AZ9405

10 AMP MINIATURE POWER RELAY

FEATURES

- 10 A switching capability
- Available in SPST-N.O. and SPDT versions
- 4 kV dielectric strength, 8 kV surge withstand voltage
- Epoxy sealed version available
- · Standard and sensitive coil available
- UL Class F insulation (155°C) standard
- Compact size, low seated height of 15.2 mm
- UL, CUR file E44211
- TÜV R50304647





CONTACTS

Arrangement SPST-N.O. (1 Form A), SPDT (1 Form C)

Ratings (max.) switched power switched current (resistive load) 150 W or 1400 VA

30 VDC* or 277 VAC switched voltage

> * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please

contact the factory.

Rated Loads UL

1 Form A

10 A at 125 VAC, resistive, 85°C, 100k cycles 5 A at 277 VAC, gen.use/resistive, 85°C, 100k cycles 5 A at 30 VDC, gen.use/resistive, 85°C, 100k cycles ¹/₁₀ HP at 125/250 VAC, 100k cycles

1 Form C (N.O. contact)

5 A at 277 VAC, gen.use/resistive, 85°C, 100k cycles 5 A at 30 VDC, gen.use/resistive, 85°C, 100k cycles ¹/₁₀ HP at 125/250 VAC, 100k cycles

1 Form C (N.C. contact)

3 A at 277 VAC, gen.use/resistive, 85°C, 100k cycles 3 A at 30 VDC, gen.use/resistive, 85°C, 100k cycles

ΤÜV

10 A at 125 VAC, resistive, 85°C, 100k cycles 5 A at 277 VAC, resistive, 85°C, 100k cycles

1 Form C (N.O. contact)

5 A at 277 VAC, resistive, 85°C, 100k cycles 5 A at 30 VDC, resistive, 85°C, 100k cycles

1 Form C (N.C. contact)

3 A at 277 VAC, resistive, 85°C, 100k cycles 3 A at 30 VDC, resistive, 85°C, 100k cycles

Contact material AgSnO₂ (silver tin oxide)

Initial resistance $\leq 100 \text{ m}\Omega \text{ (1 A / 6 V - voltage drop method)}$

NOTES

- All values at 20°C (68°F).
- Relay may pull in with less than "Must Operate" value.
- Specifications subject to change without notice.

Junkersstr. 3, D-82178 Puchheim, Germany

GENERAL DATA

Life Expectancy (minimum operations) mechanical

1 x 105 at rated loads electrical

Operate Time (max.) at nominal coil voltage

standard coil sensitive coil 15 ms

Release Time 5 ms (max.) at nominal coil voltage, without coil

suppression

Dielectric Strength (at sea level for 1 min.)

4000 V_{RMS} coil to contact

1000 V_{RMS} between open contacts 8 kV (at 1.2 x 50 µs) coil to contact

1000 M Ω (min.) at 20°C, 500 VDC, 50% RH Insulation Resistance Clearance 4 mm (1 Form A), 3 mm (1 Form C)

6 mm (1 Form A), 5 mm (1 Form C) Creepage

(at nominal coil voltage) Temperature Range -40°C (-40°F) to 85°C (185°F) operating

0.062" (1.5 mm) DA at 10-55 Hz Vibration resistance

Shock 10 g operating

Enclosure P.B.T. polyester, UL94 V-0 **Terminals** Tinned copper alloy, P. C.

Soldering

Surge voltage

max. temperature 270°C (518°F) max. time 5 seconds

Cleaning

max. solvent temp. 80°C (176°F) max. immersion time 30 seconds

Dimensions

length 20.0 mm (0.787") (0.394") width 10.0 mm height 15.2 mm (0.598")Weight 7 grams (approx.)

Compliance UL 508. IEC 61810-1. RoHS. REACH

ZETTLER electronics GmbH A ZETTLER GROUP Company

> phone: +49 89 800 97-0 fax: +49 89 800 97-200

AZ9405

COIL

Nominal coil DC voltages see coil voltage specifications tables

Dropout > 5% of nominal coil voltage

Nominal power

standard coil 400 mW sensitive coil 200 mW

Power at pickup voltage standard coil 225 mW sensitive coil 113 mW

Max. continuous dissipation

standard coil 676 mW sensitive coil 338 mW

Temperature Rise (at nominal coil voltage)

standard coil 42 K (76°F) sensitive coil 24 K (44°F)

Max. temperature Class F insulation - 155°C (311°F)

COIL VOLTAGE SPECIFICATIONS

Standard Coil

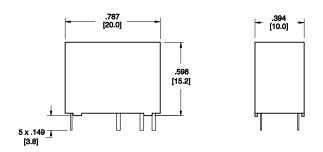
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Resistance Ohm ± 10%
3	2.25	3.9	22.5
5	3.75	6.5	63
6	4.5	7.8	90
9	6.75	11.7	203
12	9.0	15.6	360
18	15.5	23.4	810
24	18.0	31.2	1440
48	36.0	62.4	5760

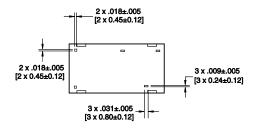
Sensitive Coil

Nominal Coil	Must Operate	Max. Continuous	Resistance
VDC	VDC	VDC	Ohm ± 10%
3	2.25	3.9	45
5	3.75	6.5	125
6	4.5	7.8	180
9	6.75	11.7	400
12	9.0	15.6	720
18	13.5	23.4	1620
24	18.0	31.2	2800

MECHANICAL DATA

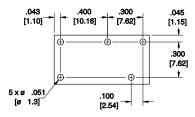
Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"





PC BOARD LAYOUT

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010" Viewed towards terminals.



ORDERING DATA

AZ9405- D F Sealing option nil: non sealed E: sealed version Coil option nil: standard coil S: sensitive coil Nominal coil voltage see coil voltage specifications tables Contact arrangement

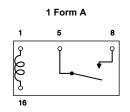
1A: 1 Form A (SPST-N.O.) 1C: 1 Form C (SPDT)

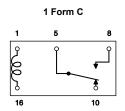
Example ordering data

AZ9405-1A-5DF 1 Form A, 5 VDC coil voltage, standard coil, non sealed AZ9405-1A-12DSEF 1 Form A, 12 VDC coil voltage, sensitive coil, sealed

WIRING DIAGRAMS

Viewed towards terminals





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