AZ160

60 AMP MINIATURE POWER RELAY

FEATURES

- 60 Amp switching capability
- Contact gap: 0.8mm standard
- Dielectric strength 4.5 kV_{RMS}
- 10kV Surge
- UL class F insulationCQC:22002335876
- TUV: B0887930019





CONTACTS		GENERAL DATA		
Arrangement	SPST-N.O. (1 Form A)	Life Expectancy mechanical electrical (minimum operations) 1 x 10 ⁶ see ratings		
Ratings (max.) switched power switched current continuous current switched voltage	(resistive load) 28800 VA 60 A 60A 480 VAC	Operate Time	20 ms (max.) at nominal coil voltage	
		Release Time	10 ms (max.) at nominal coil voltage, without coil suppression	
Rated Loads CQC	20 A Making, 60 A Carrying, 20 A Breaking ,480 VAC, 85°C, 1s On, 9s Off ,50k cycles,	Dielectric Strength coil to load contacts open load contacts	(at sea level for 1 min.) 4500 V _{RMS} 1700 V _{RMS}	
	Res. (1S On: Making 0.1s, Carrying 0.8s, Breaking 0.1s)	Surge Voltage	10kV @1.2/50μs (coil to contacts) 2.5kV @1.2/50μs (open load contacts)	
	60A ,277 VAC, 60°C, 0.1s On, 10s Off ,1k cycles, Res.	Insulation Resistance	1000 MΩ (min.) at 23°C, 500 VDC, 50% RH	
	50A ,480 VAC, 85°C, 0.1s On, 10s Off ,6k cycles, Res.	Temperature Range operating	(at nominal coil voltage) -40°C (-40°F) to 85°C (185°F)	
	40A ,480 VAC, 85°C, 3s On, 3s Off ,30k	Vibration resistance	0.062" (1.5 mm) DA at 10–55 Hz	
Contact material	cycles, Res. AgSnO ₂ (silver tin oxide)	Shock	20 g	
Contact gap standard version	0.8 mm	Enclosure protection category material group flammability	P.B.T. polyester RT II, flux proof IIIa UL94 V-0	
Contact resistance initial typical	(load contact) \leq 100 mΩ $<$ 3 mΩ	Terminals	Tinned copper alloy, P. C.	
COIL		Soldering max. temperature max. time	270 °C 5 s	
Nominal coil DC voltages	+			
Dropout voltage	> 5% of nominal coil voltage	Dimensions length	30.4mm (1.20")	
Holding voltage	> 35% of nominal coil voltage	width height	15.9 mm (0.63") 25.15 mm (0.99")	
Coil power nominal holding power at pickup voltage	(at 23 °C) 0.9 W 110 mW 506 mW	Weight	25 grams (approx.)	
Temperature Rise	70K (126°F) at nom. coil voltage, 85°C	Compliance	UL 508, IEC 61810-1, RoHS, REACH	
Max. temperature	Class F insulation - 155°C (311°F)	Packing unit in pcs	50 per plastic tray / 500 per carton box	



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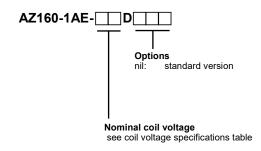
AZ160

COIL VOLTAGE SPECIFICATIONS

Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Cont. VDC	Resistance Ohm ± 10%
5	3.75	1.75	6.0	27.8
9	6.75	3.15	10.8	90.0
12	9.0	4.2	14.4	160.0
18	13.5	6.3	21.6	360.0
24	18.0	8.4	28.8	640.0
48	36.0	16.8	57.6	2560.0

Note: All values at 23°C (73°F), upright position, terminals downward.

ORDERING DATA

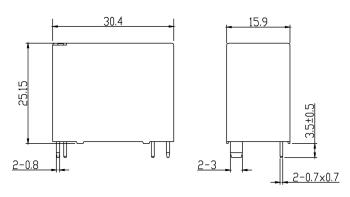


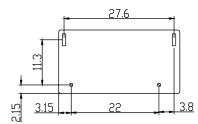
Example ordering data

AZ160-1AE-24D 24 VDC nominal coil voltage

MECHANICAL DATA

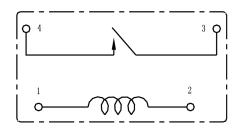
Dimensions in mm. Tolerance: ±0.3mm





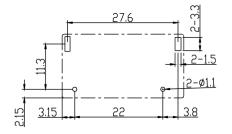
WIRING DIAGRAMS

Viewed towards terminals



PC BOARD LAYOUT

Viewed towards terminals. Dimensions in mm.



NOTES

- 1. All values at 23°C (73°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Provide sufficient PCB cross section as heat spreader on terminals.
- 4. Specifications subject to change without notice.



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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