

# 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°C.

# Safety Approval

UL, C-UL File No.: E190598

VDE File No.: 40036707

CQC File No.: CQC02001002109 CCC File No.: 2017010304978127 CE File No.: GE170305005551-A1

## **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.(1A 6VDC)			
Operate time (at nominal volt.)	18msec. Max. (no diode)			
Release time (at nominal volt.)	15msec. Max. (no diode)			
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	$10 \sim 55$ Hz at double amplitude of 1.5 mm		
	Functional	$10\sim55$ Hz at double amplitude of 1.5 mm		
Shock resistance	Destructive	100G Min.		
SHOCK resistance	Functional	10G Min.		
Endurance (operations)	Mechanical (at 7,200 ops./h)	5,000,000 cycles at room temperature		
	Electrical (at 360 ops./h)	30,000 cycles(the ventilation hole open) at room temperature		
Ambient temperature	-40°C ~ +85°C (no condensation)			
Unit weight	Approx. 30.0g			

## CoiDatal (at 20 °C)

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	75 % of nominal	5 % of	2.2514
24	93.75	256	voltage	voltage	nominal voltage	2.25W

Note: The coil voltage can reduce to 40% ... 50% of the rated coil voltage after the relay's coil have energized with the rated coil voltage more than  $50~\text{ms}_{\bullet}$ 

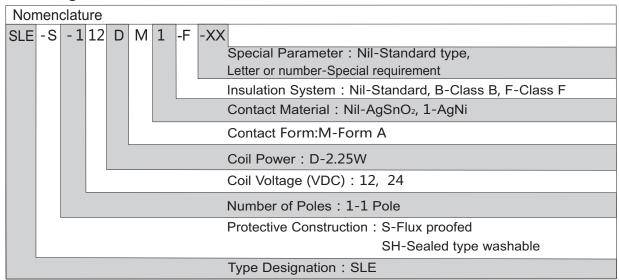
## Safety Approval Ratings

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

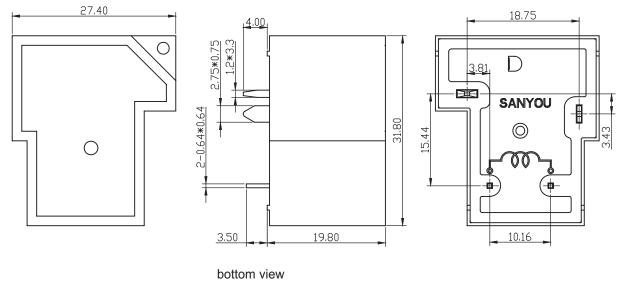
Approval	UL/CUL	VDE	CQC	CCC	CE
File No.	E190598	40036707	CQC02001002109	2017010304978127	CE170305005551-A1
Approved ratings	35A 125/250/277VAC Resistive	35A 125/250/277VAC Resistive AC-7a 35A 125/250/277VAC COSΦ=0.8	35A 125/250VAC/277VAC	AC-1 , le : 40A,Ue: AC230V	AC-1 , le : 40A,Ue: AC230V

- (1) The above-mentioned unspecified temperature ratings, means that the ambient temperature is room temperature.
- (2) Only some typical ratings are listed above. Each rating's test condition is different, so the electrical endurance will be different. If more details are required, please contact us.
- (3) For sealed type testing, please open the ventilation hole of case before test.

## Ordering Information



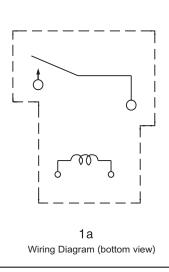
# Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)

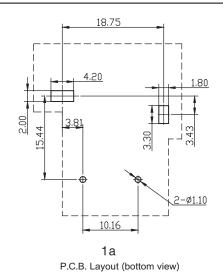


Unless otherwise specified:

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

2. Tolerance of P.C.B. layout: 0.1 mm.

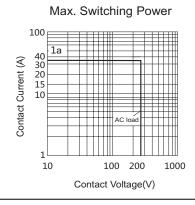


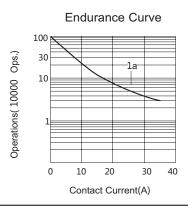


# **Typical Applications**

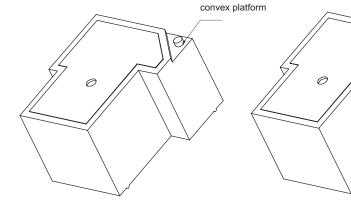
• Photovoltaic controller, Charging pile, New energy automobile

## Characteristic Curves





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. For sealed relays after installation and cleaning, please open the vent hole on the case before use. If there is any query, please contact Sanyou for the technica service. However it is the user's responsibility to determine which product should be used only.