

# CHSR6 Series 6A Forcibly Guided Relay



## FEATURES

- Outline dimension (50mm×13mm×24mm)
- Multi contact arrangements: 4NO+2NC
- Forcibly Guided contacts according to IEC61810-3
- Designed to meet cULus,TUV,CQC requirements
- Flux-tight and Wash-tight version available
- High insulation capability(1.2/50μs):10kV surge voltage between coil & contacts and 5kV between contact sets
- RoHS compliance
- Glow wire type available



## APPLICATION

Emergency shut-off, press control, machine control, safety doors, elevator and escalator control...

## COIL PARAMETER

Coil voltage	6-48VDC
Coil power	500mW

## COIL DATA @23°C

CHSR6 type ( at 23°C)				
Nominal coil voltage ( VDC )	Nominal Current ( mA )	Coil Resistance ( Ω±10% )	Operate Voltage ( VDC )	Release Voltage ( VDC )
6	83	72	≤4.5	≥0.3
9	56	162	≤6.8	≥0.45
12	42	288	≤9.0	≥0.6
18	28	648	≤13.5	≥0.9
24	21	1152	≤18.0	≥1.2
36	14	2592	≤27.0	≥1.8
48	10.4	4608	≤36.0	≥2.4

Note:

- The data shown above are initial values.

## CONTACT DATA

Contact arrangement	4NO+2NC: 4 Form A & 2 Form B	
Contact material	Ag Alloy	
Initial contact resistance	100mΩ max.(at 6VDC,1A)	
Max. switching voltage	250VAC/30VDC	
Max. switching current	6A	
Max. switching power	1500VA/180W	
Contact rating	NO	6A @ 250VAC
		6A @ 30VDC
	NC	6A @ 250VAC
		6A @ 30VDC
Mechanical endurance	1,000,000 ops Min.(no load)	
Electrical endurance (Resistive Load)	1NO: 6A 250VAC,100,000 ops	
	1NC: 6A 250VAC,50,000 ops	
Minimum load (reference value)	100mA @5VDC	

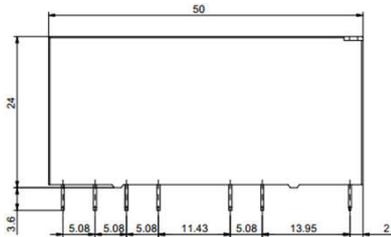
## CHARACTERISTICS

Operate voltage	75% of nominal voltage or less	
Release voltage	5% of nominal voltage or more	
Operate time (At nominal voltage)	20ms max.	
Release time(At nominal voltage)	20ms max.	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	4,000 VAC, 50/60Hz for 1 min
	Between open contacts	1,500 VAC, 50/60Hz for 1 min
	Between contacts sets	2,500 VAC, 50/60Hz for 1 min(11-12/13-14) 4,000 VAC, 50/60Hz for 1 min(others)
Surge voltage between coil and contacts	10,000V(1.2/50us)	
Vibration resistance	Destruction	10Hz~ 55Hz , 1.5mm double amplitude
	Malfunction	NO : 55Hz~200Hz. , 98m/S <sup>2</sup> NC : 55Hz~200Hz. , 49m/S <sup>2</sup>
Shock resistance	Destruction	980m/S <sup>2</sup>
	Malfunction	98m/S <sup>2</sup>
Ambient temperature	-40~ +85°C (without icing or condensation)	
Ambient humidity	5%~85% RH	
Termination	PCB terminals	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Flux-tight, RTII)	
	S: Sealed(Wash-tight, RTIII)	
Unit Weight(g)	Approx. 23g	

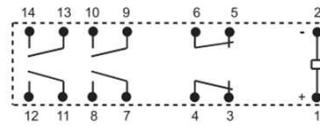
## ORDERING INFORMATION

	CHSR6	-V	-4A2B	24	D	4	F	,000
<b>1. Product Family</b>	CHSR6							
<b>2. Enclosure</b>	V = Vented (Flux-tight, RTII) S = Sealed (Wash-tight, RTIII)							
<b>3. Number of Poles</b>	4A2B=4 Form A+ 2 Form B							
<b>4. Rated Coil Voltage</b>	06,09,12,18,24,36,48							
<b>5. Coil Power</b>	D = Standard (500mW)							
<b>6. Contact material</b>	2=AgSnO2 4=AgSnO2+Au plating							
<b>7. Insulation Type</b>	F: Class F							
<b>8. Additional numbers and /or letters</b>	000-999 , AAA-ZZZ , aaa-zzz or blank , only for specific customer requirements							

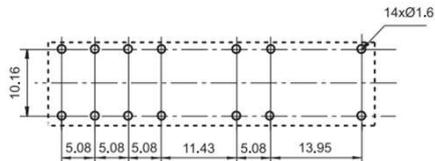
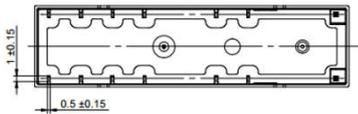
## OUTLINE DIMENSION



## WIRING DIAGRAMS (BOTTOM VIEWS)

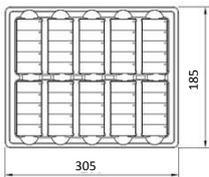


## PC BOARD LAYOUTS (BOTTOM VIEWS)



## 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.

### Remark:

- The reference tolerance in outline dimension:
  - outline dimension  $\leq 1$ mm, reference tolerance is  $\pm 0.2$ 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.