

HRS4

POWER RELAY

Features

- Miniature relay
Dimensions: 19.0×15.5×15.8(mm)
- Contact: 1 Form A, 1 Form B, 1 Form C
- TV-5 rating
- UL Class F insulation

Safety Approval

NO.1063016(LR 109368)



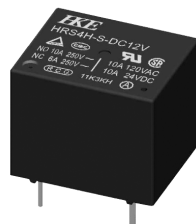
NO.50116136



US NO.E164730



NO.CQC08002027614

Relay Picture**ORDERING INFORMATION****HRS4** [H] - [S] - [DC12V] - [A]

Model	Coil Sensitivity	Enclosure	Coil Voltage	Contact Form
	H - High Sensitivity (360mW) Blank - Standard (450mW)	S - Plastic Sealed Type	DC3V, DC5V, DC6V, DC9V, DC12V, DC24V, DC48V	A - 1 Form A B - 1 Form B C - 1 Form C

SPECIFICATION**CONTACT DATA**

Contact Form	1 Form A, 1 Form B, 1 Form C	
Contact Material	Ag Alloy	
Contact Rating	A: 15A 125VAC, 10A 250VAC C: NO: 10A 250VAC/24VDC NC: 6A 250VAC/24VDC TV-5 125VAC	
Contact Resistance	Max. 100mΩ (6VDC 1A)	
Load	Max. Switching Voltage	250VAC/28VDC
	Max. Switching Current	15A
	Max. Switching Power	2,500VA, 280W
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations
	Mechanical	10,000,000 operations

COIL DATA

Nominal Coil Power	360mW, 450mW
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SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
CQC 08002027614 (GB/T 21711.1-2008)	A	0.36W/0.45W	3-48VDC	10A 250VAC	Ambient Temperature: 85℃
				15A 250VAC	Ambient Temperature: 65℃
				16A 250VAC	Ambient Temperature: 40℃
	B	0.36W/0.45W	3-48VDC	6A 250VAC	Ambient Temperature: 85℃
	C	0.36W/0.45W	3-48VDC	NO/NC:10A/6A 250VAC	Ambient Temperature: 85℃

GENERAL DATA

Insulation Resistance	Min. 1000MΩ 500VDC	
Dielectric Strength	Between open contacts	750VAC, 1 min
	Between coil and contacts	1,500VAC, 1min
Operate Time	Max. 10ms	
Release Time	Max. 5ms	
Operating Temperature	-40℃ to +85℃	
Humidity	35~95%RH, +40℃	
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 10.0g	

Note:Data shown are of initial value

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SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
TUV 50116136	A/B/C	0.36W/0.45W	3-48VDC	NO/NC:10A/6A 250VAC	Ambient Temperature: 105°C
TUV50116136 (EN 60730-1)				NO:10A(2)A 250VAC NC:6(1)A 250VAC	Ambient Temperature: 105°C
TUV 50116136-005	A	0.36W	3-48VDC	15A 250VAC	Ambient Temperature: 65°C
UL E164730	A	0.36W/0.45W	3-48VDC	15A 125VAC	Class F Insulation Ambient Temperature: 65°C
		0.36W	3-48VDC	16A 125VAC	Class F Insulation Ambient Temperature: 105°C
	C	0.36W/0.45W	3-48VDC	10A 120VAC/28VDC	Class F Insulation Ambient Temperature: 105°C
				10A 277VAC	Class F Insulation Ambient Temperature: 105°C
				TV-5 125VAC	Class F Insulation Ambient Temperature: 105°C
	A/C	0.36W/0.45W	3-48VDC	10A 250VAC	Ambient Temperature: 105°C
1/2HP 120VAC 1/2HP 240VAC				NLDX Category (N.O.Contact side)	
CSA 1063016 (LR 109368)	A/C	0.36W/0.45W	3-48VDC	10A 120VAC/24VDC	—
Explosion-proof Certificate CNEEx16.3131U	A	0.36W	12VDC	10A 250VAC	Mark: Ex nC IIC Gc

Specifications subject to change without notice

COIL DATA

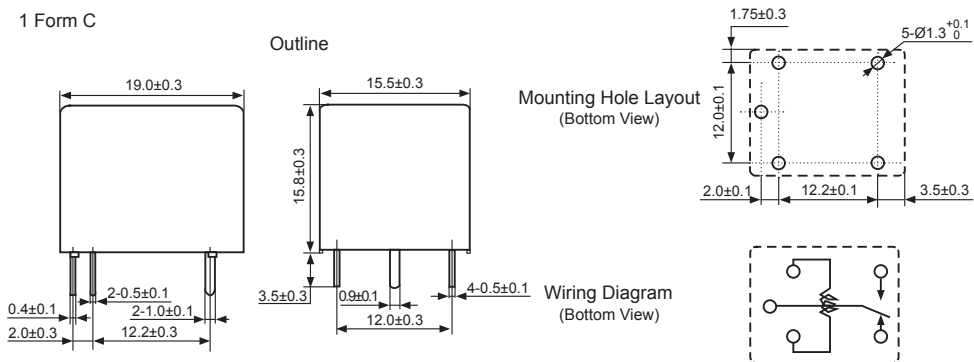
Ambient Temperature: 23°C

Model	Nominal Voltage VDC	Coil Resistance Ω +/-10%	Operate Voltage \leq VDC	Release Voltage \geq VDC	Coil Power mW
HRS4-S-DC3V	3	20	2.1	0.3	450
HRS4-S-DC5V	5	55	3.5	0.5	
HRS4-S-DC6V	6	80	4.2	0.6	
HRS4-S-DC9V	9	180	6.3	0.9	
HRS4-S-DC12V	12	320	8.4	1.2	
HRS4-S-DC24V	24	1280	16.8	2.4	
HRS4-S-DC48V	48	5120	33.6	4.8	360
HRS4H-S-DC3V	3	25	2.1	0.3	
HRS4H-S-DC5V	5	70	3.5	0.5	
HRS4H-S-DC6V	6	100	4.2	0.6	
HRS4H-S-DC9V	9	225	6.3	0.9	
HRS4H-S-DC12V	12	400	8.4	1.2	
HRS4H-S-DC24V	24	1600	16.8	2.4	360
HRS4H-S-DC48V	48	6400	33.6	4.8	

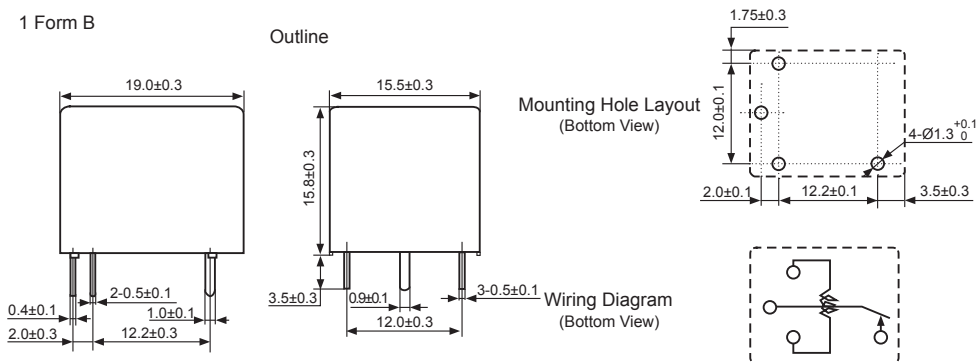
ISO9001, ISO/TS16949, ISO14001 Approved

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

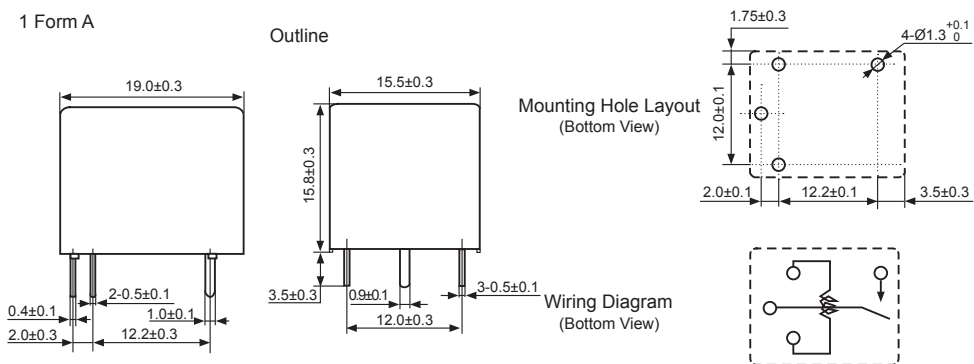
1 Form C



1 Form B



1 Form A

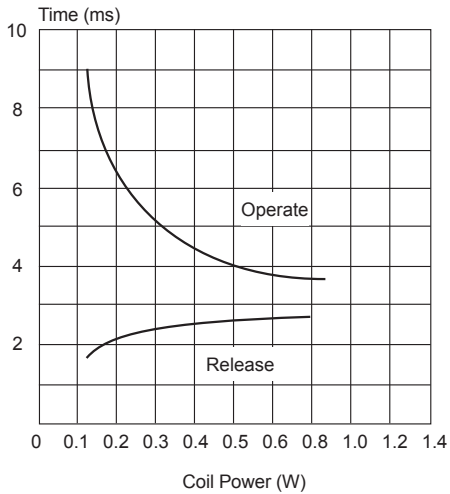


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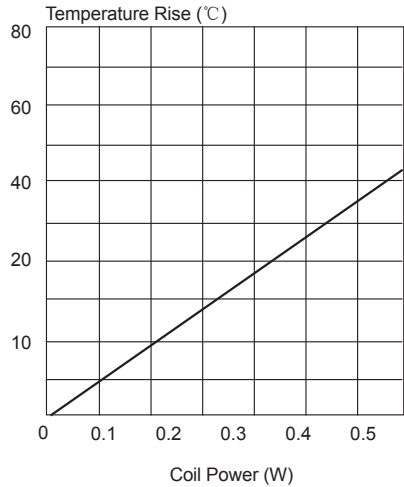
POWER RELAY

REFERENCE DATA

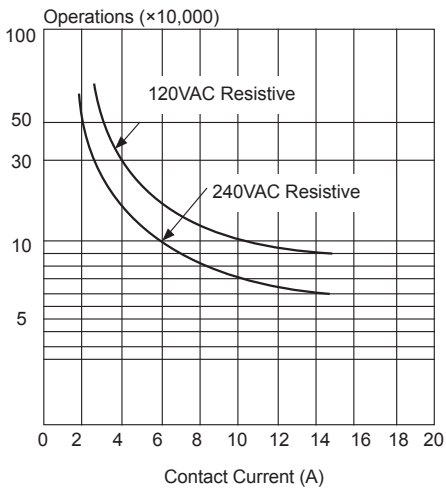
Time Curve



Coil Temperature Rise



Life Curves



Maximum Switching Power

