



功率继电器

Safety Approval

UL US NO. E164730

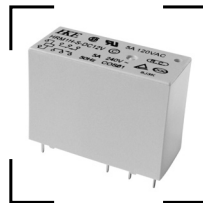
CCC NO. CQC09002035018

NO. 50134947

SP NO. 1063015(LR 106040)

Features

- General purpose power relay
Dimension: 29.0×12.6×20.8(mm)
- Contact: 2 Form A, 2 Form C
- Dielectric strength of 4000V between coil and contacts
- Creepage distance: 8mm



ORDERING INFORMATION

HRM1 [H] - [S] - [DC12V] - [A]

Model	Coil Sensitivity	Enclosure	Coil Voltage	Contact Form
	H - High Sensitivity (540mW) Blank - Standard (720mW)	S - Plastic Sealed Type	DC3V, DC5V, DC6V, DC9V DC12V, DC24V, DC48V	A - 2 Form A C - 2 Form C

SPECIFICATION

CONTACT DATA

Contact Form	2 Form A, 2 Form C	
Contact Material	Ag Alloy	
Contact Rating	Resistive: 5A 250VAC/24VDC TV Rating: TV-5 Inductive: 5A 250VAC/24VDC (COSΦ=0.4, L/R=7ms)	
Contact Resistance	Max. 100mΩ (6VDC 1A)	
Load	Max. Switching Voltage	250VAC/30VDC
	Max. Switching Current	5A
	Max. Switching Power	1,250VA, 120W
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations 20,000 operations (COSΦ=0.4, L/R=7ms)
	Mechanical	10,000,000 operations

GENERAL DATA

Insulation Resistance	Min. 1000MΩ 500VDC	
Dielectric Strength	Between open contacts	1,000VAC, 1min
	Between coil and contacts	4,000VAC, 1min
Operate Time	Max. 15ms	
Release Time	Max. 8ms	
Operating Temperature	-30~+55°C (720mW)	
	-30~+70°C (540mW)	
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 13.0g	

Note: Data shown are of initial value

COIL DATA

Nominal Coil Power	540mW, 720mW
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SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remark
UL E164730	A	0.72W/0.54W	3 - 48VDC	TV-5	Ambient Temperature: 40°C
	A/C	0.72W/0.54W	3 - 48VDC	5A 120VAC	Ambient Temperature: 40°C

HRM1

POWER RELAY

SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remark
CSA 1063015(LR 106040)	A/C	0.72W/0.54W	3 - 48VDC	5A 120VAC	—
TUV 50134947-001	A/C	0.72W/0.54W	3 - 48VDC	5A 250VAC	Ambient Temperature: 85°C
CQC09002035018 (GB/T 21711.1-2008)	A/C	0.72W/0.54W	3 - 48VDC	5A 250VAC	Ambient Temperature: 85°C

Specifications subject to change without notice

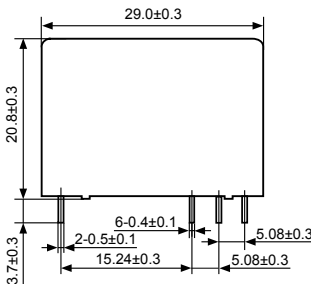
COIL DATA

Ambient Temperature: 23°C

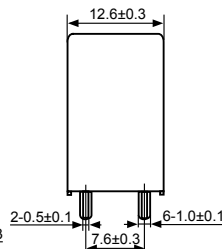
Model	Nominal Voltage VDC	Coil Resistance Ω ±10%	Operate Voltage \leq VDC	Release Voltage \geq VDC	Coil Power mW
HRM1-S-DC3V	3	12.5	2.25	0.3	720
HRM1-S-DC5V	5	35	3.75	0.5	
HRM1-S-DC6V	6	50	4.50	0.6	
HRM1-S-DC9V	9	112.5	6.75	0.9	
HRM1-S-DC12V	12	200	9.0	1.2	
HRM1-S-DC24V	24	800	18.0	2.4	
HRM1-S-DC48V	48	3200	36.0	4.8	
HRM1H-S-DC3V	3	17	2.25	0.3	540
HRM1H-S-DC5V	5	46	3.75	0.5	
HRM1H-S-DC6V	6	67	4.50	0.6	
HRM1H-S-DC9V	9	150	6.75	0.9	
HRM1H-S-DC12V	12	267	9.0	1.2	
HRM1H-S-DC24V	24	1067	18.0	2.4	
HRM1H-S-DC48V	48	4267	36.0	4.8	

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

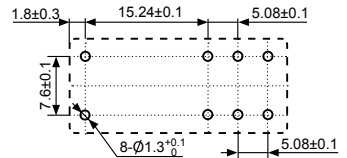
1 Form C



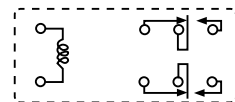
Outline



Mounting Hole Layout
(Bottom View)



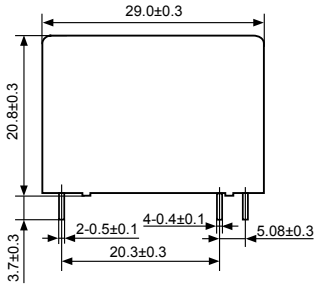
Wiring Diagram
(Bottom View)



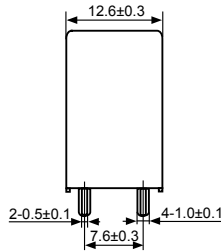
ISO9001、ISO/TS16949、ISO14001 Approved

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

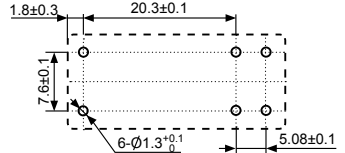
1 Form A



Outline



Mounting Hole Layout (Bottom View)

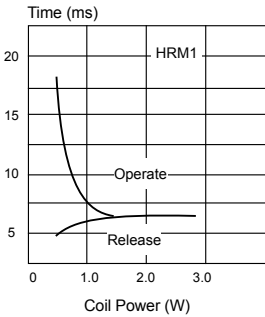


Wiring Diagram (Bottom View)

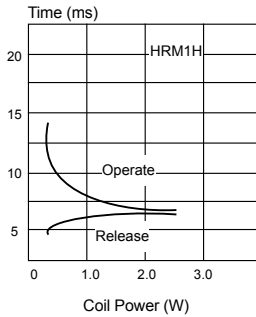


REFERENCE DATA

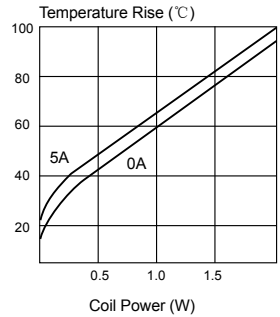
Timing (standard)



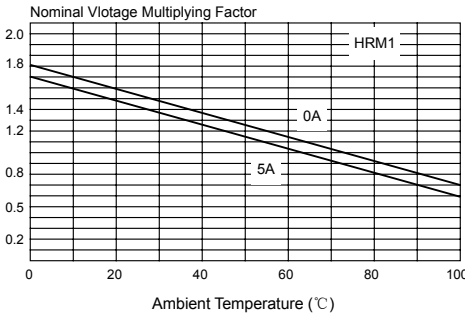
Timing (high sensitive)



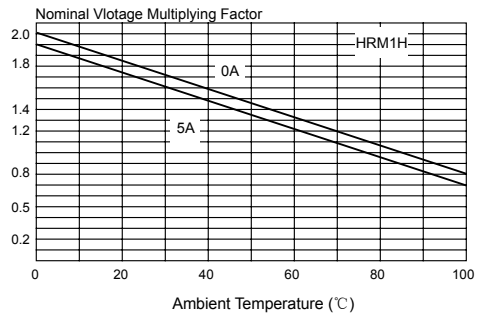
Coil Temperature Rise



Operating Range

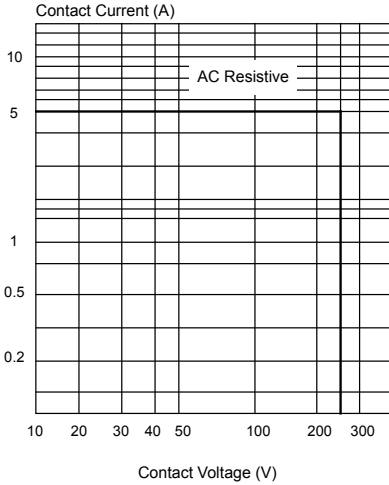


Operating Range



REFERENCE DATA

Maximum Switching Power



Life Curves

