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.) switched power switched current switched voltage	(resistive load) 480 W or 4000 VA 16 A 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]		
VDE	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] ** Note: approved with open vent hole only		
Contact material	AgNi (silver nickel) [1] AgSnO ₂ (silver tin oxide) [2]		
Initial resistance	≤ 100 mΩ		

COIL		
Nominal coil DC voltages	see coil voltage specifications table	
Dropout voltage	≥ 10% of nominal coil voltage	
Coil power nominal at pickup voltage max. cont. dissipation	250 mW 140 mW 2.2 W at 23°C (73°F)	
Temperature Rise	16 K (29°F) at nominal coil voltage	
Max. temperature	Class F insulation - 155°C (311°F)	

Nominal Coil	Must Operate	Max. Continuous	Resistance
VDC	VDC	VDC	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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GENERAL DATA			
Life Expectancy mechanical electrical (at 105°C)	(minimum operations) 3×10^7 1.7×10^5 at 10 A 230VAC resistive 2.8×10^5 at 8×230 VAC resistive 3.2×10^5 at 6×230 VAC resistive		
Operate Time	8 ms (typ.) at nominal coil voltage		
Release Time	3 ms (typ.) at nominal coil voltage, without coil 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 clearance creepage	(coil to contact) ≥ 10 mm ≥ 10 mm		
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 Operating	(at nominal coil voltage) -40°C (-40°F) to 105°C (221°F)		
Vibration resistance	10 g at 10–150 Hz		
Shock resistance	30 g		
Enclosure type material group flammability	P.B.T. polyester RT II, flux proof IIIa UL94 V-0		
Terminals	Tinned copper alloy, P. C.		
Soldering max. temperature max. time	270 °C (518°F) 5 seconds		
Cleaning max. solvent temp. max. immersion time	80°C (176°F) 30 seconds		
Dimensions length width height	29.0 mm (1.142") 12.7 mm (0.500") 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		

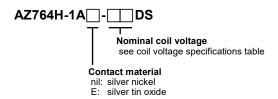
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COIL VOLTAGE SPECIFICATIONS

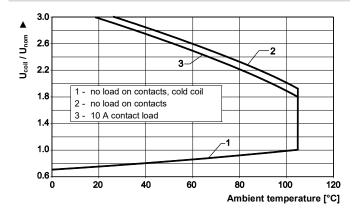
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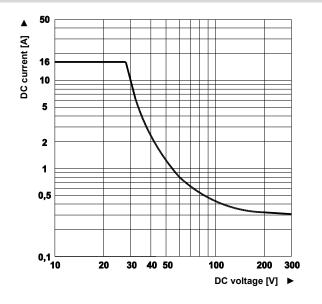
ORDERING DATA



COIL OPERATING RANGE

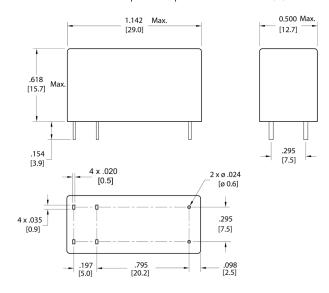


MAX DC RESISTIVE LOAD BREAKING CAPACITY



MECHANICAL DATA

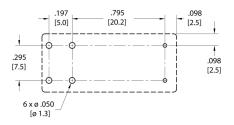
Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"



PC BOARD LAYOUT

Recommendation for PC board layout.

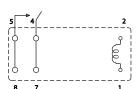
Dimensions in inches with metric equivalents in parentheses. Viewed towards terminals.



WIRING DIAGRAMS

Viewed towards terminals.

Note: Connect associated load terminals on PCB to ensure proper operation and service life.



NOTES

- 1. Specifications subject to change without notice.
- 2. All values at 23°C (73°F) unless otherwise stated.
- Relay may pull in with less than "Must Operate" value.
- 4. Coil suppression circuits such as diodes, etc. in parallel to the coil will lengthen the release time.



DISCLAIMER

This product specification is to be used in conjunction with the application notes which can be downloaded from the regional ZETTLER relay websites. 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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