



Features

- 40A high switching capability.
- 1 Form C contact configuration.
- Operating temperature: -40 to +125°C.

Contact Capacity

Model	SARL-K
Nominal switching capacity (res. load)	40A 14VDC
Max. switching current	40A
Max. switching voltage	30VDC
Max. switching power	560W

Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	10mΩ Max.	
Operate time (at nominal volt.)	10msec. Max.	
Release time (at nominal volt.)	10msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC500V, 50/60Hz 1Min.	
	Between coil and contact: AC500V, 50/60Hz 1Min.	
Vibration resistance	Functional	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	20G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 7,200 ops./h)	10,000,000
	Electrical (at 600 ops./h)	100,000
Ambient temperature	-40°C ~ +125°C (no condensation)	
Unit weight	Approx. 35.5 g	

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.)	Nominal operating power
12	109	110	--	--	150 % of nominal voltage	70 % of nominal voltage	10 % of nominal voltage	Approx. 1.3W
12	109	110	(Special) 1000	99				Approx. 1.5W
12	109	110	680	95				Approx. 1.5W

Ordering Information

Nomenclature

SARL-1 12 D K R-XX

Special Parameter: Nil-Standard type,
Letter or number-Special requirement

Accessory Form: Nil-Without accessory,
R-With resistor,
D-With diode

Terminal Type: K-Wide terminal

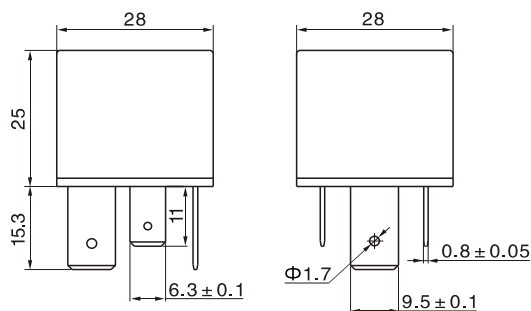
Coil Power: D-1.3W/1.5W

Coil Voltage (VDC): 12

Number of Poles: 1-1 Pole

Type Designation: SARL

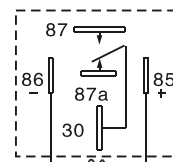
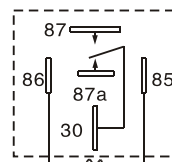
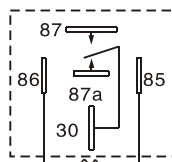
Outline Dimensions, Wiring Diagram, Mounting Holes (unit: mm)



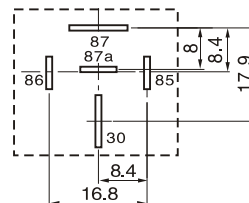
w/t accessory

with resistor

with diode



Wiring Diagram (bottom view)



Mounting Holes (bottom view)

Unless otherwise specified:

If dimension < 1mm, tolerance: $\pm 0.2\text{mm}$;

If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$;

If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$.

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

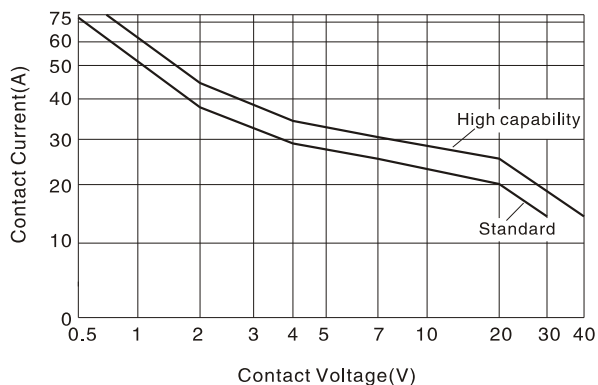
2. Tolerance of mounting holes : $\pm 0.1\text{mm}$.

Typical Applications

- Automotive control equipment

Characteristic Curves

Max. Switching Power



Ambient Temperature vs coil volt.

