

AZEV116/132 PRELIMINARY

16 AMP / 32 AMP POWER RELAY

FEATURES

- 16 Amp switching capability (AZE116)
- 32 Amp switching capability (AZE132)
- Potential free N.C. signal contact
- Withstands 1500 Amp short circuit current (carrying)
- Wide contact gap of ≥ 2.25 mm
- Dielectric strength 4 kV_{RMS}



Illustration similar



CONTACTS

Arrangement	DPST (1 Form A, 1 Form B signal contacts)
Ratings (max.)	(resistive load)
AZE116	
switched power	4432 VA
switched current	16 A
switched voltage	440 VAC
AZE132	
switched power	8864 VA
switched current	32 A
switched voltage	440 VAC
signal contacts	10 mA at 12 VDC
Rated Loads	
UL/CUR/TÜV	
AZE116	TBD
AZE132	TBD
Contact material	
load contacts	AgSnO ₂ (silver tin oxide)
signal contacts	AgNi + Au (silver nickel, gold plated)
Contact gap	≥ 2.25 mm
Initial resistance	< 50 m Ω

COIL

Nominal coil DC voltages	12, 24
Dropout voltage	> 5% of nominal coil voltage
Holding voltage	> 35% of nominal coil voltage
Coil power	
nominal	1.55 W
max. continuous	2 W (at 20°C ambient)
at pickup voltage	875 mW
Temperature Rise	70 K (126°F) at nom. coil voltage, 85°C
Max. temperature	Class F insulation - 155°C (311°F)

NOTES

1. All values at 20°C (68°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.

GENERAL DATA

Life Expectancy	(minimum operations)
mechanical	1 x 10 ⁶
electrical	
AZE116	5 x 10 ⁴ at 16 A, 277 VAC, resistive
AZE132	5 x 10 ⁴ at 32 A, 277 VAC, resistive
Operate Time	30 ms (max.) at nominal coil voltage
Release Time	10 ms (max.) at nominal coil voltage, without coil suppression
Dielectric Strength	(at sea level for 1 min.)
coil to power contacts	4000 V _{RMS}
signal to power contacts	4000 V _{RMS}
open power contacts	2500 V _{RMS}
Surge voltage	
coil to power contacts	10 kV (at 1.2 x 50 μ s)
Pulse current capability	(carrying, acc. IEC 62752)
AZE116	≥ 1.02 kA; ≥ 2.5 kA ² s
AZE132	≥ 1.50 kA; ≥ 6.0 kA ² s
Insulation Resistance	1000 M Ω (min.) at 20°C, 500 VDC, 50% RH
Temperature Range	(at nominal coil voltage)
operating	-40°C (-40°F) to 85°C (185°F)
Vibration resistance	0.062" (1.5 mm) DA at 10–55 Hz
Shock resistance	TBD
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P. C.
Soldering	
max. Temperature	270 °C
max. Time	5 s
Cleaning	
max. Solvent Temp.	80°C (176°F)
max. Immersion Time	30 seconds
Dimensions	
length	35.0 mm (1.38")
width	16.0 mm (0.63")
height	27.9 mm (1.10")
Weight	25 grams (approx.)
Compliance	UL 508, IEC 61810-1 designed to meet IEC 62752 RoHS, REACH
Packing unit in pcs	TBD

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

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COIL VOLTAGE SPECIFICATIONS

Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Cont. VDC	Resistance Ohm \pm 10%
12	9.0	4.2	14.4	93.0

ORDERING DATA

AZEV1 -1AE1BG- D

Basic series

16: 16 Amp nominal switching current
32: 32 Amp nominal switching current

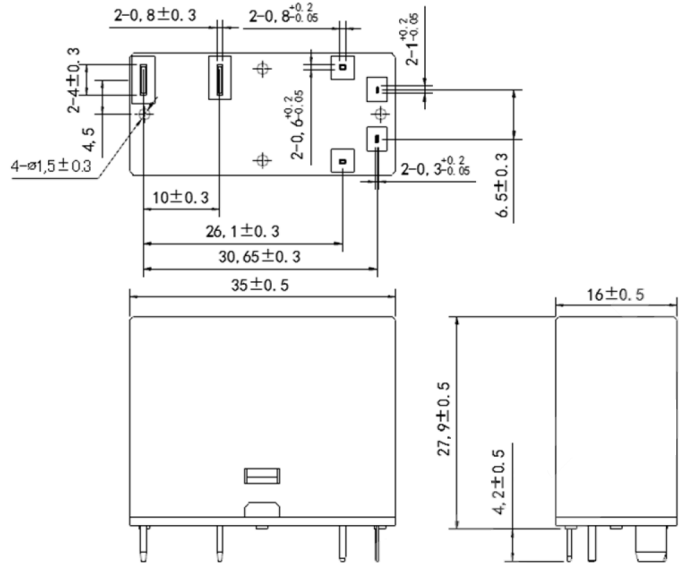
Nominal coil voltage
see coil voltage specifications table

Example ordering data

AZEV132-1AE1BG-12D 32 Amp nom. switching current, 12 VDC coil voltage

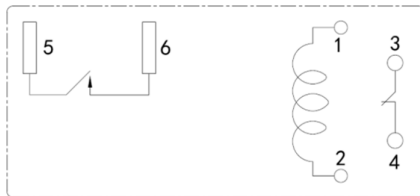
MECHANICAL DATA

Dimensions in mm.



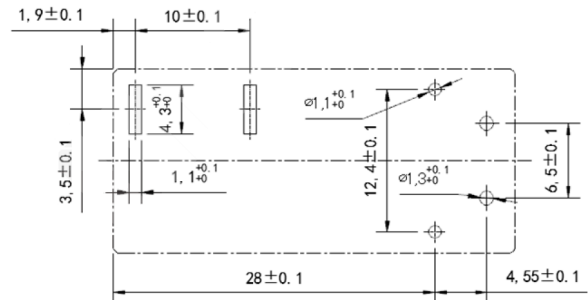
WIRING DIAGRAMS

Viewed towards terminals



PC BOARD LAYOUT

Viewed towards terminals. Dimensions in mm.



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