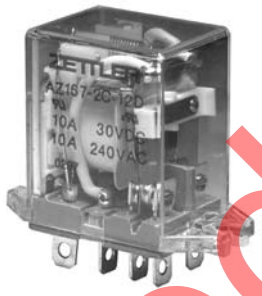
AZ167

MINIATURE POWER RELAY

FEATURES

- Bottom panel mount
- SPDT through 4PDT arrangement
- High switching capacity
- AC and DC coils
- CE marked
- UL, CUR file E43203
- TÜV pending



CONTACTS

Arrangement	SPDT (1 Form C) DPDT (2 Form C) 3PDT (3 Form C) 4PDT (4 Form C)
Ratings	See chart on page 2
UL, CUR	See chart on page 2
Minimum Load	5 VDC, 0.1 A
Material	-1CT contact Silver cadmium oxide -2C and 2CT contact Silver cerium -3C contact Silver cerium -4C contact Silver cerium
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	DC: 576 mW, 6 to 48 VDC 704 mW, 110 VDC AC: .768 VA
Max. Continuous Dissipation	DC: 1.2 W (110 V : 1.5 W) at 20°C (68°F) AC: 1.7 VA at 20°C (68°F)
Temperature	105°C (221°F)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than “Must Operate” value.
3. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 2 x 10^7 operations See UL/CUR ratings on page 2
Operate Time	25 msec max. at nominal coil voltage
Release Time	25 msec at nominal coil voltage (without suppression)
Dielectric Strength (at sea level for 1 min.)	1500 Vrms coil to contact 1000 Vrms contact to contact 1000 Vrms between contact sets
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	DC: > 10% of nominal coil voltage AC: > 30% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	 -55°C (-67°F) to 70°C (158°F) -55°C (-67°F) to 105°C (221°F)
Vibration	0.062" DA at 10–55 Hz
Shock	20g
Enclosure	Polycarbonate
Terminals	Plug-in
Max. Solder Temp.	250°C (482°F)
Max. Solder Time	5 seconds
Weight	37 grams

AMERICAN ZETTLER, INC. www.azettler.com
75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

AZ167

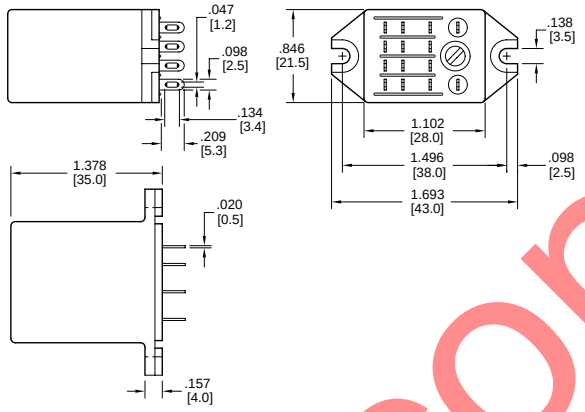
CONTACT RATINGS

Maximum Ratings	**SPDT Heavy duty, resistive load:** Max. Switched Power: 450 W, 3750 VA Max. Switched Current: 15 A Max. Switched Voltage: 30 VDC, 250 VAC **DPDT Heavy duty, resistive load:** Max. Switched Power: 300 W, 2500 VA Max. Switched Current: 10 A Max. Switched Voltage: 30 VDC, 250 VAC **DPDT Standard duty, resistive load:** Max. Switched Power: 210 W, 1750 VA Max. Switched Current: 7 A Max. Switched Voltage: 30 VDC, 250 VAC **3PDT, 4PDT, Standard duty, resistive load:** Max. Switched Power: 150 W, 1250 VA Max. Switched Current: 5 A Max. Switched Voltage: 30 VDC, 250 VAC

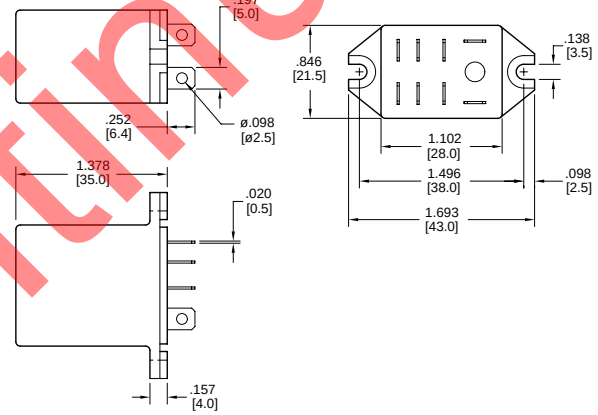
UL/CUR Ratings	**SPDT Heavy duty:** 15 A, 250 VAC 100k, Resistive 15 A, 30 VDC, 100k N.O., 30k N.C., Resistive **DPDT Heavy duty:** 10 A, 250 VAC, 100k, General use 10 A, 30 VDC, 100k, Resistive 1/3 HP, 120/240 VAC, 100k Motor load **DPDT, Standard duty:** 7A, 250 VAC, 100k Resistive 7A, 30 VDC, 100k, Resistive 3A, 240 VAC/30 VDC, 100k, General use **3PDT, 4PDT, Standard duty:** 5A, 250 VAC, 100k, Resistive 5A, 30 VDC, 100k, Resistive 3A, 240 VAC/30 VDC, 100k, General use

MECHANICAL DATA

AZ167-_C

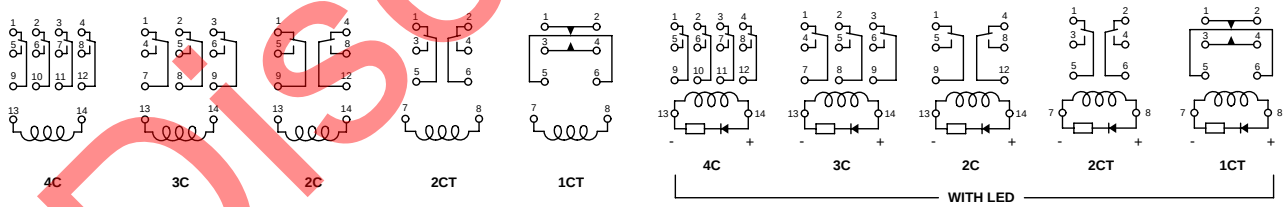


AZ167-_CT



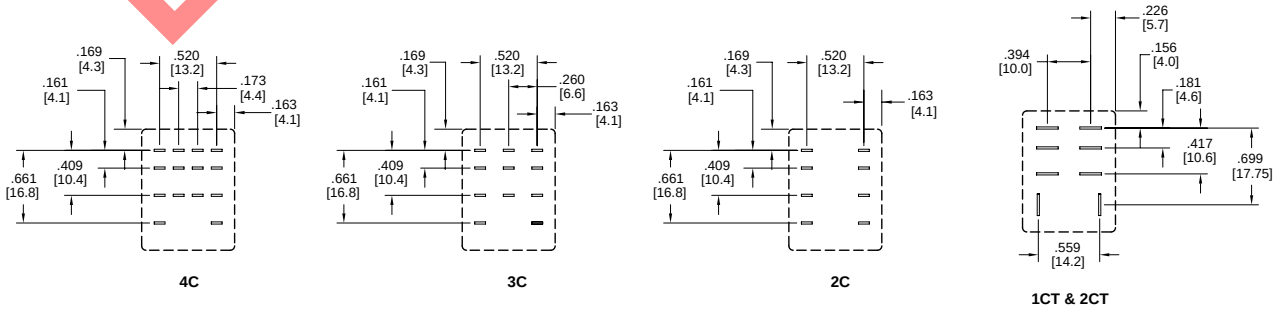
WIRING DIAGRAM

Viewed Towards Terminal



TERMINAL LAYOUTS

Viewed Towards Terminal



AMERICAN ZETTLER, INC. www.azettler.com
75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

AZ167

RELAY ORDERING DATA

STANDARD RELAYS: DC Coil					
COIL SPECIFICATIONS					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance	
5	4.0	5.5	181.0	27.5 **± 10%**	AZ167–2C–5D
6	4.8	6.6	150.0	40.0 **± 10%**	AZ167–2C–6D
12	9.6	13.2	75.0	160 **± 10%**	AZ167–2C–12D
24	19.2	26.4	36.9	650 **± 10%**	AZ167–2C–24D
48	38.4	52.8	18.5	2600 **± 15%**	AZ167–2C–48D
110	88.0	121.0	10.0	11,000 **± 15%**	AZ167–2C–110D

STANDARD RELAYS: AC Coil (50/60 Hz)					
COIL SPECIFICATIONS					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA ± 10%	Coil Resistance	
6	4.8	7.1	200.0	11.5 **± 10%**	AZ167–2C–6A
12	9.6	14.3	100.0	46.0 **± 10%**	AZ167–2C–12A
24	19.2	28.6	50.0	184 **± 10%**	AZ167–2C–24A
48	38.4	57.1	25.0	735 **± 10%**	AZ167–2C–48A
120	96.0	143.0	10.0	4,550 **± 10%**	AZ167–2C–120A
220	176.0	261.0	5.5	14,400 **± 15%**	AZ167–2C–220A
240	192.0	288.0	5.0	22,000 **± 15%**	AZ167–2C–240A

* For 3PDT or 4PDT substitute “-3C” or “-4C” for “-2C”. For LED add “1” to the end of p/n.

RELAY ORDERING DATA

HEAVY DUTY RELAYS: DC Coil					
COIL SPECIFICATIONS					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance	
5	4.0	5.5	181.0	27.5 **± 10%**	AZ167–1CT–5D
6	4.8	6.6	150.0	40.0 **± 10%**	AZ167–1CT–6D
12	9.6	13.2	75.0	160 **± 10%**	AZ167–1CT–12D
24	19.2	26.4	36.9	650 **± 10%**	AZ167–1CT–24D
48	38.4	52.8	18.5	2600 **± 15%**	AZ167–1CT–48D
110	88.0	121.0	10.0	11,000 **± 15%**	AZ167–1CT–110D

HEAVY DUTY RELAYS: AC Coil (50/60 Hz)					
COIL SPECIFICATIONS					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA ± 10%	Coil Resistance	
6	4.8	7.1	200.0	11.5 **± 10%**	AZ167–1CT–6A
12	9.6	14.3	100.0	46.0 **± 10%**	AZ167–1CT–12A
24	19.2	28.6	50.0	184 **± 10%**	AZ167–1CT–24A
48	38.4	57.1	25.0	735 **± 10%**	AZ167–1CT–48A
120	96.0	143.0	10.0	4,550 **± 10%**	AZ167–1CT–120A
220	176.0	261.0	5.5	14,400 **± 15%**	AZ167–1CT–220A
240	192.0	288.0	5.0	22,000 **± 15%**	AZ167–1CT–240A

* For DPDT substitute “-2CT” for “-1CT”. For LED add “1” to the end of p/n.

AMERICAN ZETTLER, INC. www.azettler.com
75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM
8/11/03W