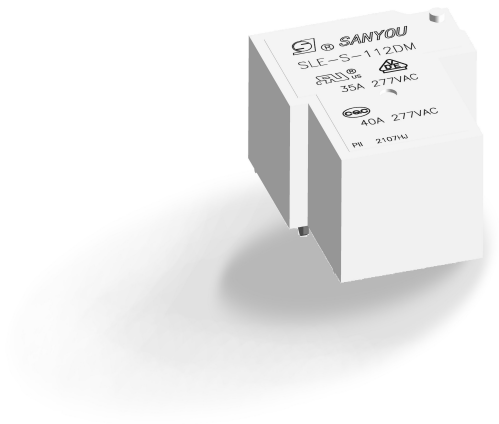
SANYOU RELAYS
Relays for advanced technology

Photovoltaic Relay SLE-Series



Features

- Miniature relay with high switching capability：35A.
- Contact form：Form A，contact Gap>1.8mm .
- 4000VAC dielectric strength high and 6000V surge voltage (1.2/50 uS) between coil and contact .
- Product in accordance to IEC60335-1 and PTI>=325.
- The appliance is able to meet VDE V 0126-1-1.
- EN61095:AC7a at 85℃.

Safety Approval

UL，C-UL File No.：applying
VDE File No.：applying
CQC File No.：applying
CCC File No.：applying

Contact Capacity

Model	SLE-DM
Nominal switching capacity (res. load)	35A 277VAC
Max. switching current	35A
Max. switching voltage	277VAC
Max. switching power	9,695VA

Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	50mΩ Max.(At 1A 6VDC)	
Operate time (at nominal volt.)	18msec. Max.	
Release time (at nominal volt.)	15msec. Max.	
Initial insulation resistance	100MΩMin.(DC500V)	
Initial dielectric strength	Between open contacts：	AC2,500V，50/60Hz 1min.
	Between coil and contact：	AC4,000V，50/60Hz 1min.
Vibration resistance	Destructive	10～55Hz at double amplitude of 1.5 mm
	Functional	10～55Hz at double amplitude of 1.5 mm
Shock resistance	Destructive	100G Min.
	Functional	10G Min.
Endurance (operations)	Mechanical (at 7,200 ops./h)	5,000,000 cycles
	Electrical (at 360 ops./h)	30,000 cycles(the ventilation hole open)
Ambient temperature	-40℃～+85℃ (no condensation)	
Unit weight	Approx. 30.0g	

CoiDatal (at 20 ℃)

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
12	187.50	64	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	2.25W
24	93.75	256				

Note:The coil voltage can reduce to 40% ... 50% of the rated coil voltage after the relay's coil have energized

Safety Approval Ratings

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

Approval	UL/CUL	VDE	CQC	CCC
File No.	Applying	Applying	Applying	Applying
Approved ratings	35A 125/250/277VAC , Resistive	35A 125/250/277VAC , COSΦ=1 35A 125/250/277VAC , COSΦ=0.8	35A 125/250/277VAC	AC-1 , Ie : 40A

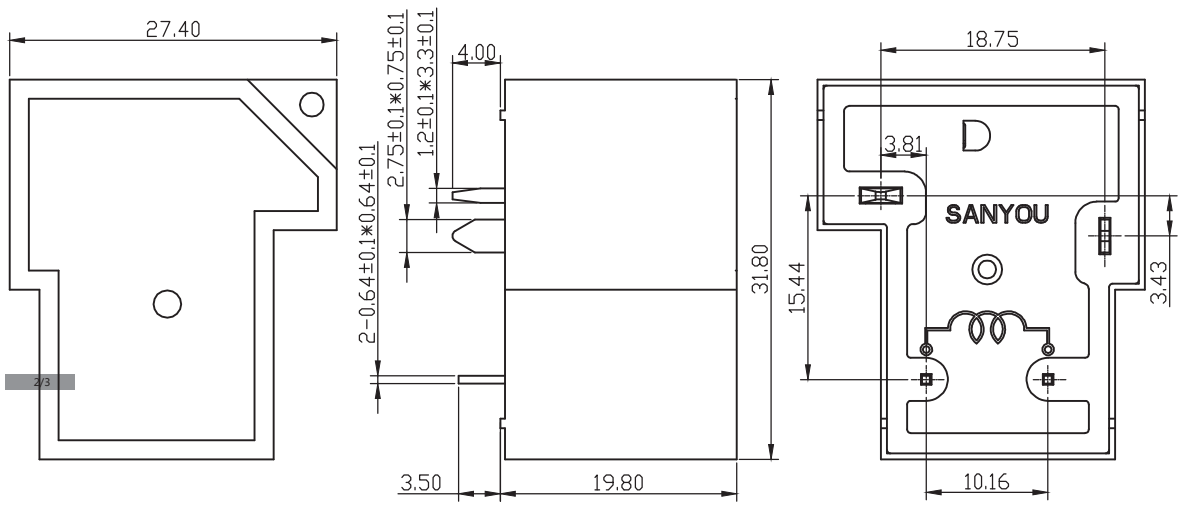
Ordering Information

Nomenclature

SLE -S -1 12 D M 1 -F -XX

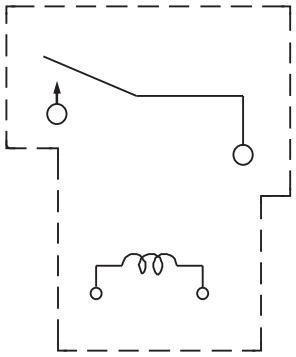
- Special Parameter : Nil-Standard type, Letter or number-Special requirement
- Insulation System : Nil-Standard, B-Class B, F-Class F
- Contact Material : Nil-$AgSnO_2$, 1-AgNi
- Contact Form:M-Form A
- Coil Power : D-2.25W
- Coil Voltage (VDC) : 12, 24
- Number of Poles : 1-1 Pole
- Protective Construction : S-Flux proofed, SH-Sealed type washable
- Type Designation : SLE

Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit : mm)

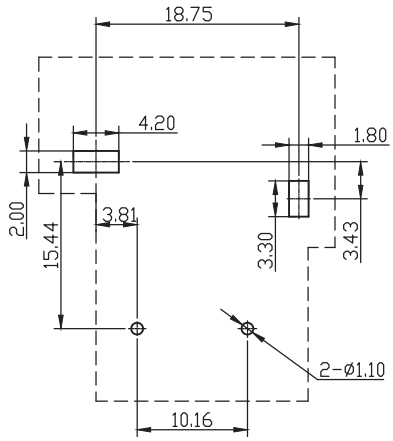


bottom view

Unless otherwise specified :
If dimension < 1mm, tolerance : ±0.2mm;
If dimension 1~5mm, tolerance : ±0.3mm;
If dimension > 5mm, tolerance : ±0.4mm.
Note : 1. Extended terminal dimension is dimension before soldering.
2. Tolerance of P.C.B. layout : ±0.1mm.



1a
Wiring Diagram (bottom view)



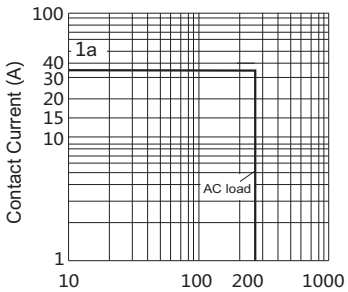
1a
P.C.B. Layout (bottom view)

Typical Applications

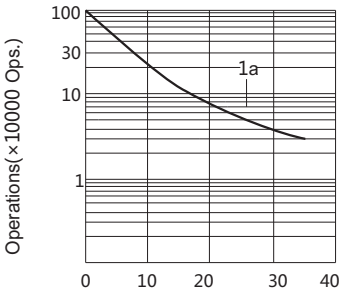
- Photovoltaic controller , Charging pile, New energy automobile

Characteristic Curves

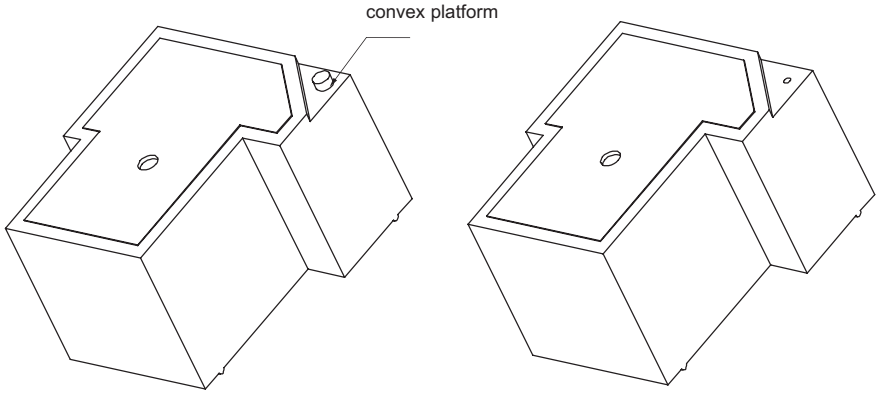
Max. Switching Power



Endurance Curve



Note: If you choose the sealed type, before using, please remove the convex platform at the top of the case to ensure the normal performance of the relay after the completion of a PCB operations. they are as shown in the following diagram:



with convex platform

without convex platform

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.