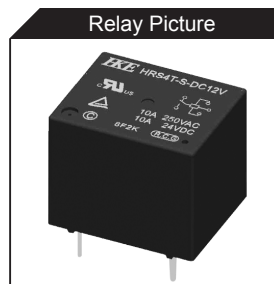




| Features  |             |
|---|-------------|
| <ul style="list-style-type: none"> <li>Miniature relay</li> <li>Dimensions: 20.0×16.3×20.2(mm)</li> <li>Contact: 1 Form A, 1 Form B, 1 Form C</li> <li>UL Class F insulation</li> </ul> |             |
| Safety Approval   |             |
| NO.E164730  | NO.50116136 |
| NO.CQC08002027614   |             |



## ORDERING INFORMATION

| HRS4T [H] - [S] - DC12V - [A] |  |                         |  |  |
|-------------------------------|--|-------------------------|--|--|
| Model                         | Coil Sensitivity   | Enclosure               | Coil Voltage                                   | Contact Form                                 |
|                               | H - High Sensitivity (360mW)<br>Blank - Standard (450mW) | S - Plastic Sealed Type | DC3V, DC5V, DC6V, DC9V,<br>DC12V, DC24V, DC48V | A - 1 Form A<br>B - 1 Form B<br>C - 1 Form C |

## SPECIFICATION

### CONTACT DATA

|                    |                              |                                 |
|--------------------|------------------------------|---------------------------------|
| Contact Form       | 1 Form A, 1 Form B, 1 Form C |                                 |
| Contact Material   | Ag Alloy                     |                                 |
| Contact Rating     | 10A 250VAC/24VDC             |                                 |
| 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 (NO contact) |
|                    | Mechanical                   | 10,000,000 operations           |

### COIL DATA

|                    |              |
|--------------------|--------------|
| Nominal Coil Power | 360mW, 450mW |
|--------------------|--------------|

### GENERAL DATA

|                       |                           |                                 |
|-----------------------|---------------------------|---------------------------------|
| Insulation Resistance | Min. 1000MΩ 500VDC        |                                 |
| Dielectric Strength   | Between open contacts     | 1,000VAC, 1 min                 |
|                       | Between coil and contacts | 1,500VAC, 1 min                 |
| 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 12.0g       |                                 |

Note: Data shown are of initial value

## SAFETY APPROVAL

| File Number                            | Contact Form | Power Consumption | Coil Voltage | Contact Rating       | Remarks   |
|--|--------------|-------------------|--------------|----------------------|---|
| CQC 08002027614<br>(GB/T 21711.1-2008) | A            | 0.36W/0.45W       | 3 - 48VDC    | 10A 250VAC           | Ambient Temperature: 85°C                       |
|  | B            | 0.36W/0.45W       | 3 - 48VDC    | 6A 250VAC            |   |
|  | C            | 0.36W/0.45W       | 3 - 48VDC    | NO/NC: 10A/6A 250VAC |   |
| UL E164730                             | A/C          | 0.36W/0.45W       | 3 - 48VDC    | 10A 250VAC/30VDC     | Class F Insulation<br>Ambient Temperature: 85°C |
| TUV 50116136                           | A/B/C        | 0.36W/0.45W       | 3 - 48VDC    | 10A 250VAC/24VDC     | Ambient Temperature: 85°C                       |
| TUV50116136(EN 60730-1)                | A/B/C        |                   |              | 10(2)A 250VAC        | Ambient Temperature: 85°C                       |

Specifications subject to change without notice

ISO9001、ISO/TS16949、ISO14001 Approved

**EKE** HRS4T-75

# HRS4T

POWER RELAY

## COIL DATA

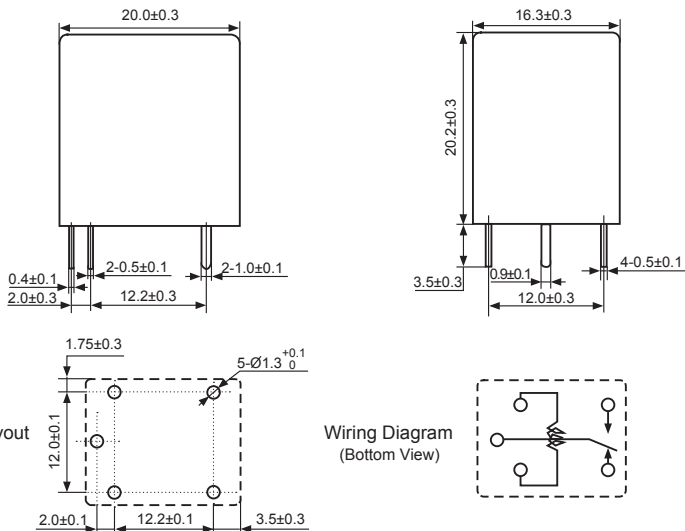
Ambient Temperature: 23°C

| Model          | Nominal Voltage VDC | Coil Resistance $\Omega \pm 10\%$ | Operate Voltage $\leq$ VDC | Release Voltage $\geq$ VDC | Coil Power mW |
|----------------|---------------------|-----------------------------------|----------------------------|----------------------------|---------------|
| HRS4T-S-DC3V   | 3                   | 20                                | 2.1                        | 0.3                        | 450           |
| HRS4T-S-DC5V   | 5                   | 55                                | 3.5                        | 0.5                        |               |
| HRS4T-S-DC6V   | 6                   | 80                                | 4.2                        | 0.6                        |               |
| HRS4T-S-DC9V   | 9                   | 180                               | 6.3                        | 0.9                        |               |
| HRS4T-S-DC12V  | 12                  | 320                               | 8.4                        | 1.2                        |               |
| HRS4T-S-DC24V  | 24                  | 1280                              | 16.8                       | 2.4                        |               |
| HRS4T-S-DC48V  | 48                  | 5120                              | 33.6                       | 4.8                        |               |
| HRS4TH-S-DC3V  | 3                   | 25                                | 2.1                        | 0.3                        | 360           |
| HRS4TH-S-DC5V  | 5                   | 70                                | 3.5                        | 0.5                        |               |
| HRS4TH-S-DC6V  | 6                   | 100                               | 4.2                        | 0.6                        |               |
| HRS4TH-S-DC9V  | 9                   | 225                               | 6.3                        | 0.9                        |               |
| HRS4TH-S-DC12V | 12                  | 400                               | 8.4                        | 1.2                        |               |
| HRS4TH-S-DC24V | 24                  | 1600                              | 16.8                       | 2.4                        |               |
| HRS4TH-S-DC48V | 48                  | 6400                              | 33.6                       | 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

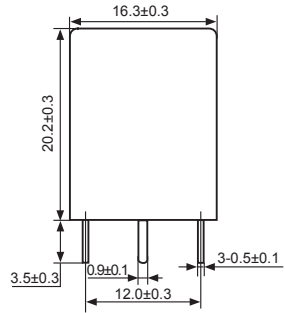
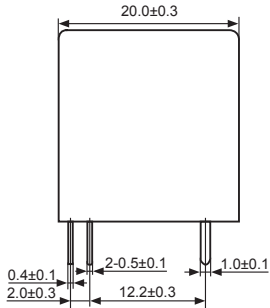
# HRS4T

POWER RELAY

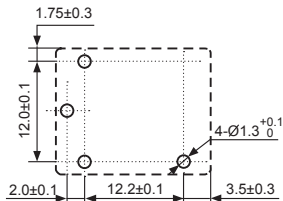
## OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

1 Form B

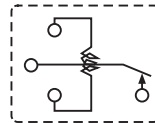
Outline



Mounting Hole Layout  
(Bottom View)

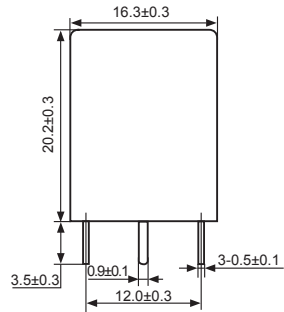
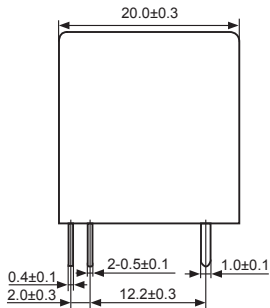


Wiring Diagram  
(Bottom View)

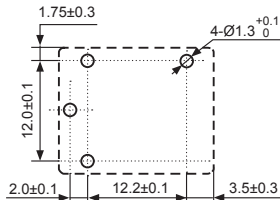


1 Form A

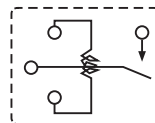
Outline



Mounting Hole Layout  
(Bottom View)

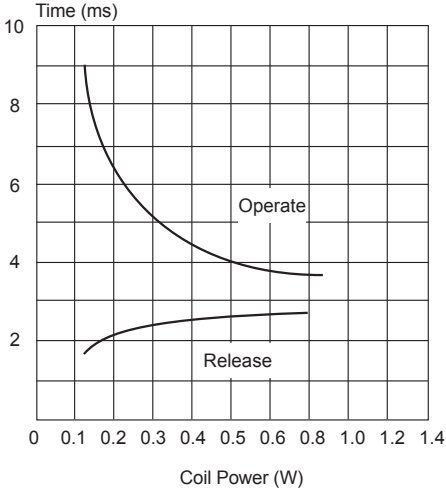


Wiring Diagram  
(Bottom View)

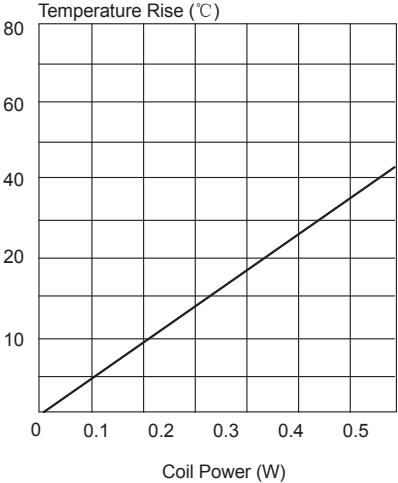


REFERENCE DATA

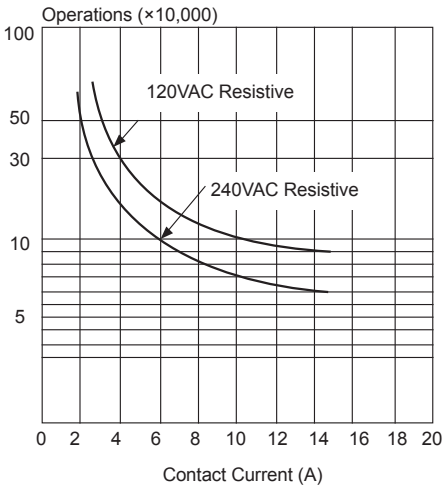
Time Curve



Coil Temperature Rise



Life Curves



Maximum Switching Power

