



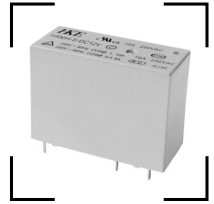
POWER RELAY

Safety Approval

- NO. 50125647 **CEC** NO. CQC09002035018
- US NO. E164730 **UL** NO. 1063016(LR 109368)
- NO. 40023201 **VDE**

Features

- General purpose power relay
- Dimension: 29.0×12.6×20.8(mm)
- TV-5 rating
- Creepage distance: 8mm



ORDERING INFORMATION

HRM H - S - DC12V - A - T

Model	Coil Sensitivity	Enclosure	Coil Voltage	Contact Form	Contact Rating
	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	Blank: 10A 250VAC T: 16A 250VAC (T - 1 Form A only)

Remark: T - High capacity, available only in 1 Form A

SPECIFICATION

CONTACT DATA

Contact Form	1 Form A, 1 Form C	
Contact Material	Ag Alloy	
Contact Rating	Resistive: 10A 250VAC/30VDC TV Rating: TV-5 Inductive: 5A 240VAC(COSΦ=0.4) Resistive: 16A 250VAC(T)	
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 50,000 operations (COSΦ=0.4, LR=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 13.00g	

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	10A 250VAC	Ambient Temperature: 40°C
				TV-5 250VAC	Ambient Temperature: 40°C



SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remark
CSA 1063016 (LR 109368)	A	0.72W/0.54W	3 - 48VDC	10A 250VAC	—
VDE 40023201	A	0.72W	3 - 48VDC	10A 250VAC	Ambient Temperature: 55°C
	A	0.54W	3 - 48VDC	10A 250VAC	Ambient Temperature: 70°C
TUV 50125647-0001	A/C	0.72W/0.54W	3 - 48VDC	10A 250VAC	Ambient Temperature: 85°C
				Inductive: 5A 250VAC	
TUV 50125647-0002 (EN 60730-1)	A/C	0.72W/0.54W	3 - 48VDC	10(2)A 250VAC	Ambient Temperature: 85°C
				10(5)A 250VAC	
CQC09002035018 (GB/T 21711.1-2008)	A/C	0.72W/0.54W	3 - 48VDC	10A 250VAC	Ambient Temperature: 85°C

Specifications subject to change without notice

COIL DATA

Ambient Temperature: 23°C

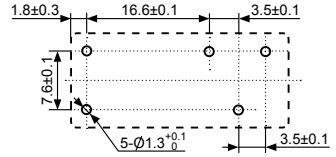
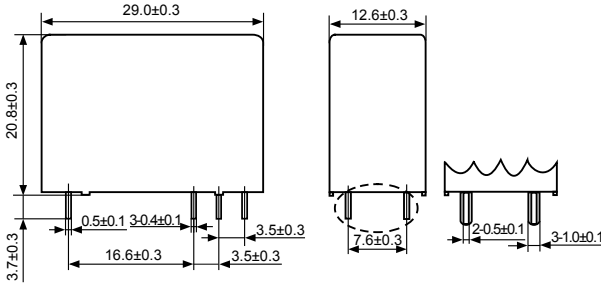
Model	Nominal Voltage VDC	Coil Resistance Ω ±10%	Operate Voltage ≤VDC	Release Voltage ≥VDC	Coil Power mW
HRM-S-DC3V	3	12.5	2.25	0.3	720
HRM-S-DC5V	5	35	3.75	0.5	
HRM-S-DC6V	6	50	4.50	0.6	
HRM-S-DC9V	9	112.5	6.75	0.9	
HRM-S-DC12V	12	200	9.0	1.2	
HRM-S-DC24V	24	800	18.0	2.4	
HRM-S-DC48V	48	3200	36.0	4.8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

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

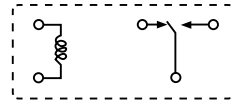
HRM C

Outline

Mounting Hole Layout
(Bottom View)



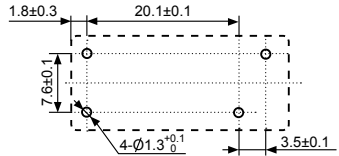
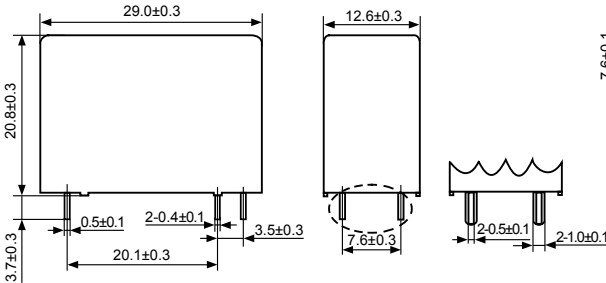
Wiring Diagram
(Bottom View)



HRMA

Outline

Mounting Hole Layout
(Bottom View)



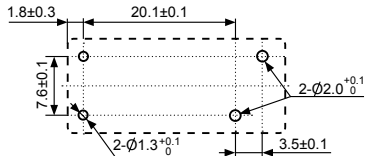
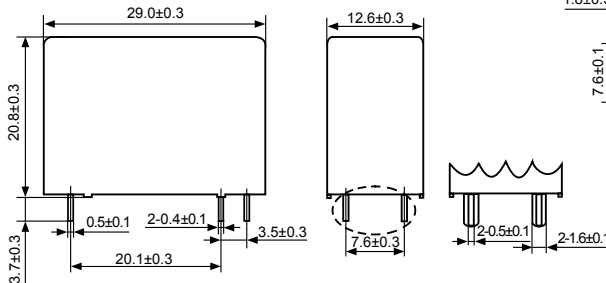
Wiring Diagram
(Bottom View)



HRM -T

Outline

Mounting Hole Layout
(Bottom View)

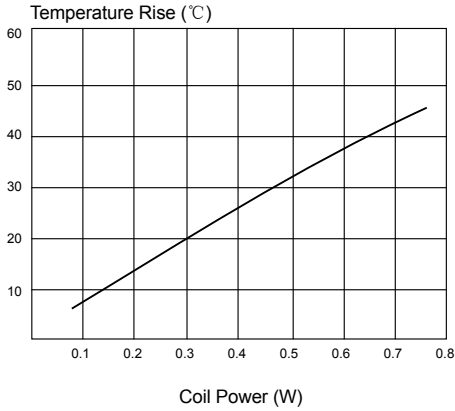


Wiring Diagram
(Bottom View)

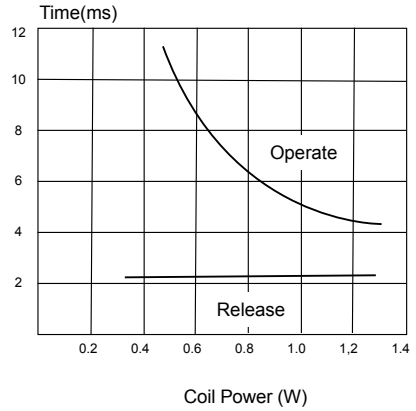


REFERENCE DATA

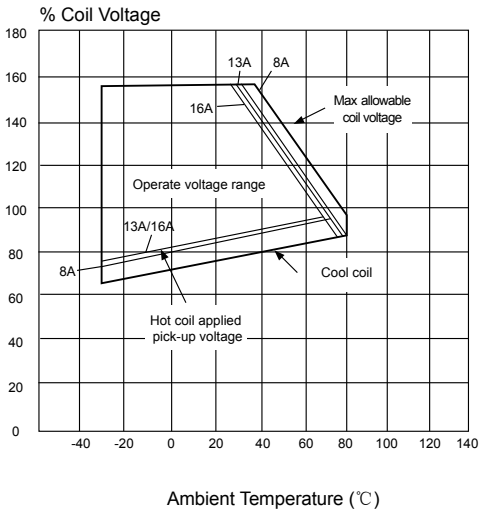
Coil Temperature Rise



Timing



Operating Range



Life Curves

