


RoHS Compliant

CIT RELAY & SWITCH™
Division of Circuit Interruption Technology, Inc.

# A4

16.9 x 14.5 (29.7) x 19.5 mm

## Features

- Low coil power consumption
- Switching current up to 20A with small size and light weight
- Suitable for household appliances, automotive applications
- Dual relay available

## Contact Data*

| | |
|---|---|
| Contact Arrangement | 1A & 1U = SPST N.O.<br>1C & 1W = SPDT<br>2A & 2U = (2) SPST N.O.<br>2C & 2W = (2) SPDT |
| Contact Rating | 1A & 1C = 10A @ 120VAC, 28VDC & 20A @ 14VDC<br>2A & 2C = 10A @ 120VAC, 28VDC & 20A @ 14VDC<br>1U & 1W = 2x10A @ 120VAC, 28VDC<br>= 2x20A @ 14VDC<br>2U & 2W = 2x10A @ 120VAC, 28VDC<br>= 2x20A @ 14VDC |

| | |
|---|---|
| Contact Resistance | < 30 milliohms initial |
| Contact Material | $AgSnO_2$ |
| Max Switching Power | 1A & 1C : 280W<br>1U & 1W : 2x280W |
| Max Switching Voltage | 380VAC, 75VDC |
| Max Switching Current | 20A |

## Coil Data*

| Coil Voltage VDC | | Coil Resistance Ω +/- 10% | Pick Up Voltage VDC (max) 70% of rated voltage | Release Voltage VDC (min) 10% of rated voltage | Coil Power W | Operate Time ms | Release Time ms |
|---|---|---|---|---|---|---|---|
| Rated | Max | | | | | | |
| 12 | 15.6 | 145 | 8.40 | 1.2 | 1.00 | 15 | 5 |
| 24 | 31.2 | 576 | 16.80 | 2.4 | | | |

## General Data*

| | |
|---|---|
| Electrical Life @ rated load | 100K cycles, average |
| Mechanical Life | 10M cycles, average |
| Insulation Resistance | 100M Ω min. @ 500VDC initial |
| Dielectric Strength, Coil to Contact<br>Contact to Contact | 1500V rms min. @ sea level initial<br>750V rms min. @ sea level initial |
| Shock Resistance | $100 m/s^2$ for 11 ms |
| Vibration Resistance | 1.27mm double amplitude 10~40Hz |
| Terminal (Copper Alloy) Strength | 10N |
| Operating Temperature | -40ºC to +85ºC |
| Storage Temperature | -40ºC to +155ºC |
| Solderability | 260ºC for 5 s |
| Weight | 12g & 24g |

* *Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.*



*Dimensions shown in mm. Dimensions are shown for reference purposes only.*

*Specifications and availability subject to change without notice.*

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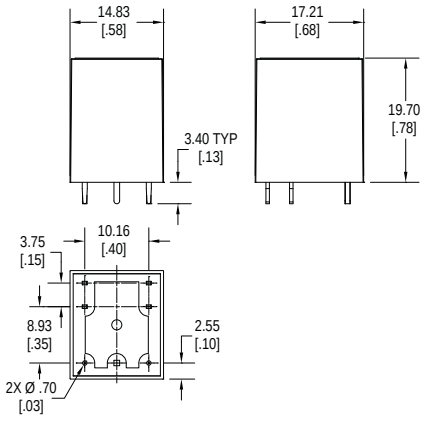
# A4

## Ordering Information

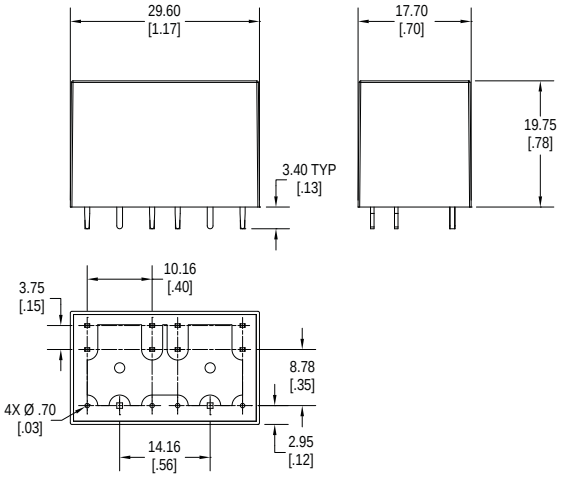
| | | | | |
|---|---|---|---|---|
| 1. Series | A4 | 1C | S | 12VDC |
| A4 | | | | |
| 2. Contact Arrangement<br>1A = SPST N.O. 2A = (2) SPST N.O.<br>1C = SPDT 2C = (2) SPDT<br>1U = SPST N.O. 2U = (2) SPST N.O.<br>1W = SPDT 2W = (2) SPDT | | | | |
| 3. Sealing Option<br>S = Sealed<br>C = Dust cover | | | | |
| 4. Coil Voltage<br>12VDC<br>24VDC | | | | |

## Dimensions

***Units = mm***



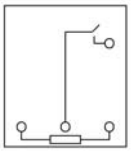

*Single Package*



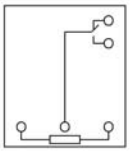

*Dual Package*

## Schematics & PC Layouts

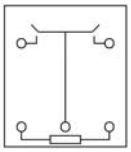
***Bottom Views***



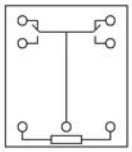
*1A*



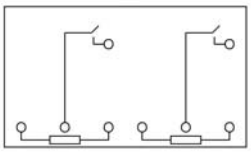
*1C*



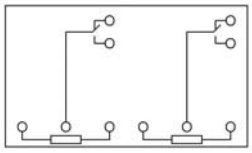
*1U*



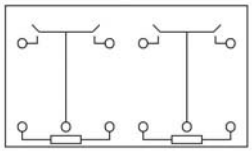
*1W*



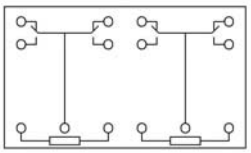
*2A*



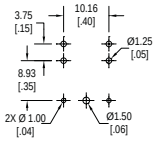
*2C*

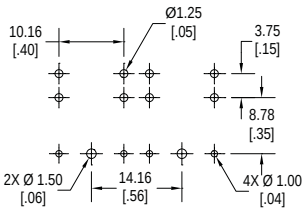


*2U*



*2W*






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