AZ2270_

30 AMP MINIATURE POWER RELAY

FEATURES

- Quick-connect leads for contacts
- 1 Form A, B and C contacts available
- AC and DC coils available
- High dielectric strength version available
- Epoxy sealed versions available
- UL Class F (155°C) standard
- UL, CUR file E44211

CONTACTS

| Arrangement | SPST (1 Form A, or B) SPDT (1 Form C) |
|-------------|---|
| Ratings | Resistive load: |
| | Max. switched power: 560 W or 8310 VA Max. switched current: 30 A (Form A) 15 A (Form B) Max. switched voltage: 277 VAC, 28 VDC |
| UL, CUR | 1 Form A 30 A at 277 VAC, General Use [1][2] 2 Hp at 250 VAC [1][2] 1 HP at 125 VAC [1][2] 30 A at 28 VDC [1] 20/60 (FLA/LRA) at 277 VAC 30k cycles [1] |
| | 1 Form B 15 A at 277 VAC, General Use [1] 10 A at 28 VDC [1] 0.5 HP at 250 VAC [1] 0.25 HP at 125 VAC [1] 10/33 (FLA/LRA) at 277 VAC 30k cycles [1] |
| | 1 Form C 30/20 A (N.O./N.C.) at 277 VAC, General Use [1][2] 20/10 A (N.O./N.C.) at 28 VDC[1] 2/0.5 HP (N.O./N.C.) at 250 VAC[1][2] 1/0.25 HP (N.O./N.C.) at 125 VAC[1][2] 20/60 (FLA/LRA) at 277 VAC 30k cycles N.O. [1] 10/33 (FLA/LRA) at 277 VAC 30k cycles N.C. [1] |
| Material | Silver cadmium oxide [1], silver tin oxide [2] |
| Resistance | < 50 milliohms initially (24 V, 1 A voltage drop method) |

COIL

| Power | |
|--------------------------------|---|
| At Pickup Voltage (typical) | DC: 590 mW AC: 1.3 VA |
| Max. Continuous Dissipation | DC: 1.7 W at 20°C AC: 2.7 VA at 20°C |
| Max. Temperature | 155°C (311°F) |



GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 30 A 120 VAC Res. | | | |
|--|---|--|--|--|
| Operate Time | 15 msec max. at nominal coil voltage | | | |
| Release Time | 10 msec max. at nominal coil voltage (without suppression) | | | |
| Dielectric Strength (at sea level for 1 min.) | 1500 Vrms contact to contact 2500 Vrms contact to coil 4000 Vrms contact to coil ("T" version) | | | |
| Insulation Resistance | 1000 megohms min. at 20°C, 500 VDC 50% RH | | | |
| Dropout | DC: > 10% of nominal coil voltage AC: > 20% of nominal coil voltage | | | |
| Ambient Temperature Operating Storage | -55°C (-67°F) to 85°C (185°F) -55°C (-67°F) to 155°C (311°F) | | | |
| Vibration | 0.062" DA at 10-55 Hz | | | |
| Shock | 10 g | | | |
| Enclosure | P.B.T. polyester | | | |
| Terminals | Tinned copper alloy, P.C., Quick Connects Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force. | | | |
| 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 | 36 grams | | | |

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.



AMERICAN ZETTLER, INC.

www.azettler.com



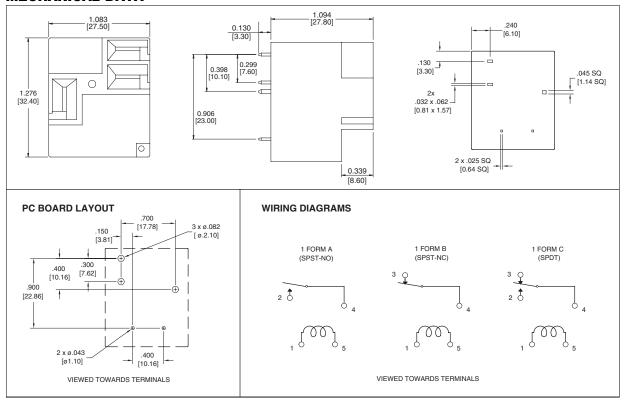
RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil | | | | | |
|-------------------------------|---------------------|------------------------|--------------------------|-----------------------|-----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Nominal Current mA ± 10% | Coil Resistance ± 10% | ORDER NUMBER* |
| 5 | 3.75 | 6.4 | 185 | 27 | AZ2270-1A-5DF |
| 6 | 4.50 | 7.8 | 150 | 40 | AZ2270-1A-6DF |
| 9 | 6.75 | 12.2 | 93 | 97 | AZ2270-1A-9DF |
| 12 | 9.0 | 15.4 | 77 | 155 | AZ2270-1A-12DF |
| 15 | 11.3 | 19.8 | 59 | 256 | AZ2270-1A-15DF |
| 18 | 13.5 | 24.1 | 47 | 380 | AZ2270-1A-18DF |
| 24 | 18.0 | 32.0 | 36 | 660 | AZ2270-1A-24DF |
| 48 | 36.0 | 62.6 | 19 | 2,560 | AZ2270-1A-48DF |
| 70 | 52.0 | 93.0 | 27 | 5,500 | AZ2270-1A-70DF |
| 110 | 82.5 | 146.0 | 20 | 13,450 | AZ2270-1A-110DF |

| COIL SPECIFICATIONS – AC Coil 50/60 Hz | | | | | |
|--|------------------|------------------------|--------------------------|-----------------------|-----------------|
| Nominal Coil VAC | Must Operate VAC | Max. Continuous VAC | Nominal Coil Power VA | Coil Resistance ± 10% | ORDER NUMBER* |
| 12 | 10.2 | 13.8 | 2.3 | 25 | AZ2270-1A-12AF |
| 24 | 20.4 | 27.6 | 2.1 | 100 | AZ2270-1A-24AF |
| 120 | 102.0 | 138.0 | 2.3 | 2,500 | AZ2270-1A-120AF |
| 208 | 166.0 | 239.0 | 2.2 | 11,000 | AZ2270-1A-208AF |
| 220/240 | 187.0 | 276.0 | 2.2/2.6 | 13,490 | AZ2270-1A-240AF |
| 277 | 220.0 | 318.0 | 2.2 | 15,000 | AZ2270-1A-277AF |

^{*}Substitute "-1B" or "-1C" in place of "-1A" for 1 Form B or 1 Form C respectively. For silver tin oxide contacts substitute "-1AE" or "-1CE" in place of "-1A" or "-1C." Add "T" to "-1AE", "-1B", "-1C" or "-1CE" for extended life contacts. Substitute "DEF" or "AEF" in place of "DF" or "AF" for epoxy sealed version. For 4000 Vrms dielectric strength change "F" to "TF."

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: \pm .010"

