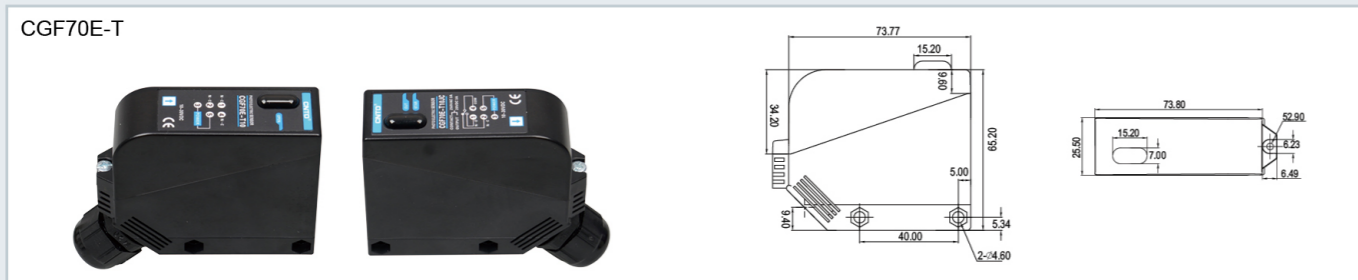
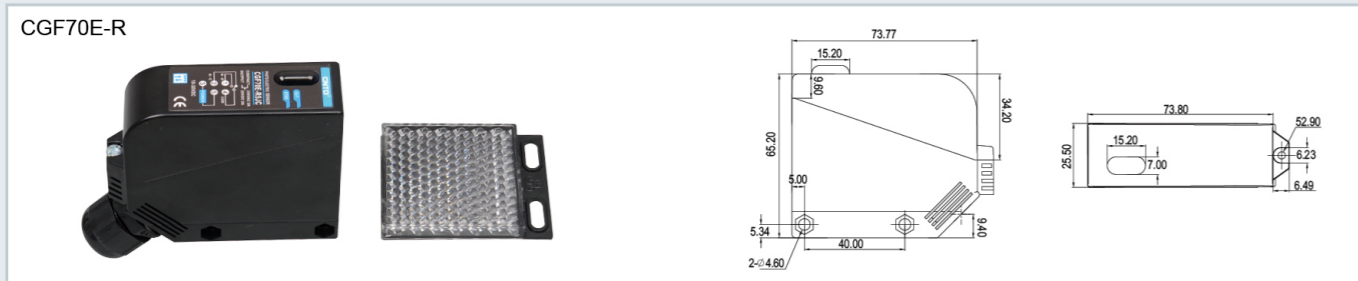
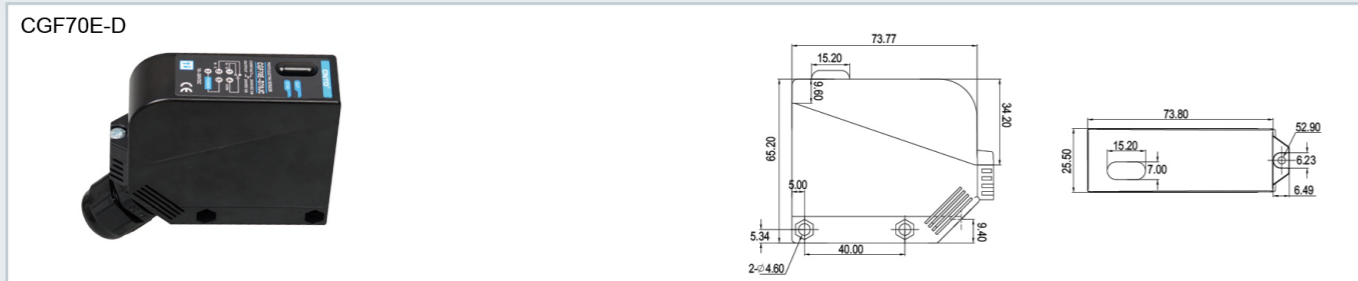
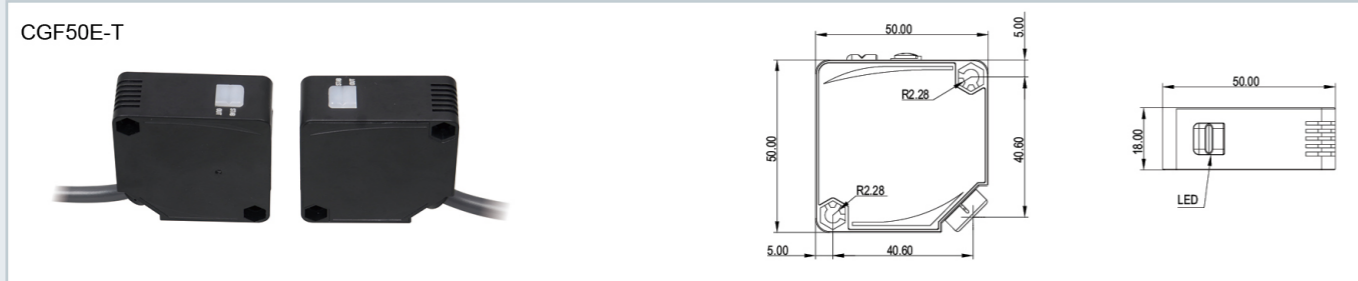
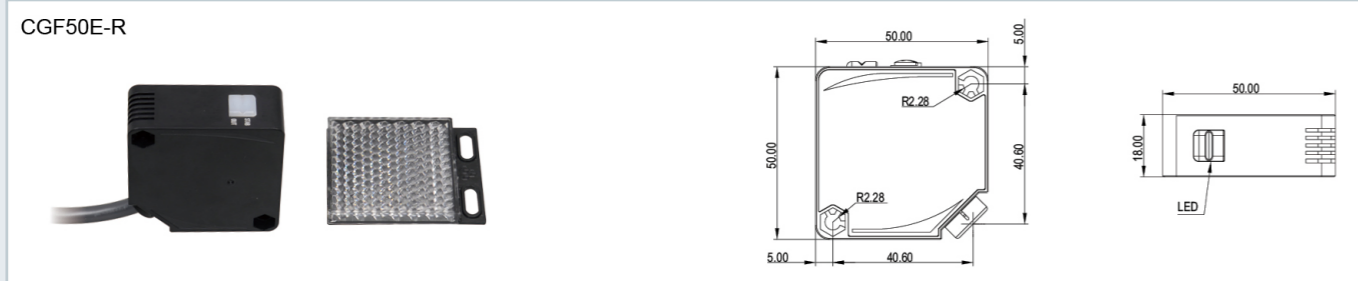
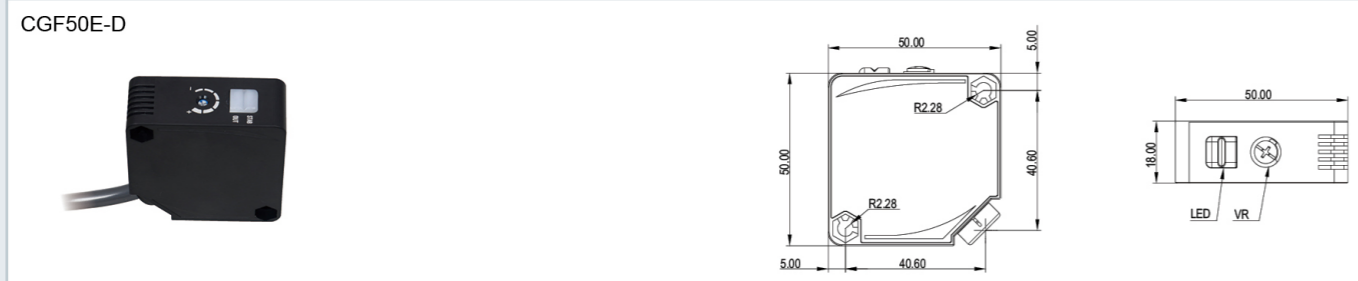


外观和尺寸 Appearance and Dimension



特点 Features

- 黑色标识代表标准型产品
- 深灰色标识代表高端型产品
- Black mark for standard type
- Dark grey mark for high-end type
- 采用专用 IC 提高抗干扰能力
- 内置浪涌保护, 电源反接保护电路
- 寿命长, 高可靠性, 操作简单, 经济实惠
- 红色 LED 状态指示灯, 易于识别运行状态
- IP65 防护等级 (IEC 规格)
- Exclusively designed IC for improving anti-jamming capability
- Inside surge protection, reverse polarity protection
- Long use-life cycle and high reliability, easy install, economic price
- Red LED status indication, easy to confirm work situation
- Protection structure IP65(IEC standard)

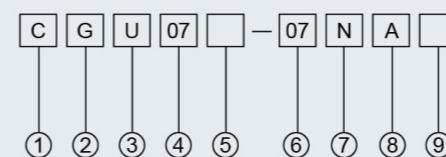


■ 黑色标准型
Black



■ 深灰色高端型
Dark grey

型号说明 Model Number Structure



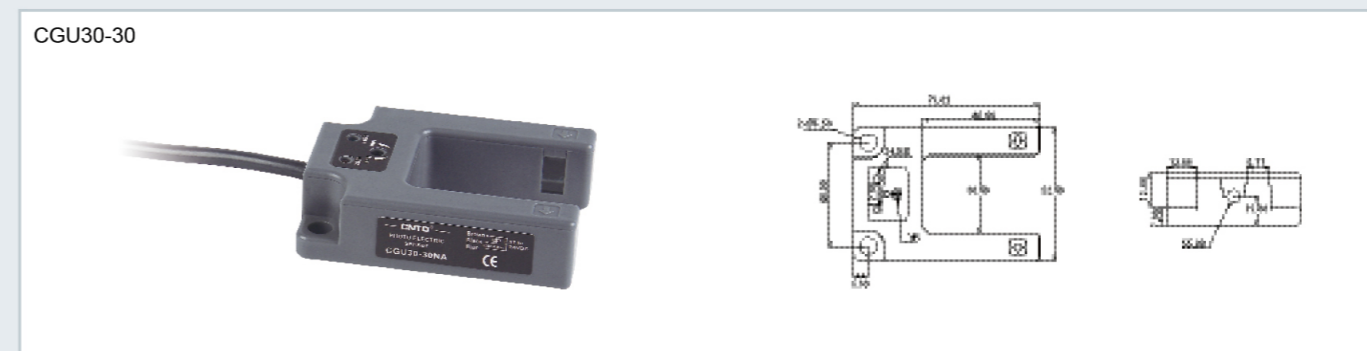
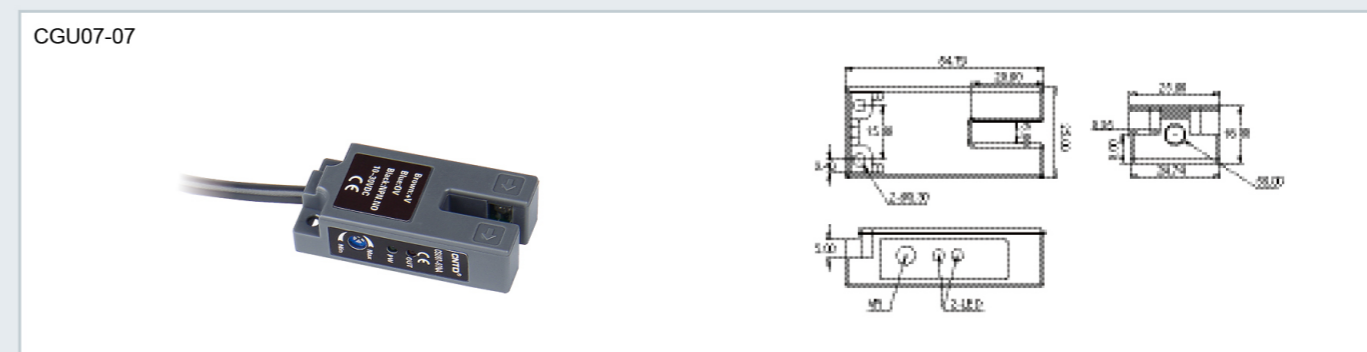
项目 Item	代号 Code	说明 Description
① 公司代号 Company code	C	公司代号 Company code
② 产品名称 Product name	G	光电开关 Photoelectric sensor
③ 外壳形状 Shape of shell	U	U 形 U type
④ 尺寸代码 Dimension code	07	7= 槽宽 7mm Groove width 7mm
⑤ 产品类型 Product type	无 Without	无 Without = 高端型 High-end type (深灰色壳体 Dark grey shell)
	E	E = 标准型 Standard type (黑色壳体 Black shell)
⑥ 检测距离 Detection distance	07	7=7mm
⑦ 输出方式 Output mode	K	AC 二线 AC 2wires
	P	PNP 三线 PNP 3wires
	N	NPN 三线 NPN 3wires
	J	继电器 Relay
⑧ 输出状态 Output state	A	常开 NO
	B	常闭 NC
	C	常开 + 常闭 NO+NC
⑨ 连接形式 Connection	无 Without	引线式 Without: Lead wire
	T	接插式 Plug-in
	R	配线引出接插式 Wiring leads Plug-in

规格 Specifications

U形光电开关

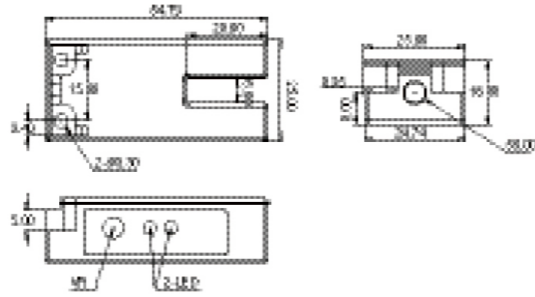
型号名 Model	高端型 High-end type	CGU07-07NA CGU07-07NB CGU07-07NC CGU07-07PA CGU07-07PB CGU07-07PC	CGU10-10NA CGU10-10NB CGU10-10PA CGU10-10PB	CGU30-30NA CGU30-30NB CGU30-30NC CGU30-30PA CGU30-30PB CGU30-30PC	CGU50-50NA CGU50-50NB CGU50-50NC CGU50-50PA CGU50-50PB CGU50-50PC
	标准型 Standard type	CGU07E-07NA CGU07E-07NB CGU07E-07NC CGU07E-07PA CGU07E-07PB CGU07E-07PC	CGU10E-10NA CGU10E-10NB CGU10E-10PA CGU10E-10PB	CGU30E-30NA CGU30E-30NB CGU30E-30NC CGU30E-30PA CGU30E-30PB CGU30E-30PC	CGU50E-50NA CGU50E-50NB CGU50E-50NC CGU50E-50PA CGU50E-50PB CGU50E-50PC
检测距离 Sensing distance	7mm		10mm	30mm	50mm
光源 Light source	红外 LED (调制) Infrared LED (Modulation)				
消耗电流 Consumption current	15mA 以下				
电源 (使用电压范围) Power supply (Operating voltage)	10-30VDC				
响应时间 Response time	< 1ms				
残留电压 Residual voltage	1V 以下 Max. 1V				
温度的影响 Affection by Temp.	在 -25~+55℃ 温度范围内 +20℃ 时的检测距离的 ±10% 以内 Max. ±10% for sensing distance at ambient temperature 20℃				
控制输出 Control output	200mA 以下 Max. 200mA				
绝缘阻抗 Insulation resistance	50MΩ 以上 (500VDC 为基准) Min. 50MΩ (at 500VDC megger)				
耐电压 Dielectric strength	1500VAC 50/60Hz 1 分钟 1500VAC 50/60Hz for 1minute				
耐振动 Vibration	10~55Hz (周期 1 分钟) 振幅 1mm X, Y, Z 各方向 2 小时 1mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 2 hours				
耐冲击 Shock	500m/s ² (50G) X, Y, Z 各方向 3 次 500m/s ² (approx. 50G) X, Y, Z directions for 3 times				
显示灯 Indicator	动作指示灯 (红色 LED) Operation indicator (red LED)				
使用周围温度 Ambient temperature	-15~+55℃ (未结冰状态 No icing)				
储存温度 Storage temperature	-15~+55℃ (未结冰状态 No icing)				
使用周围湿度 Ambient humidity	35~95%RH (未结露状态 No condensation)				
保护电路 Protection circuit	浪涌保护电路, 过流保护电路 Surge protection circuit, Overcurrent protection circuit				
材质 Material	外壳: ABS, 检测面: PMMA, 一般线缆 (灰色): 聚氯乙烯 (PVC), 耐油性线缆 (黑色): 聚氯乙烯 (耐油强化型 PVC) Case: ABS, Sensing surface: PMMA, Standard cable (Gray): Polyvinyl chloride (PVC), Oil resistant cable (Black): Oil resistant Polyvinyl chloride (PVC)				
连接线缆 Cable	高端型 High-end type	φ 4.8, 3P, 4P 2m AWG22, 芯线直径 : 0.1mm, 芯线数 : 30, 绝缘皮外径 : φ 1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: φ 1.25)	φ 3.8, 3P, 2m AWG22, 芯线直径 : 0.1mm, 芯线数 : 25, 绝缘皮外径 : φ 1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: φ 1.25)	φ 4.8, 3P, 4P 2m AWG22, 芯线直径 : 0.1mm, 芯线数 : 30, 绝缘皮外径 : φ 1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: φ 1.25)	
	标准型 Standard type	φ 4.8, 3P, 4P 1.5m AWG22, 芯线直径 : 0.1mm, 芯线数 : 30, 绝缘皮外径 : φ 1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: φ 1.25)	φ 3.8, 3P, 1.5m AWG22, 芯线直径 : 0.1mm, 芯线数 : 25, 绝缘皮外径 : φ 1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: φ 1.25)	φ 4.8, 3P, 4P 1.5m AWG22, 芯线直径 : 0.1mm, 芯线数 : 30, 绝缘皮外径 : φ 1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: φ 1.25)	
防护等级 Protection	IP65				

外观和尺寸 Appearance and Dimension

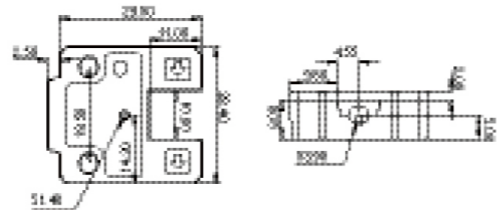
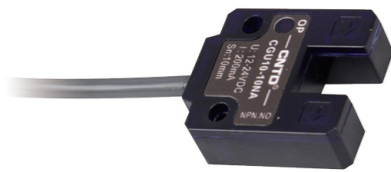


外观和尺寸 Appearance and Dimension

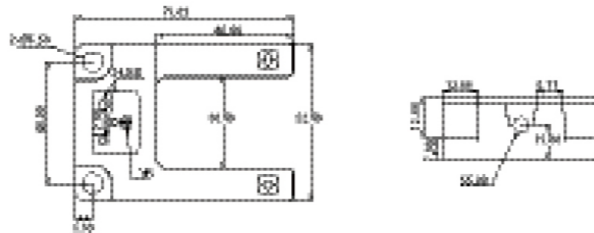
CGU07E-07



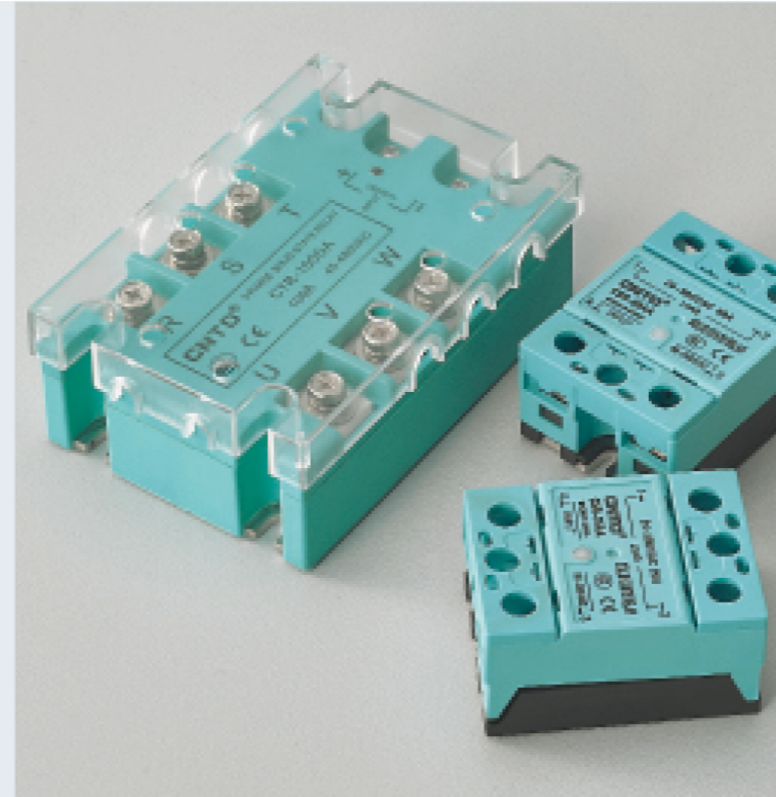
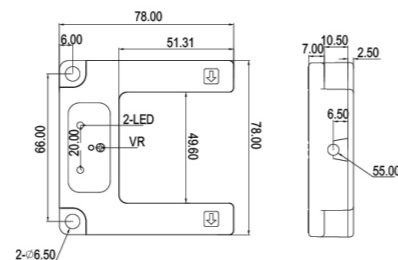
CGU10E-10



CGU30E-30



CGU50E-50



概述 Overview

固态继电器是以电力半导体器件为主功率器件的工业控制电器,它与传统的电磁接触式工业控制器相比较,更符合电力电气设备朝着高性能,智能化,数字化,系统化及绿色化发展的要求。

固态继电器按照开关方式分为过零导通型和随机导通型。当输入控制信号后,随机型能立即导通,过零型要等到负载电压过零区域才能导通。撤销控制信号后,都在小于维持电流时关断。过零型有可能造成最大半个周期的延时,却减小了对负载的冲击和射频干扰,是理想的开关器件。随机性特点是反应快,适合应用于调光调温等阻性负载和部分感性负载场合。

当CSR由导通到关断时,由于电流电压的相位不一致,将产生一个很大的电压上升率(dv/dt)在双向可控硅上,如上升率超过双向可控硅的换向dv/dt指标(标准为300V/us),将导致延时关断甚至失败。由2只单向可控硅反并联构成的增强型CSR比普通由1只双向可控硅构成的CSR的换向dv/dt有很大的提高(dv/dt值为500V/us)。因此在感性负载或容性负载领域建议选用增强型CSR。我司的固态继电器均为增强型。

固态调压器由可控硅开关电路、阻容移相电路。滞后电路和过压吸收电路等以模块的外形组成。使用时只需外接一个电位器,就可以用来实现交流功率调节。在许多场合可以取代笨重的接触式调压器,广泛应用于包装机械、纺织机械、舞台照明电源、电压、温度、亮度、速度等模拟调节。

Solid State Relay(CSR) is industrial control appliances which use power semiconductor devices for main control part, compare with traditional magnetic contact industrial controllers, it is more high-powered, intelligent, digital, systematic and green development.

according switch mode CSR have zero-cross and random type. When the input control signal, random type conduction immediately, zero cross type need load voltage turn to zero region just can conduction. Revocation of the control signal,all can cut off when less than maintenance current. zero cross type may cause the maximum half-cycle delay, but reduces the impact of the load and radiofrequency interference, is the ideal switching devices.Random type fast response,suitable for dimmer,thermostats resistive loads and some inductive load applications.

When the CSR turn off, if in the phase current and voltage have different, will have a large rise rate (dv/dt) on the triac, such as dv/dt higher than Triac standatrd (300V/us), will result in delay shutdown even failure. use anti-parallel thyristor's CSR(powerful type) will be greatly improved at dv/dt(dv / dt is 500V/us). Therefore, in the field of capacitive load or inductive load, suggest the use powerful type CSR. CNTD's CSR are all powerful type.

Solid-state voltage regulator consists of thyristor switching circuit, resistance-capacitance phase shifting circuit,lag circuit and over-voltage absorption circuit.The use of only one external potentiometer can be used to achieve AC power regulation.In many occasions can replace the heavy contact voltage lighting power supply,voltage,temperature,brightness, speed and other analog adjustment.

特点 Features

- 电流: 0.5A 400A
- 电压: 12V 680V
- 通用安装尺寸
- 真空焊接技术
- LED指示灯显示“ON”或“OFF”
- 保护面板
- IEC标准
- 输入输出类型可选择 DC / AC AC / AC DC / DC
- Current:0.5A~400A
- Voltage:12V~680V
- General Install Size
- Vacuum Weld Technics
- Led indicator showing “ON” or “OFF”
- Protect Panel
- IEC standard
- Input & output type could chose DC/AC AC/AC DC/DC

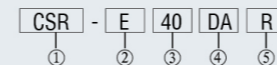


■ 灰色标准型
Gray



■ 浅绿色高端型
Light green

型号说明 Model Number Structure



- 1 CSR=昌得单相固态继电器 CSR=CNTD Single Phase Solid State Relay
CTR=昌得三相固态继电器 CTR=CNTD Three Phase Solid State Relay
- 2 无=浅绿色高端型 None= Improve Design Type(Light Green)
E=灰色标准型 E=Standard Economic Type(Gray)
- 3 额定电流 Rated Operation Current
- 4 控制和负载电压类型 Control & Load voltage type
DA=DC(4-32V)AC(24-380V) AA=AC(80-250V)AC(24-380V)
DD=DC(4-32V)DC(12-240V) VA=Voltage regulator调压器(24 380VAC)
- 5 常规过零触发型 None=Zero Cross Trigger
随机触发型 R=Radom Switch

应用 Applications

- 交流直流开关和温度控制
- 自动化控制
- 数控机床
- 包装机械
- 纺织机械
- 玻璃机械
- 塑料机械
- AC DC switch & Temp control
- Automate Control
- CNC machinery
- Packaging machinery
- Textile machinery
- Glass machinery
- Plastic machinery