



### 特点 Features

- 35A触点切换能力。  
35A switching capability
- 具有一组常开、一组转换两种触点形式。  
NO type and CO type are available
- 符合RoHS、ELV指令。  
Satisfy ROHS and ELV

### 触点参数 Contact Data

型号 Modle		SARS							
最大连续电流 <sup>(1)</sup> Max.continuous current		35A							
最大切换电流 Max.switching current		ON(NO):150A <sup>(2)</sup> , OFF(NO):35A							
最大切换电压 Max.switching voltage		40VDC							
触点负载电压 Contact Voltage	负载类型 Load Type	触点负载电流(A) Contact Current		ON:OFF		电寿命(次) endurance	触点材料 contact material	试验环境温度 test ambient temperature	
		1C、1A		ON	Off				
		NO	NC	S	S				
14VDC	阻性 resistive	on	35	20	2	2	1x10 <sup>5</sup>	23°C	
		off	35	20					
	灯 lamp load	on	150 <sup>(1)</sup>	—	2	2	1x10 <sup>5</sup>		
		off	30	—					
	感性 general	on	80	—	2	2	1x10 <sup>5</sup>		
		off	30	—					
28VDC	阻性 resistive	on	20	10	2	2	1x10 <sup>5</sup>	23°C	
		off	20	10					
	灯 lamp load	on	70 <sup>(1)</sup>	—	2	2	1x10 <sup>5</sup>		
		off	7	—					
	感性 general	on	38	28	2	2	1x10 <sup>5</sup>		
		off	15	6					

Note:1.Initial cold filament spike inrush current  
 2.Turn-on current refers to peak current

### 性能参数 Parameter Data

触点材料 Contact material	Silver alloy	
接触压降 Contact voltage drop	200mv/at 10A (max)	
吸合时间 Operate time	10msec. Max.	
释放时间 <sup>(3)</sup> Release time	10msec. Max.	
绝缘电阻 Initial insulation resistance	100MΩ Min.(DC500V)	
介质耐压 <sup>(4)</sup> Initial dielectric strength	Between open contacts : AC500V , 50/60Hz 1min.	
	Between coil and contact : AC500V , 50/60Hz 1min.	
抗振动 <sup>(5)</sup> Vibration resistance	10~25Hz 1.27mm-double-amplitude	
	25~500Hz 98m/s <sup>2</sup>	
抗冲击 Shock resistance	NO 20G/ NC 5G	
寿命 Endurance	机械寿命 Mechanical(at10800ops/h)	1x10 <sup>7</sup> ops
	电气寿命 Endurance	see contact parameter
机械性能 mechanical behavior	外壳保持力 Cover retentivity : ≥200N ( pull and press ) 引出脚保持力 Terminals retentivity : ≥100N ( pull and press ) 引出脚抗弯曲力 Terminals bending stiffness : ≥10N <sup>(6)</sup> ( all direction )	
环境温度 Ambient temperature	-40°C ~ +125°C (no condensation)	
重量 Unit weight	Approx 19.4g	

**Note:** (1) 针对常开触点，在线圈施加100%额定电压时测量所得；For the normally open contact, the measurement of the 100% rated voltage is applied to the coil  
 (2) 灯负载浪涌峰值电流，14VDC; surge current in lamp load 14VDC  
 (3) 由额定电压阶跃到0VDC，且没有线圈抑制电路时测量；Rated voltage step up to 0VDC, And measurement without coil suppression circuit；  
 (4) 漏电流小于1mA；The leakage current is less than 1mA  
 (5) 在激励时，常开触点断开时间小于1ms；在不激励时，常闭触点断开时间小于1ms,同时常开触点不能闭合；  
 When the excitation is excited,the opening time of the normally open contact is less than 1ms,when no excitation,the normally closed contact time is less than 1ms,at the same time,the normally open contact can not be closed；  
 (6) 测试点为距离引出脚末端2mm处，当移除测试力后，引出脚变形应小于0.5mm。  
 Test point for the distance 2mm from the end foot,when the test force is removed,the lead foot should be less than 0.5mm

## 线圈参数Coil Data (at 20°C)

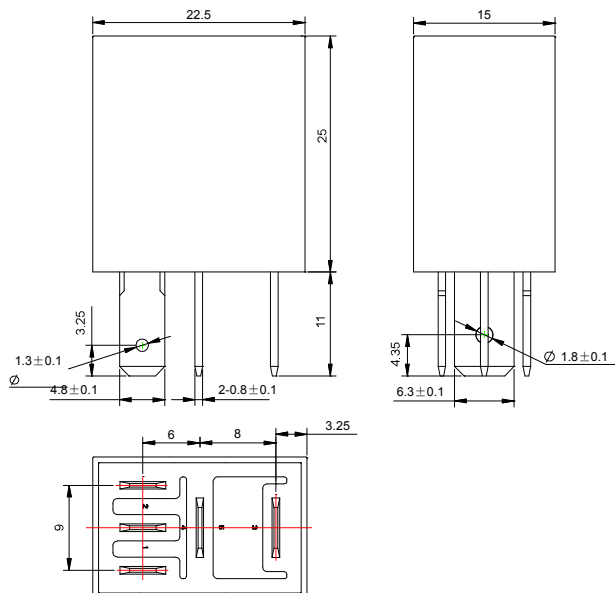
额定电压 Nominal voltage (VDC)	额定电流 Nominal operating current ±10 (mA)	线圈电阻 Coil resistance ±10 (Ω)	并联电阻 Parallel resistance (Ω)	等效电阻 Equivalent resistance (Ω)	动作电压 Pick-up voltage (VDC)	释放电压 Drop-out voltage (Min.)	最大允许电压 Max Allowable voltage (VDC)	额定功率 Nominal operating power (W)
12	100	120	---	---	≤60%	≥10%	15.6	1.2
24	50	480	---	---			31.2	1.2
12	100	120	680	102			15.6	1.4
24	50	480	2700	407.5			31.2	1.4
12	133	90	---	---	≤60%	≥10%	15.6	1.6
24	66.7	360	---	---			31.2	1.6
12	133	90	680	79.5			15.6	1.8
24	66.7	360	2700	317.6			31.2	1.8

## 订货标记Ordering Information

### 型号命名规则Nomenclature

SARS	-S	-1	12	D	M	R-XX	
							特殊参数：无-标准型，字母或数字-特殊要求 Special Parameter: Nil-Standard type,Letter or number-Special requirement
							配件形式：无-不带配件，R-带电阻，D-带二极管 (见接线图)，DC-带二极管(见接线图) Accessory Form: Nil-Without accessory, R-parallel resistor, D-parallel diode,DC-parallel diodes(see wiring diagram)
							触点形式Contact Form: Nil-Form C, M-Form A
							线圈功耗Coil Power: D-1.2W/1.4W,H-1.6/1.8W
							线圈规格Coil Voltage(VDC): 12, 24
							触点组数Number of Poles: 1-1 pole
							封装形式：无-扣耳固定式，S-塑封式，SH-防水式 Protective Construction: Nil-Dust cover S-Flux proofed SH-Sealed type washable
							基本型号Type Designation: SARS

## 外形尺寸、接线图(单位:mm) Outline Dimensions, Wiring Diagram



Unless otherwise specified

未标注尺寸公差:

< 1mm: ±0.2mm

1~5mm: ±0.3mm

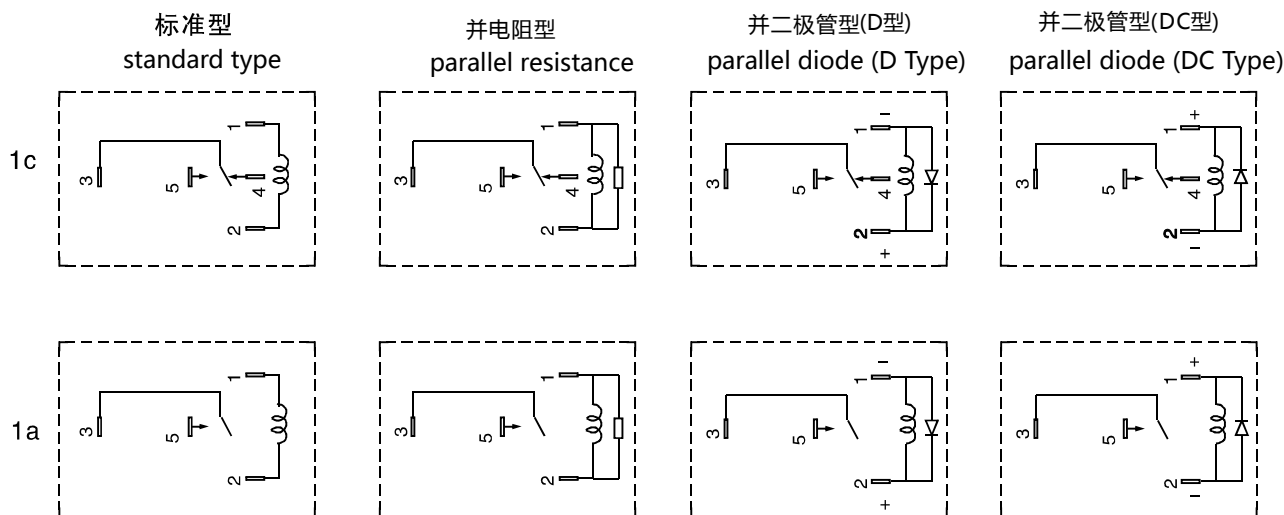
> 5mm: ±0.4mm

注: 1、引出脚尺寸为预焊前尺寸

2、安装孔尺寸公差: ±0.1mm

Note: 1. Extended terminal dimension is dimension before soldering.

2. Tolerance of mounting holes: ±0.1mm



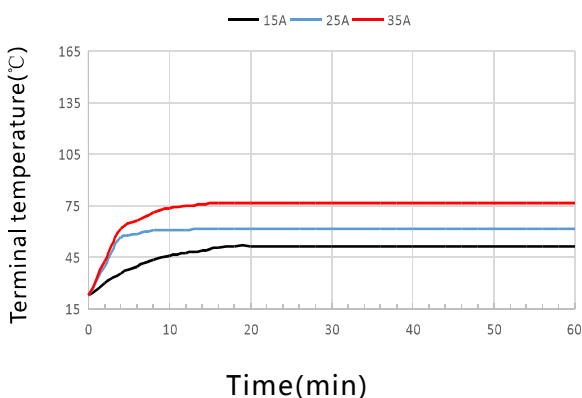
接线图(底视图)  
Wiring Diagram (bottom view)

## 典型用途 Typical Applications

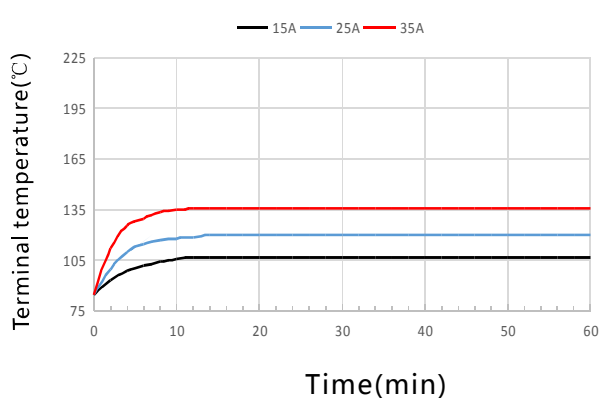
- 加热器、风扇控制、油泵控制、雨刮控制、前灯控制、电喷系统  
Heater, fan control, fuel pump control, wiper control, headlight control.
- 汽车空调、电磁铁控制、照明系统、联动装置、办公室自动化设备等。  
Car air conditioner, electromagnet control, lighting control, interlocks, office equipment, etc.

## 性能曲线图 Characteristic Curves

Terminal temperature rise  
Sample : SARS-112DM(1.2W)  
Sample quantity : 3PCS  
Measuring part: Terminal  
Coil voltage: 12VDC  
Relay load current: 15A,25A,35A  
Ambient temperature: 23°C



Terminal temperature rise  
Sample : SARS-112DM(1.2W)  
Sample quantity : 3PCS  
Measuring part: Terminal  
Coil voltage: 12VDC  
Relay load current: 15A,25A,35A  
Ambient temperature: 85°C



声明:

本产品规格书仅供客户使用时参考,若有更改,恕不另行通知。

对三友而言,不可能评定继电器在每个具体应用领域的所有性能参数要求,因而客户应该根据具体的使用条件选择与之相匹配的产品,若有疑问,请与三友联系获取更多的技术支持。但产品选型责任仅由客户负责。

Disclaimer:

This datasheet is the customers' reference. All the specification are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for the technical service. However it is the user's responsibility to determine which product should be used only.