

## FEATURES

- 35A switching capability
- 1Form A and 1 Form C contact arrangement
- Parallel resistor or diode available
- Dust protected type and wash tight type available
- Comply with RoHS and ELV instruction



## APPLICATION

ABS Control System, Fan  
 Door Control System  
 Door Lock, Fuel Pump  
 Heated Front Window Glass

## COIL PARAMETER

Coil voltage	12VDC/24VDC	
Coil power	CHAA4-D	1.5W
	CHAA4-D1	1.5W
	CHAA4-D2	1.5W
	CHAA4-R	1.7W

## COIL DATA @23°C

CHAA4-D/CHAA4-D1/CHAA4-D2						
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Parallel Resistance ( $\Omega \pm 5\%$ )	Equivalent Resistance ( $\Omega$ )	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
12	125	96	—	—	8.4	1.2
24	63.16	380	—	—	16.8	2.4

CHAA4-R						
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Parallel Resistance ( $\Omega \pm 5\%$ )	Equivalent Resistance ( $\Omega$ )	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
12	142.69	96	680	84.1	8.4	1.2
24	72.05	380	2700	333.1	16.8	2.4

## CONTACT DATA

Contact arrangement	1 Form A, 1 Form C
Contact material	Silver Alloy
Initial contact resistance	40mV Type, 200mV Max (at 10A)
Max. switching voltage	30VDC
Max. switching current	35A
Max. switching power	490W
Contact rating (Resistive Load)	NO/NC: 35A/20A 14VDC
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min.(rated load)
Minimum load (reference value)	1A@6VDC

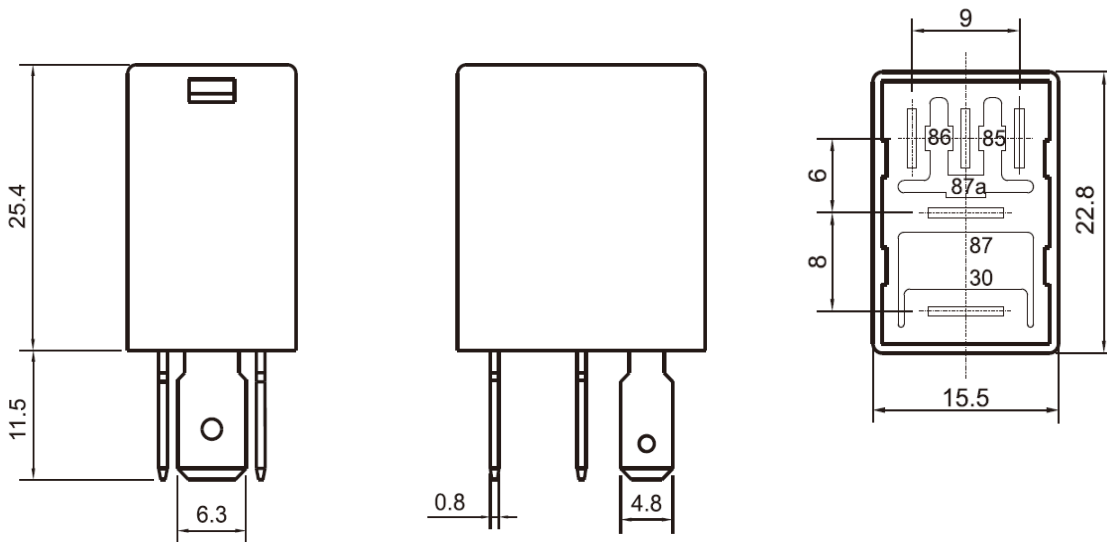
## CHARACTERISTICS

Operate voltage	70% of nominal voltage or less	
Release voltage	10% of nominal voltage or more	
Operate time(At nominal voltage)	10ms max.	
Release time(At nominal voltage)	10ms max.	
Insulation resistance	100M $\Omega$ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	$\geq 500$ VAC, 50/60Hz ( 1 min)
	Between open contacts	$\geq 500$ VAC, 50/60Hz ( 1 min)
Vibration resistance	Destruction	10Hz~ 55Hz., 1.5mm double amplitude
	Malfunction	10Hz~ 55Hz., 1.5mm double amplitude
Shock resistance	Destruction	1,000m/S <sup>2</sup> (100G Min.)
	Malfunction	100m/S <sup>2</sup> (10G Min.)
Ambient temperature	-40~ +125°C (without icing or condensation)	
Ambient humidity	20%~85% RH	
Terminal	QC terminals	
	PCB terminals	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Dust-protected, RTI)	
	S: Sealed(Wash-tight, RTIII)	
Weight	Approx. 19g	

## ORDERING INFORMATION

	CHAA4	-V	-1	12	D	A	2	,000
1.Product Family								
2.Enclosure								
V: Vented(Dust-protected, RTI) S: Sealed(Wash-tight, RTIII)								
3.Number of Poles								
1: 1 pole								
4.Rated Coil Voltage								
12,24VDC								
5.Parallel component								
D: Without parallel component R: With resistor D1: With parallel diode(Anode on 86#) D2: With parallel diode(Anode on 85#)								
6.Contact Arrangement								
A: Form A(SPST) C: Form C(SPDT)								
7.Conact Material								
2: AgSnInO2								
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								

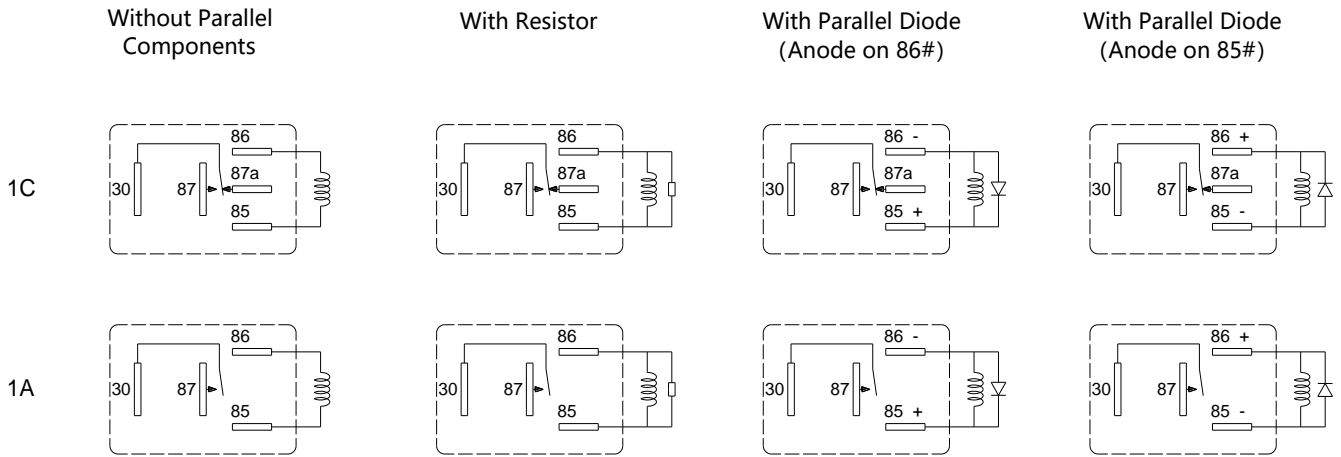
## OUTLINE DIMENSION



### Remarks:

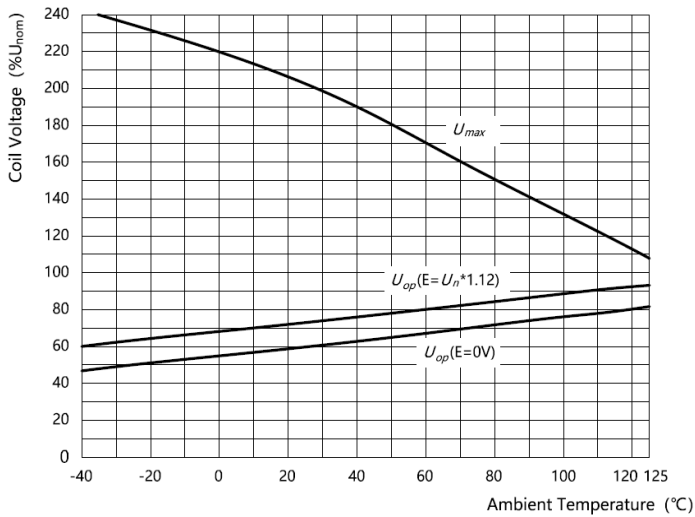
- The reference tolerance in outline dimension:
  - outline dimension  $\leq 1$ mm, reference tolerance is  $\pm 0.1$ mm
  - outline dimension  $> 1$ mm and  $\leq 5$ mm, reference tolerance is  $\pm 0.3$ mm
  - outline dimension  $> 5$ mm, reference tolerance is  $\pm 0.5$ mm.
- The reference tolerance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

## WIRING DIAGRAMS (BOTTOM VIEWS)

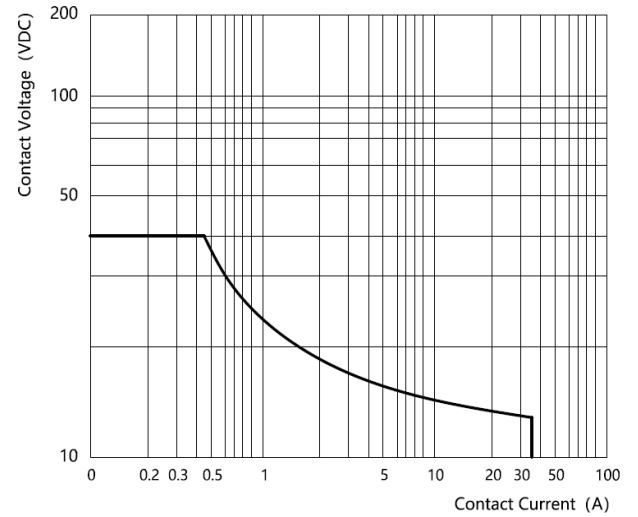


## Reference Data

Coil Continuous Voltage Range



Maximum Load Range



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.

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