

CHW Series

10A MINIATURE POWER RELAY

 UL File NO. E341422

 TUV File NO. R50254542

 CQC File NO. CQC13002093538



FEATURES

- Outline dimension (19.2mm×15.5mm×15.3mm)
- 1 Form A (SPST) or 1 Form C (SPDT) contact arrangement
- Designed to meet cULus, TUV, CQC requirements
- Immersion cleanable, sealed version available
- Class F type
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available Glow
- Glow wire type

APPLICATION

Appliances, Power Supplier, Industrial Control

COIL PARAMETER

Coil voltage	5-48VDC	
Coil power	Sensitive	240mW
	Standard	360mW

COIL DATA @23°C

CHW-DA2/DC2(360mW), Standard				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	71.4	69	3.75	0.25
6	60.0	100	4.50	0.30
9	40.0	225	6.75	0.45
12	30.0	400	9.00	0.60
18	20.0	900	13.50	0.90
24	15.0	1600	18.00	1.20
48	7.5	6400	36.00	2.40

CHW-LA2/LC2(240mW), Sensitive				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	48.0	104	3.75	0.25
6	40.0	150	4.50	0.30
9	26.7	338	6.75	0.45
12	20.0	600	9.00	0.60
18	13.3	1350	15.50	0.90
24	10.0	2400	18.00	1.20
48	5.0	9600	36.00	2.40

CONTACT DATA

Contact arrangement	1 Form A (SPST) / 1 Form C (SPDT)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC, 1A
Max. switching voltage	277VAC/30V DC
Max. switching current	15A(NO) / 6A(NC)
Max. switching power	2770VA/300W(NO)
	1662VA/180W(NC)
Contact rating (Resistive Load)	15A@125VAC
	10A@250VAC
	10A@30VDC
	10A(NO)/6A(NC)@250VAC
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min.(rated load)
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)		10ms max.
Release time(At nominal voltage)		5ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts	1,500 VAC, 50/60 Hz for 1 min
	Between open contacts	750 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts		3,000V(1.2/50μs)
Vibration resistance	Destruction	10 to 55 Hz.,1.5mm double amplitude
	Malfunction	10 to 55 Hz.,1.5mm double amplitude
Shock resistance	Destruction	1,000 m/s ² (100G approximately)
	Malfunction	100 m/s ² (10G approximately)
Ambient temperature		Operating: -40~+105℃ (without icing or condensation)
Ambient humidity		Operating: 20% to 85% RH
Terminal		PCB terminals
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight, RTII)
		S: Sealed(Wash-tight, RTIII)
Weight		Approx. 7g

ORDERING INFORMATION

CHW -V -1 12 D A 2 '000

1. Product Family

2. Enclosure

V=Vented(Flux-tight, RTII)

S=Sealed(Wash-tight, RTIII)

3. Number of Poles

1=1 pole

4. Rated Coil Voltage

05=5VDC 06=6VDC 09=9VDC

12=12VDC 24=24VDC 48=48VDC

5. Coil Power

D = Standard(360mW)

L = Sensitive(240mW)

6. Contact Arrangement

A = Form A(SPST)

C = Form C(SPDT)

7. Contact Arrangement

2 =AgSnO

8. Additional numbers and/or letters

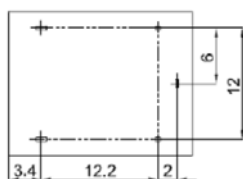
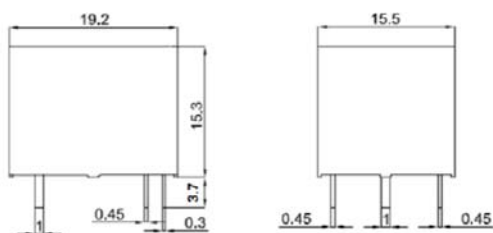
000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements

Typical products

Product Description		Characteristic							
Product Name	Code	Coil Rated voltage	Contact material	Contact Load	Electrical endurance	Safety certification	Glow	Anti-explosio	Special Feature
CHW-V-1**DA2	000	3V,5V,6V,9V,12V,18V,24V,48V	Ag alloy	10A @250VAC	100000ops.min	UL/cUL,TUV,CQC			
	G000			15A @125VAC		UL/cUL			
				10A @250VAC		UL/cUL,TUV,CQC			
000				10A @250VAC					
CHW-S-1**DA2	15A @125VAC								
	100			10A @250VAC					Halogen-Free
	600						●		
G000									
CHW-V-1**DC2	000			10A @250VAC(NO) 6A @250VAC(NC)	100000ops.min 100000ops.min	UL/cUL			
	G000			15A @240VQAC(NO)	50000ops.min				
					10A @250VAC(NO) 6A @250VAC(NC)	100000ops.min 100000ops.min	UL/cUL,TUV,CQC		
CHW-S-1**DC2	000			15A @240VQAC(NO)	50000ops.min	UL/cUL			
	F000			10A @250VAC(NO) 6A @250VAC(NC)	100000ops.min	UL/cUL,TUV,CQC		●	
	G000								

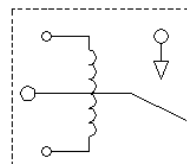
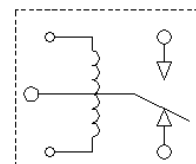
Remarks: ①Special ordering for other requirements; ② “•” Indicate the applicable model

OUTLINE DIMENSION



WIRING DIAGRAMS (BOTTOM VIEWS)

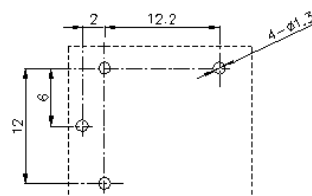
Form A

Unit:mm
Form C

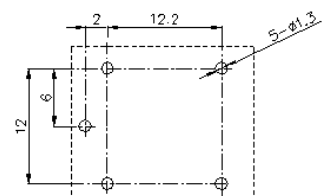
PC BOARD LAYOUTS (BOTTOM VIEWS)

Unit:mm

Form A

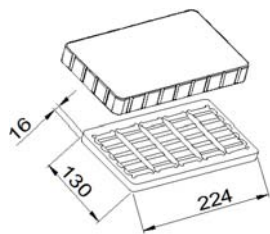


Form C



Remark:

- 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 $\pm 0.5\text{mm}$.
- The reference tolerance for PC Board layout is $\pm 0.1\text{mm}$.



50 pcs inside a box
1000pcs inside a carton