



### 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	277VAC
Max. switching power	7,500VA

### Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	50mΩ Max. (1A 6VDC)	
Operate time (at nominal volt.)	20msec. Max. (no diode)	
Release time (at nominal volt.)	5msec. Max. (no diode)	
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 (at room temperature)
	Electrical (at 360 ops./h)	100,000 (at room temperature)
Ambient temperature	-40°C ~ +85°C (no condensation)	
Unit weight	Approx.55.0g	

### 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
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

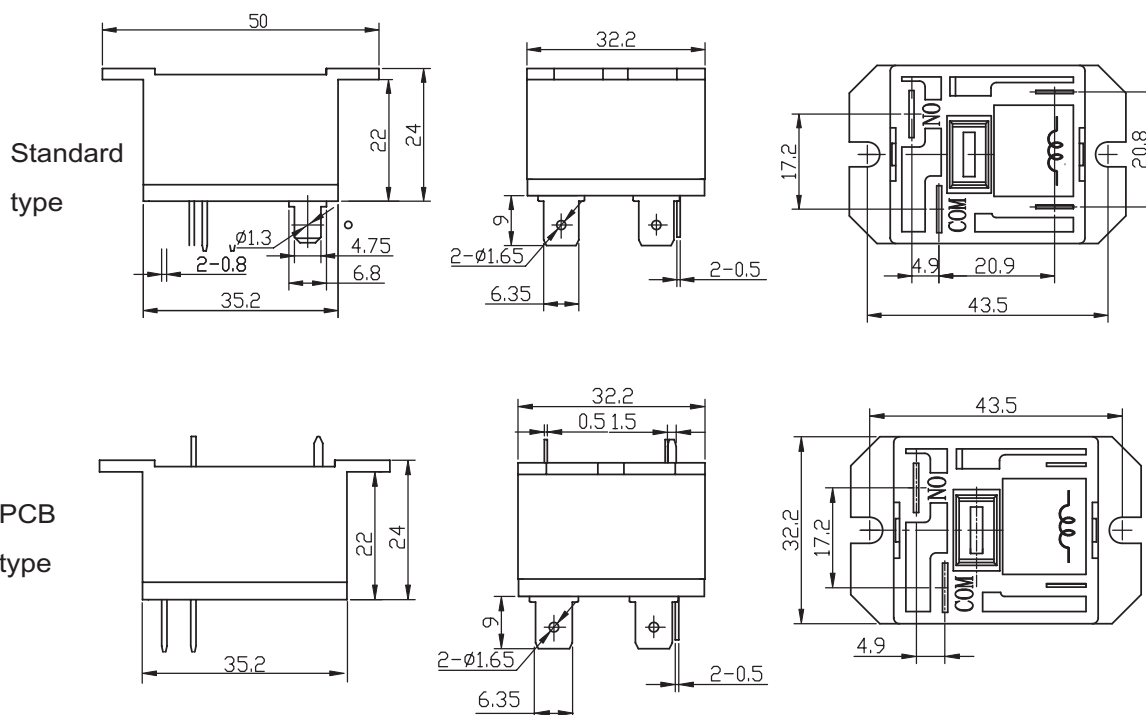
Approval	CQC	VDE	UL/CUL
File No.	CQC02001002130	40007793	E190598
Approved ratings	30A 250VAC	27A 250VAC 30A 250VAC T type	30A 277VAC, Resistive/G.P. 30A 250VAC, Resistive/G.P. 30A 120VAC, Resistive/G.P. 3HP 240VAC; 2HP 250VAC 2HP 240VAC; 2HP 125VAC TV-15 120VAC

- (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.

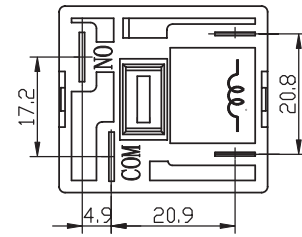
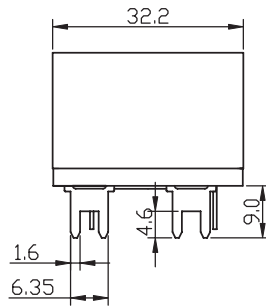
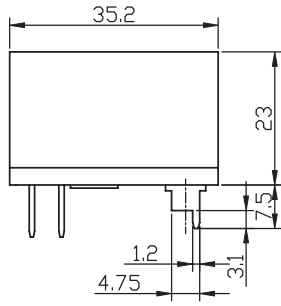
### Ordering Information

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						

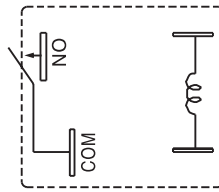
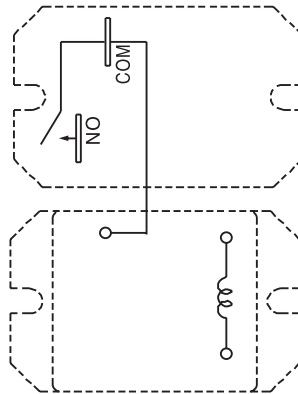
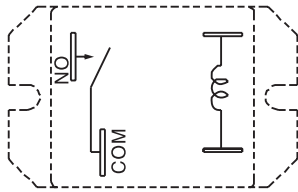
### Outline Dimensions, Wiring Diagram, Mounting Holes (unit : mm)



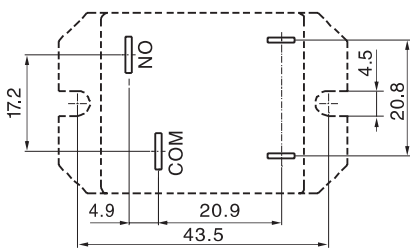
Special type



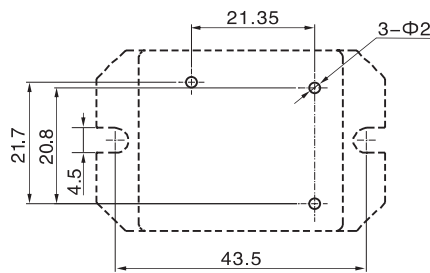
Unless otherwise specified :  
 If dimension < 1mm, tolerance : 0.2 mm;  
 If dimension 1~5mm, tolerance : 0.3 mm;  
 If dimension > 5mm, tolerance : 0.4 mm.  
 Note : 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of mounting holes 0.1 mm.



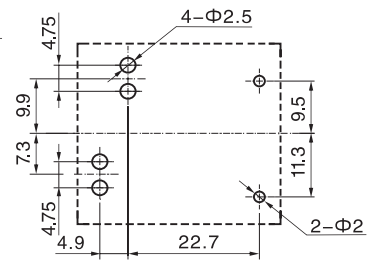
Wiring Diagram (bottom view)



Standard type



PCB type



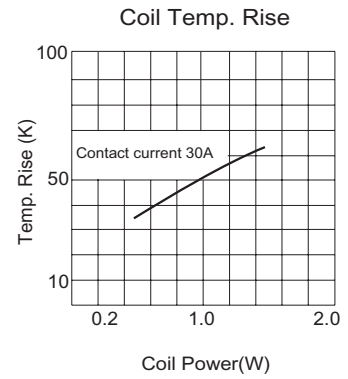
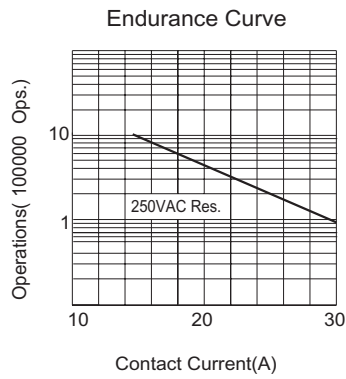
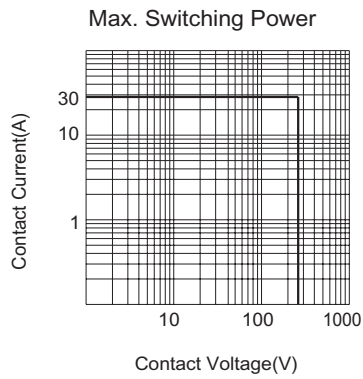
Special type

Mounting Holes (bottom view)

## Typical Applications

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

# Characteristic Curves



**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 technical service. However it is the user's responsibility to determine which product should be used only.