

## FEATURES

- Outline dimension (29.3mm×12.7mm×15.3mm)
- Latching relay
- 1 Form A (SPST) or 1 Form C (SPDT) contact arrangement
- Designed to meet cULus, TUV, CQC requirements
- Flux-tight and Wash-tight version available
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available
- Glow wire type available



File NO. E341422



File NO. R50422926



File NO. CQC18002208792

## APPLICATION

Appliances, Power Supplier, Industrial Control

## COIL PARAMETER

Coil voltage	3-48VDC	
Coil power	1 Coil latching	400mW
	2 Coil latching	600mW

## COIL DATA @23°C

D type--1 Coil latching type ( at 23°C)				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)
3	133.3	22.5	2.25	2.25
5	80	62.5	3.75	3.75
6	66.7	90	4.5	4.5
9	44.4	202.5	6.75	6.75
12	33.3	360	9	9
18	22.2	810	13.5	13.5
24	16.7	1440	18	18
36	11.1	3240	27	27
48	8.3	5760	36	36

H type--2 Coil latching type ( at 23°C)				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)
3	200	15	2.25	2.25
5	120	41.7	3.75	3.75
6	100	60	4.5	4.5
9	66.7	135	6.75	6.75
12	50	240	9	9
18	33.3	540	13.5	13.5
24	25	960	18	18
36	16.7	2160	27	27
48	12.5	3840	36	36

Note:

- The data shown above are initial values.

## CONTACT DATA

Contact arrangement	1 Form A (SPST) / 1 Form C (SPDT)	
Contact material	Ag Alloy	
Initial contact resistance	100mΩ max.(at 6VDC,1A)	
Max. switching voltage	277VAC	
Max. switching current	20A(NO) / 5A(NC)	
Max. switching power	NO: 5540VA	
	NC: 1385VA	
Contact rating	NO :	12A @ 277VAC
		17A @ 277VAC
		20A @ 277VAC
		1HP @ 240VAC
		TV-8 @ 240VAC
		Tungsten 1500W @ 120VAC
		Tungsten 3000W @ 240VAC
		Electronic ballast 8A @ 277VAC
		EM Ballast 3.7A @ 480VAC
		NC:
Mechanical endurance	1,000,000 ops Min.(no load)	
Electrical endurance (Resistive Load)	NO: 12A @ 277VAC,100,000 ops T85	
	NO: 17A @ 277VAC,50,000 ops T85	
	NO: 20A @ 277VAC,30,000 ops T85	
	NC: 5A @ 277VAC,50,000 ops T85	
Minimum load (reference value)	100mA @5VDC	

## CHARACTERISTICS

Operate voltage	75% of nominal voltage or less	
Release voltage	75% of nominal voltage or less	
Operate time (At nominal voltage)	15ms max.	
Release time(At nominal voltage)	15ms max.	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	5,000 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	1,00m/S <sup>2</sup> (10G approximately)
Ambient temperature	-40~+85°C (without icing or condensation)	
Ambient humidity	20%~85% RH	
Pulse Duration	50ms Min.	
Termination	PCB terminals	
Enclosure	V: Vented(Flux-tight, RTII)	

# ORDERING INFORMATION

CHI03

L

-V

-1

12

D

A

2

,000

### 1. Product Family

CHI03: 17A, Contact terminal pin 5.0mm (code 3)

### 2. Coil System

L = Latching version

### 3. Enclosure

V = Vented (Flux-tight, RTII)

S = Sealed (Wash-tight, RTIII)

### 4. Number of Poles

1=1 pole

### 5. Rated Coil Voltage

03,05,06,09,12,18,24,36,48VDC

### 6.Coil Power

D = 1 coil latching 400mW H = 2 coil latching 600mW

### 7. Contact Arrangement

A = Form A(SPST) C = Form C(SPDT)

### 8.Contact material

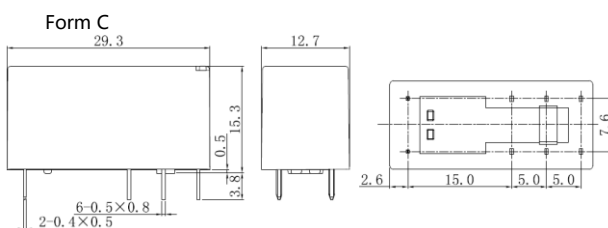
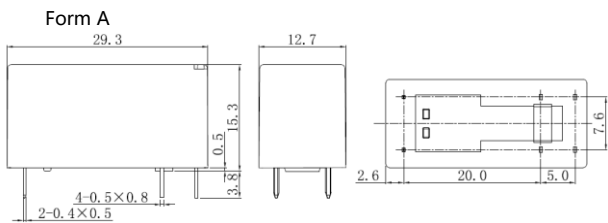
2=AgSnO<sub>2</sub>

### 9. Additional numbers and /or letters

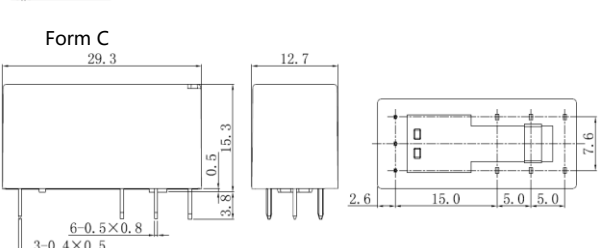
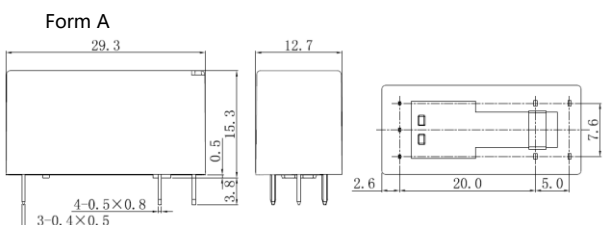
000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements

# OUTLINE DIMENSION

## 1 coil latching type



## 2 coil latching type



# WIRING DIAGRAMS (BOTTOM VIEWS)

## 1 coil latching type

### Form A

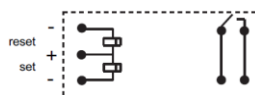


### Form C

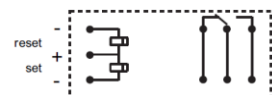


## 2 coil latching type

### Form A



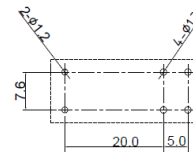
### Form C



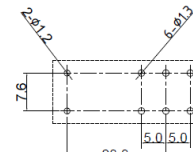
# PC BOARD LAYOUTS (BOTTOM VIEWS)

## 1 coil latching type

### Form A

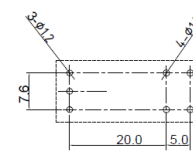


### Form C

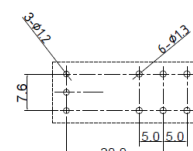


## 2 coil latching type

### Form A



### Form C



**Remark:**

1) The reference tolerance in outline dimension:

outline dimension  $\leq 1\text{mm}$ , reference tolerance is  $\pm 0.2\text{mm}$ ;

outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , reference tolerance is  $\pm 0.3\text{mm}$ ;

outline dimension  $> 5\text{mm}$ , reference tolerance is  $\pm 0.5\text{mm}$ .

2) The reference tolerance for PC Board layout is  $\pm 0.1\text{mm}$ .

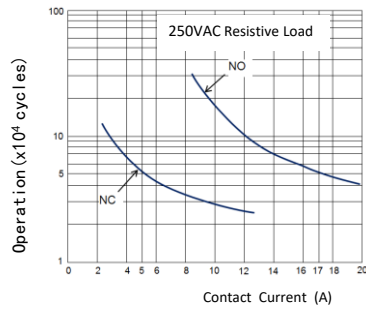
3) Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "set" or "reset" status, therefore, when application ( connecting the power supply ), please rest the relay to "set" or "reset" status on request.

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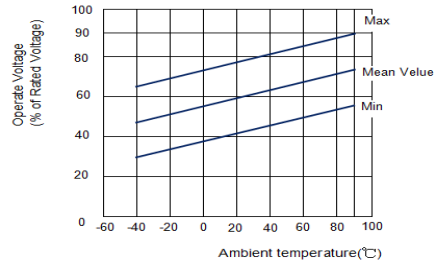
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## REFERENCE DATA

Electrical Life

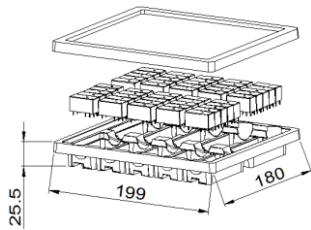


Coil Operate/Release Voltage & Temperature Cure



## PACKAGING FIGURE

Box



50 pcs inside a box

500 pcs inside a carton

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)

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