



Features

- Miniature relay with high switching capability : 30A.
- Contact form : Form A, Form B or 1Form C.
- Special type of 4000VAC dielectric strength and 6000V surge voltage (1.2/50uS) between coil and contact available.
- Protection quick connect terminal type available.
- Satisfice IEC60335-1product is available.

Safety Approval

UL , C-UL File No. : E190598

TUV File No. : R50143450

CQC File No. : CQC02001002109

VDE File No. : 40036707

Contact Capacity

| Model | SLC -DM | SLC -DB | SLC -D |
|--|------------|------------|----------------|
| Nominal switching capacity (res. load) | 30A 250VAC | 15A 250VAC | 20A/10A 250VAC |
| Max. switching current | 30A | 20A | 20A |
| Max. switching voltage | 250VAC | 250VAC | 250VAC |
| Max. switching power | 7,500VA | 5,000VA | 5,000VA |

Characteristic Data

| | | |
|---|--|---|
| Contact material | Silver alloy | |
| Initial contact resistance (at 6VDC 1A) | 50mΩ Max. | |
| Operate time (at nominal volt.) | 15msec. Max. | |
| Release time (at nominal volt.) | 10msec. Max. | |
| Initial insulation resistance | 100MΩ Min.(DC500V) | |
| Initial dielectric strength | Between open contacts : AC1,500V , 50/60Hz 1min. | |
| | Between coil and contact : AC2,500V , 50/60Hz 1min.(AC4KV available) | |
| 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 | 10G Min. |
| | Destructive | 100G Min. |
| Endurance (operations) | Mechanical (at 10,800 ops./h) | 10,000,000 cycles |
| | Electrical (at 600 ops./h) | 100,000 cycles |
| Ambient temperature | -40°C ~ +105°C (no condensation) | |
| Unit weight | Approx.31.0g | |

Coil Data(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 |
|-----------------------|-------------------------------------|--------------------------|--------------------------|------------------------|-------------------------|-------------------------|
| 5 | 180.00 | 27 | 130 % of nominal voltage | 75% of nominal voltage | 5 % of nominal voltage | 0.90W |
| 6 | 150.00 | 40 | | | | |
| 9 | 100.00 | 90 | | | | |
| 12 | 75.00 | 160 | | | | |
| 15 | 60.00 | 250 | | | | |
| 18 | 50.00 | 360 | | | | |
| 24 | 37.50 | 640 | | | | |
| 48 | 18.75 | 2,560 | | | | |
| 110 | 8.20 | 13,400 | | | | |

Safety Approval Ratings

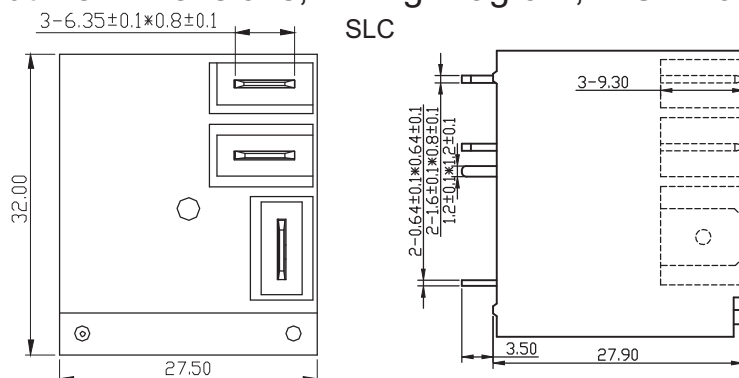
(Note: More detail of approval ratings, please refer to the safety certification)

| Approval | CQC | TUV | UL/CUL | VDE |
|------------------|--|---|---|--|
| File No. | CQC02001002109 | R50143450 | E190598 | 40036707 |
| Approved ratings | Form A : 30A 250VAC Form B : 15A 250VAC Form C : 20A/10A 250VAC | Form A : 30A 240VAC Making: 80A 250VAC(300ms) Breaking: 20A 250VAC Form B : 15A 240VAC Form C : 20A/10A 240VAC | Form A: 40A 277VAC, Resistive; 15A 240VAC ; 30A 240VAC, Resistive/General Use; 1-1/2HP 240VAC; 3/4 HP 120VAC; TV-8 120VAC ; 30A 120VAC, Resistive/General Use; Pilot duty: 470 VA, 240VAC; Electronic Ballast: 10A 277VAC /120VAC; Form B: 30A 120VAC, General Use; 20A 240VAC, General Use; 20A 120VAC, Resistive; 10A 240VAC, Resistive/General Use; Pilot duty: 275VA, 240VAC; Electronic Ballast: 5A, 277VAC/120VAC; 1/2HP 240VAC; 1/4HP 120VAC; Form C: N.O. N.C. 30A 240/120VAC, Resistive 30A 240/120VAC, General Use 20A 240/120VAC, Resistive 20A 240VAC, Resistive 20A 240/120VAC, General Use 10A 240VAC, Resistive 10A 240VAC, Resistive 1-1/2HP 240VAC 1/2HP 240VAC 3/4HP 125/120VAC 1/4HP 125/120VAC TV-8 120VAC TV-3 120VAC 20A 240VAC, General Use 10A 240VAC, General Use Pilot Duty: 470VA 240VAC Pilot Duty: 275VA 240VAC Electronic Ballast: Electronic Ballast: 10A 277VAC/120VAC 5A 277VAC/120VAC | 30A 250VAC, NO 20A 250VAC, CO(test NO) 10A 250VAC, CO(test NC) |

Ordering Information

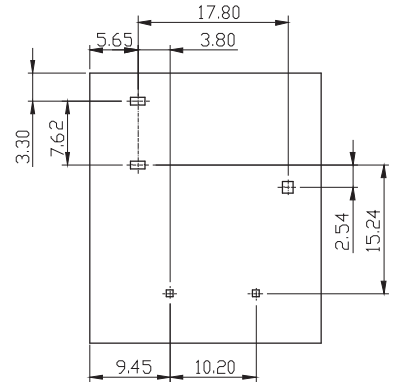
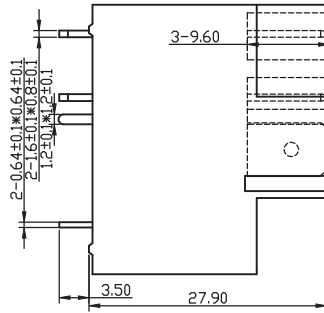
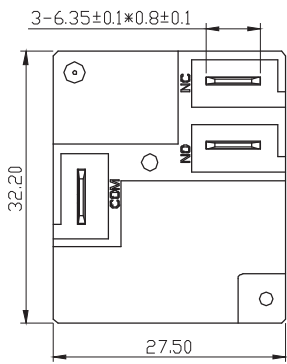
| Nomenclature | |
|------------------------|--|
| SLC-S-112DMK1-G-P-F-XX | Special Parameter : Nil-Standard type, Letter or number-Special requirement |
| | Insulation System : Nil-Standard, B-Class B, F-Class F |
| | COM Flat quick-connect terminals: Nil- Yoke and flat quick-connect terminal is one part; P-Yoke rivet flat quick-connect terminal only for SLC-K |
| | Parameter sign : Nil-Standard, G-High contact load, Double-layer spring, Ø5.0 Contact |
| | Contact Material : Nil-AgSnO ₂ , 1-AgCdO |
| | Terminal position: Nil-COM terminal and NC/NO terminal on the same side K-COM terminal and NC/NO terminal on the opposite side |
| | Contact Form : Nil-Form C, B-Form B, M-Form A |
| | Coil Power : D-0.90W |
| | Coil Voltage (VDC) : 05, 06, 09, 12, 15, 18, 24, 48, 110 |
| | Number of Poles : 1-1 Pole |
| | Protective Construction : S-Flux proofed, SH-sealed type washable |
| | Type Designation : SLC |

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

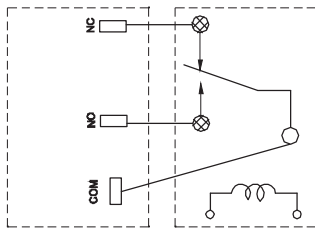


Unless otherwise specified :
 If dimension < 1mm, tolerance : ±0.2mm;
 If dimension 1~5mm, tolerance : ±0.3mm;
 If dimension > 5mm, tolerance : ±0.4mm.
 Note : 1. Extended terminal dimension is dimension before soldering.
 2. Tolerance of P.C.B. Layout : ±0.1mm.

SLC-K

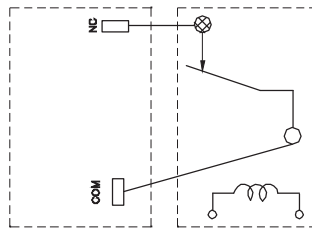


bottom view



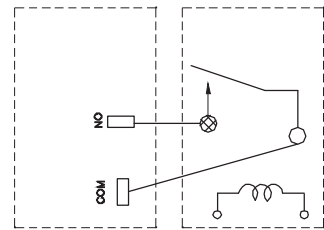
(top view)

1c



(top view)

1b



(top view)

1a



(bottom view)

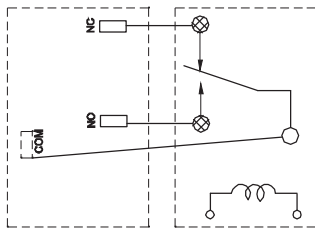


(bottom view)



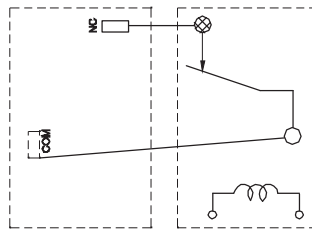
(bottom view)

SLC Wiring Diagram



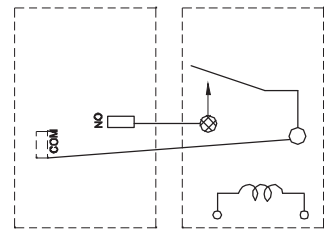
(top view)

1c



(top view)

1b



(top view)

1a



(bottom view)

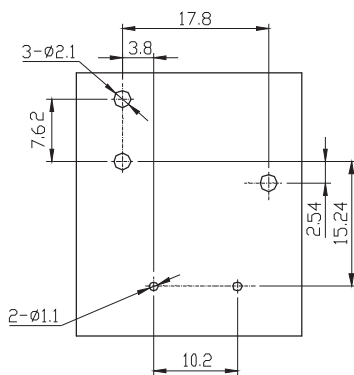


(bottom view)

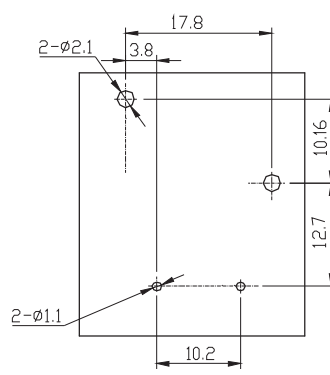


(bottom view)

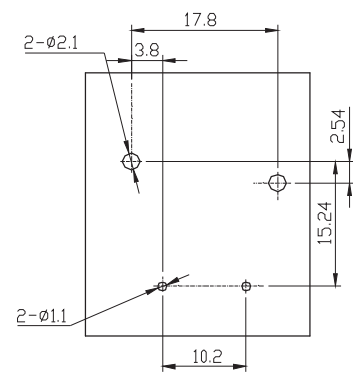
SLC-KWiring Diagram



1c



1b



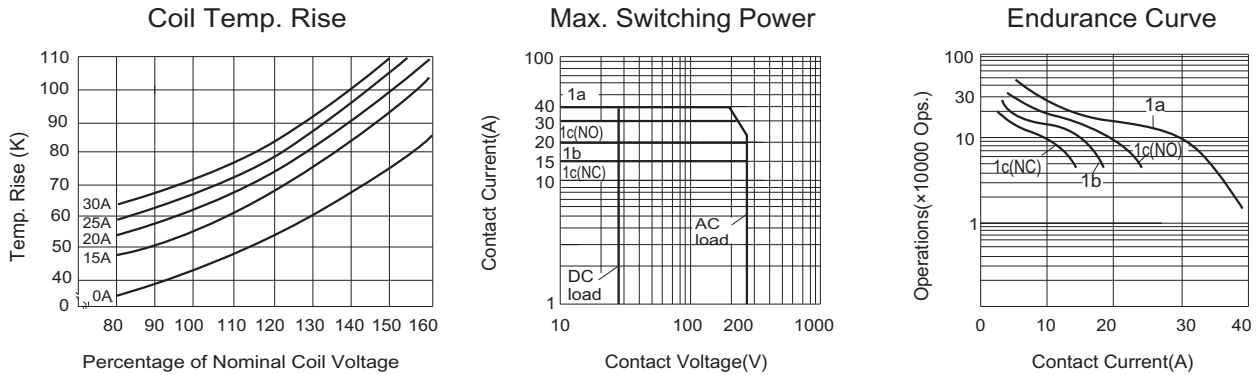
1a

P.C.B Layout (Bottom view)

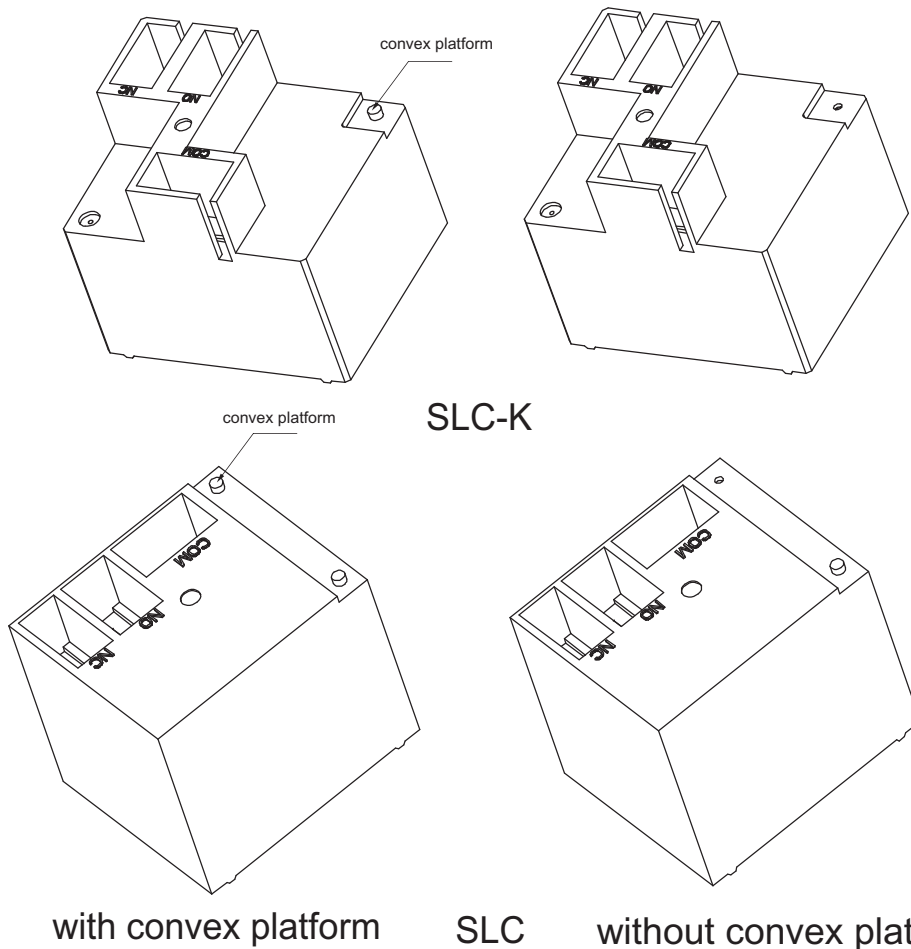
Typical Applications

- Car
- Air conditioner
- Heater and ventilation equipment
- Home appliances

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 :



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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