**Features:**

- High contact capacity : 100A, 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 :

TUV File No :

Contact Capacity

Model	100A
Nominal switching capacity (res. load)	Through to 40A, Carrying current 100A, Break 40A/240VAC, On 1s/Off 9s, at 85°C , 30K ops
	Through to 30A, Carrying current 100A, Break 30A/400VAC, On 1s/Off 9s, at 85°C , 30K ops
Max. switching current	100A
Max. switching voltage	690VAC
Max. switching power	69,000VA

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 40A, Carrying current 150A, Break 40A/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. 170.0 g (applying)	

Coil Data (at 20°C)

100A type

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistabce ±10% (Ω)	Pick-up voltage ⁽¹⁾ (Max.)	Drop-out voltage (Min.)	Keep voltage ⁽²⁾	Nominal operating power
12	158.3	75.8	75 % of Nominal voltage	5 % of Nominal voltage	50~55 % of Nominal voltage	power 1.9W
24	79.2	303.2				

150A type

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistabce ±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

Safety Approval Ratings

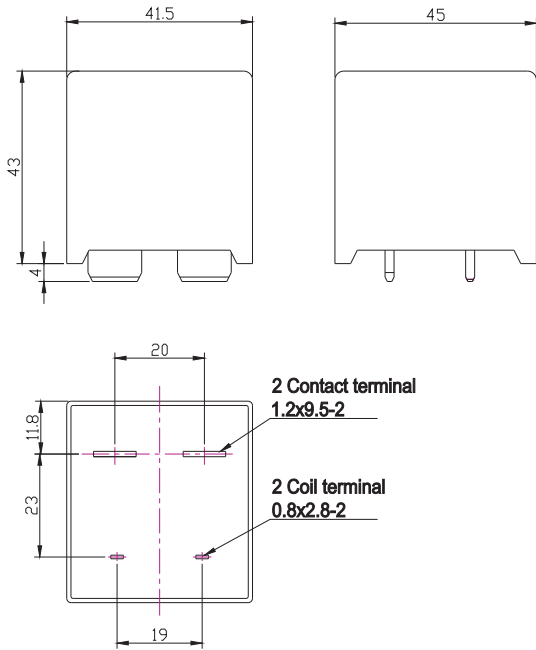
(Note:More detail of approval ratings,please refer to the safety certification)

Approval	TUV	UL/CUL
File No.	applying	applying
Approved ratings	applying	applying

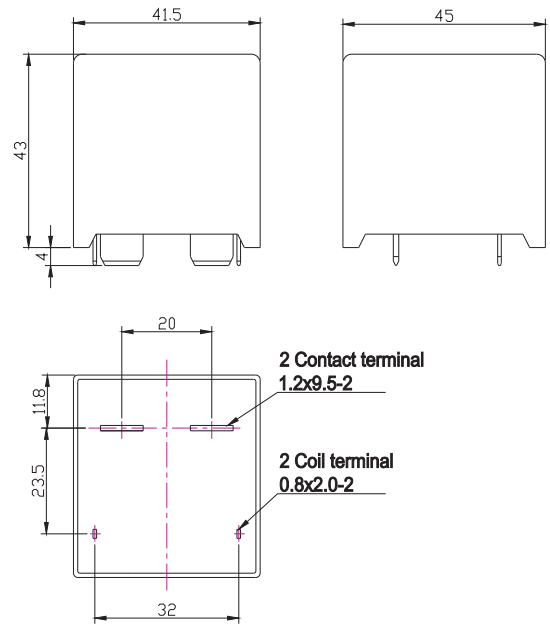
Ordering Information

Nomenclature
SPV 100 - S - M □ □ □ □
<p>Special Parameter: Nil-Standard type Letter or number: Special requirement</p> <p>Installation dimensions: Nil-Standard type H-H type</p> <p>Contact material: 1-AgSnO₂ 2-AgNi</p> <p>The coil voltage: 12 : 12VDC 24 : 24VDC</p> <p>Contact form: M-Form A</p> <p>Form of protection: S-Flux proofed SH-Sealed type washable</p> <p>The load type: 100-100A, 150-150A</p> <p>Type designation: SPV</p>

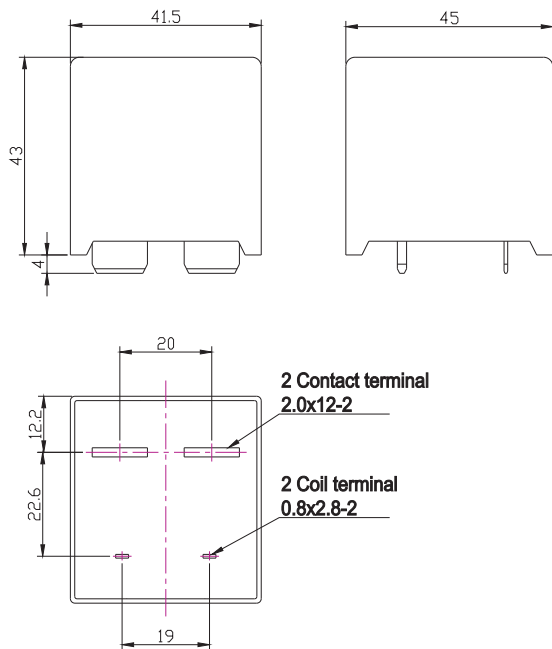
100A Standard type



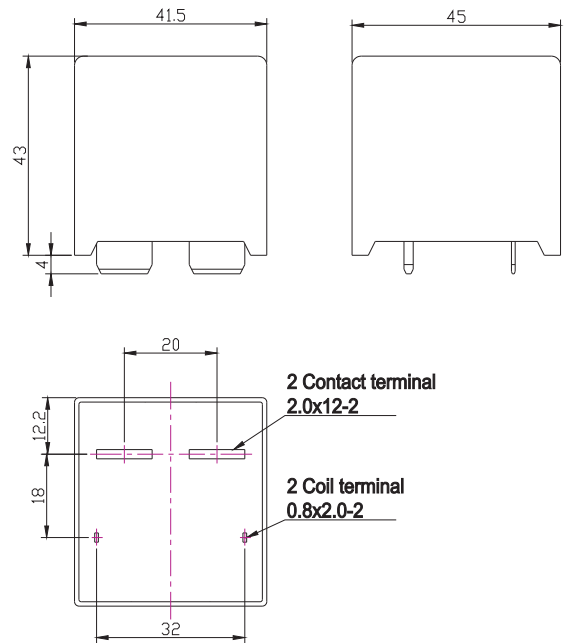
100A H type



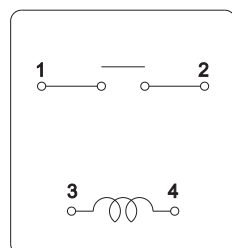
150A Standard type



150A H type



Wiring Diagram



Unless otherwise specified :

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

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

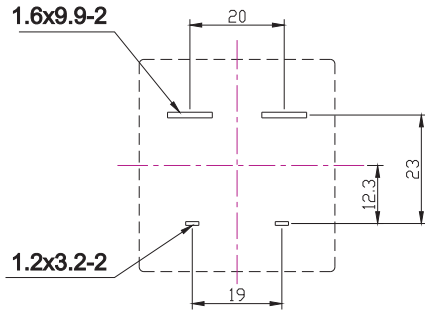
If dimension > 5mm, tolerance : $\pm 0.4\text{mm}$.

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

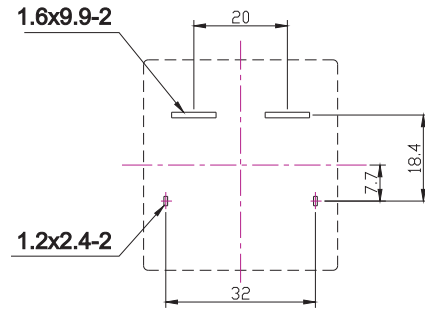
2. Tolerance of P.C.B. layout : $\pm 0.1\text{mm}$.

P.C.B. Layout (bottom view)

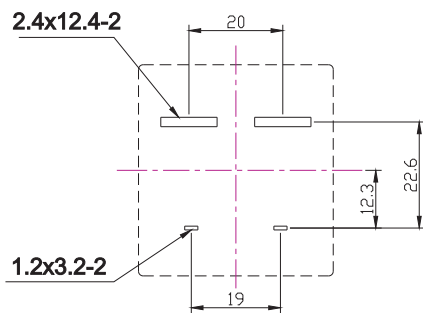
100A Standard type



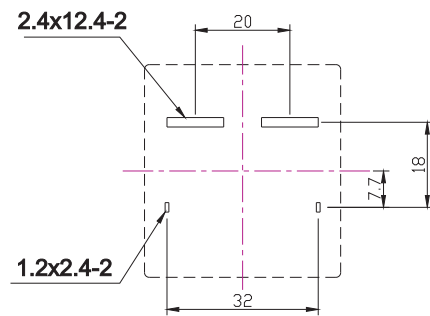
100A H type



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.