

CHS-H Series 30-60A Miniature Solar Relay

FEATURES

- Outline dimension (32.1mm×27.05mm×20.2mm)
- 1 Form A (SPST) contact arrangement
- Designed to meet cULus,TUV,CQC requirements
- PCB terminal layout
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available
- Glow wire type available



 File NO. E341422
 File NO. R50271657
 File NO. CQC13002102346

APPLICATION

Solar inverter , Power Supplier,Industrial Control

COIL PARAMETER

Coil voltage	9-48VDC	
Coil power	High capacity ver.	2250mW
Hold power *	0.35W min	
Holding voltage 2) 3)	40%~120%Un (at 23°C)	
	45%~80%Un (at 85°C)	

COIL DATA @23°C

CHS-HA Standard				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
9	250	36	6.75	0.45
12	187.5	64	9	0.6
18	125	144	13.5	0.9
24	93.8	256	18	1.2
48	46.9	1024	36	2.4

Note:

- The data shown above are initial values.
- The coil holding voltage is that voltage of relay coil after being applied rated voltage for 100ms.
- The relay does not allow for a long time to maintain the upper limit of the holding voltage. It is suggested that when the relay coil applied to the rated voltage 100ms, then decreases to the lower limit value of the voltage specification, prevent overheating of relay.

CONTACT DATA

Contact arrangement	1 Form A (SPST)	
Contact material	Ag Alloy	
Initial contact resistance	100mΩ max.(at 6VDC,1A)	
Max. switching voltage	277VAC	
Max. Current	Switching	35A
	Carrying	60A
Max. power	Switching	9,695VA
	Carrying	16,620VA
Contact rating	35A @ 277VAC	
	15A-43A-15A @ 250VAC, Make-Carry-Break	
	15A-50A-15A @ 250VAC, Make-Carry-Break	
	15A-60A-15A @ 250VAC, Make-Carry-Break	
Mechanical endurance	300,000 ops Min.(no load)	
Electrical endurance (Resistive Load)	35A @ 250VAC,30,000 ops T85	
	15A-60A/50A/43A-15A @ 250VAC, Make-Carry-Break ,30,000 ops T85	
Minimum load (reference value)	100mA @5VDC	

CHARACTERISTICS

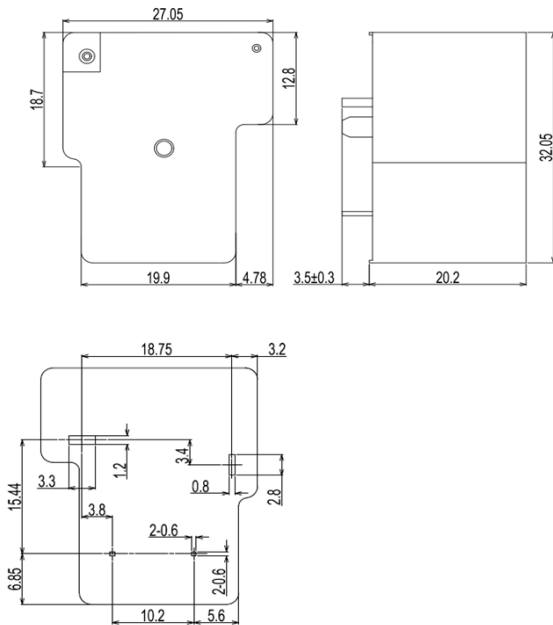
Operate voltage	75% of nominal voltage or less	
Release voltage	5% of nominal voltage or more	
Operate time (At nominal voltage)	15ms max.	
Release time(At nominal voltage)	15ms max.	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	4,000 VAC, 50/60 Hz for 1 min
	Between open contacts	2,500 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts	6,000V(1.2/50us)	
Vibration resistance	Destruction	10 to 55 Hz,1.5mm double amplitude
	Malfunction	10 to 55 Hz,1.5mm double amplitude
Shock resistance	Destruction	1,000m/S ² (100G approximately)
	Malfunction	1,00m/S ² (10G approximately)
Ambient temperature	-40~+85°C (without icing or condensation)	
Ambient humidity	20%~85% RH	
Termination	PCB terminals	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Flux-tight, RTII)	
Unit Weight	Approx.26g	

ORDERING INFORMATION

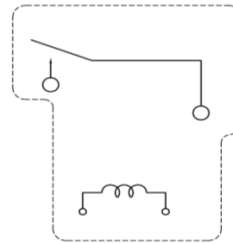
CHS01	-V	-1	12	H	A	2	,000
1. Product Family CHS01: PCB terminal							
2. Enclosure V = Vented (Flux-tight, RTII) S = Sealed (Wash-tight, RTIII) (only 40A and blow)							
3. Number of Poles 1=1 pole							
4. Rated Coil Voltage 09,12,18,24,48VDC							
5. Coil Power H = High capacity (2250mW)							
6. Contact Arrangement A = Form A(SPST)							
7. Contact material Blank = AgCdO(43A and down) 2 = AgSnO ₂							
8. Additional numbers and /or letters 000-999 , AAA-ZZZ , aaa-zzz or blank , only for specific customer requirements,ex:(43G)=43A,(50G)=50A,(60G)=60A ...							

OUTLINE DIMENSION

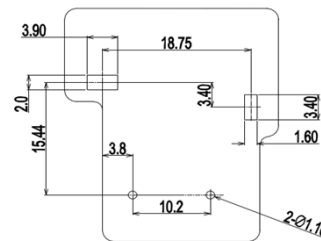
Unit: mm



WIRING DIAGRAMS (BOTTOM VIEWS)



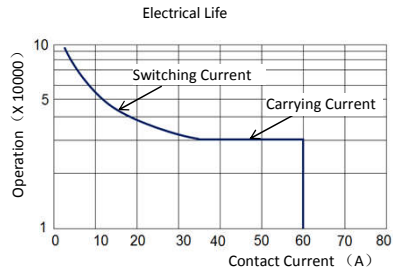
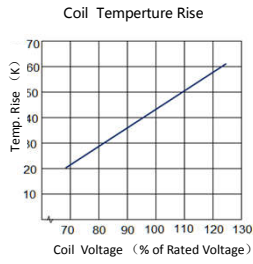
PC BOARD LAYOUTS (BOTTOM VIEWS)



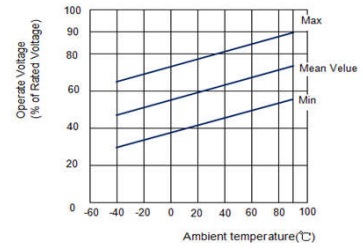
Remark:

- The reference tolerance in outline dimension:
 outline dimension ≤ 1 mm, reference tolerance is ± 0.2 mm;
 outline dimension > 1 mm and ≤ 5 mm, reference tolerance is ± 0.3 mm;
 outline dimension > 5 mm, reference tolerance is ± 0.5 mm.
- The reference tolerance for PC Board layout is ± 0.1 mm.

REFERENCE DATA

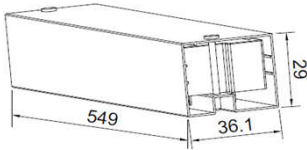


Coil Operate/Release Voltage & Temperature Cure



PACKAGING FIGURE

Tube



20 pcs inside a tube

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.

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