CHC-90 Series

large current latching contactor



FEATURES

- PCB terminal, large current latching contactor, outline dimension (30mm×16mm×25mm)
- Double contact for arc extinguishing structure,Load is non-polarity
- Low contact pressure drop
- Contact arrangement: Main normally close contacts; Auxiliary normally close contacts
- UL,CCC,TUV compliance
- RoHS compliance
- REACH SvHC compliance





File NO. E329801



File NO. R 50545700



File NO.: In process

APPLICATIO

5G communication power supply Charging pile Other DC load devices

COIL PARAMETER

Coil voltage	12~72VDC
Coil power	3W



COIL DATA @23°C

CHC Standard(3W)						
Nominal coil voltage (VDC)	Nominal Current (A)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)		
12	0.25	48	8.40	8.40		
24	0.13	192	16.80	16.80		
48	0.06	768	33.60	33.60		
60	0.05	1200	42.00	42.00		
72	0.04	1728	50.40	50.40		

CONTACT DATA

Contact arrangement	1 Form A	
Contact material	Ag Alloy	
Initial contact resistance	0.8mΩ Max.@6VDC 20A	
Max. switching voltage	48VDC(CHC-D90)	250VAC(CHC-A90)
Max. switching current	90A	
Max. switching power	4,320W	22,500VA
Main contact rated load (Resistive Load)	90A@ 48VDC	90A@ 250VAC
Auxiliary contact rated load (Resistive Load)	1A@48VDC	
Mechanical endurance	100,000 ops Min.(no load)	
Electrical endurance	6,000 ops Min.(Resistive Load)	
Minimum load (reference value)	Main Contact: 100mA@1VDC	Auxiliary Contact: 10mA@5VDC

CHARACTERISTICS

Operate voltage 75% of nominal voltage or less Release voltage 75% of nominal voltage or less Operate time(At nominal voltage) \$20ms Release time (At nominal voltage) \$20ms Operate bounce time (At nominal voltage) \$3ms		
Operate time(At nominal voltage) ≤20ms Release time (At nominal voltage) ≤20ms		
Release time (At nominal voltage) ≤20ms		
<u> </u>		
Operate houses time (At nominal voltage) <3ms		
Operate bounce time (At nominal voltage)		
Insulation resistance 100 MΩ (at 500 VDC)		
Between coil and main contacts 1,000 VAC, 50/60 Hz (1min)		
Between coil and Auxiliary contacts 1,000 VAC, 50/60 Hz (1min)	1,000 VAC, 50/60 Hz (1min)	
Between open main contacts 1,000 VAC, 50/60 Hz (1min)	1,000 VAC, 50/60 Hz (1min)	
Dielectric Between open Auxiliary contacts 1,000 VAC, 50/60 Hz (1min)	1,000 VAC, 50/60 Hz (1min)	
strength Between main contacts and Auxiliary contacts 1,000 VAC, 50/60 Hz (1min)		
Between Live part and ground electrode 1,000 VAC, 50/60 Hz (1min)		
Rated impulse withstand voltage (Between coil and contacts) 2,500V(1.2/50μs)		
Vibration resistance Functional 10 Hz ~ 55 Hz.,50 m/s2 (Approx. 5G)	10 Hz ~ 55 Hz.,50 m/s2 (Approx. 5G)	
Destructive 10 Hz ~ 55 Hz,,20 m/s2 (Approx. 2G)	10 Hz ~ 55 Hz.,20 m/s2 (Approx. 2G)	
Shock resistance Functional 500 m/s²(Approx.50G)		
Destructive 300 m/s²(Approx.30G)	300 m/s ² (Approx.30G)	
Ambient temperature -40~+90°C (without icing or condensation)	-40~+90℃ (without icing or condensation)	
Ambient humidity 5% to 95% RH	5% to 95% RH	
Terminal shape PCB Terminal	PCB Terminal	
Protection grade IP40		
Weight Approx. 49g		

ORDERING CHC -D 90 V В -12 -L Α В 000 1.Product Family **CHC Series** 2.Load type A: AC load D : DC load 3. Rated load current 90: 90A 4. Level of Protection V : dustproof type S : dustproof and waterproof type 5. Contactor construction A : open contact, B : close contact 6. Rated Coil Voltage 12: 12VDC 24:24VDC 48:48VDC 60:60VDC 72:72VDC 7. Product type L: Bistable latching 8. Auxiliary normally Blank: without Auxiliary Contact A: with one group Auxiliary Contact

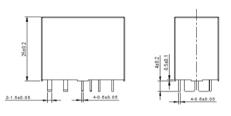
9: Auxiliary Contactor construction

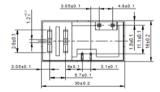
A : open contact , B: close contact

Character Numbers

000-999, AAA-ZZZor blank, which does not represent electrical changes, only for specific customer requirements

OUTLINE DIMENSION



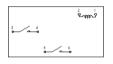


Remark

The reference tolerance in outline dimension: outline dimension $\le 1 mm$, reference tolerance is $\pm 0.2 mm$, outline dimension > 1 mm and $\le 5 mm$, 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)

Unit:mm

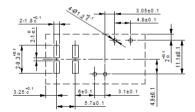






PC BOARD LAYOUTS (BOTTOM VIEWS)

Unit:mm



PACKAGING

1carton



50 pcs inside a box 250 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.