HRS4N

POWER RELAY

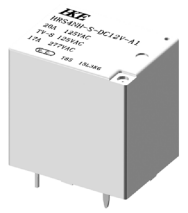
Features

- Max.20A switching capability
- High temperature load: 17A 277VAC at 105℃
- Available for single pin and double pins terminal
- Compliance to standard EN 60335-1
- Compliance to RoHS Directive
- UL Insulation system: F Class

Safety Approval

cqc NO.CQC16002155729 50367249

Relay Picture



ORDERING INFORMATION

HRS4N H – S – DC12V – A1

Model	Coil Sensitivity	Enclosure	Coil Voltage	Contact Form
	H - High Sensitivity (360mW)	S - Plastic Sealed Type	DC3V,DC5V,DC6V,DC9V, DC12V,DC18V,DC24V, DC36V,DC48V	A1 - Normal Open, Single pin B1 - Normal Closed, Single pin C1 - Changeover, Single pin A2 - Normal Open, Double pin B2 - Normal Closed, Double pin C2 - Changeover, Double pin

SPECIFICATION

CONTACT DATA

Contact Form		1 Form A, 1 Form B, 1 Form C
Contact Material		Ag Alloy
Contact Rating		1 Form A: 20A 125VAC 17A 277VAC TV-8 125VAC 1 Form C: NO:17A 277VAC NC:7A 277VAC
Contact Resistance		Max.100mΩ(1A 24VDC)
Load	Max. Switching Voltage	400VAC/28VDC
	Max. Switching Current	20A(A),17A(C)
	Max. Switching Power	4700VA
Life	Electrical	1 Form A: 100,000 operations 1 Form C: 50,000 operations
	Mechanical	10,000,000 operations

COIL DATA

Nominal Coil Power	360mW

GENERAL DATA

Insulation Resistance		Min.1000MΩ 500VDC
Dielectric Strength	Between open contacts	1000VAC,50/60Hz,1 min
	Between coil and contacts	2500VAC,50/60Hz,1 min
Operate Time		Max.10ms
Release Time		Max.5ms
Operating Temperature		-40℃ to +85℃(Single pin) -40℃ to +105℃(Double pin)
Humidity		5～90%RH
Shock Resistance	Endurance	1,000m/s^2(10g)
	Misoperation	100m/s^2(100g)
Vibration Resistance	Endurance	10～55Hz, 1.5mm double amplitude
	Misoperation	10～55Hz, 1.5mm double amplitude
Weight		Approximately 14.0g

Note:Data shown are of initial value

SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
CQC 16002155729 (GB/T 21711.1-2008)	A1	0.36W	3V,5V,6V, 9V,12V,18V, 24V, 36V,48V	17A 277VAC	Ambient Temperature: 85℃
	A1/A2	0.36W		20A 125VAC	Ambient Temperature: 40℃
	B1	0.36W		10A 277VAC	Ambient Temperature: 85℃
	A2	0.36W		17A 277VAC	Ambient Temperature: 105℃
	B2	0.36W		10A 277VAC	Ambient Temperature: 105℃

HRS4N

POWER RELAY

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
TUV 50367249	A1	0.36W	3V,5V,6V, 9V,12V,18V, 24V, 36V,48V	17A 277VAC	Class F Insulation Ambient Temperature: 85℃
	A2	0.36W		17A 277VAC	Class F Insulation Ambient Temperature: 105℃
	A1/A2	0.36W		20A 125VAC	Class F Insulation Ambient Temperature: 40℃

Specifications subject to change without notice

COIL DATA

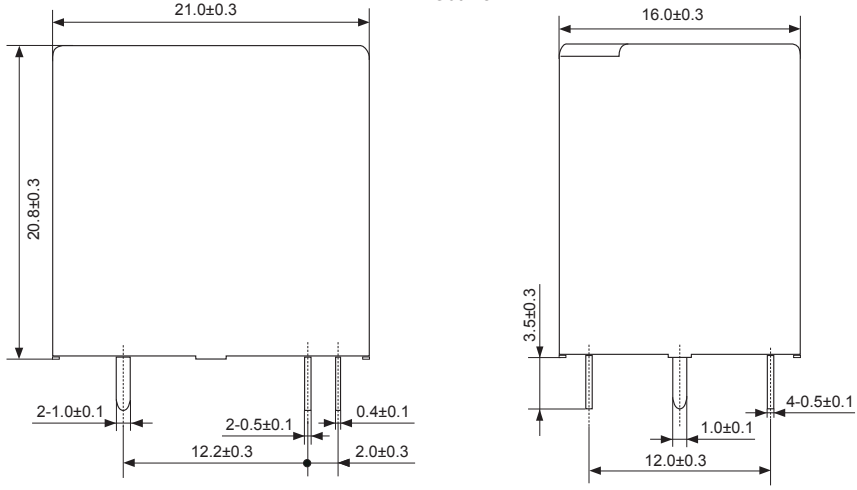
Ambient Temperature: 23℃

Model	Nominal Voltage VDC	Coil Resistance Ω+/-10%	Operate Voltage ≤VDC	Release Voltage ≥VDC	Max. Allowable Voltage ≥VDC	Coil Power mW
HRS4NH-S-DC3V	3	25	2.25	0.3	3.9	360
HRS4NH-S-DC5V	5	70	3.75	0.5	6.5	
HRS4NH-S-DC6V	6	100	4.50	0.6	7.8	
HRS4NH-S-DC9V	9	225	6.75	0.9	11.7	
HRS4NH-S-DC12V	12	400	9.00	1.2	15.6	
HRS4NH-S-DC18V	18	900	13.50	1.8	23.4	
HRS4NH-S-DC24V	24	1600	18.00	2.4	31.2	
HRS4NH-S-DC48V	48	6400	36.00	4.8	62.4	

OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

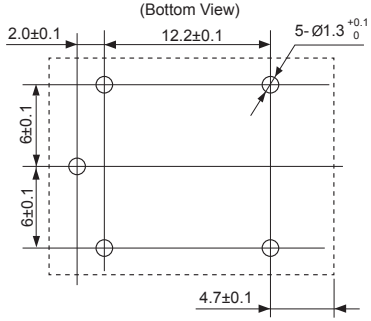
Single pin version

Outline

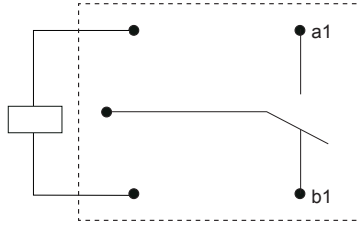


OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

Mounting Hole Layout
(Bottom View)

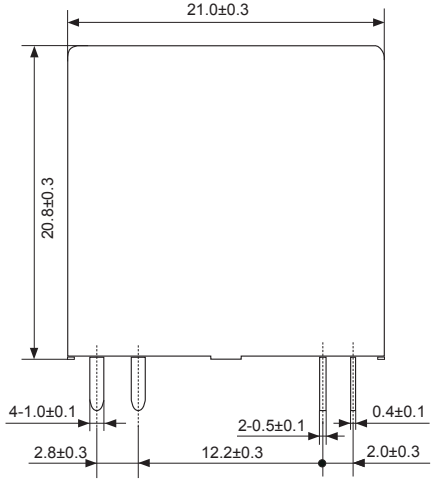


Wiring Diagram
(Bottom View)

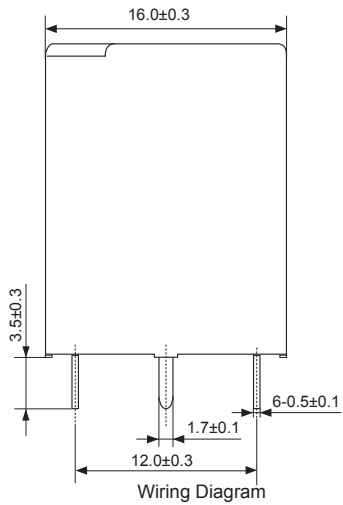


Remark: A1:Without B1 terminal
B1:Without A1 terminal
C1: With all terminals

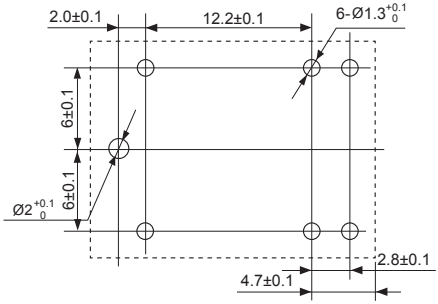
Double pin version



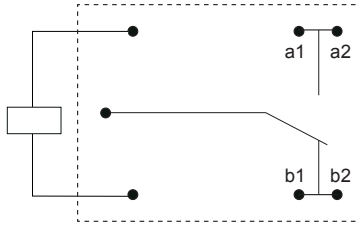
Outline



Mounting Hole Layout
(Bottom View)



Wiring Diagram
(Bottom View)



Remark: A2:Without B1,B2 terminas
B2:Without A1,A2 terminals
C2: With all terminals