

Features:

- High contact capacity: 270A 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 > 4.0mm.
- Meet European pv standards IEC62109、VDE0126。

Safety Approval

UL, C-UL File No: UL E179745

TUV File No: R 50609945

CQC File No: CQC23002412659

Contact Capacity

Model	270A
Nominal switching capacity (res. load)	High operating current 55A, Load current 270A, Cut off capacity 55A/1000VAC, On 1s/O ff9s, at85°C, 30K ops Switch 270A/1000VAC, On 1s/O ff9s, at85°C, 100ops
Max. switching current	270A
Max. switching voltage	1000VAC
Max. switching power	270,000VA

Characteristic Data

Contact arrangement	Silver alloy	
contact resistance	1mΩ/at 20A (max)	
Operate time (at nominal volt.)	45msec. Max.	
Release time (at nominal volt.)	10msec. Max.	
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 1.0 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.0 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. 215g	

Coil Data (at 20°C)

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	250	48	Nominal voltage 75 %	Nominal voltage 5 %	Nominal voltage 50~55 %	3W
24	125	192				

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

Approval	TUV	CQC	UL/CUL
File No.	R 50609945	CQC23002412659	UL E179745
Approved ratings	Making 55A carrying 270A breaking 55A 1000VAC, 30000 cycles 270A 1000VAC, 100 cycles	Making 55A carrying 270A breaking 55A 1000VAC, 30000 cycles 270A 1000VAC, 100 cycles	Making 55A carrying 270A breaking 55A 1000VAC, 30000 cycles 270A 1000VAC, 100 cycles

Ordering Information

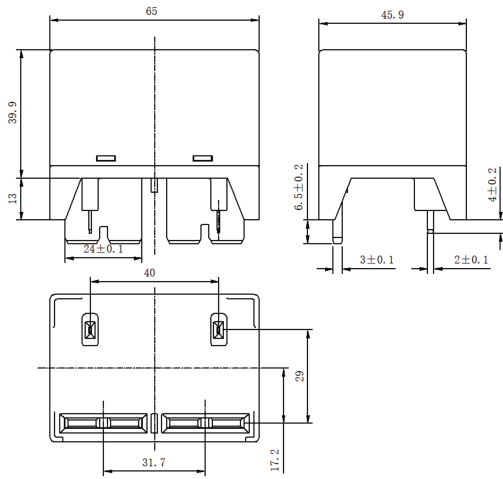
Nomenclature	
SPV 270 -M	<input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>
Special Parameter: Nil-Standard type ; -X:Special requirement	
Contact material:	1: AgSnO2
The coil voltage:	12: 12VDC 24: 24VDC
Contact form:	M: Form A
The load type:	270-270A
Type designation:	SPV

Special Parameter:

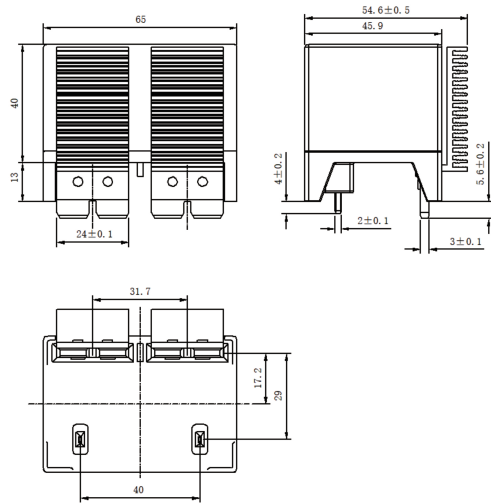
- S:The exposed length of the load terminal is 5.6mm.
- G:With auxiliary heat sink.

Outline Dimensions

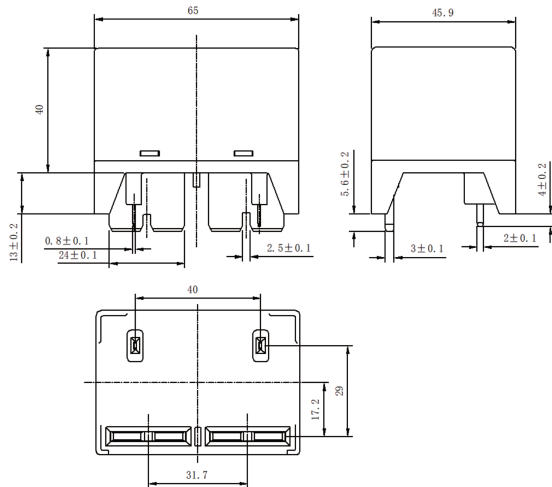
SPV270



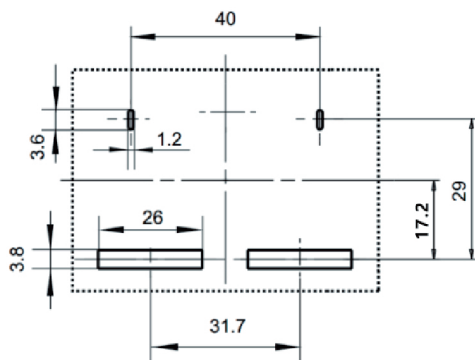
SPV270-G



SPV270-S



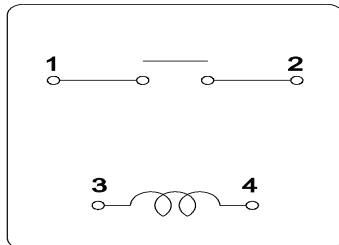
Mounting dimensions (mm)



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: $\pm 0.1\text{mm}$.

Wiring diagram



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.

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