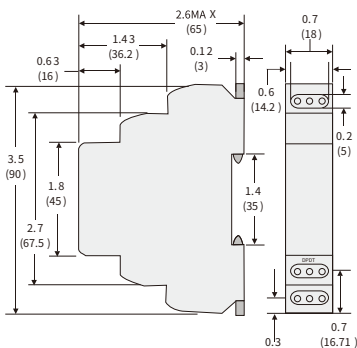


DPDT

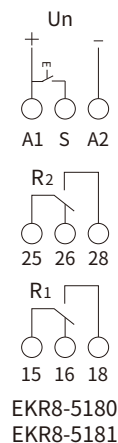


DPDT

Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5180
 EKR8-5181

触发时间继电器

Trigger Time Relay

触发时间继电器

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 HVAC system 暖通空调系统
 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

EKR8-5270

EKR8-5271

Output Characteristics 输出特性

Multi-period SPDT Output 多时段一组输出

Rated Current 额定电流

5A/16A

Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
 Wide Voltage 宽电压: AC/DC12-240V

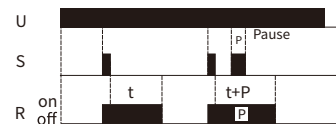
Time Range 时间范围

0.1S~10D (0.1秒~10天)

Functions 功能

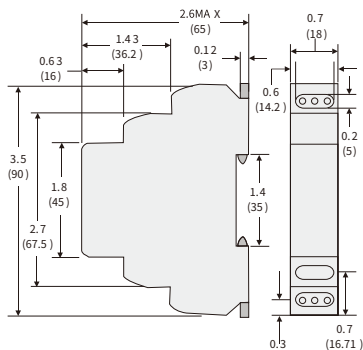


SPDT

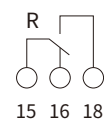
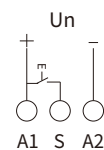


SPDT

Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5270
EKR8-5271

触发时间继电器

Trigger Time Relay

触发时间继电器

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 Industrial machinery 工业机械
 Illumination 照明
 Manufacturing 制造业
 HVAC system 暖通空调系统
 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

EKR8-5280

EKR8-5281

Output Characteristics 输出特性

Multi-period DPDT output 多时段两组输出

Rated Current 额定电流

5A/16A

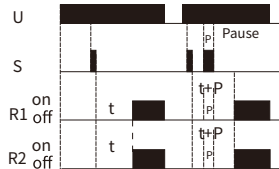
Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
 Wide Voltage 宽电压: AC/DC12-240V

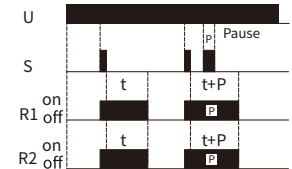
Time Range 时间范围

0.1S~10D (0.1秒~10天)

Functions 功能

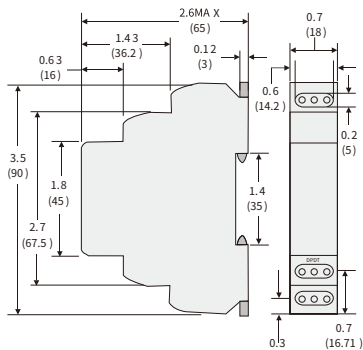


DPDT

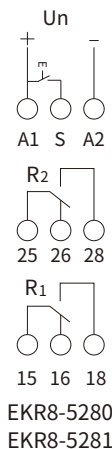


DPDT

Dimensions 外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-5280
EKR8-5281

触发时间继电器

Trigger Time Relay

触发时间继电器

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 Illumination 照明
 Manufacturing 制造业
 HVAC system 暖通空调系统
 Food and agriculture 食品和农业

EKR8-5 Series



Technical Data 技术数据

EKR8-5290

Output Characteristics 输出特性

Multi-period SPDT Output 多时段一组输出

Rated Current 额定电流

5A/16A

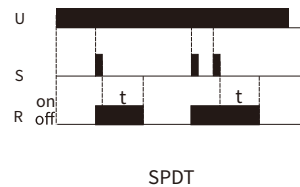
Working Voltage 工作电压

Single Voltage 单电压: AC12V, AC24V, AC110V, AC220V, DC12V, DC24V
 Wide Voltage 宽电压: AC/DC12-240V

Time Range 时间范围

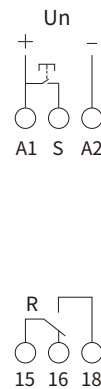
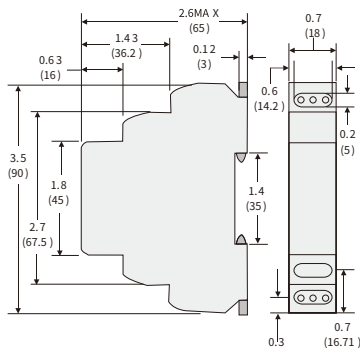
0.1S~1D (0.1秒~1天)

Functions 功能



Dimensions 外形尺寸图: in 英寸 (mm 毫米)

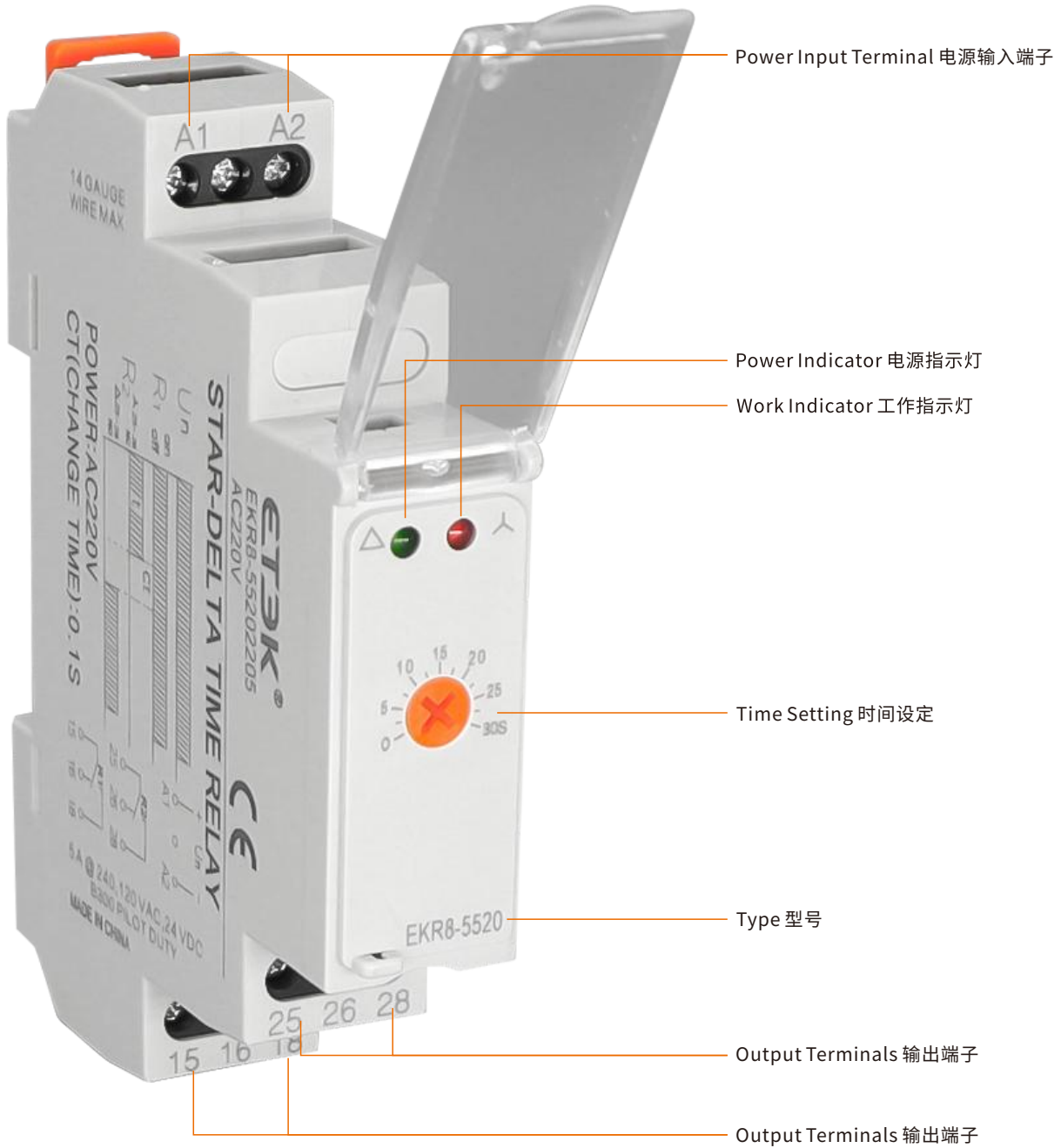
Wiring Diagrams 接线图



EKR8-5 Series Star-delta Time Relay

星三角时间继电器

Front view: function selector and regulators
前视图: 功能选择器和调节器



星三角时间继电器

Star-delta Time Relay

星三角时间继电器

Three-phase asynchronous motor star-delta step-down start is one of the common methods to solve the excessive starting current of the motor. When the motor is started, the stator winding is star-shaped and stepped down to start. After the start, the stator winding is connected into a triangle full-pressure motion.

This star type start, star-delta starting method of triangle operation can reduce the starting current and its impact on the power grid.

三相异步电机星三角降压启动，是解决电动机启动电流过大的常用方法之一。在电动机启动时将定子绕组接成星形降压启动，启动结束后，再将定子绕组接成三角形全压运动。这样星形启动，三角形运行的星三角启动方法，可以降低启动电流，减轻它对电网的冲击。

Application 应用领域:

Industrial machinery 工业机械

EKR8-5 Series



Technical Data 技术数据

EKR8-5520

Output Characteristics 输出特性

One Group Inst, One Group Delay, 一瞬一延, DPDT

Rated Current 额定电流

5A

Working Voltage 工作电压

Single Voltage 单电压: AC220V, AC380V

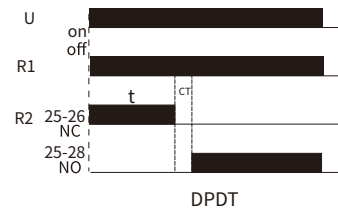
Time Range(t) 时间范围

30S/60S

Change Time(Ct) 切换时间

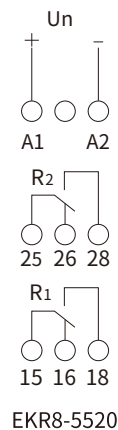
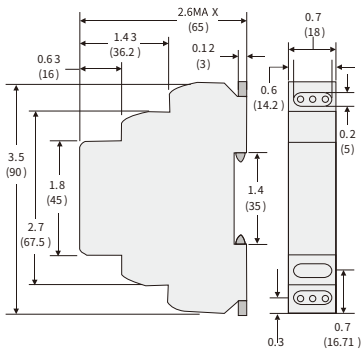
0.1S/0.2S/0.5S

Functions 功能



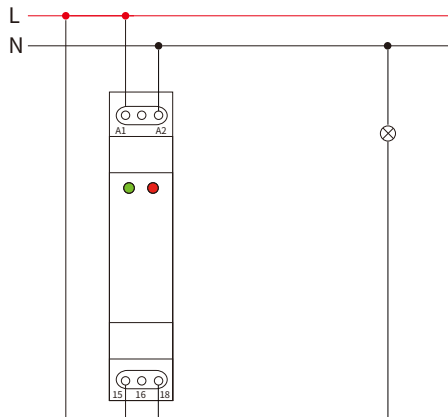
Dimensions 外形尺寸图: in 英寸 (mm 毫米)

Wiring Diagrams 接线图



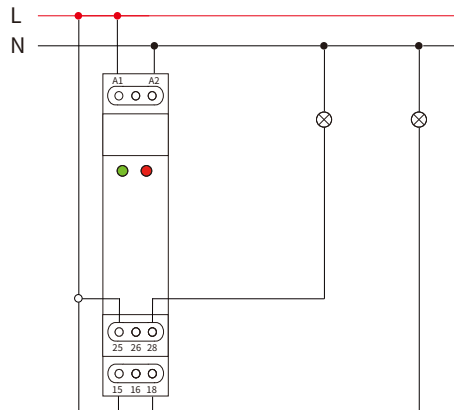
Wiring Diagram 接线图

EKR8-5 Series Time Relay 系列时间继电器
Working Wiring Diagram 工作接线图(SPDT)



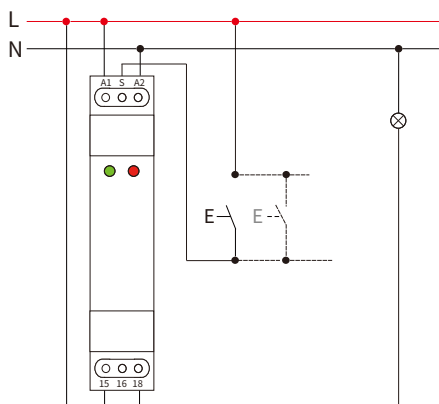
EKR8-5110,EKR8-5111,EKR8-521T,EKR8-521★,
EKR8-541T

EKR8-5 Series Time Relay 系列时间继电器
Working Wiring Diagram 工作接线图(DPDT)



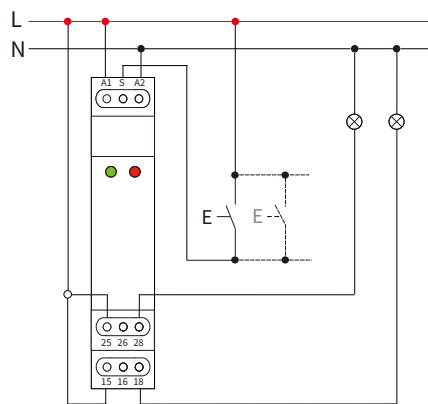
EKR8-5120,EKR8-5121,EKR8-5130,EKR8-522T,
EKR8-522★,EKR8-532★,EKR8-542T

EKR8-5 Trigger Time Relay 系列触发时间继电器
Working Wiring Diagram 工作接线图(SPDT)



EKR8-5150,EKR8-5151,EKR8-5250,
EKR8-5251,EKR8-5170,EKR8-5171,
EKR8-5270,EKR8-5271,EKR8-5290,
EKR8-531T

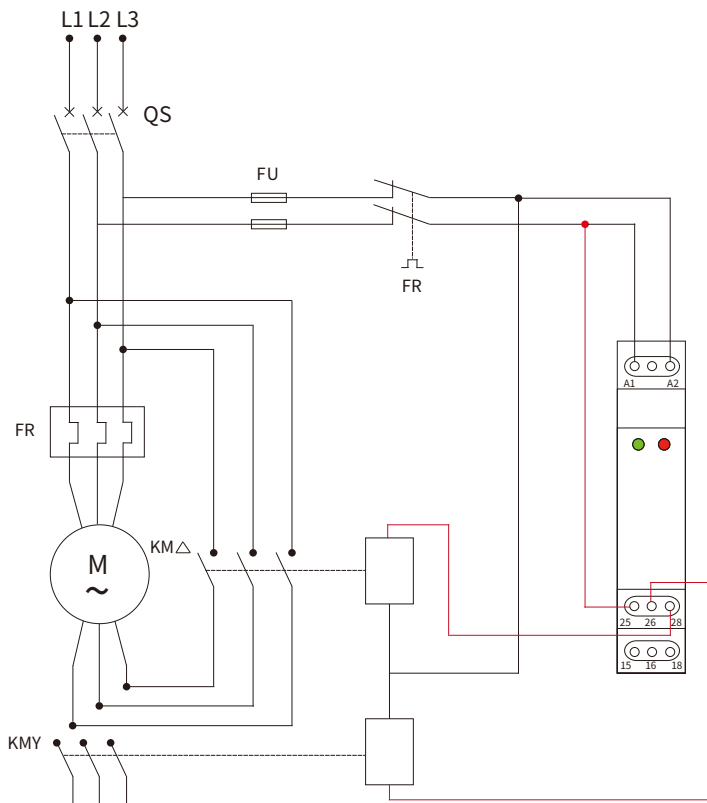
EKR8-5 Trigger Time Relay 系列触发时间继电器
Working Wiring Diagram 工作接线图(DPDT)



EKR8-5160,EKR8-5161,EKR8-5260,
EKR8-5261,EKR8-5180,EKR8-5181,
EKR8-5280,EKR8-5281,EKR8-532T

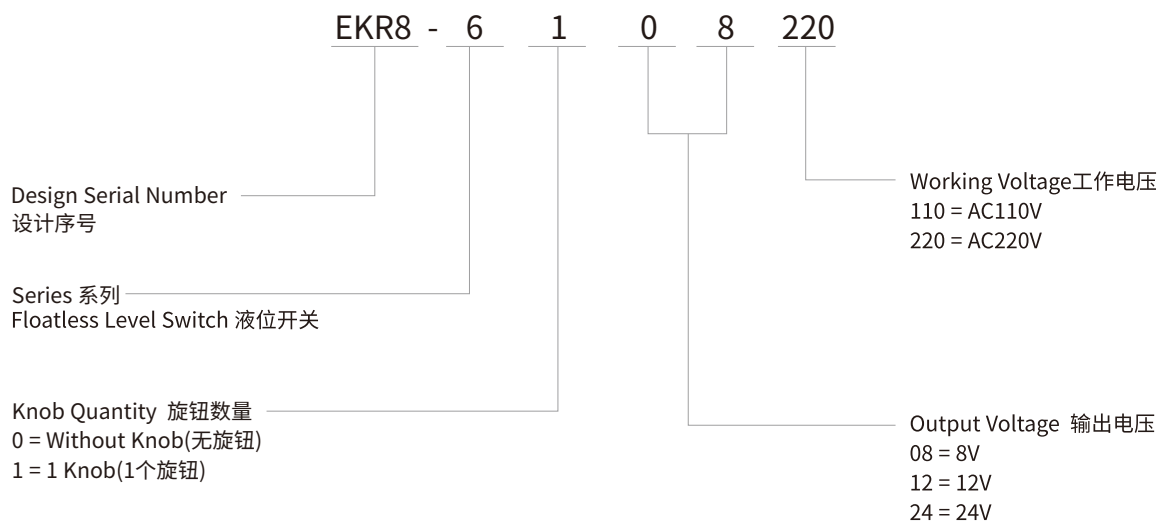
Wiring Diagram 接线图

EKR8-5 Series Star-delta Time Relay 系列星三角时间继电器
Working Wiring Diagram 工作接线图(DPDT)



EKR8-5520

Model Naming Rules 型号命名规则



Function Parameters 功能参数

Type 型号	Sensitivity 灵敏度	Output Voltage 输出电压	Applicable Environment 适用环境
EKR8-6008	Low Sensitivity, Fixed 低灵敏度, 固定式	8V	Used for liquid with low intrinsic resistance, such as salt water, sewage and Acid-baseliqid medicine. 盐水、污水、酸性药液、碱性药液等固有电阻低的液体
EKR8-6108	Low Sensitivity, Adjustable 低灵敏度, 可调式		
EKR8-6012	Medium Sensitivity, Fixed 中灵敏度, 固定式	12V	Used for normal purified water and sewage. 一般的净水、污水
EKR8-6112	Medium Sensitivity, Adjustable 中灵敏度, 可调式		
EKR8-6024	High Sensitivity, Fixed 高灵敏度, 固定式	24V	Used for liquid with high intrinsic resistance, such as distilled water. 蒸馏水等固有电阻高的液体
EKR8-6124	High Sensitivity, Adjustable 高灵敏度, 可调式		

EKR8-6 Series Floatless Level Switch



液位开关

Front view: function selector and regulators

前视图：功能选择器和调节器



液位开关

Floatless Level Switch

液位开关

Floatless level switch is a kind of switch that controls the height of the liquid level in the container. It uses the conductivity of the liquid to turn on or off the contact output when the liquid level reaches a certain height, and automatically monitor run or stop of the water pump to achieve the purpose of controlling the amount of liquid in the container.

液位开关是一种控制容器内液体液面高低的开关,利用液体的导电性,在液面达到一定高度的时候,接通或者断开触点输出,自动监控水泵的运行或停止,来达到对容器内液体进行一个量的控制的目的。

Application: It is generally used in homes, industries, commercial places, public places and other places where automatic monitoring of water supply and drainage systems is required.

It has small size and complete specification.

It can be widely used in domestic water systems, sewage treatment systems, and special liquidsupply systems.

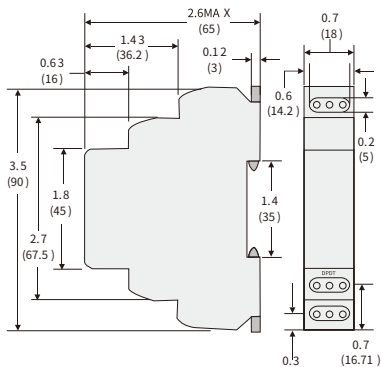
用途:一般用于家庭、工业、商用场所、公共场所等需要组建自动监控供水、排水系统地方,体积小,规格齐全,可以广泛应用于各种生活用水系统,污水处理系统,特殊液体供给系统。

EKR8-6 Series

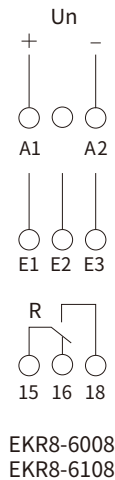


Technical Data 技术数据	EKR8-6008	EKR8-6108
Output Characteristics 输出特性	SPDT	SPDT
Rated Current 额定电流	5A	5A
Working Voltage 工作电压	AC110V,AC220V	
Output Voltage 输出电压	8V	
Applicable Environment 适用环境	Used for liquid with low intrinsic resistance,such as salt water, sewage and Acid-baseliquid medicine. 盐水、污水、酸性药液、碱性药液等固有电阻低的液体	

Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



液位开关

Floatless Level Switch

液位开关

Floatless level switch is a kind of switch that controls the height of the liquid level in the container. It uses the conductivity of the liquid to turn on or off the contact output when the liquid level reaches a certain height, and automatically monitor run or stop of the water pump to achieve the purpose of controlling the amount of liquid in the container.

液位开关是一种控制容器内液体液面高低的开关,利用液体的导电性,在液面达到一定高度的时候,接通或者断开触点输出,自动监控水泵的运行或停止,来达到对容器内液体进行一个量的控制的目的。

Application: It is generally used in homes, industries, commercial places, public places and other places where automatic monitoring of water supply and drainage systems is required.

It has small size and complete specification.

It can be widely used in domestic water systems, sewage treatment systems, and special liquidsupply systems.

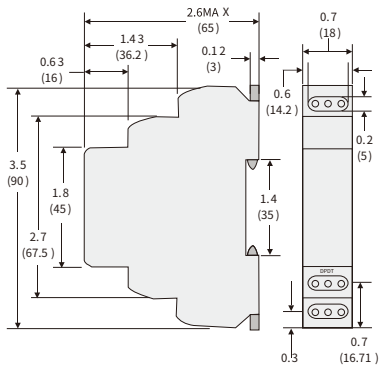
用途:一般用于家庭、工业、商用场所、公共场所等需要组建自动监控供水、排水系统地方,体积小,规格齐全,可以广泛应用于各种生活用水系统,污水处理系统,特殊液体供给系统。

EKR8-6 Series

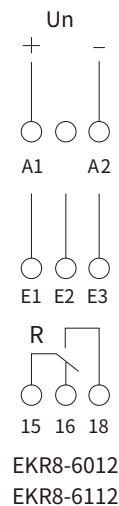


Technical Data 技术数据	EKR8-6012	EKR8-6112
Output Characteristics 输出特性	SPDT	SPDT
Rated Current 额定电流	5A	5A
Working Voltage 工作电压	AC110V,AC220V	
Output Voltage 输出电压	12V	
Applicable Environment 适用环境	Used for normal purified water and sewage. 一般的净水、污水	

Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



液位开关

Floatless Level Switch

液位开关

Floatless level switch is a kind of switch that controls the height of the liquid level in the container. It uses the conductivity of the liquid to turn on or off the contact output when the liquid level reaches a certain height, and automatically monitor run or stop of the water pump to achieve the purpose of controlling the amount of liquid in the container.

液位开关是一种控制容器内液体液面高低的开关,利用液体的导电性,在液面达到一定高度的时候,接通或者断开触点输出,自动监控水泵的运行或停止,来达到对容器内液体进行一个量的控制的目的。

Application: It is generally used in homes, industries, commercial places, public places and other places where automatic monitoring of water supply and drainage systems is required.

It has small size and complete specification.

It can be widely used in domestic water systems, sewage treatment systems, and special liquidsupply systems.

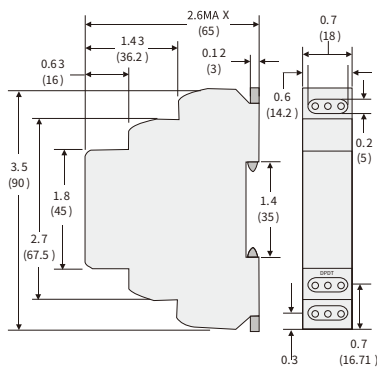
用途:一般用于家庭、工业、商用场所、公共场所等需要组建自动监控供水、排水系统地方,体积小,规格齐全,可以广泛应用于各种生活用水系统,污水处理系统,特殊液体供给系统。

EKR8-6 Series

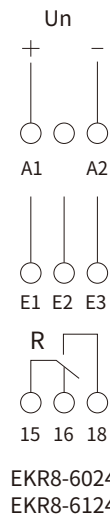


Technical Data 技术数据	EKR8-6024	EKR8-6124
Output Characteristics 输出特性	SPDT	SPDT
Rated Current 额定电流	5A	5A
Working Voltage 工作电压	AC110V, AC220V	
Output Voltage 输出电压	24V	
Applicable Environment 适用环境	Used for liquid with high intrinsic resistance, such as distilled water. 蒸馏水等固有电阻高的液体	

Dimensions 外形尺寸图: in 英寸 (mm 毫米)



Wiring Diagrams 接线图



液位开关

Floatless Level Switch

液位开关

Floatless level switch is a kind of switch that controls the height of the liquid level in the container. It uses the conductivity of the liquid to turn on or off the contact output when the liquid level reaches a certain height, and automatically monitor run or stop of the water pump to achieve the purpose of controlling the amount of liquid in the container.

液位开关是一种控制容器内液体液面高低的开关,利用液体的导电性,在液面达到一定高度的时候,接通或者断开触点输出,自动监控水泵的运行或停止,来达到对容器内液体进行一个量的控制的目的。

Application: It is generally used in homes, industries, commercial places, public places and other places where automatic monitoring of water supply and drainage systems is required.

It has small size and complete specification.

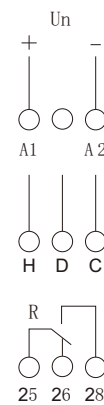
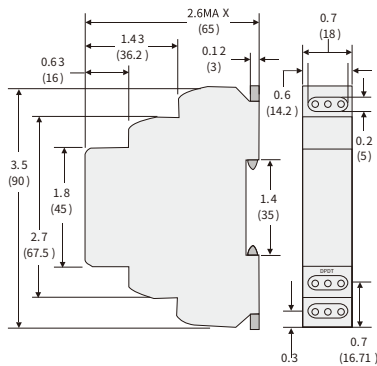
It can be widely used in domestic water systems, sewage treatment systems, and special liquidsupply systems.

用途:一般用于家庭、工业、商用场所、公共场所等需要组建自动监控供水、排水系统地方,体积小,规格齐全,可以广泛应用于各种生活用水系统,污水处理系统,特殊液体供给系统。

EKR8-6 Series



Technical Data 技术数据	EKR8-6312
Output Characteristics 输出特性	SPDT
Rated Current 额定电流	5A/16A
Working Voltage 工作电压	AC/DC24-240V
Applicable Environment 适用环境	Used for domestic water systems, sewage treatment systems and special liquid supply systems. 用于生活用水系统、污水处理系统和特殊液体供给系统
Dimensions外形尺寸图:in 英寸 (mm 毫米)	Wiring Diagrams 接线图

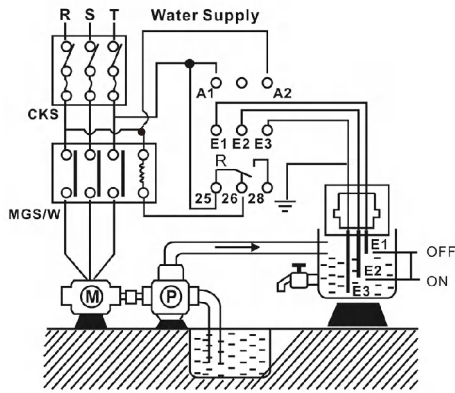


EKR8-6312

Wiring Diagram 接线图

EKR8-60/61系列 Floatless Level Switch Wiring Diagrams 液位开关接线图

Water Supply 供水

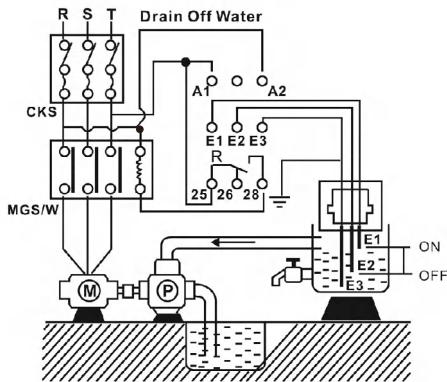


Water Supply Wiring Diagram 供水接线图

When water level of tank reaches E1, pump stops working and stops the water intake; when water level drops below E2, pump runs automatically and water tank starts to enter water. When pump is running, the light is off.

当水箱水位达到E1时,水泵停止工作,停止进水;当水位降到E2以下,水泵自动运行,水箱开始进水,在水泵运行时,灯处于熄灭状态。

Drainage 排水

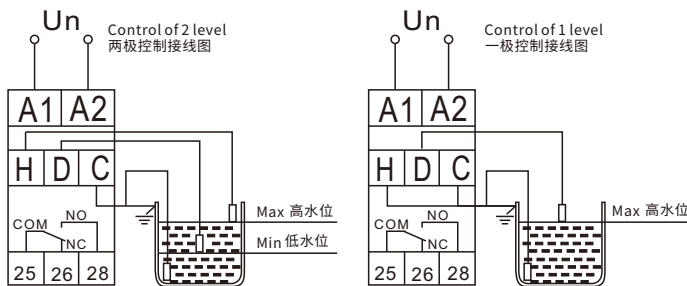


Drainage Wiring Diagram 排水接线图

When water level of tank reaches E1, pump starts to work and starts to drain; when water level drops below E2, pump stops working and water tank stops draining. When pump is running, the light is on.

当水箱水位达到E1时,水泵开始工作,开始排水;当水位降到E2以下,水泵停止工作,水箱停止排水,在水泵运行时,灯处于点亮状态。

WIRING DIAGRAMS: EKR8-6312*
EKR8-63两极/一极控制接线图



Water Supply/Drainage Same as EKR8-60/61 Series
供水和排水工作过程参照EKR8-60/61系列

Water Supply Wiring Diagram 供水接线图

When water level of tank reaches D, pump stops working and stops the water intake. When water level drops below D, the delay starts. When the time is up, the pump starts working and supply water.

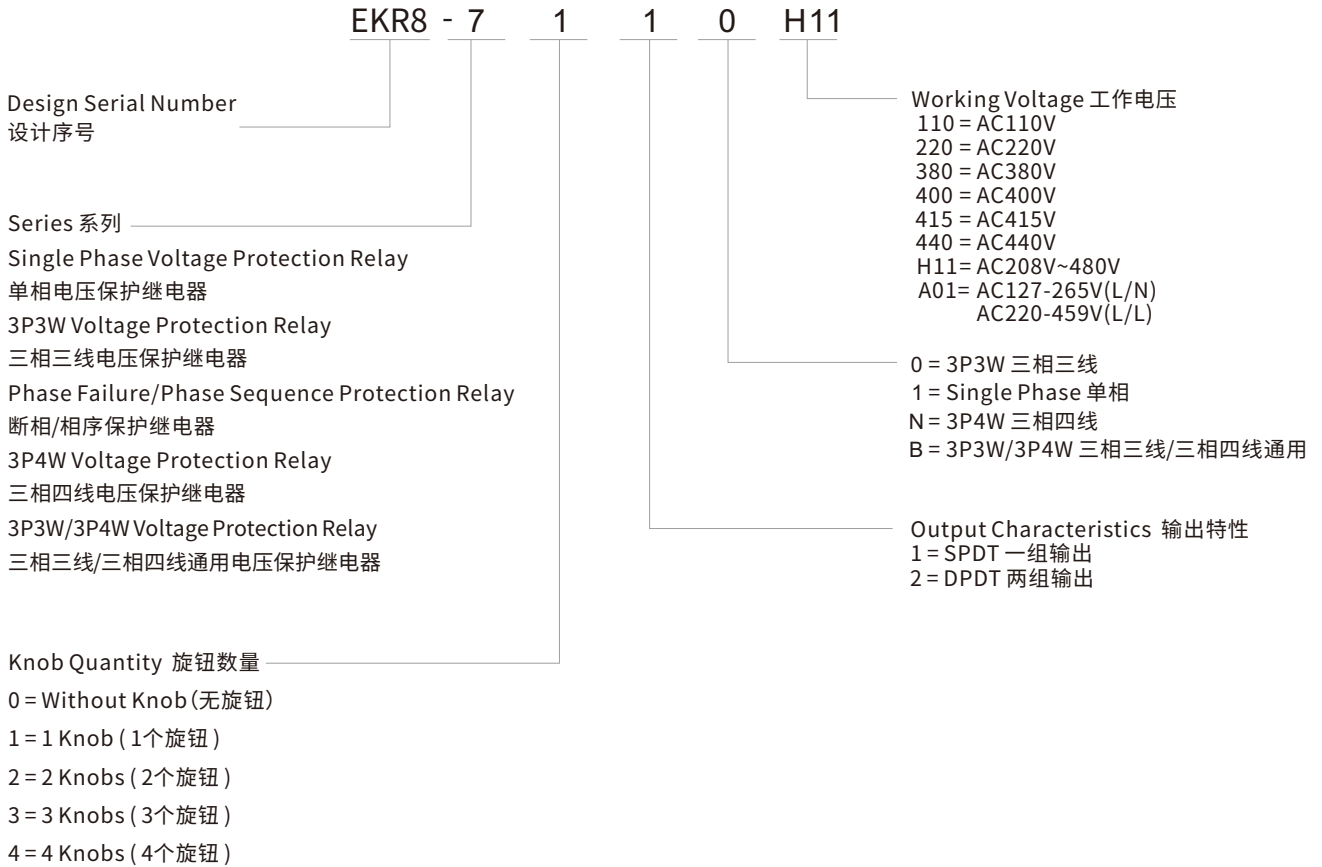
当水箱水位达到D时,水泵停止工作,停止进水,当水位降到D以下,开始延时,时间到了水泵开始工作,开始供水。

Drainage Wiring Diagram 排水接线图

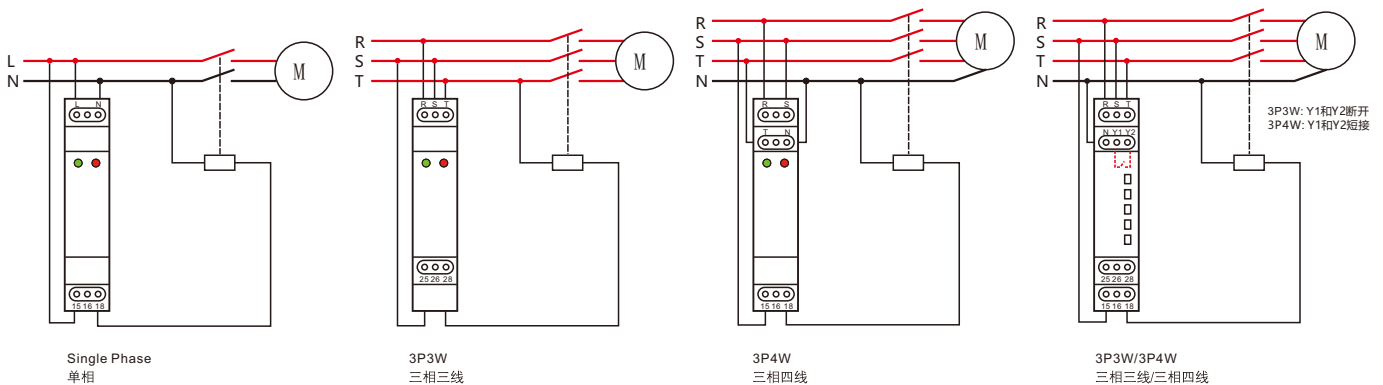
When water level of tank reaches D, pump starts working and starts to drain. When water level drops below D, the delay starts. When the time is up, the pump stops working and stops draining.

当水箱水位达到D时,水泵开始工作,开始排水,当水位降到D以下,开始延时,时间到了水泵停止工作,停止排水。

Model Naming Rules 型号命名规则



Wiring Diagram 接线图



EKR8-7 Series Single Phase Voltage Protection Relay

ETEK®

单相电压保护继电器

Front view: function selector and regulators

前视图：功能选择器和调节器



断相/相序保护继电器

Phase Failure Protection Relay 断相保护继电器

Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.

电压保护继电器采用高速低功耗处理器为核心,当供电线路出现过压、欠压或者欠相、逆相时,继电器迅速、安全地切断电路,避免异常电压送入终端电器造成事故的发生。当电压恢复正常值,继电器自动接通电路,确保终端电器在无人值守情况下正常运行。

1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.

1. 线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。

2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.

2. 线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

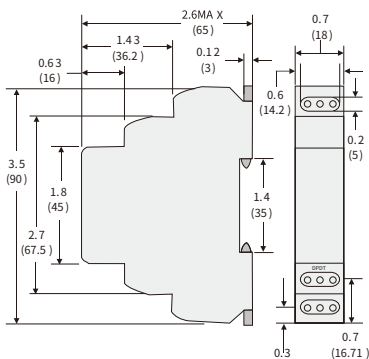
EKR8-7 Series



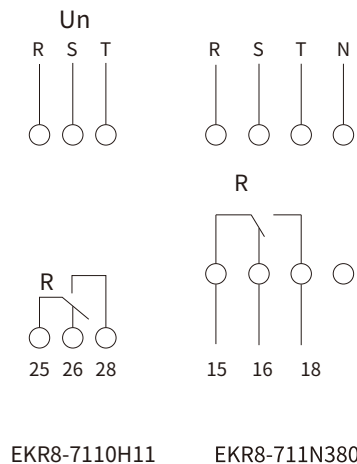
Technical Data 技术数据

	EKR8-7110H11	EKR8-711N380
Monitoring Type 监测类型	3P3W 三相三线	3P4W 三相四线
Output Characteristics 输出特性	SPDT	
Over Voltage 过电压	-	
Under Voltage 欠电压	-	
Time Delay 时间延迟	3S	
Phase Sequence 逆相	-	
Phase Failure 断相	√	
Working Voltage 工作电压	Wide Voltage宽电压 H11:AC220-480V	
Frequency 工作频率	50/60Hz	
Response Time of Relay 继电器响应时间	0.5S	
Contact Rating 触点容量	AC-15:3A/250VAC	AC-15:10A/250VAC
Ambient Temperature 环境温度	-10°C ~ +55°C	
Voltage Error 电压误差	±2% Max	
Temperature Error 温度误差	±2% Max	

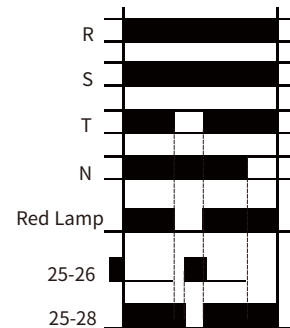
Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



Phase Failure 断相/欠相



断相/相序保护继电器

Phase Sequence Protection Relay 相序保护继电器

Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.

电压保护继电器采用高速低功耗处理器为核心,当供电线路出现过压、欠压或者欠相、逆相时,继电器迅速、安全地切断电路,避免异常电压送入终端电器造成事故的发生。当电压恢复正常值,继电器自动接通电路,确保终端电器在无人值守情况下正常运行。

1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.
1. 线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。
2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.
2. 线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

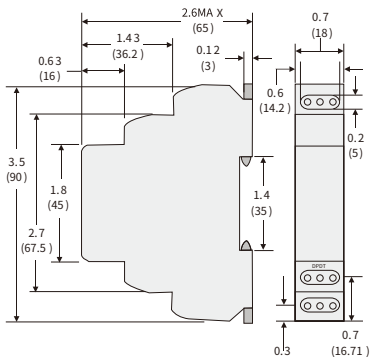
EKR8-7 Series



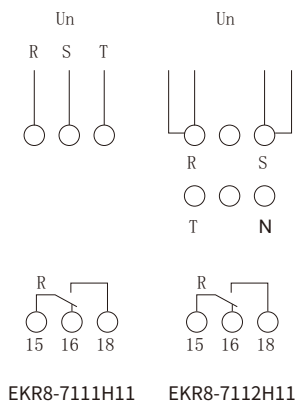
Technical Data 技术数据

	EKR8-7111H11	EKR8-7112H11
Monitoring Type 监测类型	3P3W 三相三线	3P4W 三相四线
Output Characteristics 输出特性		SPDT
Over Voltage 过电压		-
Under Voltage 欠电压		-
Time Delay 时间延迟		3S
Phase Sequence 逆相		√
Phase Failure 断相		√
Working Voltage 工作电压		L/L: 208-480VAC
Frequency 工作频率		50/60Hz
Response Time of Relay 继电器响应时间		0.5S
Contact Rating 触点容量		5A/250VAC COSφ=1
Ambient Temperature 环境温度		-10°C ~ +55°C
Voltage Error 电压误差		±2% Max
Temperature Error 温度误差		±2% Max

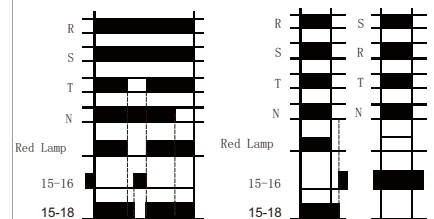
Dimensions外形尺寸图:in 英寸(mm 毫米)



Wiring Diagrams 接线图



Phase Failure 断相/欠相 Phase Sequence 逆相



三相三线电压保护继电器

3P3W Voltage Protection Relay 三相三线电压保护继电器

Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.

电压保护继电器采用高速低功耗处理器为核心,当供电线路出现过压、欠压或者欠相、逆相时,继电器迅速、安全地切断电路,避免异常电压送入终端电器造成事故的发生。当电压恢复正常值,继电器自动接通电路,确保终端电器在无人值守情况下正常运行。

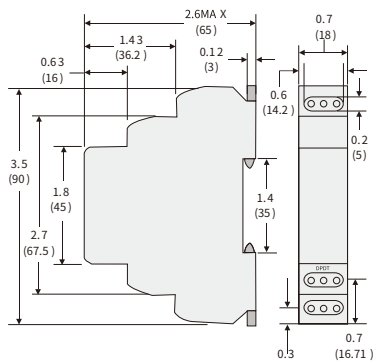
1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.
1、线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。
2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.
2、线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

EKR8-7 Series

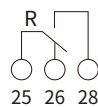
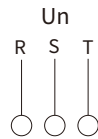


Technical Data 技术数据	EKR8-7010	EKR8-7210	EKR8-7310
Monitoring Type 监测类型	3P3W 三相三线		
Output Characteristics 输出特性	SPDT		
Over Voltage 过电压	15%	0 ~ 20%	0 ~ 20%
Under Voltage 欠电压	15%	0 ~ 20%	0 ~ 20%
Time Delay 时间延迟	3S	3S	0.1 ~ 10S
Phase Sequence 逆相	√		
Phase Failure 断相	√		
Working Voltage 工作电压	AC220V,380V,400V,415V,440V		
Frequency 工作频率	50/60Hz		
Response Time of Relay 继电器响应时间	0.5S		
Contact Rating 触点容量	AC-15:3A/250VAC		
Ambient Temperature 环境温度	-10°C ~ +55°C		
Voltage Error 电压误差	±2% Max		
Temperature Error 温度误差	±2% Max		

Dimensions外形尺寸图:in 英寸 (mm 毫米)

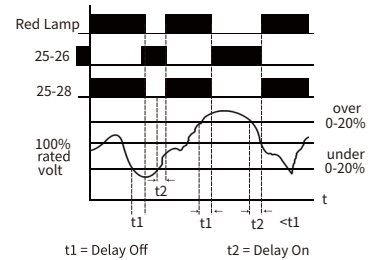


Wiring Diagrams 接线图

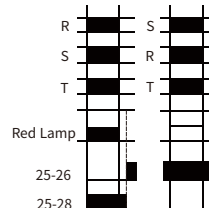


EKR8-7010
EKR8-7210
EKR8-7310

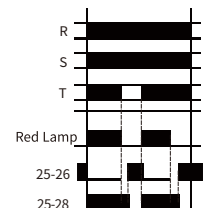
Over & Under Voltage 过压和欠压



Phase Sequence 逆相



Phase Failure 断相/欠相



三相四线电压保护继电器

3P4W Voltage Protection Relay 三相四线电压保护继电器

Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.

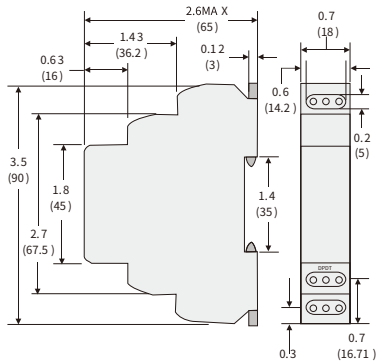
电压保护继电器采用高速低功耗处理器为核心,当供电线路出现过压、欠压或者欠相、逆相时,继电器迅速、安全地切断电路,避免异常电压送入终端电器造成事故的发生。当电压恢复正常值,继电器自动接通电路,确保终端电器在无人值守情况下正常运行。

1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.
1. 线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。
2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.
2. 线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

EKR8-7 Series



Dimensions外形尺寸图:in 英寸 (mm 毫米)

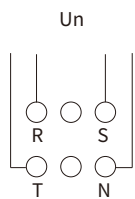


Technical Data 技术数据

EKR8-741NA01

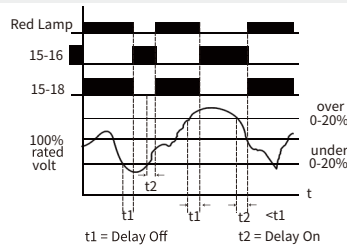
Monitoring Type 监测类型	3P4W 三相四线
Output Characteristics 输出特性	SPDT
Over Voltage 过电压	0 ~ 20%
Under Voltage 欠电压	0 ~ 20%
Time Delay 时间延迟	0.1 ~ 10S
Phase Sequence 逆相	√
Phase Failure 断相	√
Asymmetric Voltage 三相不平衡	5% ~ 15%
Working Voltage/Frequency 额定电压/工作频率	L/N:AC127V - 254V 50/60Hz
Response Time of Relay 继电器响应时间	0.5S
Contact Rating 触点容量	AC-15:3A/250VAC
Ambient Temperature 环境温度	-10°C ~ +55°C
Voltage Error 电压误差	±2% Max
Temperature Error 温度误差	±2% Max

Wiring Diagrams 接线图

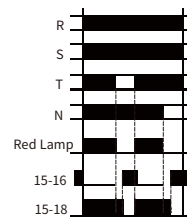


EKR8-741NA01

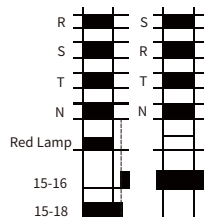
Over & Under Voltage 过压和欠压



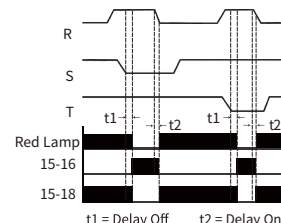
Phase Failure 断相/欠相



Phase Sequence 逆相



Asymmetric Voltage 三相不平衡



Asymmetric Voltage Function:
 (The highest voltage of phase R,S,T) - (The lowest voltage of phase R,S,T) / (The highest voltage of phase R,S,T) × 100% ≥ Asymmetric voltage limit 5% - 15%
 Relay 15-18 Off Red Lamp Off

EKR8-7 Series 3P3W/3P4W Voltage Protection Relay

ETEK®

三相三线/三相四线电压保护继电器

Front view: function selector and regulators
前视图: 功能选择器和调节器



三相三线/三相四线电压保护继电器

3P3W/3P4W Voltage Protection Relay 三相三线/三相四线通用电压保护继电器

Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.

电压保护继电器采用高速低功耗处理器为核心,当供电线路出现过压、欠压或者欠相、逆相时,继电器迅速、安全地切断电路,避免异常电压送入终端电器造成事故的发生。当电压恢复正常值,继电器自动接通电路,确保终端电器在无人值守情况下正常运行。

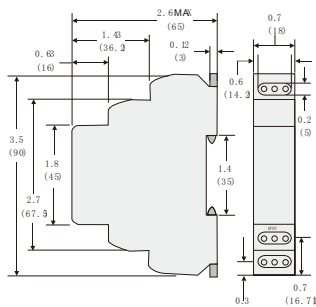
1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.
1. 线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。
2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.
2. 线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

EKR8-7 Series

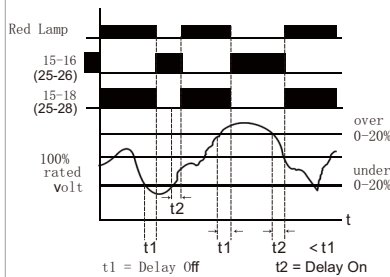


Technical Data 技术数据	EKR8-702B	EKR8-722B	EKR8-732B
Monitoring Type 监测类型	3P3W/3P4W 三相三线/三相四线		
Output Characteristics 输出特性	DPDT		
Over Voltage 过电压	15%	0 ~ 20%	0 ~ 20%
Under Voltage 欠电压	15%	0 ~ 20%	0 ~ 20%
Time Delay 时间延迟	3S	3S	0.1 ~ 10S
Phase Sequence 逆相		√	
Phase Failure 断相		√	
Asymmetric Voltage 三相不平衡		15%	
Working Voltage/Frequency 额定电压/工作频率	L/N:AC127/220/230/240/254V or L/L:AC220/380/400/415/440V 50/60Hz		
Response Time of Relay 继电器响应时间	0.5S		
Contact Rating 触点容量	8A/250VAC COSφ=1		
Ambient Temperature 环境温度	-10°C ~ +55°C		
Voltage Error 电压误差	±2% Max		
Temperature Error 温度误差	±2% Max		

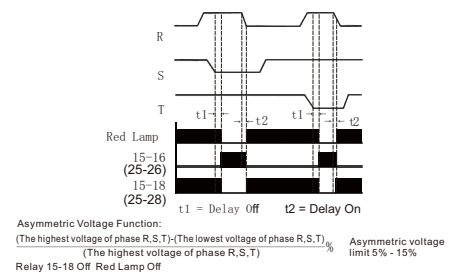
Dimensions 外形尺寸图:in 英寸 (mm 毫米)



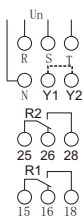
Over & Under Voltage 过压和欠压



Asymmetric Voltage 三相不平衡

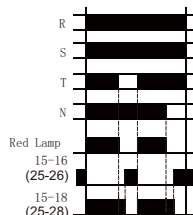


Wiring Diagrams 接线图

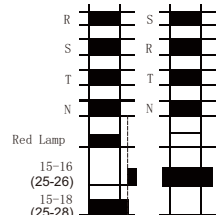


3P3W = Y1-Y2
3P4W = Y1-Y2

Phase Failure 断相/欠相



Phase Sequence 逆相



三相三线/三相四线电压保护继电器

3P3W/3P4W Voltage Protection Relay 三相三线/三相四线通用电压保护继电器

Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.

电压保护继电器采用高速低功耗处理器为核心,当供电线路出现过压、欠压或者欠相、逆相时,继电器迅速、安全地切断电路,避免异常电压送入终端电器造成事故的发生。当电压恢复正常值,继电器自动接通电路,确保终端电器在无人值守情况下正常运行。

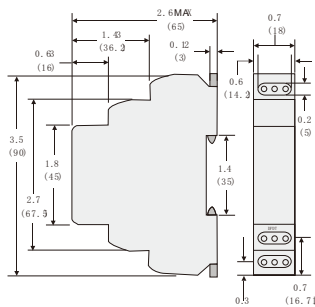
1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.
1. 线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。
2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.
2. 线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

EKR8-7 Series

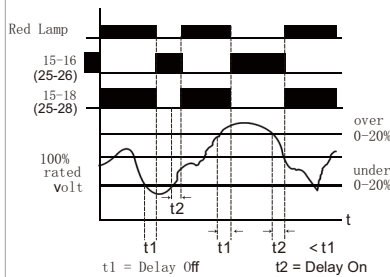


Technical Data 技术数据	EKR8-712BA01	EKR8-742BA01
Monitoring Type 监测类型	3P3W/3P4W 三相三线/三相四线	
Output Characteristics 输出特性	DPDT	
Over Voltage 过电压	15%	0 ~ 20%
Under Voltage 欠电压	15%	0 ~ 20%
Time Delay 时间延迟	3S	0.1 ~ 10S
Phase Sequence 逆相		√
Phase Failure 断相		√
Asymmetric Voltage 三相不平衡	15%	5-15%
Working Voltage/Frequency 额定电压/工作频率	L/N:AC127-265V or L/L:AC220-459V	50/60Hz
Response Time of Relay 继电器响应时间	0.5S	
Contact Rating 触点容量	8A/250VAC COSφ=1	
Ambient Temperature 环境温度	-10°C ~ +55°C	
Voltage Error 电压误差	±2% Max	
Temperature Error 温度误差	±2% Max	

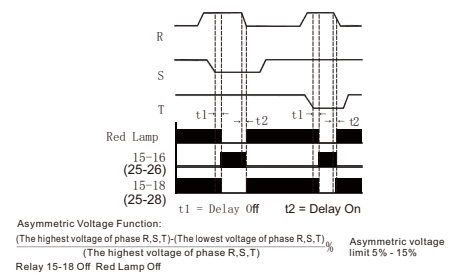
Dimensions 外形尺寸图:in 英寸 (mm 毫米)



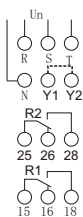
Over & Under Voltage 过压和欠压



Asymmetric Voltage 三相不平衡

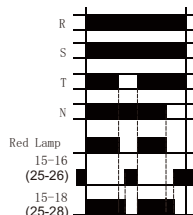


Wiring Diagrams 接线图

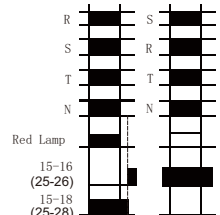


3P3W = Y1-Y2
3P4W = Y1-Y2

Phase Failure 断相/欠相



Phase Sequence 逆相



三相三线/三相四线电压保护继电器

3P3W/3P4W Voltage Protection Relay 三相三线/三相四线通用电压保护继电器

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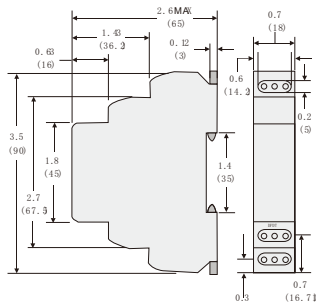
1. Cut off the line when Over & Under Voltage occurs, and automatically reset and connect the line after returning to normal without manual operation.
1. 线路发生过/欠电压时切断线路,电压恢复正常后自动复位接通线路,无需人工操作。
2. When the line appears transient or transient Over & Under Voltage, the protector does not malfunction.
2. 线路出现瞬态或暂态过/欠电压时,保护器不产生误动作。

EKR8-7 Series

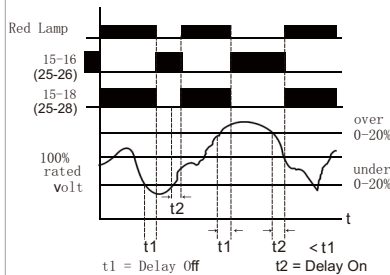


Technical Data 技术数据	EKR8-7620A01	EKR8-762NA01
Monitoring Type 监测类型	3P3W 三相三线	3P4W 三相四线
Output Characteristics 输出特性		DPDT
Over Voltage 过电压		0 ~ 20%
Under Voltage 欠电压		0 ~ 20%
Time Delay 时间延迟		0.1 ~ 10S
Reset Time 恢复时间		0.1 ~ 10S
Phase Sequence 逆相		√
Phase Failure 断相		√
Asymmetric Voltage 三相不平衡		5-15%
Working Voltage/Frequency 额定电压/工作频率	L/N:AC127-265V or L/L:AC220-459V	50/60Hz
Response Time of Relay 继电器响应时间		0.5S
Contact Rating 触点容量		8A/250VAC COSφ=1
Ambient Temperature 环境温度		-10°C ~ +55°C
Voltage Error 电压误差		±2% Max
Temperature Error 温度误差		±2% Max

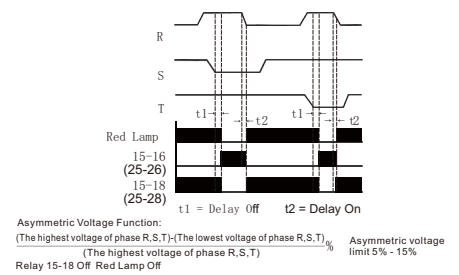
Dimensions 外形尺寸图:in 英寸 (mm 毫米)



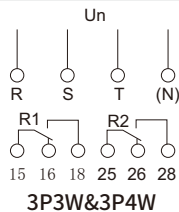
Over & Under Voltage 过压和欠压



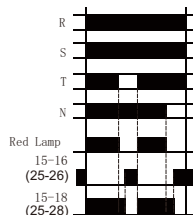
Asymmetric Voltage 三相不平衡



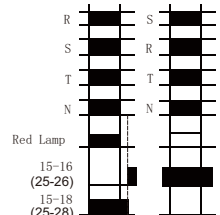
Wiring Diagrams 接线图



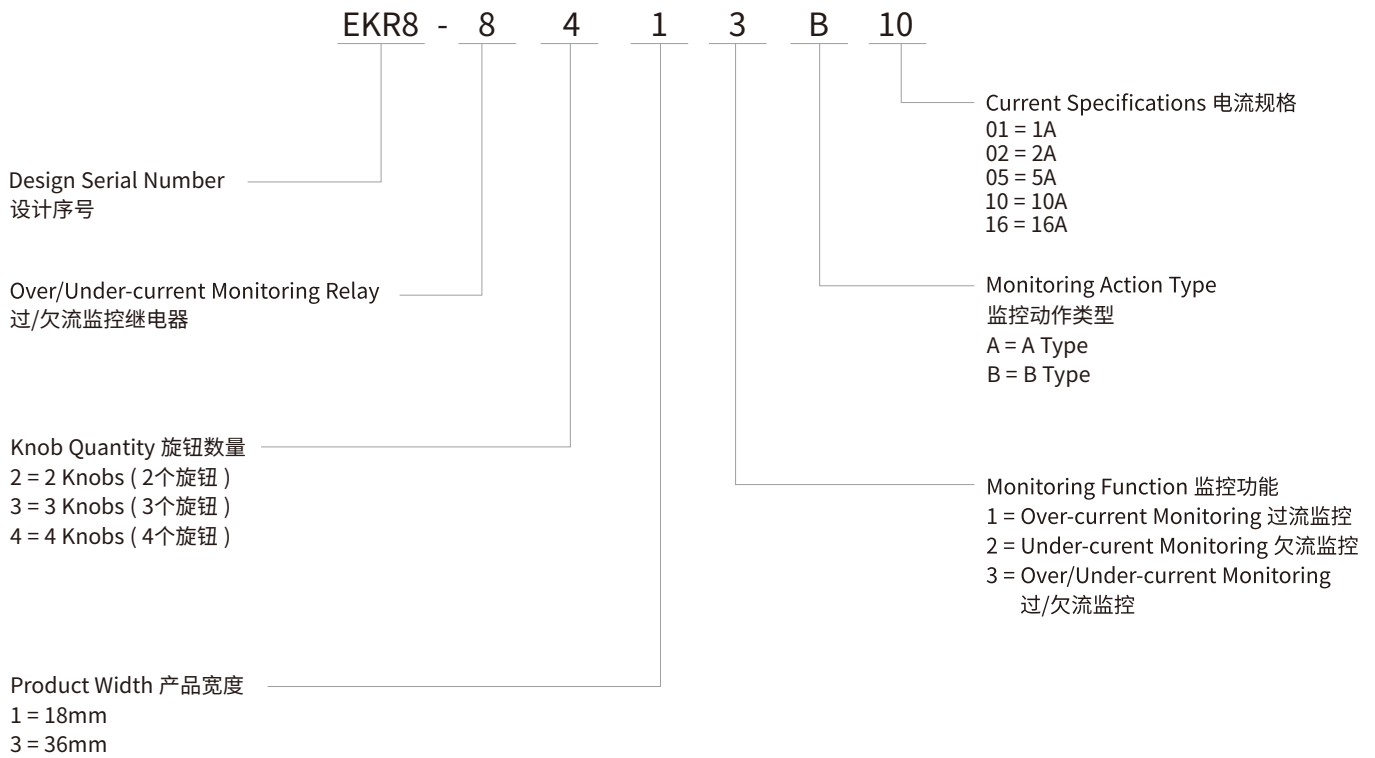
Phase Failure 断相/欠相



Phase Sequence 逆相



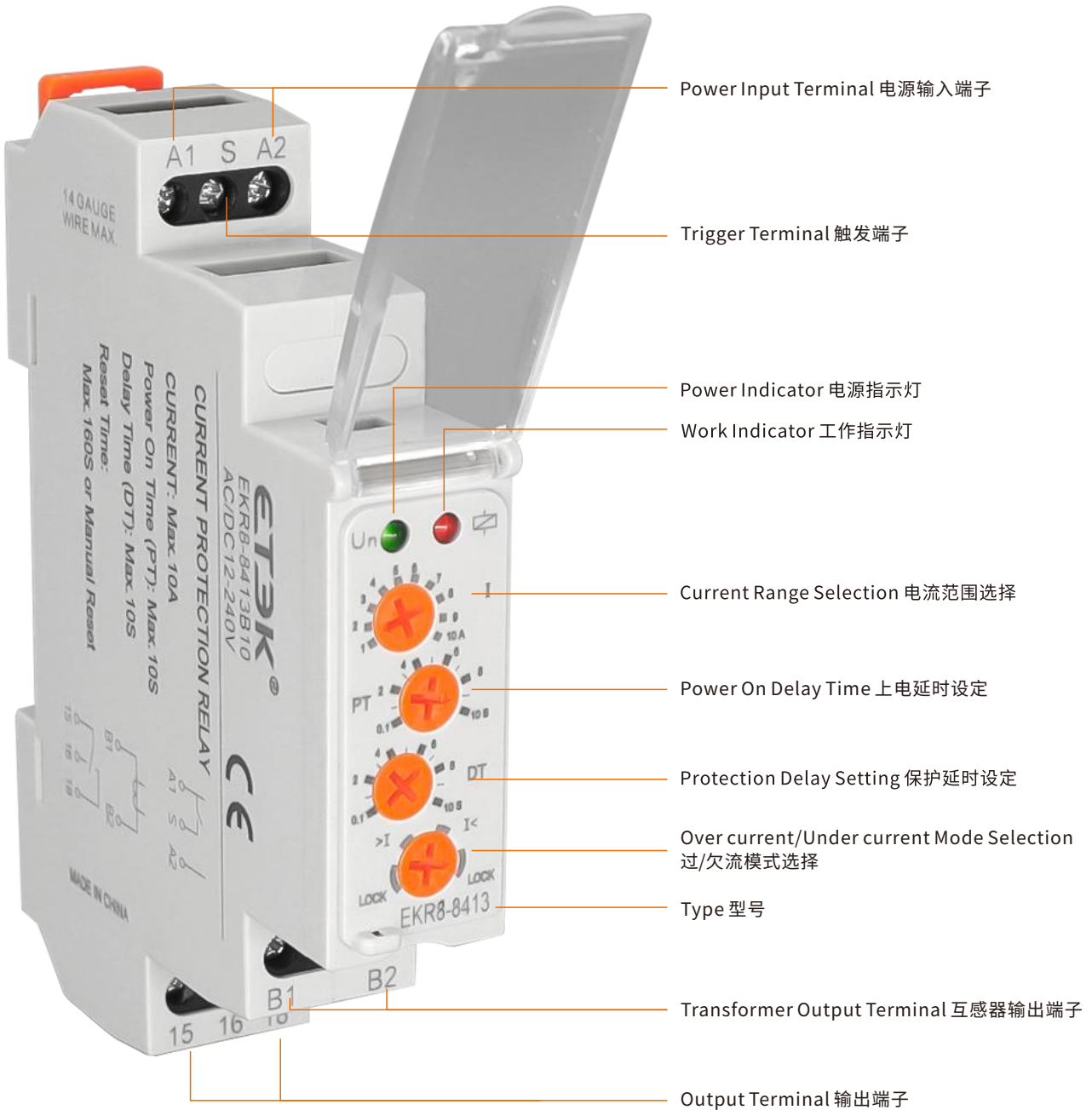
Model Naming Rules 型号命名规则



EKR8-8 Series Current Monitoring Relay

电流监控继电器

Front view: function selector and regulators
前视图：功能选择器和调节器



EKR8-8 Series Current Monitoring Relay



电流监控继电器

A Series

Over/Under-current Monitoring Relay A系列过/欠流监控继电器

When the working current suddenly increases or decreases due to various faults of load, protective measures must be taken, otherwise serious safety accidents are likely to occur. When the fault current reaches the set value of the protector, the contact of the current relay is closed after a pre-set delay, and the signal alarm device is activated. 当负载因各种故障造成工作电流突然增大或减小时, 必须要采用保护措施, 否则容易发生严重的安全事故。当故障电流达到保护器的设定值时, 电流继电器经过预定的延时后, 触点闭合, 启动信号报警装置。

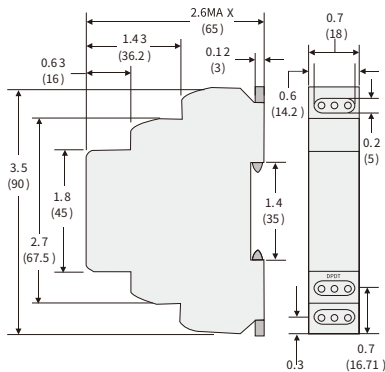
EKR8-8 Series



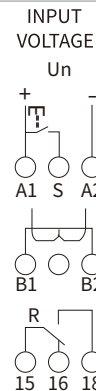
Type 型号	Current specification 电流规格
EKR8-8211A**	1A/2A/5A 10A/16A
EKR8-8212A**	
EKR8-8311A**	
EKR8-8312A**	
EKR8-8413A**	
EKR8-8231A**	
EKR8-8232A**	
EKR8-8331A**	
EKR8-8332A**	
EKR8-8433A**	

Output Features 输出特性		
Output Features 输出特性	SPDT	
Contact Material 触点材料	Silver Alloy 银合金	
Minimum Switching Power 最小切换功率	500mW	
Indicator Light 指示灯	Red Light 红灯	
Input Features 输入特性		
Voltage Range 电压范围	AC/DC12-240V 或 Single Voltage 单电压	
Working Range 工作范围	-0.25A ~ +0.25A	
Max Power Consumption 最大功耗	3VA(AC) 1.7W(DC)	
Indicator Light 指示灯	Green Light 绿灯	
Performance Features 性能特性		
Protection Delay Range 保护延时范围	Max.10S	
Reset Delay Range 重置延时范围	Max.10S	
Electrical Life 电气寿命	10 ⁵	
Mechanical Life 机械寿命	10 ⁷	
Dielectric strength 介电强度	between input and contacts	2500VAC
	between contacts 触点间	1000VAC
Terminal Wire Capacity 端子导线容量	14AWG(2.1mm ²)	
Torque of Terminal 端子扭矩	7.1 lbf in (0.8Nm)	
Environment 环境		
Environment	Storage 贮存	-30°C ~ +70°C
Temperature 环境温度	Working 工作	-20°C ~ +55°C
Weight 重量		65g

Dimensions外形尺寸图:in 英寸 (mm 毫米)



Wiring Diagrams 接线图



EKR8-8 Series Current Monitoring Relay



电流监控继电器

B Series

Over/Under-current Monitoring Relay B系列过/欠流监控继电器

When the working current suddenly increases or decreases due to various faults of load, protective measures must be taken, otherwise serious safety accidents are likely to occur. When the fault current reaches the set value of the protector, the contact of the current relay is closed after a pre-set delay, and the signal alarm device is activated. 当负载因各种故障造成工作电流突然增大或减小时, 必须要采用保护措施, 否则容易发生严重的安全事故。当故障电流达到保护器的设定值时, 电流继电器经过预定的延时后, 触点闭合, 启动信号报警装置。

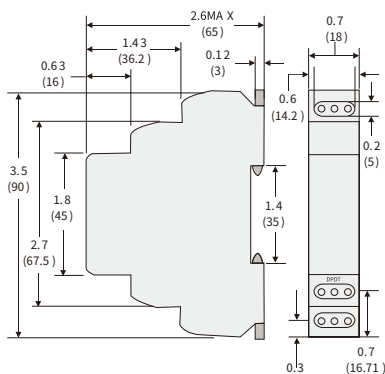
EKR8-8 Series



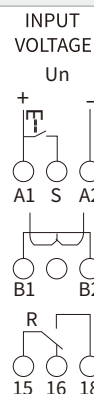
Type 型号	Current specification 电流规格
EKR8-8211B**	1A/2A/5A 10A/16A
EKR8-8212B**	
EKR8-8311B**	
EKR8-8312B**	
EKR8-8413B**	
EKR8-8231B**	
EKR8-8232B**	
EKR8-8331B**	
EKR8-8332B**	
EKR8-8433B**	

Output Features 输出特性		SPDT
Output Features 输出特性		Silver Alloy 银合金
Contact Material 触点材料		500mW
Minimum Switching Power 最小切换功率		Red Light 红灯
Indicator Light 指示灯		
Input Features 输入特性		
Voltage Range 电压范围		AC/DC12-240V 或 Single Voltage 单电压
Working Range 工作范围		-0.25A ~ +0.25A
Max Power Consumption 最大功耗		3VA(AC) 1.7W(DC)
Indicator Light 指示灯		Green Light 绿灯
Performance Features 性能特性		
Protection Delay Range 保护延时范围		Max.10S
Reset Delay Range 重置延时范围		Max.10S
Electrical Life 电气寿命		10 ⁵
Mechanical Life 机械寿命		10 ⁷
Dielectric strength 介电强度	between input and contacts	2500VAC
	between contacts 触点间	1000VAC
Terminal Wire Capacity 端子导线容量		14AWG(2.1mm ²)
Torque of Terminal 端子扭矩		7.1 lbf in (0.8Nm)
Environment 环境		
Environment	Storage 贮存	-30°C ~ +70°C
Temperature 环境温度	Working 工作	-20°C ~ +55°C
Weight 重量		65g

Dimensions外形尺寸图:in 英寸 (mm 毫米)

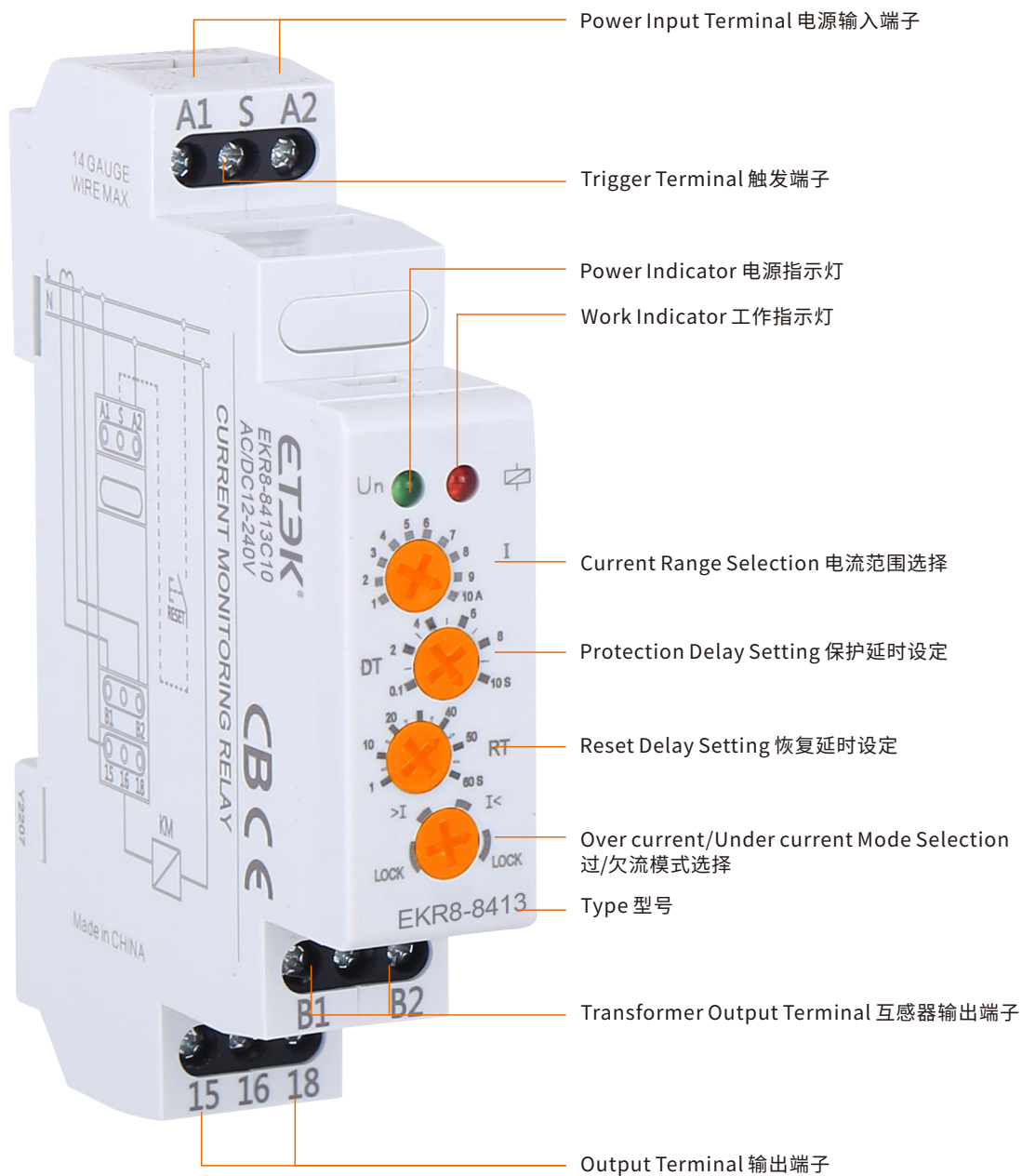


Wiring Diagrams 接线图



EKR8-8 Series Current Monitoring Relay

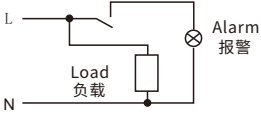
电流监控继电器



电流监控继电器

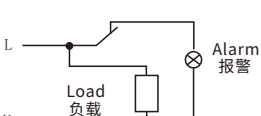
A Series Action Chart A系列动作图

Normal Operation
正常工作



Relay is in a normally closed state. Alarm off
继电器正常吸合状态, 报警断开。

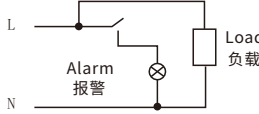
Over/Under-current Arise
出现过/欠流



Relay is released, NC contact is closed with alarm output.
继电器释放, 常闭触点闭合, 报警输出

B Series Action Chart B系列动作图

Normal Operation
正常工作



Relay is under normal release state. Alarm off.
继电器正常释放状态, 报警断开。

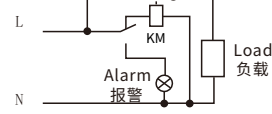
Over/Under-current Arise
出现过/欠流



Relay is closed, NO contact is closed with alarm output.
继电器吸合, 常开触点闭合, 报警输出

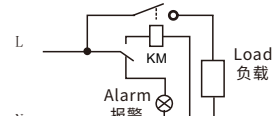
C Series Action Chart C系列动作图

Normal Operation
正常工作



Relay is under normal release state. Alarm off.
继电器正常释放状态, 报警断开。

Over/Under-current Arise
出现过/欠流

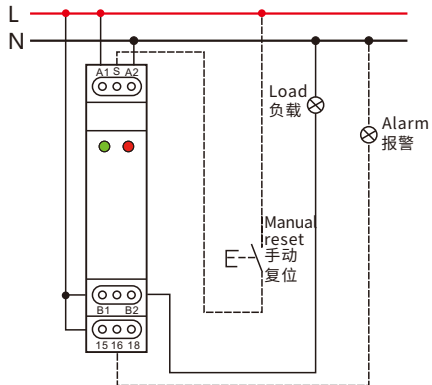


The relay is closed, KM is disconnected, the load is powered off, and the alarm is connected.
继电器吸合, KM断开, 负载断电, 报警接通。

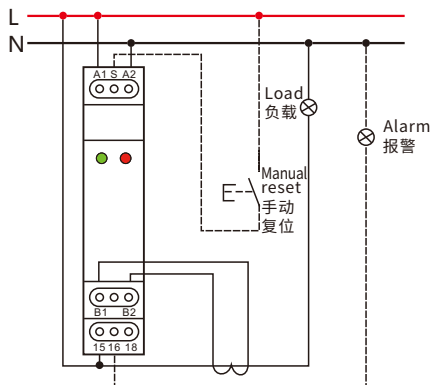
Wiring Diagram 接线图

A Series Wiring Diagram A系列接线图

Built-in Transformer A Series Connection
内置互感器A系列接法

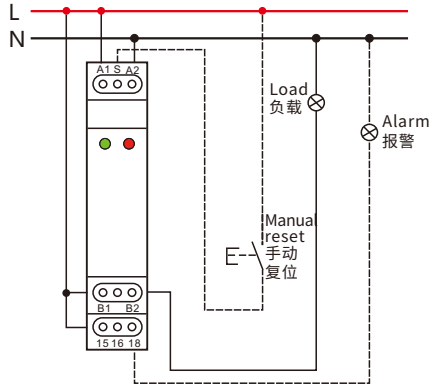


External Transformer A Series Connection
外置互感器A系列接法

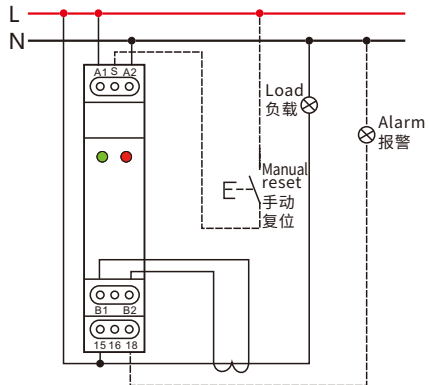


B Series Wiring Diagram B系列接线图

Built-in Transformer B Series Connection
内置互感器B系列接法

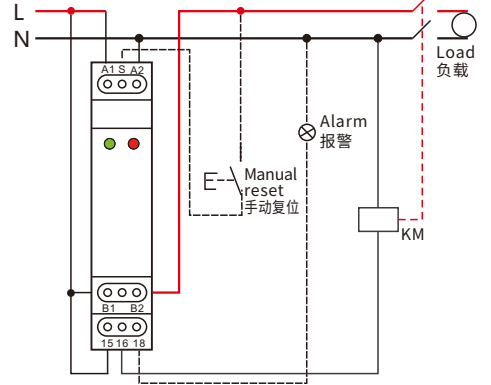


External Transformer B Series Connection
外置互感器B系列接法

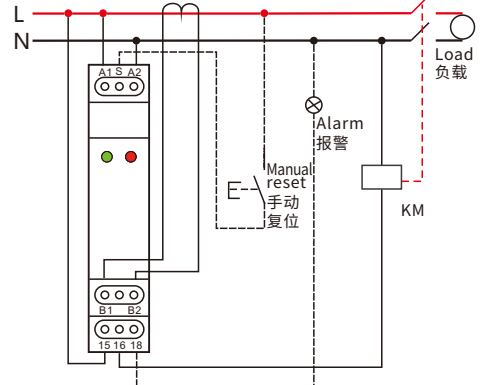



C Series Wiring Diagram C系列接线图

Built-in Transformer C Series Connection
内置互感器C系列接法



External Transformer C Series Connection
外置互感器C系列接法



 The product data referred to in the company shall be subject to material object. Subject to change without notice.
The company has the final right to interpret.

 Green paper printing

Tel-
0086-577-62780116

Fax-
0086-577-62774090

Email-
info@etek-china.com

No. 288 Wei 17th Road,
Economic Development Zone,
Yueqing City Zhejiang China.

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ZHEJIANG ETEK
ELECTRICAL TECHNOLOGY CO.,LTD.

