



**Feature:**

- 40A Switching Capability
- 125°C High Operating Temperature
- 1 Form A and 1 Form C contact available
- Dustproof and Fluxproof type available
- Resistor or diode paralleled type available

**Contact Load**

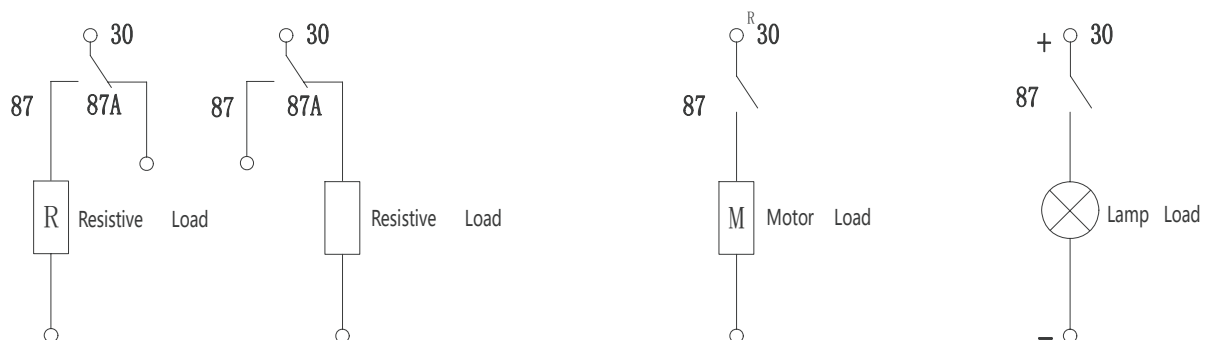
Model	SARQ
Nominal Load( Res.Load)	Normal:NO:40A 14VDC /NC: 30A 14VDC 2A: NO:30A 14VDC
Max.Switching Current(normal)	On(NO):150A (Surge Current of Lamp Load, 14VDC) Off(NO):40A (Resistive Load, 14VDC)
Max.Continuous Current	40A at 23°C

**Contact Data**

Contact Voltage	Load Type		Contact Current			Duty Factor		Endurance (Cycles)	Contact Material
			Form C		Form A	On	Off		
14VDC	Res.	on	40	30	40	2S	2S	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		off	40	30	40	2S	2S		
	Motor	on	80 <sup>a</sup>	--	80 <sup>a</sup>	2S	2S	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		off	30	--	30	2S	2S		
	Lamp	on	150 <sup>a</sup>	--	150 <sup>a</sup>	2S	2S	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		off	30	--	30	2S	2S		
27VDC	Res.	on	30	10	20	2S	2S	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		off	30	10	20	2S	2S		

a. Time ratio of peak current: Stable current is: 1:10

**Load Wiring Diagram**



## Characteristic Data

Contact Material	SilverAlloy	
Dropping Voltageof Contacts	200mv/at 10A (max)	
Operate Time	10msec.Max.	
Release Time	ordinary type:10msec.Max. with resistor or diode type :15 msec. Max.	
Initial Insulation Resistance	100MΩ Min.(DC500V)	
Initial Dielectric Strength	OP/OP: AC500V , 50/60Hzfor 1min.	
	IP/OP: AC500V , 50/60Hzfor 1min.	
Vibration Resistance	5 ~ 22.3Hz at double amplitude of 10 mm 22.3~500Hz 98m/s <sup>2</sup>	
Shock Resistance	NO 30G/NC 5G	
Endurance (operations)	Mechanical (10,800ops./h)	1x10 <sup>7</sup> cycles
	Electrical (900ops./h)	See the contact parameters table
Ambient Temperature	-40°C ~ +125°C(no condensation)	
Unit Weight	Approx. 32.0g	

## Coil Data(at 20°C)

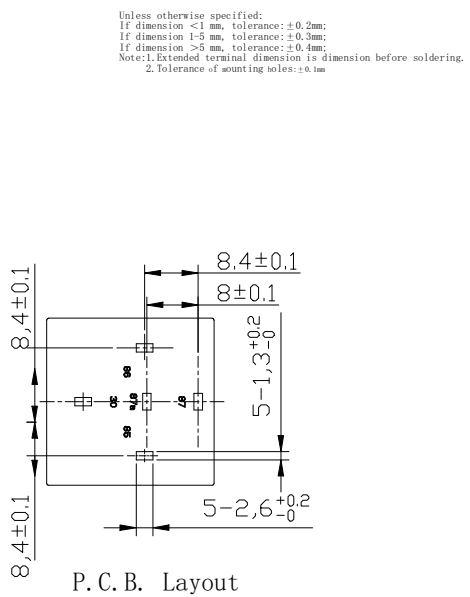
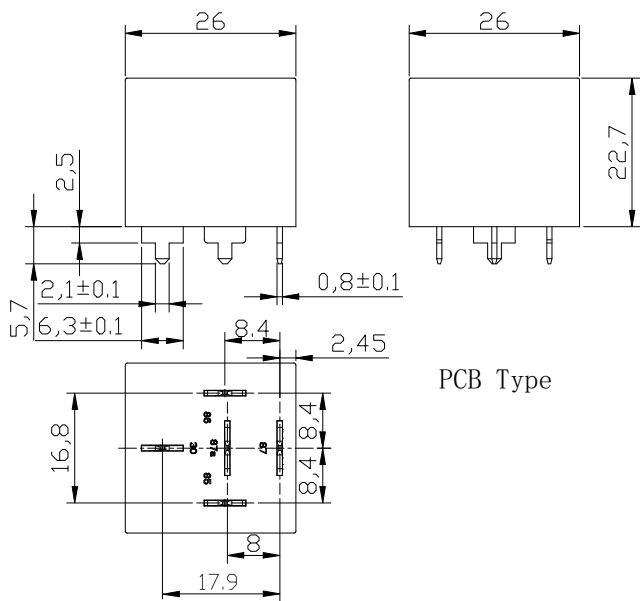
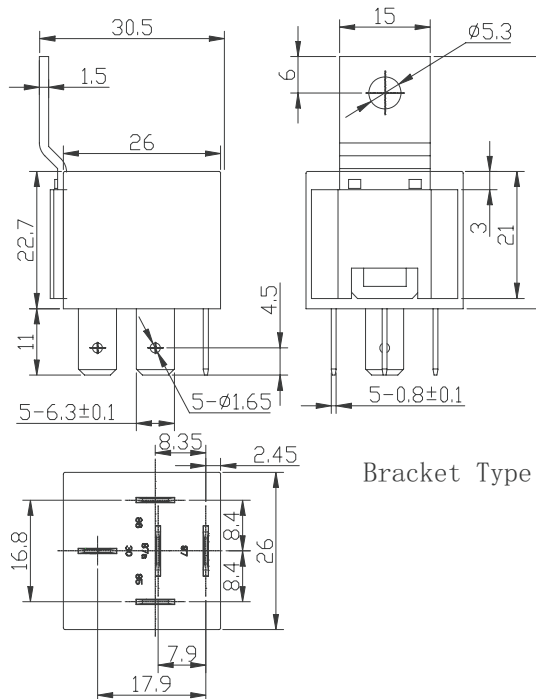
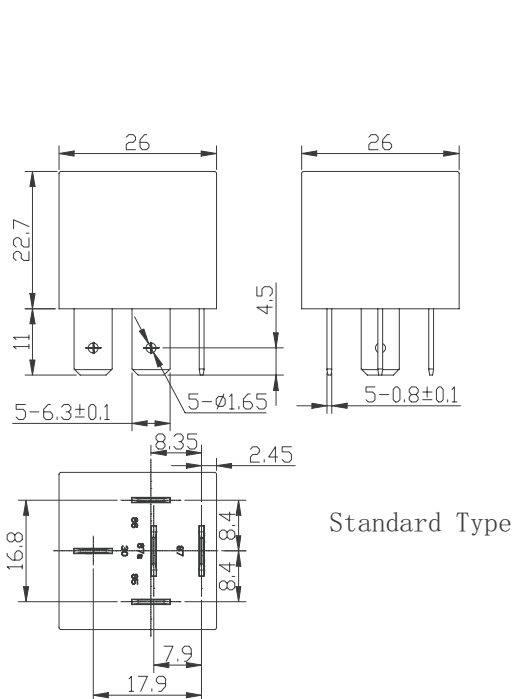
Nominal Voltage (VDC)	Nominal Operating Current 10%(mA)	Coil Resistance ± 10%(Ω)	Parallel Resistance (Ω)	Equivalent Resistance (Ω)	Max. allowable Voltage	Pick-up Voltage (Max.)	Drop-out Voltage (Min.)	Coil Power (W)
12	133.33	90	---	---	150%of Nominal Voltage	60%of Nominal Voltage	10%of Nominal Voltage	Approx.1.6
12	133.33	90	680	80				Approx.1.8
24	66.7	360	---	---				Approx.1.6
24	66.7	360	2700	320				Approx.1.8

## Ordering Information

## Nomenclature

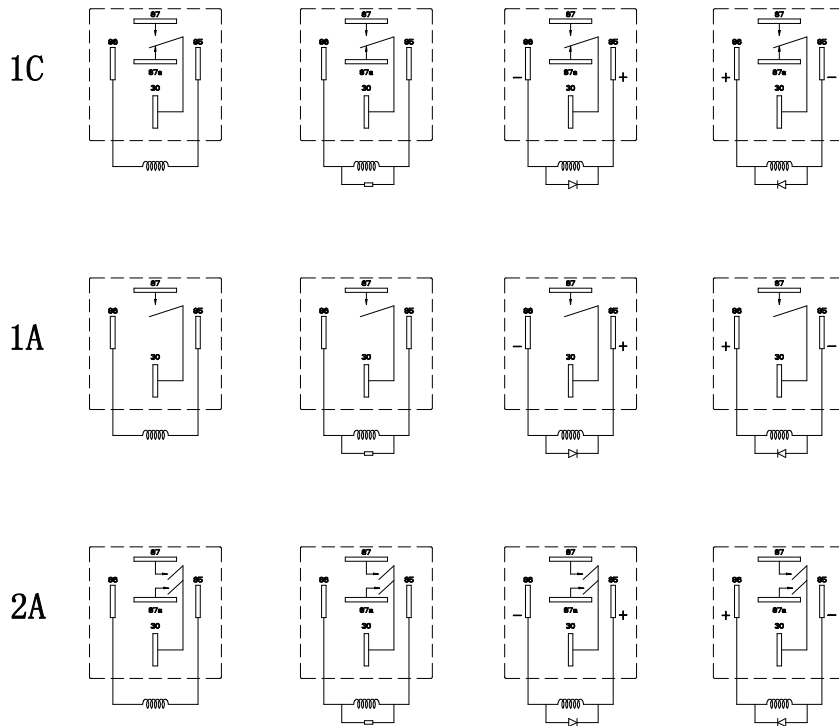
SARQ	-S	-1	12	D	M	F	R	-XX
Special Parameter: Nil-Standard type, 01-terminal without hole								
Accessory Form:Nil-withoutaccessory,R-withresistor D-withdiode(see wiring diagram) DC-withdiode(see wiring diagram)								
Mounting type : Nil-without bracket, F-with iron bracket, P-PCB type								
Contact Form: Nil-FormC,M-FormA,								
Coil Power: D-1.6/1.8W								
Coil Voltage (VDC): 12, 24								
Number of Poles: 1-1Pole, 2-2Pole								
ProtectiveConstruction:Nil-Dustproof,-S Fluxproof								
Type Designation: SARQ								

Outline Dimensions



Unless otherwise specified:  
 If dimension <1 mm, tolerance: +0.2mm;  
 If dimension 1-5 mm, tolerance: ±0.3mm;  
 If dimension >5 mm, tolerance: ±0.4mm;  
 Note: 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of mounting holes: ±0.1mm

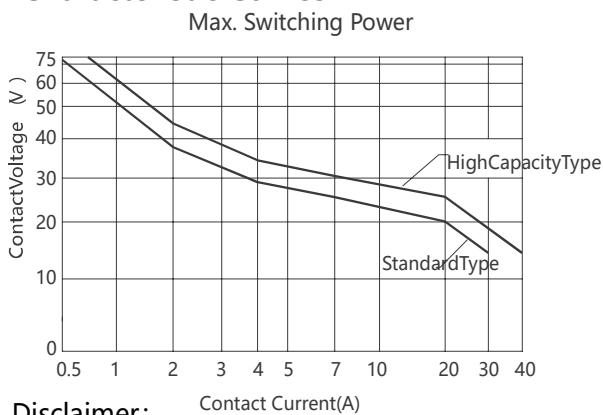
# Wiring Diagram



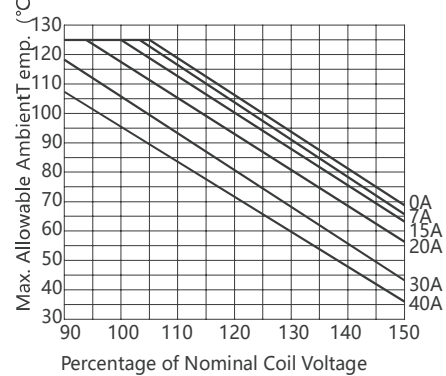
## Typical Applications

- rear window defogger, battery breaking device, automotive AC, foglight control, headlight control
- electric power distributor, ABS, traction control system.

## Characteristic Curves



Ambient Temperature vs Coil Voltage



**Disclaimer:**

This datasheet is the customers' reference. All the specification are subject to change without notice. We could not evaluate all the performance and parameters for every possible application. Thus the users should be in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for technical service. However it is the users' responsibility to determine which product should be used only.

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