SANYOURELAYS
Relays for advanced technology

High Voltage DC Relay

SEV250

Feature:

- Adopt ceramic seal structure , be able to use at explosive or harmful environment, the contact will not be corroded and oxidated. And the contact meets the IP67 protection degree.
- With energy-saving coil circuit , the nominal power is only 1.8W, broad coil voltage:12~24VDC
- Satisfy abnormal response to requirements , switch 10 times overcurrent .
- RoHS compliant

Parameters Table

Characteristic	Items		Information	
Contact Data	Contact Form		1 Form A contact	
	Nominal Load Current		200A	
	Max. Load Current		250A	
	Contact resistance		≤1mΩ(at6V 20A)	
	Min. load		1A 12VDC	
	Outgoing Mode		M8 External Thread	
Electrical Data(1)			450V Type	750V Type
	Max. Switching Voltage		750VDC	900VDC
	Max. Breaking Current		2000A (450VDC more than once)	2000A (750VDC more than once)
	Electrical Endurance	Capacitive Load	25,000 Cycles (22.5VDC,τ=1ms shock 400A, steady 200A)	25,000 Cycles (37.5VDC,τ=1ms shock 400A, steady 200A)
		Resistive Load	10,000 Cycles (450VDC 200A)	6,000 Cycles (750VDC 200A)
		Resistive Load	3,000 Cycles (450VDC 250A)	3,000 Cycles (750VDC 250A)

Characteristic	Items		Information
Characteristic Data	Mechanical Endurance		500,000 Cycles
	Initial dielectric strength	Between coil and contact	4000VAC 1min
		Between open contacts	3000VAC 1min
	Initial insulation resistance		1000MΩ(1000VDC)
	Operation time(at 12V)		≤50ms
	Release time(at 12V)		≤30ms
	Shock resistance	Stability	196m/s² (20G)
		Durability	490m/s² (50G)
	Vibration resistance		10~200Hz 43m/s²(4.4G)
	Ambient temperature		-40℃~85℃
	Ambient humidity		5%~95%RH
	Unit weight		670g
	L×W×H (mm)		95×55.5×91.8

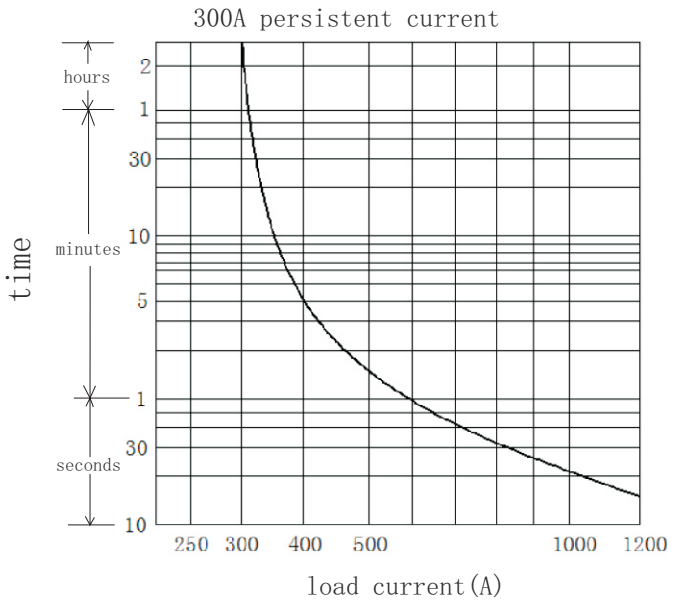
Coil Data(at 23℃)(2)

Rated Voltage (VDC)	12~24
Max. Voltage (VDC)	24
Pick-up Voltage (VDC)	≤9
Drop-out Voltage (VDC)	≥1
Coil resistance(±10%)(Ω)	3.4
Starting power (W)	42
Steady power (W)	1.7

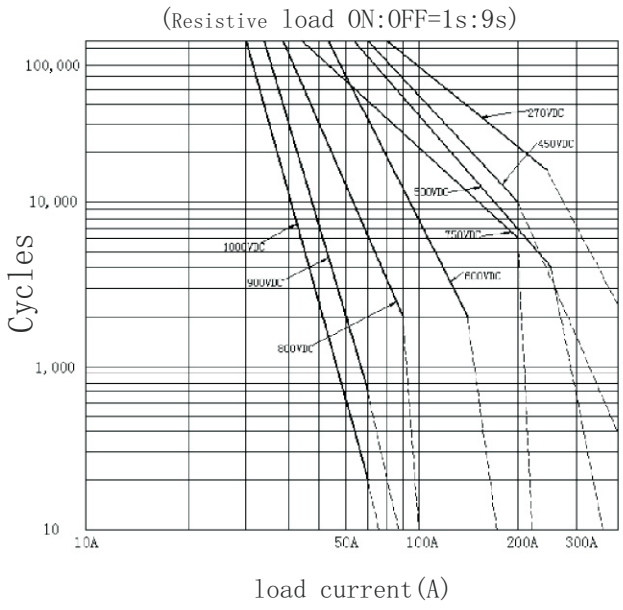
Note:
(1) Beside the special label, the ambient temperature of electrical endurance test is 23℃,on-off ratio is 0.6S:5.4S ;
(2) Coil data is based on coil with diode.

Reference Data

Electric Diagram



Life of the graph on load to cut off



Ordering Information

Nomenclature

SEV 250 -□ M L □ □ □

□ Customer features label:
Nil:No Customer special requirements
Numbers or Letters: Customer special requirements

Load connection type:
1:connection piece+external thread
2:internal thread

Coil connection type: Nil: outgoing line
C: outgoing line+connector

Coil Voltage (VDC) : L:12~24

Number of Poles: M:1 Form A contact

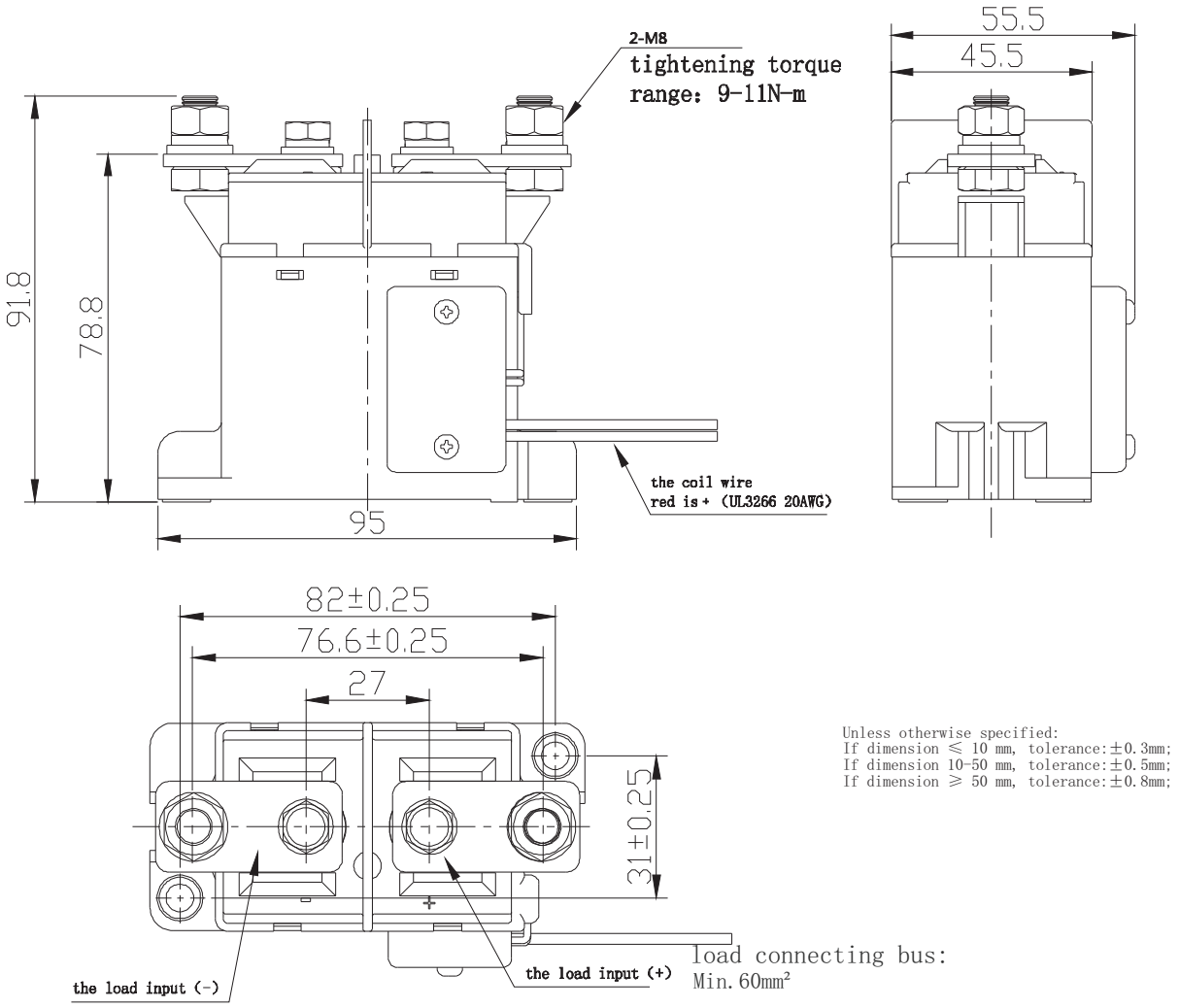
Load Voltage : 750:750VDC
450:450VDC

Load current : 250A

Type Designation: SEV

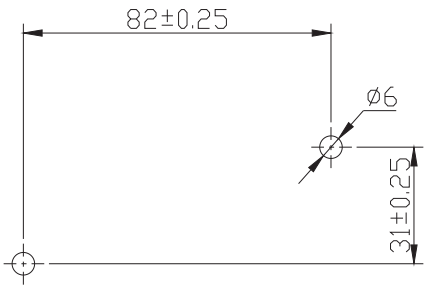
Note: The outgoing line length is 100±15mm.

Outline Dimensions



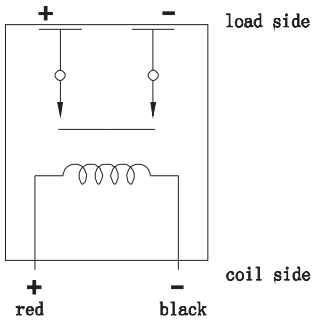
Unless otherwise specified:
If dimension ≤ 10 mm, tolerance:±0.3mm;
If dimension 10-50 mm, tolerance:±0.5mm;
If dimension ≥ 50 mm, tolerance:±0.8mm;

Installation Size Chart



Please tightening the relay
at the torque range:3-4Nm

Schematic Diagram



The load side has positive and
and negative electrode

Instructions

1.Use and transport conditions

1)temperature:-40℃~+80℃

2)humidity:5~85%RH

3)atmosphere pressure:86~106Kpa

2.When install the relay, you must using the gasket to prevent the screw become flexible.

3.The tightening torque of screw refers to the Outline Dimensions, and the gas inside the sealing member is H_2. If the torque range is exceeded, the sealing member may be destroyed and it will be dangerous.

4.Please regard the relay as a product within a service life. Don't exceed its capacity of the switch and service life. Please change in time as necessary.

5.The load output of the relay has positive and negative electrode, please refer the Wiring Diagram to connect it.

6.Be careful and don't stain the connection part of contact with foreign bodies and oil, it may lead to abnormal heat dissipation. Please use the connecting bus with nominal sectional area.

7.Please avoid applying to the terminal with excessive load, if the load of nominal range is exceeded, it will affect the function of switch .