

Features:

- High contact capacity : 150A of ability to switch contacts.
- Coil holding voltage can be reduced to 50~55%V of coil rated voltage to achieve energy saving effect.
- A group of normally open contact, contact gap > 3.0mm.
- Meet European pv standards IEC62109、VDE0126 .

Safety Approval

UL , C-UL File No : E190598

TUV File No : R50442051

CQC File No : CQC19002216643

Contact Capacity

Model	150A
Nominal switching capacity (res. load)	Through to 40A, Carrying current 150A, Break 40A/240VAC, On 1s/Off 9s, at 85°C , 30K ops
	Through to 30A, Carrying current 150A, Break 30A/400VAC, On 1s/Off 9s, at 85°C , 10K ops
Max. switching current	150A
Max. switching voltage	690VAC
Max. switching power	103,500VA

Characteristic Data

Contact material	Silver alloy	
Initial contact resistance	50mv/at 10A (max) Voltage drop.	
Operate time (at nominal volt.)	30msec. Max.	
Release time (at nominal volt.)	10msec. Max.	
Initial insulation resistance	1,000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts : AC2,000V , 50/60Hz 1min.	
	Between coil and contact : AC5,000V , 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	100G Min.
	Destructive	10G Min.
Endurance	Mechanical (at 9000 ops./h)	1,000,000 cycles
Ambient temperature	-40°C ~ +85°C (no condensation)	
Unit weight	Approx. 155g	

Coil Data (at 20°C)

150A type

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Pick-up voltage ⁽¹⁾ (Max.)	Drop-out voltage (Min.)	Keep voltage ⁽²⁾	Nominal operating power
12	208.3	57.6	75 % of Nominal voltage	5 % of Nominal voltage	50~55 % of Nominal voltage	power 2.5W
24	104.2	230.4				

Comment : (1)Relays apply full coil voltage to maintain 200ms

(2)The coil holding voltage is 50~55% of the rated coil voltage after the coil excitation voltage is maintained for 200ms

(3)Relay coils are not allowed to exceed the upper limit of the holding voltage for long periods of time to prevent the relay from overheating and burning out

Safety Approval Ratings

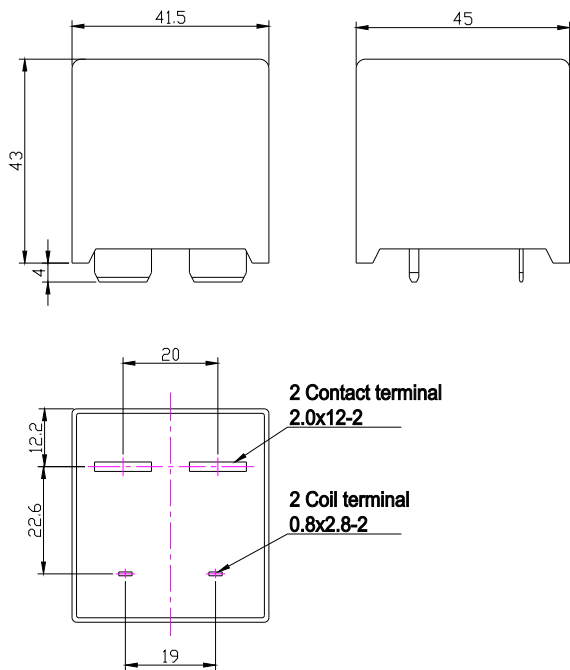
(Note:More detail of approval ratings,please refer to the safety certification)

Approval	TUV	CQC	UL/CUL
File No.	R50442051	CQC19002216643	E190598
Approved ratings	SPV150: Making 40A/240VAC, carrying 150A/240VAC breaking 40A/240VAC T85°C Making 30A/690VAC, carrying 150A/690VAC breaking 30A/690VAC T85°C	SPV150: Making 40A/240VAC, carrying 150A/240VAC breaking 40A/240VAC T85°C Making 40A/690VAC, carrying 150A/690VAC breaking 40A/690VAC T85°C	SPV150: Making 40A/240VAC, carrying 150A/240VAC breaking 40A/240VAC T85°C Making 30A/690VAC, carrying 150A/690VAC breaking 30A/690VAC T85°C

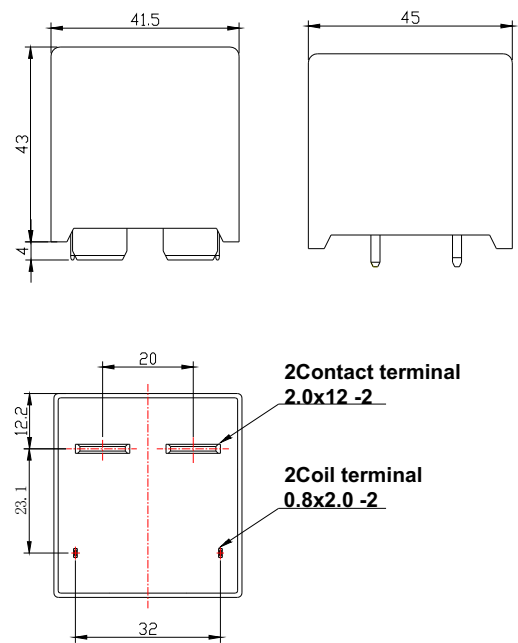
Ordering Information

Nomenclature
SPV 150 - S - M <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Special Parameter: Nil-Standard type Letter or number: Special requirement
Installation dimensions: Nil-Standard type H-H type
Contact material: 1-AgSnO2 2-AgNi
The coil voltage: 12 : 12VDC 24 : 24VDC
Contact form: M-Form A
Form of protection: S-Flux proofed SH -Sealed type washable
The load type: 150-150A
Type designation: SPV

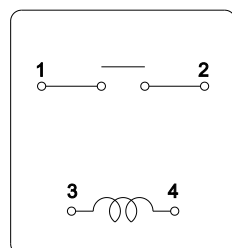
150A Standard type



150A H type



Wiring Diagram



Unless otherwise specified :

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

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

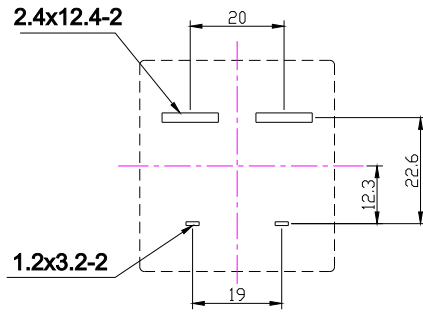
If dimension > 5mm, tolerance : $\pm 0.4\text{mm}$.

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

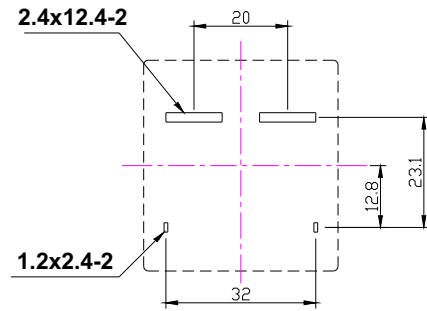
2. Tolerance of P.C.B. layout : $\pm 0.1\text{mm}$.

P.C.B. Layout (bottom view)

150A Standard type



150A-H type



Disclaimer:

This datasheet is the customers' reference. All the specification are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for the technical service. However it is the user's responsibility to determine which product should be used only.