

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。

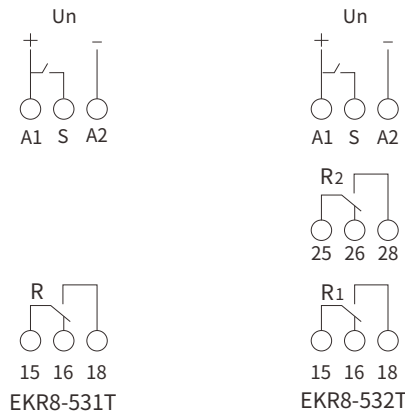
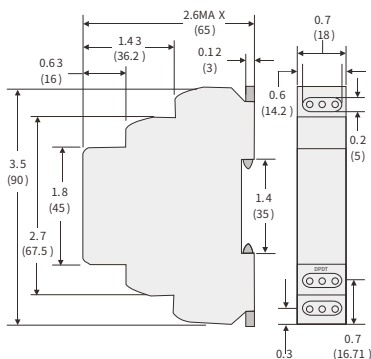
This series of time relay has the advantages of wide operating voltage range, clear working instructions, small volume, uniform size, easy installation, etc. 本系列时间继电器具有工作电压范围广,工作指示清晰,体积小,尺寸统一,便于安装等优点。

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



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	



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 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 transfer 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	AC 1 5	DC1(24/110/220V)
AgN i	1000 W			70uF		4000V A	0.9kW	750V A	16A/0.5A/0.35 A