

## FEATURES

- Outline dimension (30.1mm×15.7mm×23.3mm)
- #250 quick connect terminal and PCB terminal
- 1 Form A (SPST) contact arrangement
- Designed to meet cULus,TUV,CQC requirements
- 4,500VAC Dielectric strength between coil and contact
- RoHS compliance
- REACH SvHC compliance
- Explosion-proof type



**cULus**  
File NO. E341422

**tüv**  
File NO. R50220099

**CQC**  
File NO. CQC1100206606

## APPLICATION

Air Condition, Washing Machine...etc

## COIL PARAMETER

Coil voltage	5-48VDC
Coil power	900mW

## COIL DATA@23°C

CHE				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	180.0	28	3.75	0.25
6	150.0	40	4.5	0.30
9	100.0	90	6.75	0.45
12	75.0	160	9	0.60
18	50.0	360	13.5	0.90
24	37.5	640	18	1.20
48	18.8	2560	36	2.40

## CONTACT DATA

Contact arrangement	1 Form A(SPST)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC,1A
Max. switching voltage	250VAC/30VDC
Max. switching current	25A
Max. switching power	6,250VA / 750W
Contact rating	25A 250VAC,Resistive
	25A 30VDC,Resistive
	20A 250VAC,Resistive
	20A 30VDC,Resistive
	25A 250VAC,Inductive(cos Φ =0.75)
	25A FLA/ 85 LRA 250V AC
	2HP 240VAC,Motor
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min(rated load 1s on /9s off)
Minimum load(reference value)	100mA @5VDC

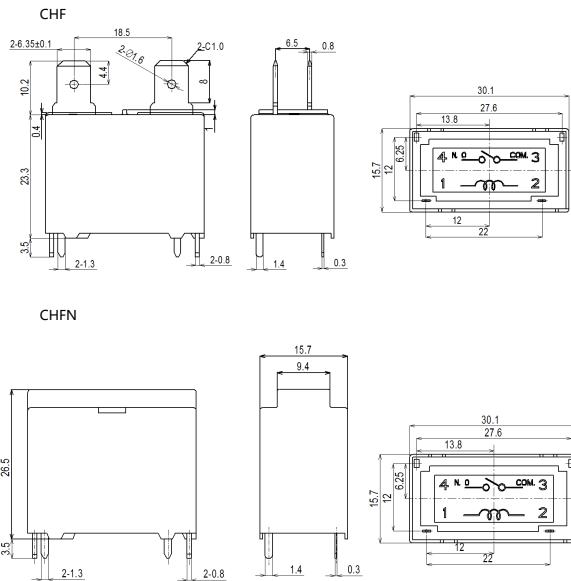
## CHARACTERISTICS

Operate voltage	75% of nominal voltage or less	
Release voltage	5% of nominal voltage or more	
Operate time (At nominal voltage)	20ms max.	
Release time(At nominal voltage)	10ms max.	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	4,500 VAC, 50/60 Hz for 1 min
	Between open contacts	1,000 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts	10,000V(1.2/50us)	
Vibration resistance	Destruction	10 to 55 Hz,1.5mm double amplitude
	Malfunction	10 to 55 Hz,1.5mm double amplitude
Shock resistance	Destruction	1,000m/S <sup>2</sup> (100G approximately)
	Malfunction	100m/S <sup>2</sup> (10G approximately)
Ambient temperature	-40°C~+85°C (without icing or condensation)	
Ambient humidity	20%~85% RH	
Terminal	PCB terminal & #250 Quick connect terminal	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Flux-tight),plastic cover.(RT II)	
	S: Sealed,plastic cover.(RT III)	
Weight	Approx. 23g	

## ORDERING INFORMATION

CHF	-S	-1	12	D	A	2	000
<p>1. Product Family CHF = #250 Quick Connect CHF N = PCB Terminal only</p> <p>2. Enclosure V = Vented (Flux-tight, RT II) S = Sealed (Wash-tight, RT III)</p> <p>3. Number of Poles 1 = 1 pole</p> <p>4. Rated Coil Voltage 05 = 5VDC 06 = 6VDC 09 = 9VDC 12 = 12VDC 24 = 24VDC 48 = 48VDC</p> <p>5. Coil Input D = Standard (900mW)</p> <p>6. Contact Arrangement A = Form A (SPST-NO)</p> <p>7. Contact material 2 = AgSnO<sub>2</sub></p> <p>8. Additional numbers and /or letters 000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements</p>							

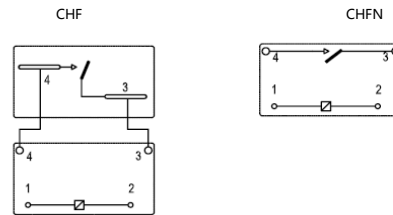
## OUTLINE DIMENSION



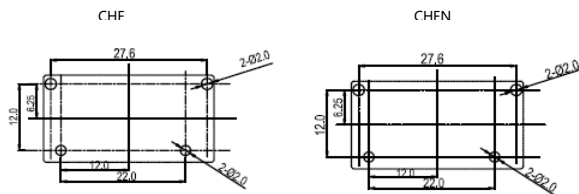
### Remark:

- The reference tolerance in outline dimension:  
outline dimension  $\leq 1$ mm, reference tolerance is  $\pm 0.2$ mm;  
outline dimension  $> 1$ mm and  $\leq 5$ mm, reference tolerance is  $\pm 0.3$ mm;  
outline dimension  $> 5$ mm, reference tolerance is  $\pm 0.5$ mm.
- The reference tolerance for PC Board layout is  $\pm 0.1$ mm.

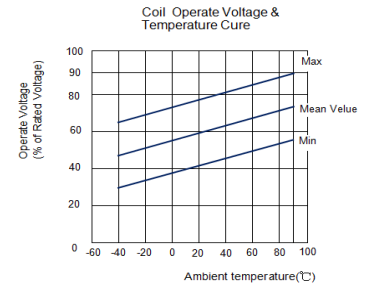
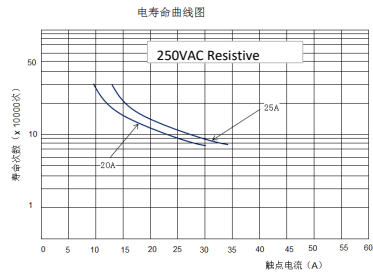
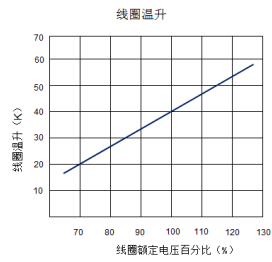
## WIRING DIAGRAMS (BOTTOM VIEWS)



## PC BOARD LAYOUTS (BOTTOM VIEWS)

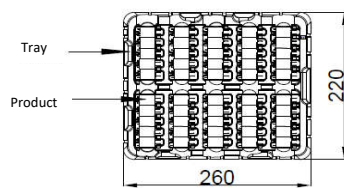


## Reference Date



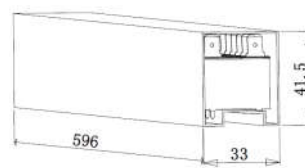
## PACKAGING FIGURE

1.Box



50 pcs inside a box  
500 pcs inside a carton

2.Tube



34 pcs inside a tube

Disclaimer:

The specification is for reference only, if you need more detail information, please contact Churod. We could not evaluate all the performance and all parameters for every possible application. And the user should be in a right position to choose the suitable product for their own application. If there is any new need, please contact Churod for the technical service.

[Http://www.churod.com](http://www.churod.com)

2020 Rev.01 Churod Electronics Co., Ltd.