CHU SERIES 30A MINIATURE POWER RELAY

Churod Electronics

FEATURES

- Outline dimension(52.0×33.7×26.7)
- 2 Form A(DPST-NO), 2 Form C(DPDT-CO) arrangement
- 4,000VAC dielectric strength between coil and contact
- PCB terminal and quick connect mount type avaliable
- RoHS compliance
- F class Insulation System
- RoHS compliance
- REACH/ SvHC compliance

APPLICATION

HVAC,Residential&Commercial appliances,Industrial controls...etc

COIL PARAMETER

Coil voltage	DC: 5--110VDC AC: 24-- 277VAC	
Coil power	DC Coil	About 1.7W
	AC Coil	About 4VA

COIL DATA (23℃)

CHU DC Type				
Nominal coil voltage (VDC)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)	Max. Operate Voltage (VDC)
5	15.3	≤3.8	≥0.5	8
6	22	≤4.5	≥0.6	9.6
12	86	≤9	≥1.2	19.20
24	350	≤18	≥2.4	38.4
48	1390	≤36	≥48	76.80
110	7,255	≤82.5	≥11	176.00

CHU AC Type(50Hz)				
Nominal coil voltage (VDC)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)	Max. Operate Voltage (VDC)
24	45	≤19.2	≥4.8	26.4
120	1125	≤96	≥24	132
208	3278	≤166.4	≥41.6	229.00
220	3800	≤176	≥44	242
240	4500	≤192	≥48	264.00
277	5,960	≤221.6	≥55.4	305.00

CHU AC Type(60Hz)				
Nominal coil voltage (VDC)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)	Max. Operate Voltage (VDC)
24	35.7	≤19.2	≥4.8	26.4
120	830	≤96	≥24	132
208	2600	≤166.4	≥41.6	229.00
220	2870	≤176	≥44	242
240	3800	≤192	≥48	264.00
277	4,700	≤221.6	≥55.4	305.00

CONTACT DATA

Contact arrangement	2 Form A(DPST-NO), 2 Form C(DPDT-CO)
Contact material	Ag Alloy
Initial contact resistance	50mΩ max.(24VDC,1A)
Max. switching voltage	277VAC/30VDC
Max. switching current	30A
Max. switching power	8310VA
Contact rating	NO: 30A 250VAC, Resistive
	NO: 30A 277VAC, Resistive
	NO: 30A 30VDC, Resistive
	NC: 3A 250VAC, Resistive
	NC: 3A 277VAC, Resistive
	NC: 3A 30VDC, Resistive
Mechanical endurance	10,000,000 ops Min.(No load)
Electrical endurance	100,000 ops(NO: 30A 250VAC, Resistive 6cycles/min.)
	100,000 ops(NC: 3A 250VAC, Resistive 6cycles/min.)
Electrical endurance	100mA@5VDC

CHARACTERISTICS

Operate voltage		75%Us(DC type)/80%Us(AC type)
Release voltage		10%Us(DC type)/20%Us(AC type)
Operate time (At nominal voltage)		25ms max.(DC type)
Release time(At nominal voltage)		25ms max.(DC type)
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts	4,000 VAC, 50/60Hz (Min)
	Between open contacts	1,500 VAC, 50/60Hz (Min)
	Between contacts poles	2,000 VAC, 50/60Hz (Min)
Surge voltage between coil and contacts		10,000V(1.2/50μs)
Vibration resistance	Malfunction	10 to 55 Hz.,1.65mm double amplitude
	Destruction	10 to 55 Hz.,1.65mm double amplitude
Shock resistance	Malfunction	100 m/s2(10G approximately)
	Destruction	1,000 m/s2(100G approximately)
Ambient temperature	AC type:	-40~+65℃
	DC type:	-40~+85℃
Ambient humidity		5%~85%RH
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight),plastic cover.(RT II)
		S:Sealed,plastic cover.(RT III)
Terminal		PCB Terminal & QC Terminal
Weight		Approx. 86g

ORDERING INFORMATION

	CHU1	-V	-2	12	D	A	2	,000

1. Product Family

CHU1:printed circuit board terminal

CHU2: Panel mount via flanged cover, 6.35x0.8mm coil&QC terminal

CHU3:Panel mount via flanged cover; 4.75x0.8mm for coil terminal, 6.35x0.8mm for QC terminal

2.Enclosure

V = Vented(Flux-tight),plastic cover.(RT II)

S = Sealed,plastic cover.(RT III)

3.Number of Poles

2 = 2 pole

4.Rated Coil Voltage

DC: 05,06,09,12,24,48,110,

AC: 24 (Used of 50Hz) , 120,208,220,240,277

5.Coil Input

D:1.7W A:50Hz 4VA A1:60HZ 4VA

6.Contact Arrangement

A =Form A (DPST-NO) C = Form C (DPDT-CO)

7.Contact material

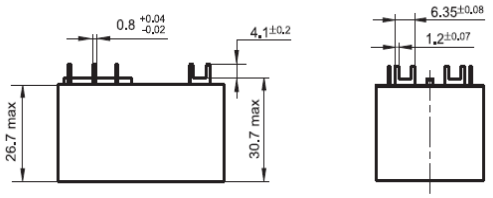
2=$AgSnO_2$

9.Additional numbers and /or letters

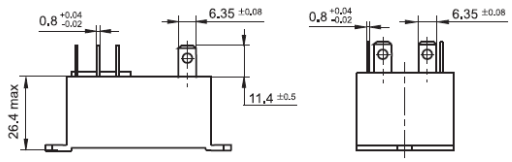
000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements

OUTLINE DIMENSION

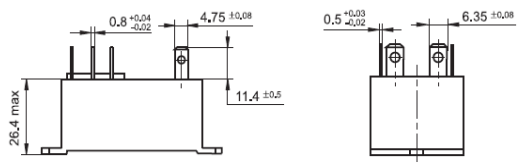
CHU1 -PCB type



CHU2 -QC type

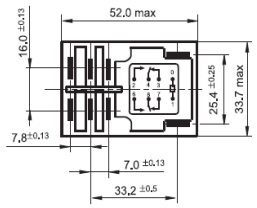


CHU3 -QC type

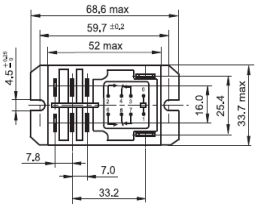


WIRING DIAGRAMS (BOTTOM VIEWS)

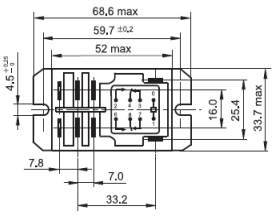
CHU1 -PCB type



CHU2 -QC type

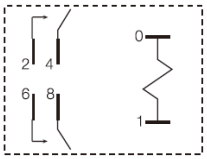


CHU3 -QC type

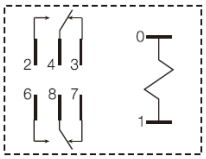


Terminal assignment (BOTTOM VIEWS)

2 FORM A



2 FORM C



Remarks:

1)The reference tolerance in outline dimer

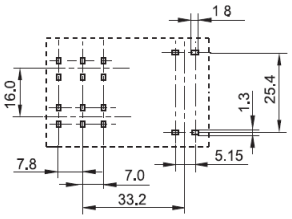
outline dimension ≤1mm, reference tolerance is ±

outline dimension > 1mm and ≤5mm, reference tolerance

outline dimension > 5mm, reference tolerance is ±

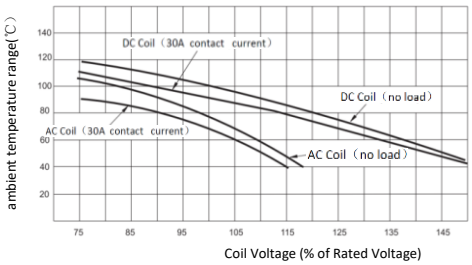
2)The reference tolerance for PC Board layout is ±

PC BOARD LAYOUTS (BOTTOM VIEWS)



Reference Data

Maximum allowable ambient temperature curve



Packaging Figure

1.BOX

100 pcs inside a Box

1000 pcs inside a carton

2.TUBE

50 pcs inside a tube

2000 pcs inside a carton