

FEATURES

- Outline dimension (32.1mm×27.05mm×20.2mm)
- 1 Form A (SPST) or 1 Form C (SPDT) contact arrangement
- Designed to meet cULus, TUV, CQC requirements
- Immersion cleanable, sealed version available
- Class F Coil
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available Glow
- Glow wire type

UL File NO. E341422
 TUV File NO. R50271657
 CQC File NO. CQC13002102346



APPLICATION

Air Condition, Industrial Control, Printer heater

COIL PARAMETER

| | |
|--------------|---------|
| Coil voltage | 5-48VDC |
| Coil power | 900mW |

COIL DATA @23°C

| CHW-DA2/DC2(360mW), Standard | | | | |
|------------------------------|----------------------|-------------------------|----------------------------|----------------------------|
| Nominal coil voltage (VDC) | Nominal Current (mA) | Coil Resistance (Ω)±10% | Operate Voltage (VDC Max.) | Release Voltage (VDC Min.) |
| 5 | 180.0 | 27 | 3.75 | 0.25 |
| 6 | 150.0 | 40 | 4.50 | 0.30 |
| 9 | 100.0 | 97 | 6.75 | 0.45 |
| 12 | 75.0 | 155 | 9.00 | 0.60 |
| 18 | 50 | 360 | 13.50 | 0.90 |
| 22 | 40.9 | 538 | 16.50 | 1.10 |
| 24 | 36.4 | 660 | 18.00 | 1.20 |
| 48 | 18.8 | 2560 | 36.00 | 2.40 |
| 110 | 8.2 | 13450 | 82.50 | 5.50 |

CONTACT DATA

| | |
|---------------------------------|---|
| Contact arrangement | 1 Form A (SPST) / 1 Form C (SPDT) |
| Contact material | Ag Alloy |
| Initial contact resistance | 100mΩ max. @6VDC, 1A |
| Max. switching voltage | 277VAC |
| Max. switching current | 30A(NO) /10A(NC) |
| Max. switching power | 8310VA(NO) 2770VA(NC) |
| Contact rating (Resistive Load) | FORM A 30A 277VAC Resistive 2HP 250VAC |
| | FORM C 20A(N.O)/10A(N.C)277VAC Resistive 2HP(N.O)/0.5HP(N.C)250VAC |
| | FORM B 15A 277VAC Resistive |
| Mechanical endurance | 10,000,000 ops Min.(no load) |
| Electrical endurance | 100,000 ops Min.(rated load) |
| 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 2,500 VAC, 50/60 Hz for 1 min |
| | Between open contacts 1,500 VAC, 50/60 Hz for 1 min |
| Surge voltage between coil and contacts | 3,000V(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~+85°C (without icing or condensation) |
| Ambient humidity | Operating: 20% to 85% RH |
| Terminal | PCB terminals |
| Enclosure (94V-0 Flammability Ratings) | V: Vented(Flux-tight, RTII) |
| | S: Sealed(Wash-tight, RTIII) |
| Weight | Approx. 26g(CHS01), 32g(CHS02) |

ORDERING INFORMATION

CHS01 -V -1 12 L A 2 '000

1. Product Family

CHS01:PCB Terminal
CHS02:PCB & Quick Connect

2. Enclosure

V=Vented(Flux-tight, RTII)
S=Sealed(Wash-tight, RTIII)

3. Number of Poles

1=1 pole

4. Rated Coil Voltage

05=5VDC 06=6VDC 09=9VDC 12=12VDC 18=18VDC
22=22VDC 24=24VDC 48=48VDC 110=110VDC

5. Coil Power

L = Standard(900mW)

6. Contact Arrangement

A = Form A(SPST-NO)
B = Form B(SPST-NC)
C = Form C(SPDT)

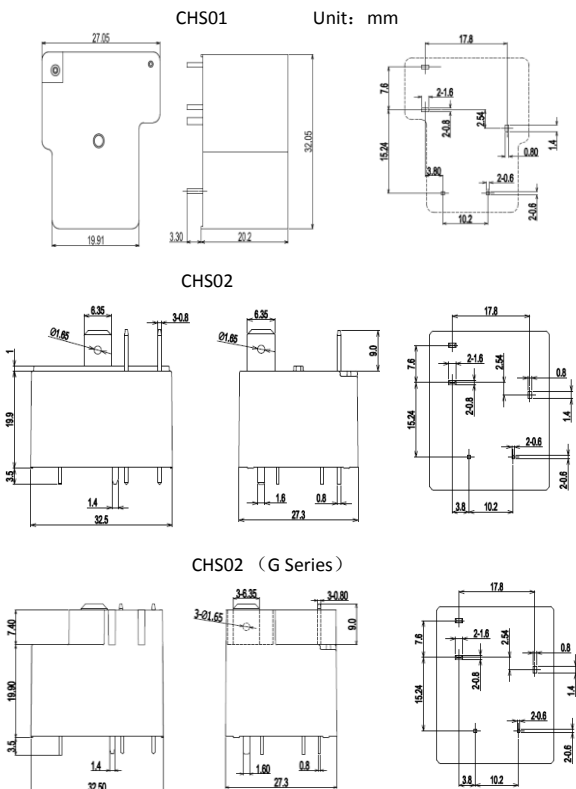
7. Contact Arrangement

Blank =AgCdO
2 =AgSnO

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

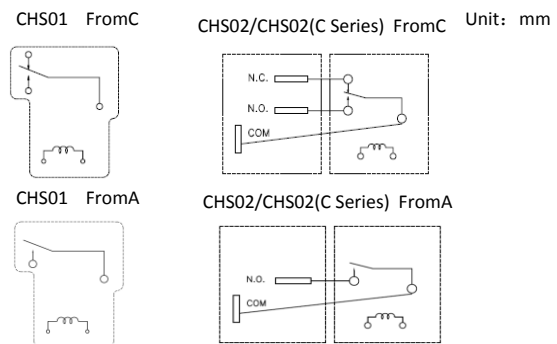
OUTLINE DIMENSION



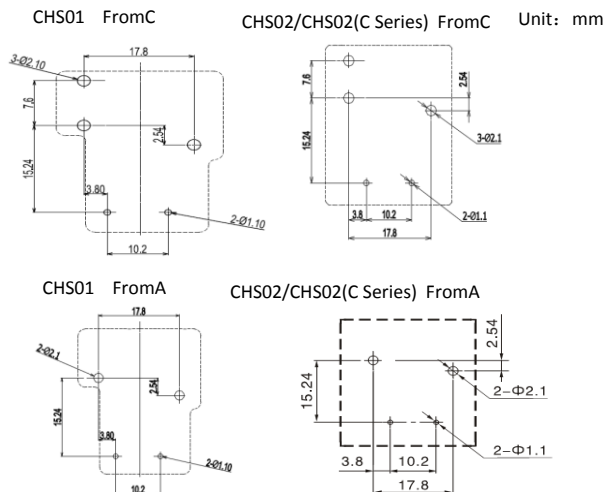
Remark:

- 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.

WIRING DIAGRAMS (BOTTOM VIEWS)



PC BOARD LAYOUTS (BOTTOM VIEWS)



Typical products

CHS01



CHS02



CHS02 (G Series)



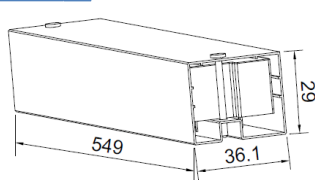
| Product Description | | Characteristic | | | | | | | | | |
|---------------------|------|---|---|------------------------------------|----------------------|----------------------|---------------|----------------------------------|-----------------|-------------------------------|--|
| Product Name | Code | Coil Rated voltage | Contact material | Contact Load | Electrical endurance | Safety certification | Glow | Anti-explosion | Special Feature | | |
| CHS01-V-1**LA | 000 | 6V, 9V 12V, 24V 36V, 48V 60V, 110V | AgCdO | 30A @277VAC | 100000ops.min | UL/cUL,TUV,CQC | | | | | |
| | 201 | | AgSnO ₂ | 40A @277VAC | | UL/cUL | | | | | |
| | 241 | | AgSnO ₂ | 30A @277VAC | | | | 4000VAC between coil to contacts | | | |
| CHS01-S-1**LA | 000 | | AgCdO | 30A @277VAC | | | | | | | |
| | 241 | | AgSnO ₂ | | | | | 4000VAC between coil to contacts | | | |
| | F600 | | AgCdO | | | | • | • | | | |
| CHS01-V-1**LA2 | 000 | | AgSnO ₂ | | | | | | | | |
| CHS01-S-1**LA2 | 000 | | AgSnO ₂ | | | | | | | | |
| CHS01-S-1**LC | 000 | | AgCdO | 20A @277VAC(NO) 10A @277VAC(NC) | | | | | | | |
| CHS01-V-1**LC2 | 000 | | AgSnO ₂ | | | | | | | | |
| CHS01-S-1**LC2 | 000 | | AgSnO ₂ | | | | | | | | |
| CHS02-V-1**LA | 000 | | 6V, 9V 12V, 24V 36V, 48V 60V, 110V | AgSnO ₂ | | 30A @277VAC | 100000ops.min | UL/cUL,TUV,CQC | | | |
| | 600 | AgSnO ₂ | | | | | | | | | |
| | T000 | AgSnO ₂ | | | | | | | | Quick Connect With Copper | |
| | 701 | AgSnO ₂ | | | | | | | | Φ3.2mm(hole of Quick Connect) | |
| CHS02-S-1**LA | 000 | AgSnO ₂ | | | | | | | | | |
| | F601 | AgSnO ₂ | | | | | | | | | |
| | F600 | AgSnO ₂ | | | | | | | | | |

CHS02 G Series

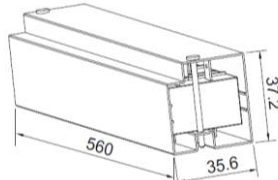
| | | | | | | | | | |
|----------------|------|---|--------------------|------------------------------------|---------------|----------------|--|--|--|
| CHS02-S-1**LA2 | G000 | 6V, 9V 12V, 24V 36V, 48V 60V, 110V | AgSnO ₂ | 30A@277VAC | 100000ops.min | UL/cUL,TUV,CQC | | | |
| CHS02-S-1**LC2 | G000 | 6V, 9V 12V, 24V 36V, 48V 60V, 110V | AgSnO ₂ | 20A @277VAC(NO) 10A @277VAC(NC) | 100000ops.min | UL/cUL,TUV,CQC | | | |

Remarks: Special ordering for other requirements

PACKAGING FIGURE



One Tube of 20 Products



One Tube of 20 Products