

AZ942

16 AMP MINIATURE PC BOARD RELAY

FEATURES

- Extremely low cost
- High switching capacity — 16 Amps
- DC coils to 48 VDC
- UL, CUR file E44211
- Class B insulation for high temperature operation
- Class F insulation available



CONTACTS

| | |
|--------------------|---|
| Arrangement | SPST (1 Form A) SPDT (1 Form C) |
| Ratings | Resistive load |
| Medium Duty | Max. switched power: 150 W or 2770 VA Max. switched current: 10 A Max. switched voltage: 30 VDC or 300 VAC UL Rating: 5 A at 30 VDC 10 A at 277 VAC 1/3 HP at 125 VAC (1 Form A) 2.9 A 125 VAC Pilot Duty (1 Form A) |
| Heavy Duty | Max. switched power: 480 W or 4000 VA Max. switched current: 16 A Max. switched voltage: 30 VDC or 300 VAC UL Rating: 12 A at 28 VDC 12 A at 277 VAC 16A at 250 VAC (SPDT) 2.0 A at 240 VAC Pilot Duty |
| Material | Medium Duty: Silver cerium Heavy Duty: Silver tin oxide |
| Resistance | <100 milliohms initially (24 V, 1 A voltage drop method) |

COIL

| | |
|------------------------------------|--|
| Power | |
| At Pickup Voltage (typical) | 230 mW |
| Max Continuous Dissipation | Class B: 1.8 W at 20°C (68°F) ambient Class F: 2.4 W at 20°C (68°F) ambient |
| Temperature Rise | 23°C (42°F) at nominal coil voltage |
| Temperature | Class B: Max. 130°C (266°F) Class F: Max. 155°C (311°F) |

GENERAL DATA

| | |
|--|---|
| Life Expectancy Mechanical Electrical | Minimum operations 1x10 ⁷ 1 x 10 ⁵ at 10 A 277 VAC Res. |
| Operate Time (typical) | 10 ms at nominal coil voltage |
| Release Time (typical) | 5 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 1750 Vrms contact to coil 1000 Vrms across contacts |
| Insulation Resistance | 100 megohms min. at 20°C, 500 VDC, 50% RH |
| Dropout | Greater than 10% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage Class B: -40°C(-40°F) to 100°C(212°F) Class F: -40°C(-40°F) to 120°C(248°F) Class B: -55°C(-67°F) to 130°C(266°F) Class F: -55°C(-67°F) to 155°C(311°F) |
| Vibration | 0.062" DA at 10–55Hz |
| Shock | 10 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | 270°C (518°F) |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | 80°C (176°F) |
| Max. Immersion Time | 30 seconds |
| Weight | 13 g |

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Unsealed relays should not be dip cleaned.
4. Specifications subject to change without notice.

AZ942

RELAY ORDERING DATA

| STANDARD RELAYS: Medium Duty Type (10 Amp Contact) | | | | ORDER NUMBER* | |
|--|------------------|---------------------|----------------------------|---------------|----------------|
| COIL SPECIFICATIONS | | | | Unsealed | Sealed |
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | | |
| 3 | 2.4 | 6.7 | 25 | AZ942-1CH-3D | AZ942-1CH-3DE |
| 5 | 4.0 | 11.2 | 70 | AZ942-1CH-5D | AZ942-1CH-5DE |
| 6 | 4.8 | 13.4 | 100 | AZ942-1CH-6D | AZ942-1CH-6DE |
| 9 | 7.2 | 20.1 | 225 | AZ942-1CH-9D | AZ942-1CH-9DE |
| 12 | 9.6 | 26.8 | 400 | AZ942-1CH-12D | AZ942-1CH-12DE |
| 18 | 14.4 | 40.2 | 900 | AZ942-1CH-18D | AZ942-1CH-18DE |
| 24 | 19.2 | 53.6 | 1,600 | AZ942-1CH-24D | AZ942-1CH-24DE |
| 48 | 38.4 | 107.3 | 6,400 | AZ942-1CH-48D | AZ942-1CH-48DE |

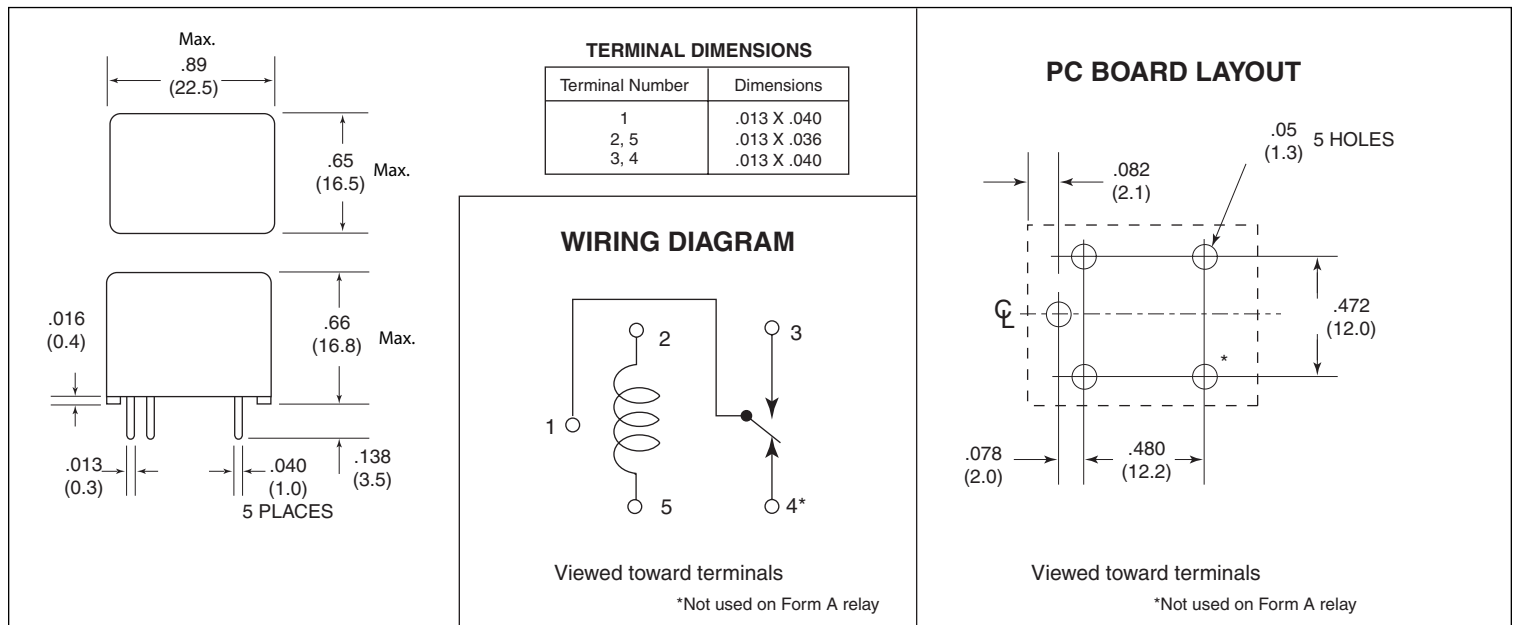
*Substitute "1AT" in place of "1CH" to indicate 1 Form A contact. To indicate Class F version, add suffix "F."

RELAY ORDERING DATA

| STANDARD RELAYS: Heavy Duty Type (16 Amp Contact) | | | | ORDER NUMBER* | |
|---|------------------|---------------------|----------------------------|---------------|----------------|
| COIL SPECIFICATIONS | | | | Unsealed | Sealed |
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | | |
| 3 | 2.4 | 6.7 | 25 | AZ942-1CT-3D | AZ942-1CT-3DE |
| 5 | 4.0 | 11.2 | 70 | AZ942-1CT-5D | AZ942-1CT-5DE |
| 6 | 4.8 | 13.4 | 100 | AZ942-1CT-6D | AZ942-1CT-6DE |
| 9 | 7.2 | 20.1 | 225 | AZ942-1CT-9D | AZ942-1CT-9DE |
| 12 | 9.6 | 26.8 | 400 | AZ942-1CT-12D | AZ942-1CT-12DE |
| 18 | 14.4 | 40.2 | 900 | AZ942-1CT-18D | AZ942-1CT-18DE |
| 24 | 19.2 | 53.6 | 1,600 | AZ942-1CT-24D | AZ942-1CT-24DE |
| 48 | 38.4 | 107.3 | 6,400 | AZ942-1CT-48D | AZ942-1CT-48DE |

*Substitute "1AW" in place of "1CT" to indicate 1 Form A contact. To indicate Class F version, add suffix "F."

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "

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