



POWER RELAY

Safety Approval

UL US NO. E164730

CQC NO. CQC09002035018

NO. 50116140

SP NO. 1063015(LR 106040)

Features

- General purpose power relay  
Dimensions: 29.0×12.6×20.8(mm)
- Contact: 1 Form A, 1 Form C
- Dielectric strength of 4000V between coil and contacts
- 16A contact current
- Creepage distance: 8mm



ORDERING INFORMATION

HRM2 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 - 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: 16A 250VAC/30VDC TV Rating: TV-8 125VAC Inductive: 8A 250VAC/30VDC (COSΦ=0.4, LR=7ms)	
Contact Resistance	Max. 100mΩ (6VDC 1A)	
Load	Max. Switching Voltage	250VAC/30VDC
	Max. Switching Current	16A
	Max. Switching Power	4,000VA, 480W
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations
	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 <sup>2</sup>
	Misoperation	100m/s <sup>2</sup>
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude
Weight	Approximately 13.0g	

COIL DATA

Nominal Coil Power	540mW, 720mW
--------------------	--------------

Note: Data shown are of initial value

SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
CSA 1063015 (LR 106040)	A/C	0.72W/0.54W	3 - 48VDC	16A 120VAC	-
TUV 50116140-001	A	0.72W/0.54W	3 - 48VDC	16A 250VAC	Ambient Temperature: 85°C
	C	0.72W/0.54W	3 - 48VDC	NO/NC: 16A/10A 250VAC	Ambient Temperature: 85°C

# HRM2

POWER RELAY

## SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
UL E164730	A/C	0.72W/0.54W	3 - 48VDC	16A 120VAC	Ambient Temperature: 40°C
CQC09002035018 (GB/T 21711.1-2008)	A	0.72W/0.54W	3 - 48VDC	16A 250VAC	Ambient Temperature: 85°C
	C	0.72W/0.54W	3 - 48VDC	NO/NC: 16A/10A 250VAC	Ambient Temperature: 85°C

Specifications subject to change without notice

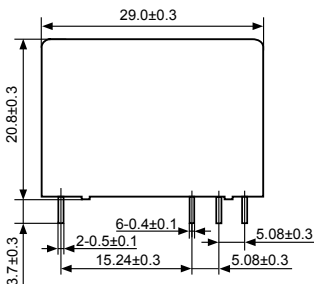
## COIL DATA

Ambient Temperature: 23°C

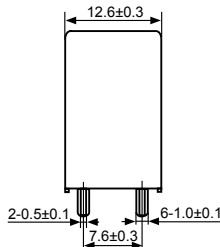
Model	Nominal Voltage VDC	Coil Resistance $\Omega$ +/- 10%	Operate Voltage $\leq$ VDC	Release Voltage $\geq$ VDC	Coil Power mW
HRM2-S-DC3V	3	12.5	2.25	0.3	720
HRM2-S-DC5V	5	35	3.75	0.5	
HRM2-S-DC6V	6	50	4.50	0.6	
HRM2-S-DC9V	9	112.5	6.75	0.9	
HRM2-S-DC12V	12	200	9.0	1.2	
HRM2-S-DC24V	24	800	18.0	2.4	
HRM2-S-DC48V	48	3200	36.0	4.8	
HRM2H-S-DC3V	3	17	2.25	0.3	540
HRM2H-S-DC5V	5	46	3.75	0.5	
HRM2H-S-DC6V	6	67	4.50	0.6	
HRM2H-S-DC9V	9	150	6.75	0.9	
HRM2H-S-DC12V	12	267	9.0	1.2	
HRM2H-S-DC24V	24	1067	18.0	2.4	
HRM2H-S-DC48V	48	4267	36.0	4.8	

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

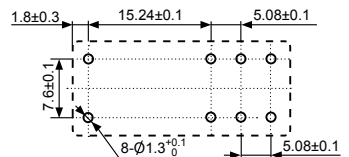
1 Form C



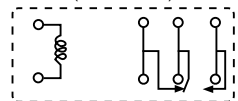
Outline



Mounting Hole Layout  
(Bottom View)



Wiring Diagram  
(Bottom View)



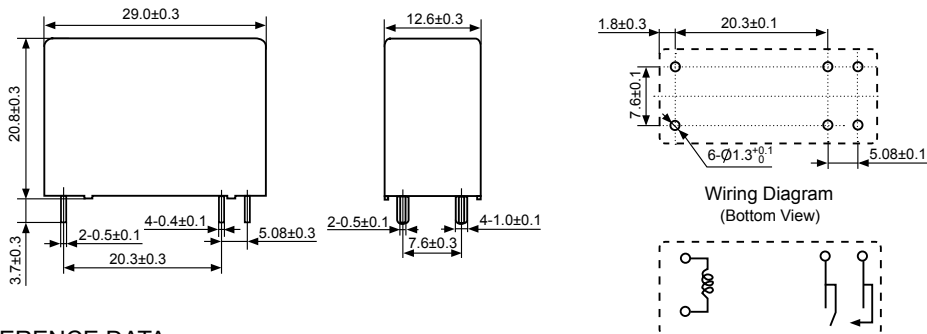
ISO9001, ISO/TS16949, ISO14001 Approved

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

1 Form A

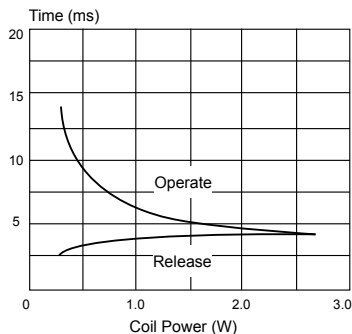
Outline

Mounting Hole Layout  
(Bottom View)

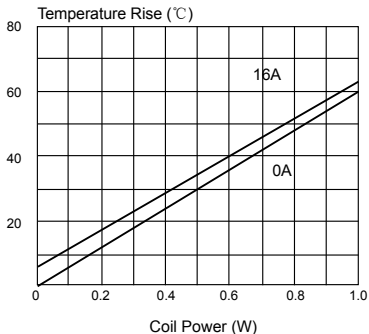


## REFERENCE DATA

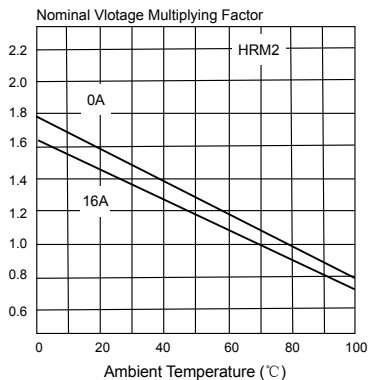
Time Curve



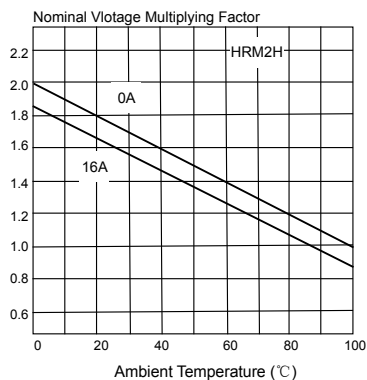
Coil Temperature Rise



Operating Range



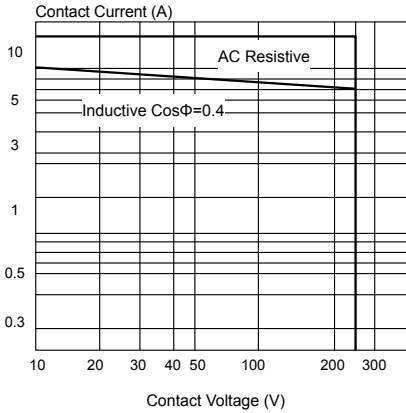
Operating Range



**REFERENCE DATA**

---

**Maximum Switching Power**



**Life Curves**

