AZ764H

16 AMP HIGH TEMPERATURE POWER RELAY

FEATURES

- 16 Amp switching capability
- Ambient temperature up to 105°C (221°F)
- 5 kV dielectric strength, Isolation spacing ≥ 10 mm
- Reinforced insulation, IEC 60730-1, IEC 60335-1
- Proof tracking index (PTI/CTI) 250
- Compact size, low seated height of 15.7 mm
- UL / CUR file E43203
- VDE certificate 40012572





CONTACTS

Arrangement SPST-N.O. (1 Form A)

Ratings (max.) (resistive load) 480 W or 4000 VA switched power switched current 16 A switched voltage 300 VDC* or 400 VAC

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

Please contact the factory.

Rated Loads

UL, CUR 10 A at 250 VAC, general use [1][2]

16 A at 250 VAC, 100k cycles, 45°C $^{[1]**}$ 16 A at 250 VAC, 10k cycles, 105°C $^{[2]}$ 10 A at 250 VAC, 150k cycles, 105°C $^{[1][2]}$ **VDE**

** Note: approved with open vent hole only

Contact material AqNi (silver nickel) [1]

AgSnO₂ (silver tin oxide) [2]

Initial resistance $\leq 100 \text{ m}\Omega$

GENERAL DATA

Life Expectancy (minimum operations)

mechanical 3×10^{7}

1.7 x 10⁵ at 10 A 230VAC resistive electrical (at 105°C) 2.8 x 10⁵ at 8 A 230VAC resistive 3.2 x 10⁵ at 6 A 230VAC resistive

Operate Time 8 ms (typ.) at nominal coil voltage

3 ms (typ.) at nominal coil voltage, without coil Release Time

suppression

Dielectric Strength (at sea level for 1 min.)

5000 V_{RMS} coil to contact 1000 V_{RMS} between open contacts

Insulation Resistance $10^5 \text{ M}\Omega$ (min.) at 20°C, 500 VDC, 50% RH

Isolation spacing (coil to contact) clearance ≥ 10 mm ≥ 10 mm creepage Insulation C250

Overvoltage category: III

Pollution degree: 3 Nominal voltage: 250 VAC (according to DIN VDE 0110, IEC 60664-1) Reinforced insulation according to

IEC 60730-1 (VDE 0631, part 1) IEC 60335-1 (VDE 0700, part 1)

Temperature Range

(at nominal coil voltage) -40°C (-40°F) to 105°C (221°F) operating

Vibration resistance 10 g at 10-150 Hz

Shock resistance 30 g

Enclosure P.B.T. polyester RT II, flux proof type material group Illa UL94 V-0 flammability

Terminals Tinned copper alloy, P. C.

Soldering

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 29.0 mm (1.142")width 12.7 mm (0.500")height 15.7 mm (0.618")Weight 14 grams (approx.)

Packing unit in pcs

20 per carton tube / 1000 per carton box Compliance UL 508, IEC 61810-1, IEC60335-1 (GWT),

RoHS, REACH

COIL

Nominal coil DC voltages see coil voltage specifications table **Dropout voltage** ≥ 10% of nominal coil voltage

Coil power

250 mW nominal at pickup voltage 140 mW

2.2 W at 20°C (68°F) max. cont. dissipation

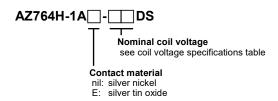
Temperature Rise 16 K (29°F) at nominal coil voltage Max. temperature Class F insulation - 155°C (311°F)

COIL VOLTAGE SPECIFICATIONS

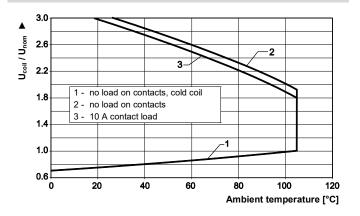
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Resistance Ohm ± 10%
5	3.75	15.0	102
6	4.5	18.0	144
9	6.75	27.0	330
10	7.5	30.0	400
12	9.0	36.0	580
18	13.5	54.0	1300
24	18.0	72.0	2300
48	36.0	144.0	9340

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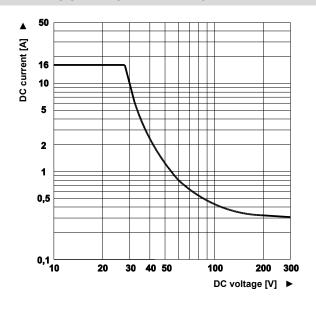
ORDERING DATA



COIL OPERATING RANGE

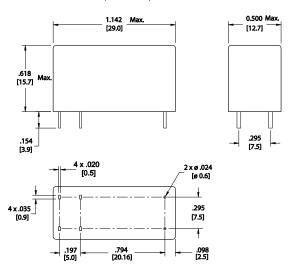


MAX DC RESISTIVE LOAD BREAKING CAPACITY



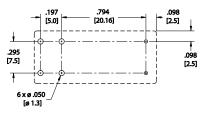
MECHANICAL DATA

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.

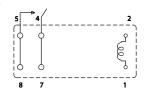


NOTES

- 1. Specifications subject to change without notice.
- 2. All values at 20°C (68°F) unless otherwise stated.
- 3. Relay may pull in with less than "Must Operate" value.
- Coil suppression circuits such as diodes, etc. in parallel to the coil will lengthen the release time.

WIRING DIAGRAMS

Viewed towards terminals



DISCLAIMER

This product specification is to be used in conjunction with the application notes which can be downloaded from www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf

The specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.

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