

**HRS3FN**

POWER RELAY

**Features**

- Microminiature relay
- Dimensions: 18.2×10.2×15.5(mm)
- 10A switching capacity
- Contact: 1 Form A
- Reinforced insulation between coil and contact

**Safety Approval**

NO.CQC12002076143



NO.50223752



US NO.E164730

**Relay Picture****ORDERING INFORMATION****HRS3FN** H - S - DC12V - A

Model	Coil Sensitivity	Enclosure	Coil Voltage	Contact Form
	H - High Sensitivity (200mW) Blank - Standard (450mW)	S - Plastic Sealed Type	DC5V, DC6V DC9V, DC12V, DC24V	A - 1 Form A

**SPECIFICATION****CONTACT DATA**

Contact Form	1 Form A	
Contact Material	Ag Alloy	
Contact Rating	Resistive: 10A 250VAC Horsepower: 1/3HP 240VAC(450mW) 1/4HP 240VAC(450mW)	
Contact Resistance	Max. 100mΩ(6VDC 1A)	
Load	Max. Switching Voltage	277VAC/30VDC
	Max. Switching Current	10A
	Max. Switching Power	2500VA, 300W
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations
	Mechanical	1,000,000 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. 10ms	
Release Time	Max. 5ms	
Operating Temperature	-40°C to +85°C	
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 6.0g	

Note:Data shown are of initial value

**COIL DATA**

Nominal Coil Power	200mW, 450mW
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## SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remarks
TUV 50223752	A	0.45W/0.2W	3-24VDC	10A 250VAC	Class F Insulation Ambient Temperature: 85°C
CQC 12002076143	A	0.45W/0.2W	3-24VDC	10A 250VAC	Class F Insulation Ambient Temperature: 85°C
UL E164730	A	0.45W/0.2W	5-24VDC	10A 250VAC	Ambient Temperature: 85°C
		0.45W	5-24VDC	1/3HP 240VAC	Ambient Temperature: 65°C
		0.45W/0.2W	5-24VDC	1/4HP 240VAC	Ambient Temperature: 65°C
Explosion-proof Certificate CNEEx16.3129U	A	0.45W	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 $\Omega \pm 10\%$	Operate Voltage $\leq$ VDC	Release Voltage $\geq$ VDC	Coil Power mW
HRS3FN-S-DC5V-A	5	55.6	3.5	0.5	450
HRS3FN-S-DC6V-A	6	80	4.2	0.6	
HRS3FN-S-DC9V-A	9	180	6.3	0.9	
HRS3FN-S-DC12V-A	12	320	8.4	1.2	
HRS3FN-S-DC24V-A	24	1280	16.8	2.4	
HRS3FNH-S-DC5V-A	5	125	3.75	0.5	200
HRS3FNH-S-DC6V-A	6	180	4.5	0.6	
HRS3FNH-S-DC9V-A	9	405	6.75	0.9	
HRS3FNH-S-DC12V-A	12	720	9.0	1.2	
HRS3FNH-S-DC24V-A	24	2880	18.0	2.4	

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

