

CHI03 RELAY SERIES

17A MINIATURE POWER RELAY

FEATURES

- Outline dimension(29.3×12.7×15.3)
- 1 Form A(SPST-NO) and
- 1 Form C(SPDT) contact arrangement
- Designed to meet UL/cUL,TUV,CQC requirements
- 5,000VAC dielectric strength between coil and contact
- F class Insulation System
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available

APPLICATION

Appliances, power supply, Industrial Control...etc

COIL PARAMETER

Coil voltage	3-110VDC
Coil power	400mW

COIL DATA@23°C

Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
3	133.3	22.5	2.25	0.15
5	80.0	62.5	3.75	0.25
6	66.7	90	4.50	0.30
9	44.4	203	6.75	0.45
12	33.3	360	9.00	0.60
18	22.2	810	13.50	0.90
22	18.2	1210	16.50	1.10
24	16.7	1440	18.00	1.20
36	11.1	3240	27.00	1.80
48	8.3	5760	36.00	2.40
60	6.7	9000	45.00	3.00
110	3.6	30250	82.50	5.50



UL File NO. E341422
TUV File NO. R50384623
CQC File NO. CQC17002177358



CONTACT DATA

Contact arrangement	1 Form A(SPST-NO),1 Form C(SPDT)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC,1A
Max. switching voltage	277V AC, 30V DC
Max. switching current	20A
Max. switching power	5540VA, 600W
Contact rating	17A 277VAC/30VDC, Resistive 20A 277VAC, Resistive,30Kops 1HP 120/240/480VAC 10FLA/60LRA 250VAC 5A pilot duty 120VAC and 277VAC 16A general purpose 120VAC and 277VAC TV-8 120VAC 25K cycles
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)		15ms max.
Release time(At nominal voltage)		8ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Insulation system		155(F)
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(1.2/50μs)
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: 5% to 85% RH
Terminal		PCB terminal
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight),plastic cover.(RT II)
		S:Sealed,plastic cover.(RT III)
Weight		Approx. 14g

ORDERING INFORMATION

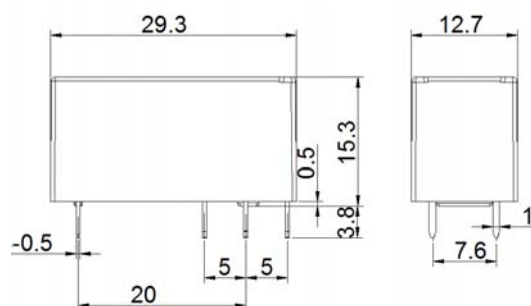
	CHI03	-V	-1	12	D	A	2	000
1. Product Family CHI03								
2. Enclosure V = Vented(Flux-tight),plastic cover.(RT II) S = Sealed,plastic cover.(RT III)								
3. Number of Poles 1 = 1 pole								
4. Rated Coil Voltage 03 = 3VDC 05 = 5VDC 06 = 6VDC 09 = 9VDC 12 = 12VDC 18 = 18VDC 22 = 22VDC 24 = 24VDC 36 = 36VDC 48 = 48VDC 60 = 60VDC 110 = 110VDC								
5. Coil Input D= Standard (400mW)								
6. Contact Arrangement A = Form A (SPST-NO) C = Form C (SPDT)								
7. Contact material 2 = AgSnO ₂								
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-explosion	Special Feature
CHI03-V-1**DA2	000	3V、5V、6V、9V、12V、24V、48V、110V	AgSnO ₂	17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			
	000			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			
	100			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			End-foot length 3.0mm
CHI03-S-1**DA2	F000			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC		●	
	F600			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC	●	●	
	000H			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			Packing: Box
	600			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			
			Ag Alloy	17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC	●		
CHI03-V-1**DC2	000		AgSnO ₂	17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			
CHI03-S-1**DC2	000			17A @ 277VAC	100000ops.min	UL/cUL,TUV,CQC			

Remarks: Special ordering for other requirements

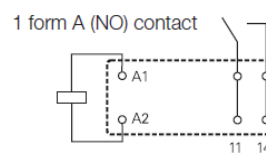
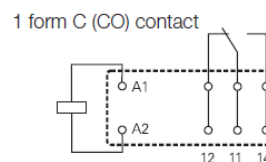
OUTLINE DIMENSION



Remark:

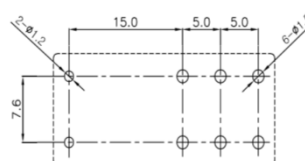
- 1) The reference tolerance in outline dimension:
outline dimension $\leq 1\text{mm}$, reference tolerance is $\pm 0.2\text{mm}$;
outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, reference tolerance is $\pm 0.3\text{mm}$;
outline dimension $> 5\text{mm}$, reference tolerance is $\pm 0.5\text{mm}$.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

WIRING DIAGRAMS (BOTTOM)

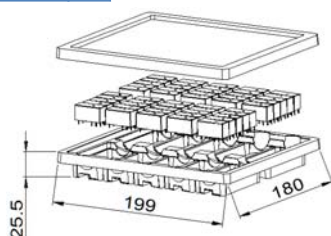


PC BOARD LAYOUTS (BOTTOM)

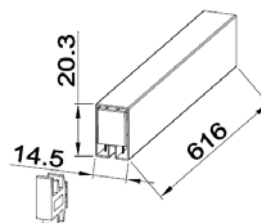
Unit:mm



PACKAGING FIGURE



50 pcs inside a box
500 pcs inside carton



20 pcs inside a box
1000 pcs inside carton