



POWER RELAY

Safety Approval

UL US NO. E164730 CEC NO. CQC09002030014

NO. 50097843

Features

- Low profile,height 15.7mm
Dimensions: 29.0×12.6×15.7(mm)
- Switching capacity 12A
- Contact: 1 Form A, 1 Form C
- Sensitivity 400mW
- Insulation: 5KV
Creepage:10mm



ORDERING INFORMATION

HCP1 - [S] - [DC12V] - [C]

Model	Enclosure	Coil Voltage	Contact Form
	S - Plastic Sealed Type	DC5V, DC6V, DC9V, DC12V, DC24V, DC48V	A - 1 Form A C - 1 Form C

SPECIFICATION

CONTACT DATA

Contact Form	1 Form A, 1 Form C	
Contact Material	Ag Alloy	
Contact Rating	Resistive: 12A 250VAC/30VDC Inductive: 5A 250VAC Cosφ=0.4	
Contact Resistance	Max. 100mΩ (6VDC 1A)	
Load	Max. Switching Voltage	440VAC/120VDC
	Max. Switching Current	12A
	Max. Switching Power	3,000VA, 360W
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations
		50,000 operations (Inductive: Cosφ=0.4, L/R=7ms)
	Mechanical	20,000,000 operations

GENERAL DATA

Insulation Resistance		Min. 1000MΩ 500VDC
Dielectric Strength	Between open contacts	1,000VAC, 1min
	Between coil and contacts	5,000VAC, 1min
Operate Time		Max. 10ms
Release Time		Max. 5ms
Operating Temperature		-40°C to +85°C
Humidity		35~95%RH, +40°C
Shock Resistance	Endurance	1,000m/s ²
	Misoperation	100m/s ²
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude
Weight		Approximately 13.00g

Note:Data shown are of initial value

COIL DATA

Nominal Coil Power	400mW
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SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
UL E164730	A/C	0.4W	5 - 48VDC	12A 250VAC	Class F insulation Ambient Temperature: 85°C
TUV 50097843	A/C	0.4W	5 - 48VDC	12A 250VAC	Ambient Temperature: 85°C
CQC09002030014 (GB/T 21711.1-2008)	A/C	0.4W	5 - 48VDC	12A 250VAC	Ambient Temperature: 85°C

Specifications subject to change without notice

ISO9001、ISO/TS16949、ISO14001 Approved

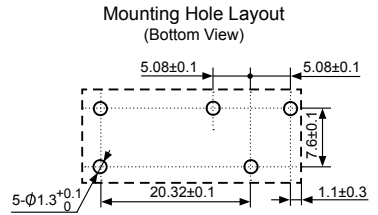
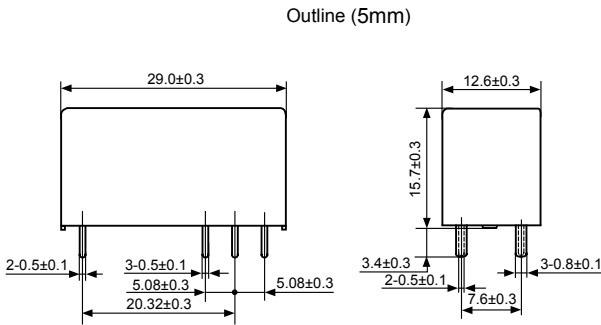
COIL DATA

Ambient Temperature: 23°C

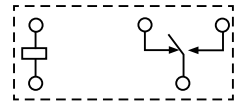
Model	Nominal Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Operate Voltage \leq VDC	Release Voltage \geq VDC	Coil Power mW
HCP1-S-DC5V	5	62.5	3.5	0.5	400
HCP1-S-DC6V	6	90.0	4.2	0.6	
HCP1-S-DC9V	9	202.5	6.3	0.9	
HCP1-S-DC12V	12	360	8.4	1.2	
HCP1-S-DC24V	24	1440	16.8	2.4	
HCP1-S-DC48V	48	5760	33.6	4.8	

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

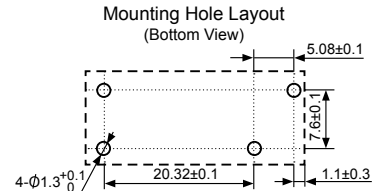
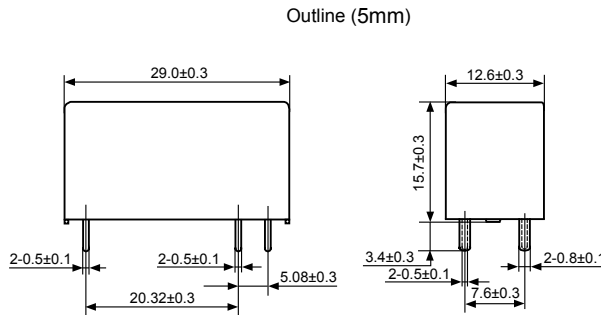
1 Form C



Wiring Diagram (Bottom View)



1 Form A



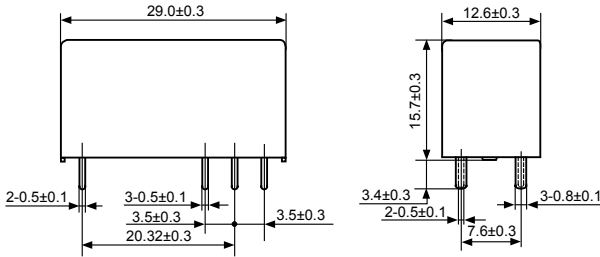
Wiring Diagram (Bottom View)



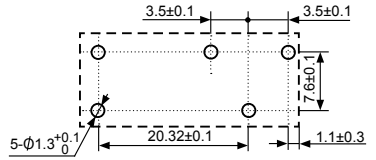
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

1 Form C

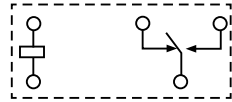
Outline (3.5mm)



Mounting Hole Layout (Bottom View)

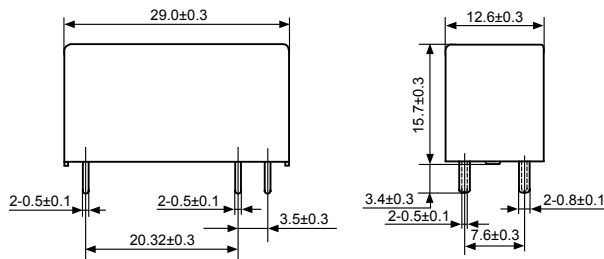


Wiring Diagram (Bottom View)

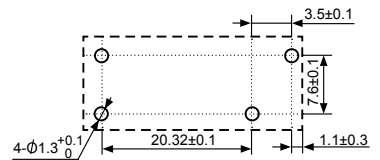


1 Form A

Outline (3.5mm)



Mounting Hole Layout (Bottom View)

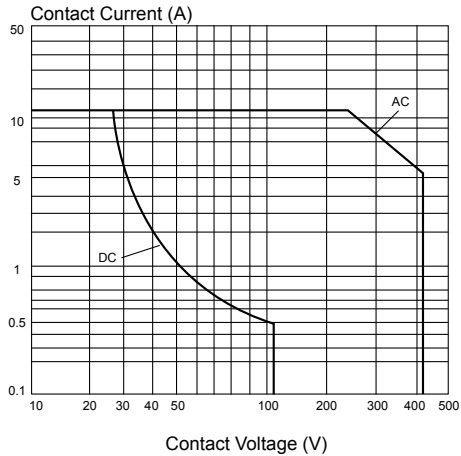


Wiring Diagram (Bottom View)

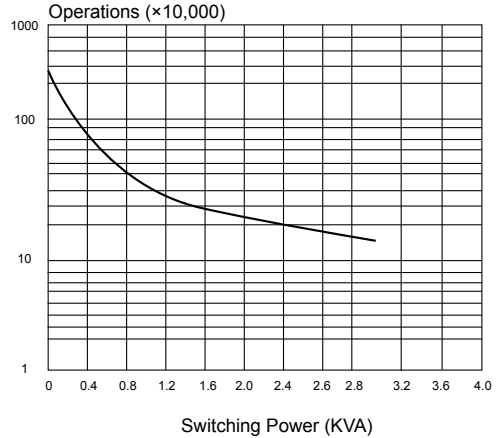


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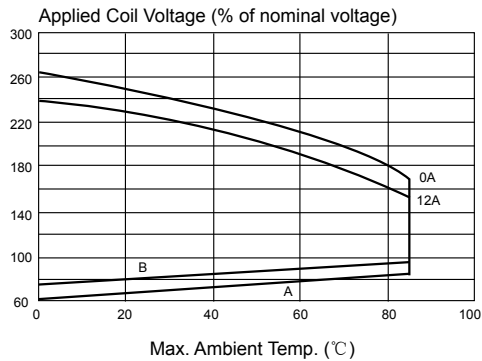
Maximum Switching Power



Life Curves



Max. Ambient Temp. Vs. Coil Voltage



A: Coil temperature = Ambient temperature.

B: 110% of nominal coil voltage at rated contact load.