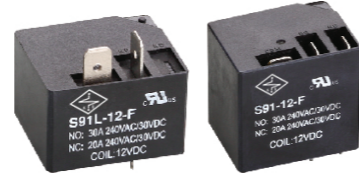


### ARTICLE CODE

S91 L - 12 A - F

## S91 Series



F: Sealed Type  
 Nil: Open Type  
 Nil: 1C  
 A: 1A  
 B: 1B  
 Coil Voltage  
 5,6,9,12,18,24,48 VDC  
 Nil: Standard  
 L: Low Profile type  
 Model Name: S91

#### Main Features:

- Small size, light weight. Low coil power consumption, heavy contact load. reliability, long life.
- PC board mounting and direct insert mounting available
- Suitable for various industrial

### COIL RATING(at 20°C)

Nominal Voltage (VDC)	Coil Resistance (Ω)(±10%)	Power Consumption(W)	Nominal Current (mA)(±10%)	Pull In Voltage (VDC)	Drop Out Voltage (VDC)	Max. Allowable Voltage (VDC)
5V	28 Ω	0.9W	178.6mA	75% MAX	10% MIX	130%
6V	40 Ω		150.0mA			
9V	90 Ω		100.0mA			
12V	160 Ω		75.0mA			
18V	360 Ω		50.0mA			
24V	640 Ω		37.5mA			
48V	2560 Ω		18.8mA			

### PERFORMANCE(at initial value )

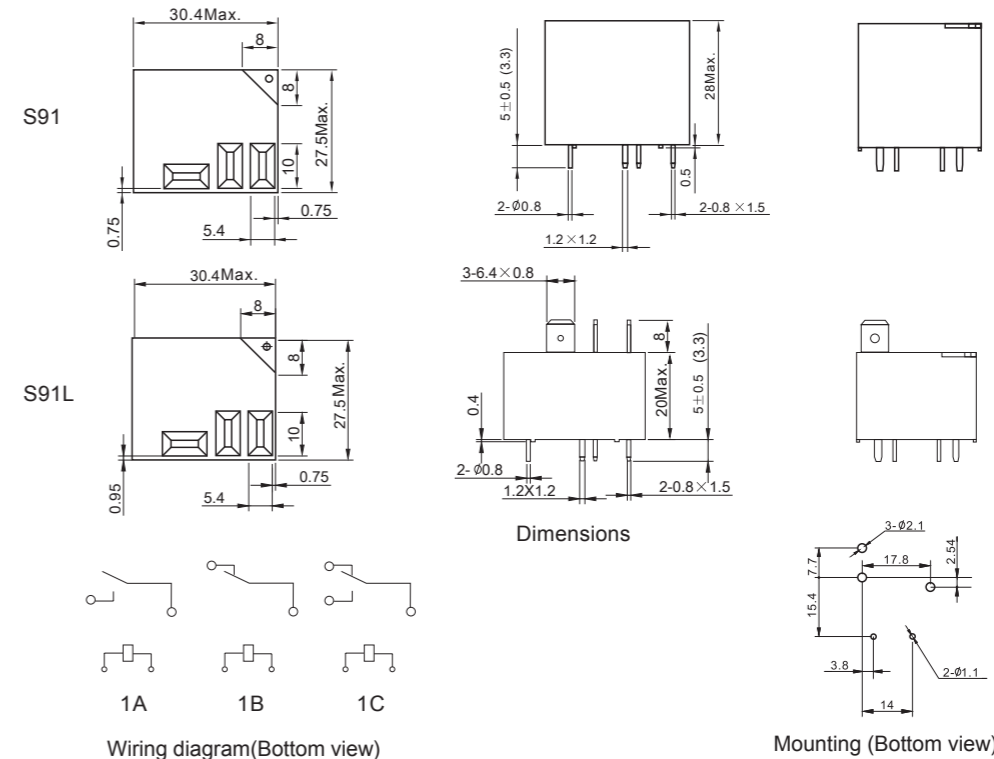
Item	Type	30A	40A
Contact Resistance		50mΩ	Max.(Initial Value)
Operate Time		15msec Max.	
Release Time		10msec Max.	
Dielectric Strength between Coil & Contact between Contact		2500VAC(1min) 1500VAC(1min)	
Insulation Resistance		100MΩ Min.(DC500V)	
Operating Ambient Temperature		-40°C ~+110°C	
Humidity		35 to 85% RH	
Vibration Resistance		10G(10~55Hz) (Dual Amplitude:1.5mm)	
Shock Resistance		10G	
Life Expectancy Mechanically Electrically		10,000,000 ops.Min. (1800 ops./h) 100,000 ops.Min. (1200 ops./h)	
Weight		33g	35g(approx.)

### CONTACT RATING

Item	Type	30A	40A
Rated Carrying Current		30A/240VAC 30A/30VDC	40A/240VAC 40A/30VDC
Motor load		250VAC	240VAC
Max. Allowable Current		30A	40A
Max. Allowable Voltage		110VDC 250VAC	110VDC 250VAC
Max. Current(Continual)		30A	40A
Min. Load		10VDC 10mA	
Contact Material		Ag alloy	

### OUTLINE DIMENSION, WIRING DIAGRAM & PC BOARD LAYOUT

Unit: mm



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension > 1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.  
 2) The tolerance without indicating for PCB layout is always ±0.1mm.

### CHARACTERISTIC CURVES

