

Features

- Normally Open (SPST) contact form.
- Miniature power relay, high capability of 30A.
- High impulse current of 65A and high surge voltage of 10000V withstand.
- Miniature relay for high density mounting requirement.

Safety Approval

UL, C-UL File No.: E190598
 VDE File No.: 40007793
 CQC File No.: CQC02001002130

Contact Capacity

| | |
|--|------------|
| Model | SFD |
| Nominal switching capacity (res. load) | 30A 250VAC |
| Max. switching current | 30A |
| Max. switching voltage | 250VAC |
| Max. switching power | 7,500VA |

Charateristic Data

| | | |
|---|---|---|
| Contact material | Silver alloy | |
| Initial contact resistance (at 6VDC 1A) | 50mΩ Max. | |
| Operate time (at nominal volt.) | 20msec. Max. | |
| Release time (at nominal volt.) | 5msec. Max. | |
| Initial insulation resistance | 1,000MΩ Min.(DC500V) | |
| Initial dielectric strength | Between open contacts: AC1,200V, 50/60Hz 1Min. | |
| | Between coil and contact: AC4,000V, 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 | 10G Min. |
| | Destructive | 100G Min. |
| Endurance (operations) | Mechanical (at 7,200 ops./h) | 10,000,000 |
| | Electrical (at 600 ops./h) | 100,000 |
| Ambient temperature | -40°C ~ +105°C (no condensation) | |
| Unit weight | Approx. 55.0 g | |

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 |
|-----------------------|--------------------------------------|---------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| 3 | 400.00 | 7.5 | 130 % of nominal voltage | 70 % of nominal voltage | 10 % of nominal voltage | Approx. 1.20W |
| 5 | 240.00 | 20.8 | | | | |
| 6 | 200.00 | 30 | | | | |
| 9 | 134.00 | 67 | | | | |
| 12 | 100.00 | 120 | | | | |
| 18 | 66.67 | 270 | | | | |
| 24 | 50.00 | 480 | | | | |
| 48 | 25.00 | 1,920 | | | | |
| 60 | 20.00 | 3,000 | | | | |

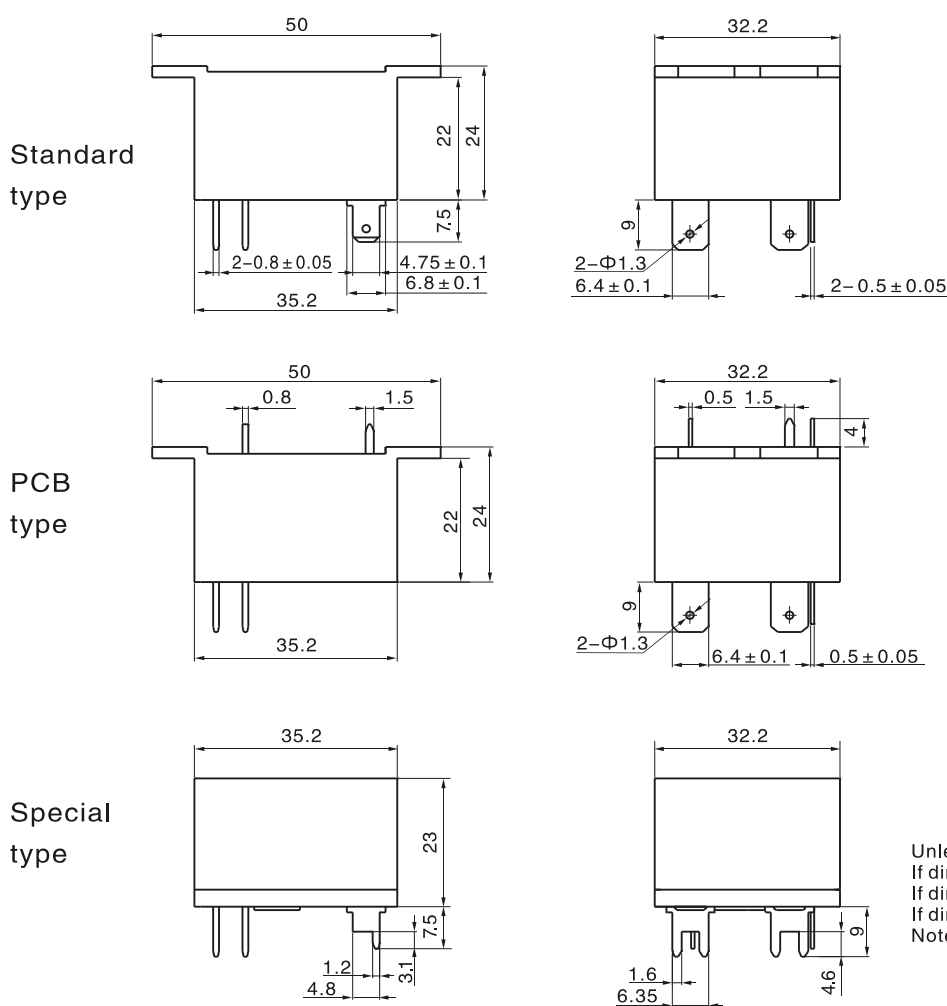
Safety Approval Ratings

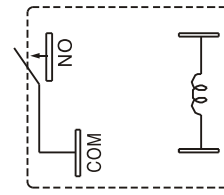
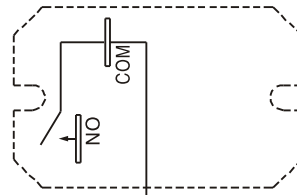
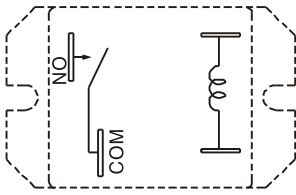
| Approval | CQC | VDE | UL/CUL |
|------------------|----------------|-------------------------------------|--------------------------|
| File No. | CQC02001002130 | 40007793 | E190598 |
| Approved ratings | 30A 250VAC | 27A 250VAC 30A 250VAC (T type) | 30A 250VAC 2HP 250VAC |

Ordering Information

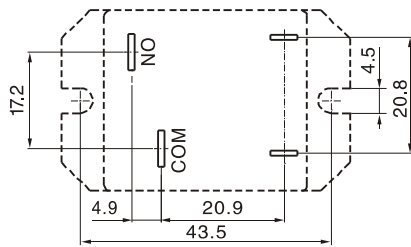
| Nomenclature | |
|----------------------|---|
| SFD -1 12 D M P F XX | Special Parameter: Nil-Standard type, Letter or number-Special requirement |
| | Insulation System: Nil-Standard, B-Class B, F-Class F |
| | Terminal Type: Nil-Standard, P-PCB, T-Special type |
| | Contact Form: M-Form A |
| | Coil Power: D-1.20W |
| | Coil Voltage (VDC): 03, 05, 06, 09, 12, 18, 24, 48, 60 |
| | Number of Poles: 1-1 Pole |
| | Type Designation: SFD |

Outline Dimensions, Wiring Diagram, Mounting Holes (unit: mm)

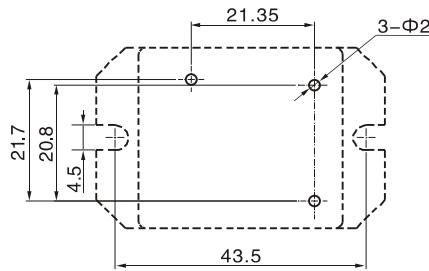




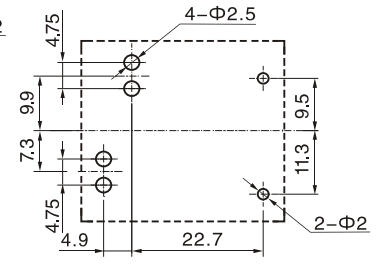
Wiring Diagram (bottom view)



Standard type



PCB type



Special type

Mounting Holes (bottom view)

Typical Applications

- Motor control, compressor control
- Home appliances and industrial control equipment

Characteristic Curves

