

**HRM3**

POWER RELAY

**Features**

- Available in sealed and unsealed versions  
Sealed: 24.6×10.6×25.0(mm)  
Unsealed: 24.0×10.0×25.0(mm)
- High sensitivity type with power consumption of 250mW
- 1 form A contact configuration
- Comply with TV-5 standards required for TV and audio power supplies

**Safety Approval**

 NO.CQC08001026616   
  NO.1063016(LR 109368)  
 us NO.E164730   
 NO.40018308   
 NO.50125648

**Relay Picture****ORDERING INFORMATION****HRM3** [H] - [S] - [DC12V]

Model	Coil Sensitivity	Enclosure	Coil Voltage
	H - High Sensitivity (250mW) L - High Sensitivity (150mW) Blank - Standard (540mW)	S - Sealed Plastic Cover Blank - Unsealed Plastic Cover	DC3V, DC5V, DC6V, DC9V DC12V, DC24V, DC48V

Remark: 1. Available in 1 Form A only

**SPECIFICATION****CONTACT DATA**

Contact Form	1 Form A	
Contact Material	Ag Alloy	
Contact Rating	10A 250VAC/30VDC, TV-5	
Contact Resistance	Max. 100mΩ (6VDC 1A)	
Load	Max. Switching Voltage	250VAC/30VDC
	Max. Switching Current	10A
	Max. Switching Power	2,500VA, 300W
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations
	Mechanical	2,000,000 operations

**GENERAL DATA**

Insulation Resistance		Min. 1000MΩ 500VDC
Dielectric Strength	Between open contacts	1,000VAC, 1min
	Between coil and contacts	4,000VAC, 1min
Sure Strength		10,000VAC
Operate Time		Max. 15ms
Release Time		Max. 8ms
Operating Temperature		-40~+70℃
Humidity		35~95%RH, +40℃
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 10.0g

**COIL DATA**

Nominal Coil Power	150mW, 250mW, 540mW
--------------------	---------------------

**SAFETY APPROVAL**

Note: Data shown are of initial value

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
UL E164730	A	0.54W/0.25W	3 - 48VDC	10A 250VAC/30VDC	—
				TV-8 125VAC	
	A	0.15W	3 - 48VDC	5A 250VAC/30VDC	—
				TV-5 125VAC	
CQC 08001026616	A	0.54W/0.25W	3 - 48VDC	10A 250VAC	Ambient Temperature: 85℃

ISO9001、ISO/TS16949、ISO14001 Approved



**SAFETY APPROVAL**

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
CSA 1063016(LR 109368)	A	0.54W/0.25W	3-48VDC	10A 250VAC/30VDC	—
VDE 40018308	A	0.54W/0.25W	3,5,6,9,12,24,48VDC	10A 250VAC/30VDC	Ambient Temperature: 70°C
		0.54W	5,10,18,12VDC	5A 250VAC	
		0.25W	5,10,12VDC	8A 250VAC	
TUV 50125648-0001	A	0.54W/0.25W	3-48VDC	10A 250VAC	Ambient Temperature: 85°C
TUV 50125648-0002 (EN 60730-1)	A	0.54W/0.25W	3-48VDC	10(2)A 250VAC	Ambient Temperature: 85°C
				10(5)A 250VAC	

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
HRM3-(S)-DC3V	3	17	2.25	0.3	540
HRM3-(S)-DC5V	5	47	3.75	0.5	
HRM3-(S)-DC6V	6	67	4.50	0.6	
HRM3-(S)-DC9V	9	150	6.75	0.9	
HRM3-(S)-DC12V	12	267	9.0	1.2	
HRM3-(S)-DC24V	24	1067	18.0	2.4	
HRM3-(S)-DC48V	48	4267	36.0	4.8	
HRM3H-(S)-DC3V	3	36	2.25	0.3	250
HRM3H-(S)-DC5V	5	100	3.75	0.5	
HRM3H-(S)-DC6V	6	144	4.50	0.6	
HRM3H-(S)-DC9V	9	324	6.75	0.9	
HRM3H-(S)-DC12V	12	576	9.0	1.2	
HRM3H-(S)-DC24V	24	2304	18.0	2.4	
HRM3H-(S)-DC48V	48	9216	36.0	4.8	
HRM3L-(S)-DC3V	3	60	2.25	0.3	150
HRM3L-(S)-DC5V	5	167	3.75	0.5	
HRM3L-(S)-DC6V	6	240	4.5	0.6	
HRM3L-(S)-DC9V	9	540	6.75	0.9	
HRM3L-(S)-DC12V	12	960	9.0	1.2	
HRM3L-(S)-DC24V	24	3840	18.0	2.4	

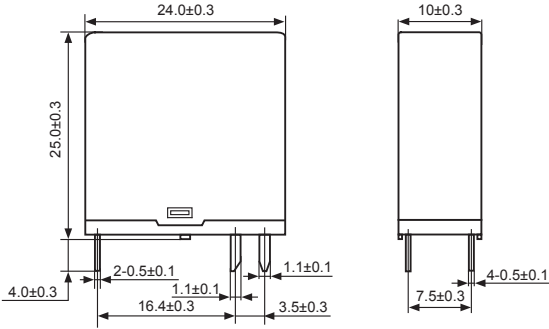
# HRM3

POWER RELAY

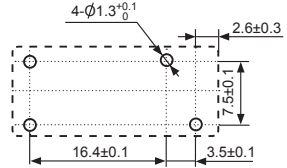
## OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

Unsealed type

Outline



Mounting Hole Layout  
(Bottom View)

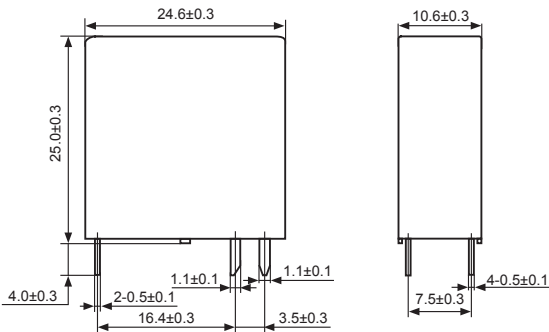


Wiring Diagram  
(Bottom View)

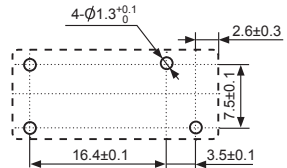


Sealed type

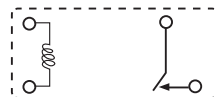
Outline



Mounting Hole Layout  
(Bottom View)

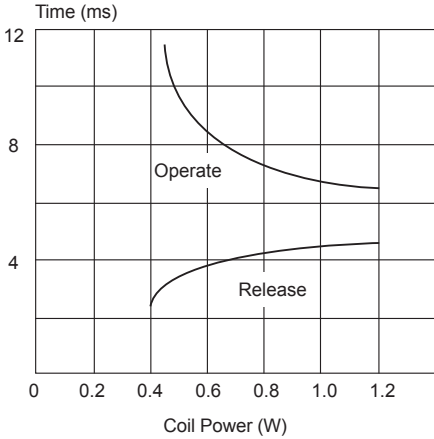


Wiring Diagram  
(Bottom View)

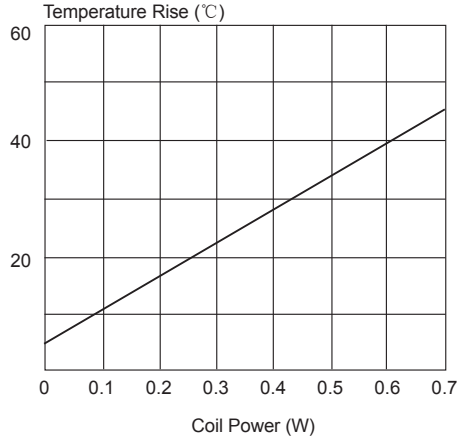


**REFERENCE DATA**

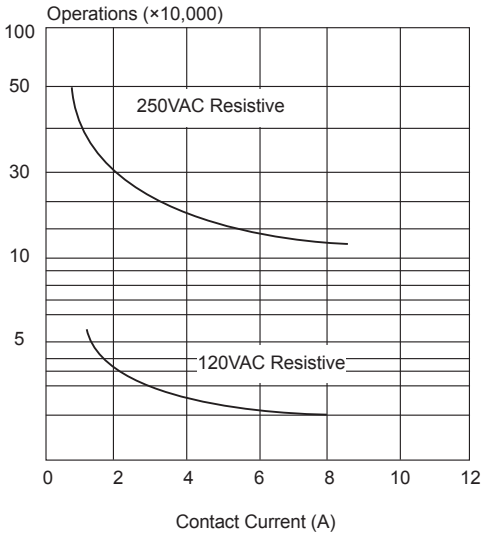
Time Curve



Coil Temperature Rise



Life Curves



Maximum Switching Power

