



## Features

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

## Contact Data

Contact Arrangement	1A = SPST N.O. 1B = SPST N.C. 1C = SPDT 1U = SPST N.O. (2 terminals)		Contact Resistance	< 30 milliohms initial
Contact Rating	Standard	Heavy Duty	Contact Material	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>
1A	60A @ 14VDC	80A @ 14VDC	Max Switching Power	1120W
1B	40A @ 14VDC	70A @ 14VDC	Max Switching Voltage	75VDC
1C	60A @ 14VDC N.O. 40A @ 14VDC N.C.	80A @ 14VDC N.O. 70A @ 14VDC N.C.	Max Switching Current	80A
1U	2x25A @ 14VDC	2x25@ 14VDC		

## Coil Data

Coil Voltage VDC		Coil Resistance Ω +/- 10%	Pick Up Voltage VDC (max)	Release Voltage VDC (min)	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	1.8W	70% of rated voltage	10% of rated voltage	1.80	7	5
6	7.8		20	4.20			
12	15.6	80	8.40	1.2			
24	31.2	320	16.80	2.4			

## 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 <sup>2</sup> for 11 ms
Vibration Resistance	1.5mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength	8N (quick connect), 4N (PCB pins)
Operating Temperature	-40°C to +125°C
Storage Temperature	-40°C to +155°C
Solderability	260°C for 5 s
Weight	46g

### Caution

1. 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.

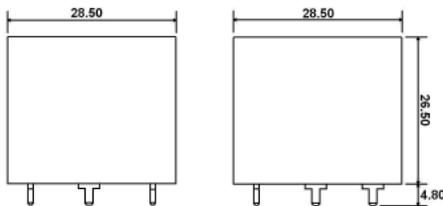
## Ordering Information

1. Series	A3F	1C	S	Q	24VDC	2
A3 standard A3F with mounting flange A3M 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 Option						
S = Sealed *Sealing only available with heavy duty contacts C = Dust Cover						
4. Termination						
P = PCB Pins Q = Quick Connect						
5. Coil Voltage						
6VDC 12VDC 24VDC						
6. Contacts						
1 = Standard *Sockets for these models can be found on the CIT Relay Socket catalog page 2 = Heavy Duty *We recommend the PR series socket from Custom Connector Corporation						
7. Coil Suppression						
Blank = Standard D = Diode (1N4005) Cathode on "86" terminal R = Resistor (180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 2VDC) 2D = 2 Diodes (1N4005) DR = Diode & Resistor Cathode on "86" terminal (1N4005 & 180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 2VDC) ** Consult factory if other values are needed						

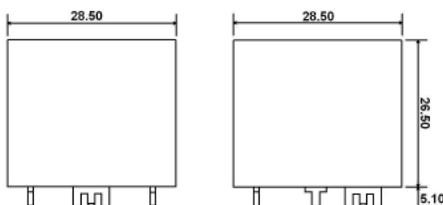
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## Dimensions A3

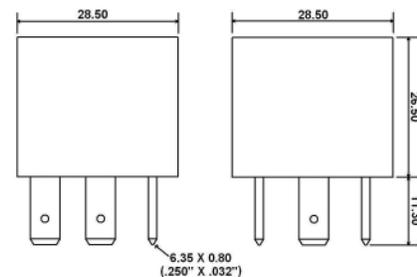
Units = mm



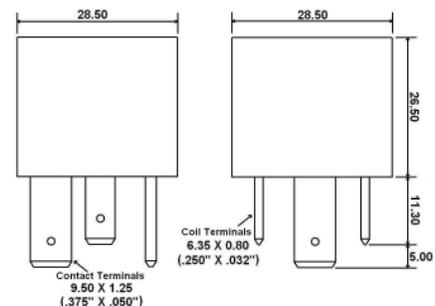
**Standard contacts (1) with PC Pin**



**Heavy Duty contacts (2) with PC Pins**



**Standard contacts (1) with Quick Connect**

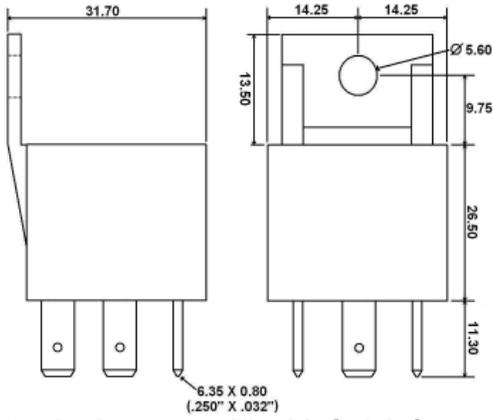


**Heavy Duty contacts (2) with Quick Connects**

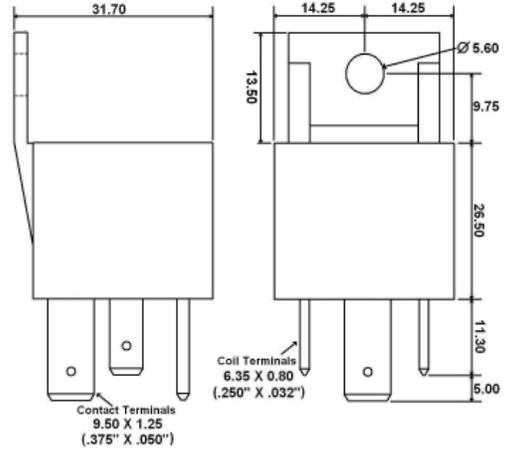
Dimensions shown in mm. Dimensions are shown for reference purposes only.

**Dimensions A3F**

Units = mm



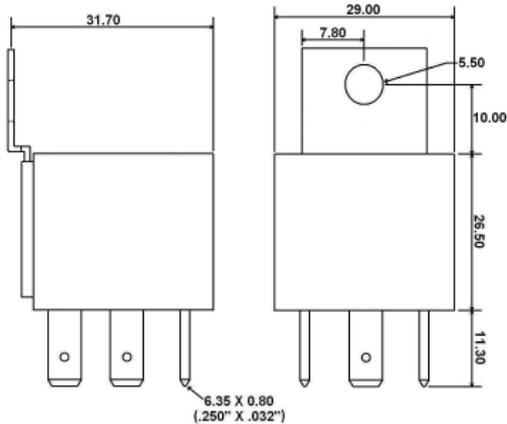
Standard contacts (1) with Quick Connect



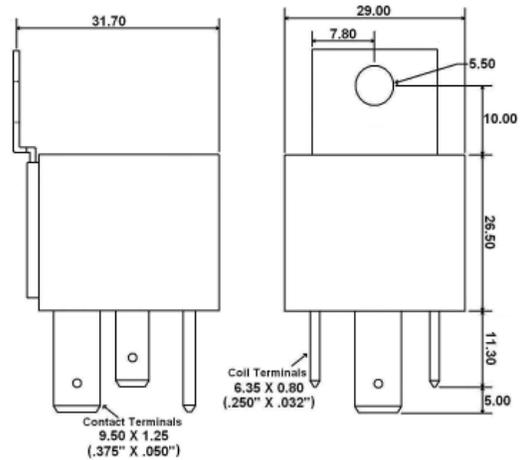
Heavy Duty contacts (2) with Quick Connects

**Dimensions A3M**

Units = mm



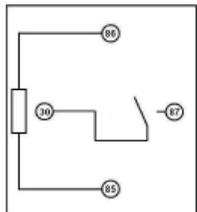
Standard contacts (1) with Quick Connect



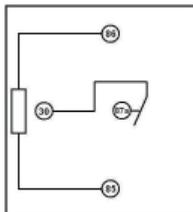
Heavy Duty contacts (2) with Quick Connects

**Schematics, PC Pin Dimensions & PC Layouts**

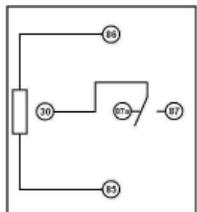
Bottom Views



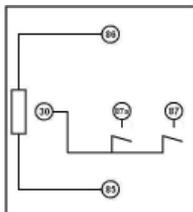
1A



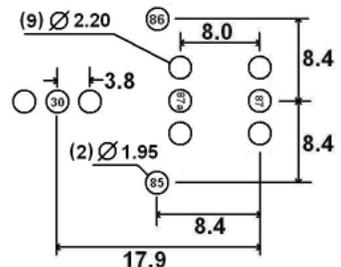
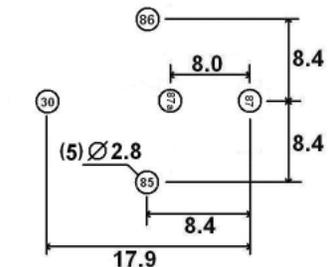
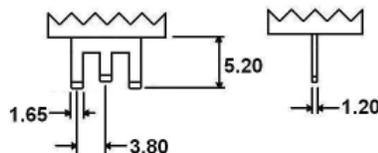
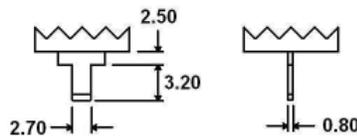
1B



1C



1U



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