

High power relay

SPV150B



- High contact capacity: 150A contact switching capability.
- The coil holding voltage can be reduced to 50~60%V of the rated voltage of the coil to achieve energy saving
- One set of normally open contacts with contact spacing > 4 mm.
- Conforms to European photovoltaic standards IEC62109, VDE0126.
- UL No.E179745
- TUV No. R50624027
- CQC No.CQC24002426482

Contact Data

Type	SPV150B
Rated load (Resistive)	150A 1000VAC
Max. Switching current	150A
Max. Switching voltage	1000VAC
Max. Switching power	150000VA

Parameters Data

Contact material	AgSnO ₂	
Contact resistance	≤1mΩ (at 6V 20A)	
Operate time (at nomi.volt .)	30msec.Max.	
Release time (at nomi.volt .)	10msec.Max.	
Insulation resistance	1000MΩ Min. (DC500V)	
Dielectric strength	Between auxiliary contact and coil	AC5000V, 50/60Hz 1min.
	Between open main contacts	AC2000V, 50/60Hz 1min.
Vibration resistance	Destructive	10 ~ 55Hz, 1.5 mm DA
	Functional	10 ~ 55Hz, 1.5 mm DA
Shock resistance	Destructive	100G Min.
	Functional	10G Min.
Endurance	Mechanical endurance	1×10 ⁵ OPS
	Electrical endurance (1s on 9s off)	Making 50A, Carrying 200A, Breaking 50A, 1000VAC, Resistive load, 85°C,,3×10 ⁴ times.
Ambient temperature	-40°C to +85°C (non-condensing)	
Weight	Approx. 220g	

Coil Data

Nominal Voltage VDC	Nominal Coil current VDC	Coil Resistance Ω	Max.Allowable Voltage VDC	Max.Operate Voltage VDC	Release Voltage VDC	Holding Voltage	Coil Power
12	250	48 (±10%)	110% Nomi. Volt.	75% Nomi. Volt.	5% Nomi. Volt.	40% to 100% Nomi. Volt. (at 23°C) 50% to 60% Nomi. Volt.(at 23°C)	3W
24	125	192 (±10%)					

Note:(1)Relay coil full voltage for 100 milliseconds.

(2)The coil holding voltage is the value of the voltage applied to the coil after the coil excitation voltage has been maintained for 100ms.

(3)The relay coil is not allowed to apply more than the upper limit of the holding voltage for a long period of time to prevent the relay from overheating and burning out.

Safety approval ratings

Certificates	CQC	TUV	UL
File No.	CQC24002426482	R50624027	E179745
Approved ratings	Making 50A, Carrying 150A, Breaking 50A, 1000VAC, Resistive load, 85°C, 3×10^4 times.		

Note:(1) All values unspecified are at room temperature.

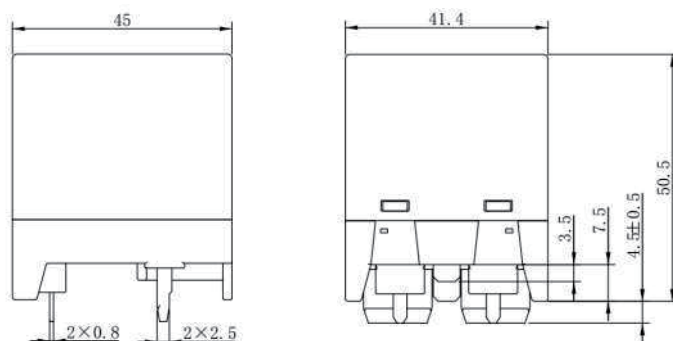
(2) Only some typical rating are listed above.If more details are required,please contact us.

Ordering Information

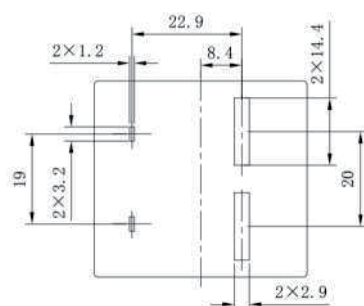
SPV150B	- M	XX	X	X	<p>Special parameter: Nil-Standard,XXX-Customer requirements</p> <p>Contact material: 1-AgSnO₂</p> <p>Coil Voltage(VDC): 12, 24</p> <p>Main contact form:M-Form A</p> <p>Type:SPV150B</p>
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Outline Dimensions, wiring diagram, PCB layout (unit:mm)

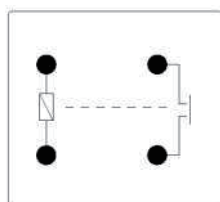
Outline Dimnsions



PCB layout



Wiring Diagram(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: $\pm 0.4\text{mm}$;

Statement:

This product specification is for reference only, subject to change without prior notice. We could not evaluate all test conditions for every possible application, thus customers should be in a right position to choose suitable products for their own application. In if doubt, please contact Sanyou for more technical support. However, it's the customer's responsibility to determine which product should be used.