

FEATURES:

- Large switching capacity up to 80A
- Small size and light weight
- PCB pin and quick connect mounting available
- Suitable for automobile and lamp accessories
- QS-9000, ISO-9002 Certified Manufacturing



28.5 x 28.5 x 26.5 (40.0) mm

CONTACT DATA

| | | | |
|---------------------------|---|--------------------------------------|--------------------------------------|
| Contact Arrangement | 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT 1U = SPST N.O. (2 terminals) | | |
| Contact Rating | Contact Configuration | Standard | Heavy Duty |
| | 1A | 60A @ 14VDC | 80A @ 14VDC |
| | 1B | 40A @ 14VDC | 70A @ 14VDC |
| | 1C | 60A @ 14VDC N.O. 40A @ 14VDC N.C. | 80A @ 14VDC N.O. 70A @ 14VDC N.C. |
| | 1U | 2x25A @ 14VDC | 2x25A @ 14VDC |
| Contact Resistance | < 30 milliohms initial | | |
| Contact Material | AgSnO ₂ In ₂ O ₃ | | |
| Maximum Switching Power | 980W | | |
| Maximum Switching Voltage | 75VDC | | |
| Maximum Switching Current | 80A | | |

COIL DATA

| Coil Voltage VDC | | Coil Resistance $\Omega \pm 10\%$ | Pick Up Voltage VDC (max) | Release Voltage VDC (min) | Coil Power W | Operate Time ms | Release Time ms |
|---------------------|------|--------------------------------------|------------------------------|------------------------------|-----------------|--------------------|--------------------|
| Rated | Max. | 1.8W | 75% of rated voltage | 10% of rated voltage | | | |
| 6 | 7.8 | | 20 | 4.2 | 0.6 | 1.8 | 7 |
| 12 | 15.6 | 80 | 8.4 | 1.2 | | | |
| 24 | 31.2 | 320 | 16.8 | 2.4 | | | |

CAUTION:

1. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.
2. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

GENERAL DATA

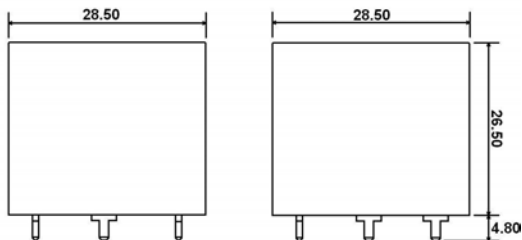
| | |
|--------------------------------------|-------------------------------------|
| Electrical Life @ rated load | 100K cycles, typical |
| Mechanical Life | 10M cycles, typical |
| Insulation Resistance | 100M Ω min @ 500VDC |
| Dielectric Strength, Coil to Contact | 500V rms min. @ sea level |
| Contact to Contact | 500V rms min. @ sea level |
| Shock Resistance | 147m/s ² for 11ms |
| Vibration Resistance | 1.5mm double amplitude 10-40Hz |
| Terminal (Copper Alloy) Strength | 8N (Quick Connect), 4N (PCB Pins) |
| Operating Temperature | -40 °C to + 85 °C |
| Storage Temperature | -40 °C to + 155 °C |
| Solderability | 230 °C \pm 2 °C for 10 \pm 0.5s |
| Weight | 46g |

Distributor: **Electro-Stock** www.electrostock.com Tel: 630-682-1542 Fax: 630-682-1562

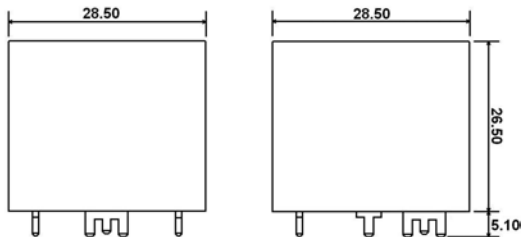
ORDERING INFORMATION

| | | | | | | |
|--|-------|----|---|---|-------|---|
| 1. Series: | CTA3F | 1C | S | P | 24VDC | 2 |
| CTA3 standard CTA3F with mounting flange CTA3M with metal bracket | | | | | | |
| 2. Contact Arrangement: | | | | | | |
| 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT 1U = SPST N.O. **Only available with standard contacts | | | | | | |
| 3. Sealing Options: | | | | | | |
| S = Sealed C = Dust Cover | | | | | | |
| 4. Termination Options: | | | | | | |
| P = PCB Pins Q = Quick Connect | | | | | | |
| 5. Coil Voltage: | | | | | | |
| 6VDC 12VDC 24VDC | | | | | | |
| 6. Contacts: | | | | | | |
| 1 = Standard 2 = Heavy Duty | | | | | | |
| 7. Coil Suppression: | | | | | | |
| Blank = Standard D = Diode (1N4005) Cathode on "86" terminal R = Resistor (680 Ohms) 2D = 2 diodes (1N4005) DR = Diode & Resistor (1N4005 & 680 Ohms) Cathode on "86" terminal | | | | | | |
| ** Consult factory if other values are needed. | | | | | | |

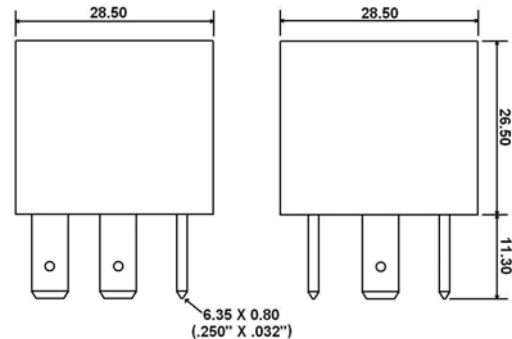
DIMENSIONS – CTA3 (Units = mm)



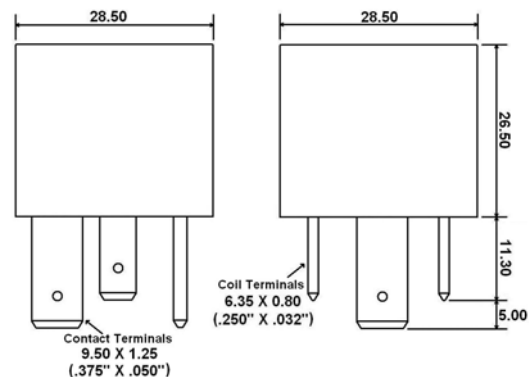
Standard contacts (1) with PC Pins



Heavy duty contacts (2) with PC Pins



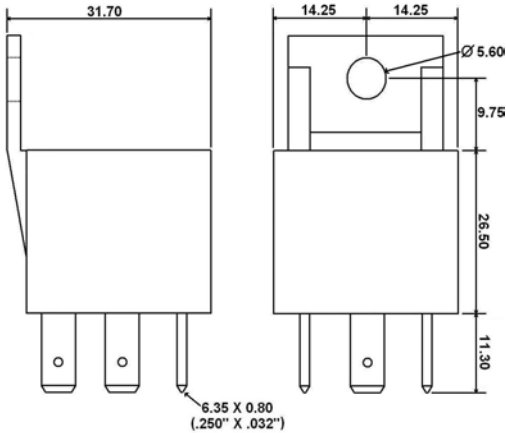
Standard contacts (1) with Quick Connects



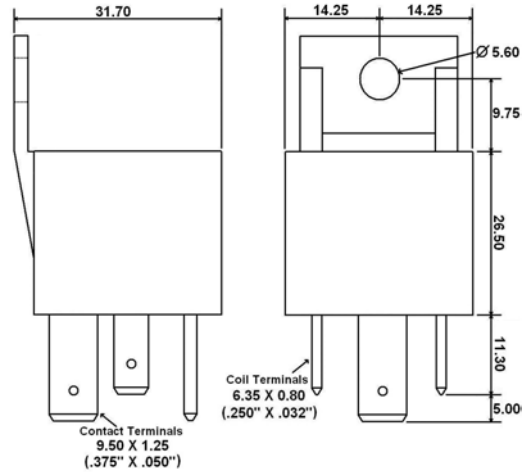
Heavy duty contacts (2) with Quick Connects

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DIMENSIONS – CTA3F (Units = mm)

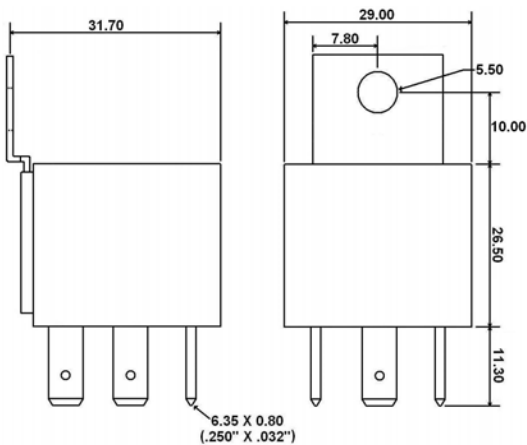


Standard contacts (1) with Quick Connects

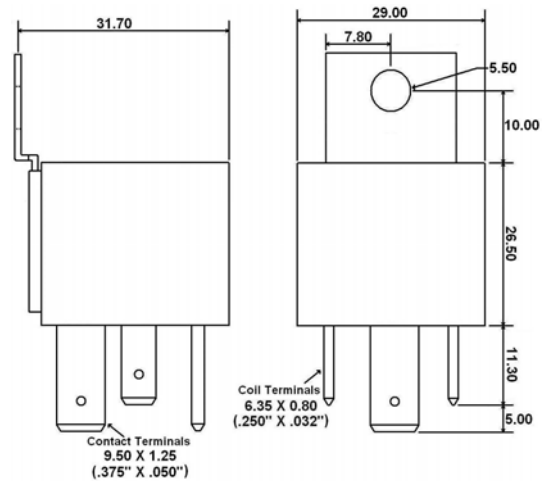


Heavy duty contacts (2) with Quick Connects

DIMENSIONS – CTA3M (Units = mm)

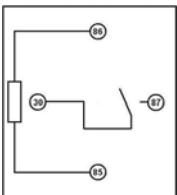


Standard contacts (1) with Quick Connects

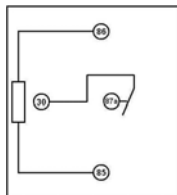


Heavy duty contacts (2) with Quick Connects

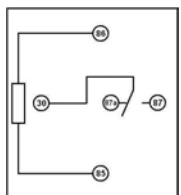
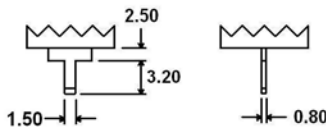
SCHEMATICS, PC PIN DIMENSIONS, & PC LAYOUTS (BOTTOM VIEWS)



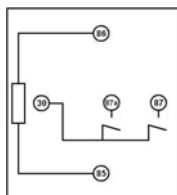
1A



1B



1C



1U

