

AZSR131

35 AMP MINIATURE POWER RELAY

FEATURES

- 35 Amp switching capability
- Contact gap: 1.8 mm / 2.3 mm
- Dielectric strength 4500V_{RMS}, 10kV Surge
- UL class F insulation
- GWT(IEC60335-1) version available
- UL / CUR E365652
- TÜV B0887930015
- CQC 17002168255



CONTACTS

Arrangement	SPST-N.O. (1 Form A)
Ratings (max.) switched power switched current continuous current switched voltage	(resistive load) 9695 VA 35 A 35 A 277 VAC
Rated Loads UL/CUR/TÜV/CQC	26A at 277 VAC, resistive, 85°C, 50k cycles 35A at 277 VAC, resistive, 85°C, 30k cycles 22A at 277 VAC, resistive, 70°C, 100k cycles 33A at 277 VAC, cosphi 0.8, 85°C, 50k cycles 35A at 277 VAC, cosphi 0.8, 85°C, 30k cycles
Contact material	AgSnO ₂ (silver tin oxide)
Contact gap standard version option (200) version	1.8 mm 2.3 mm
Contact resistance initial typical	(load contact) ≤ 100 mΩ < 3 mΩ

COIL

Nominal coil DC voltages	5, 9, 12, 18, 24, 48
Dropout voltage	> 5% of nominal coil voltage
Holding voltage	> 35% of nominal coil voltage
Coil power nominal holding power at pickup voltage	(at 23 °C) 1.4 W 172 mW 790 mW
Temperature Rise	70 K at nom. coil voltage, 35A, 85°C
Max. temperature	Class F insulation - 155°C (311°F)

GENERAL DATA

Life Expectancy Mechanical electrical	(minimum operations) 1 x 10 ⁵ (2.3mm gap) 3 x 10 ⁵ (1.8mm gap) see UL/CUR/TÜV/CQC ratings
Operate Time	20 ms (max.) at nominal coil voltage
Release Time	10 ms (max.) at nominal coil voltage, without coil suppression
Dielectric Strength coil to load contacts open load contacts	(at sea level for 1 min.) 4500 V _{RMS} 2500 V _{RMS} 3500 V _{RMS} (200 version)
Surge Voltage	10kV @1.2/50μs (coil to contacts)
Insulation Resistance	1000 MΩ (min.) at 23°C, 500 VDC, 50% RH
Temperature Range Operating storage	(at nominal coil voltage) -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
Vibration resistance	0.062" (1.5 mm) DA at 10–55 Hz
Shock	20 g
Enclosure protection category material group flammability	P.B.T. polyester RT II, flux proof IIla UL94 V-0
Terminals	Tinned copper alloy, P. C.
Soldering max. temperature max. time	270 °C 5 s
Dimensions length width height	30.4 mm (1.20") 15.9 mm (0.63") 25.15 mm (1.00")
Weight	25 grams (approx.)
Compliance	UL 508, IEC 61810-1, RoHS, REACH
Packing unit in pcs	50 per plastic tray / 500 per carton box

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COIL VOLTAGE SPECIFICATIONS

Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Cont. VDC	Resistance Ohm \pm 10%
5	3.75	1.75	6.0	18
9	6.75	3.2	10.8	58
12	9.0	4.2	14.4	103
18	13.5	6.3	21.6	230
24	18.0	8.4	28.8	410
48	36.0	16.8	57.6	1650

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

ORDERING DATA

AZSR131-1AE- **DGW**

Options

nil: standard version
(200): 2.3 mm contact gap version

Glow wire degree

blank: without glow wire
GW: with glow wire

Nominal coil voltage

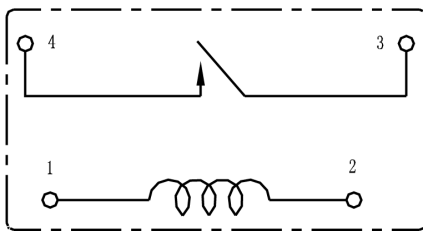
see coil voltage specifications table

Example ordering data

AZSR131-1AE-12D	12 VDC nominal coil voltage, 1.8 mm contact gap, without glow wire
AZSR131-1AE-12DGW	12 VDC nominal coil voltage, 1.8 mm contact gap, with glow wire
AZSR131-1AE-12D(200)	12 VDC nominal coil voltage, 2.3 mm contact gap, without glow wire

WIRING DIAGRAMS

Viewed towards terminals

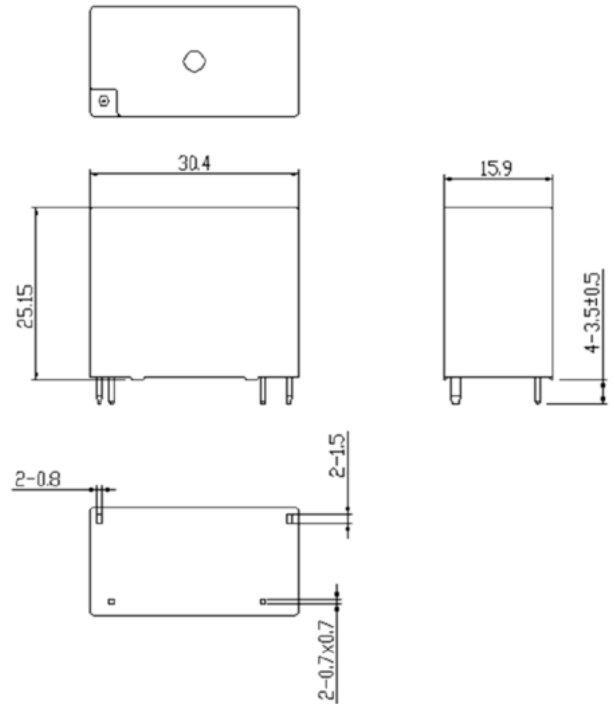


NOTES

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

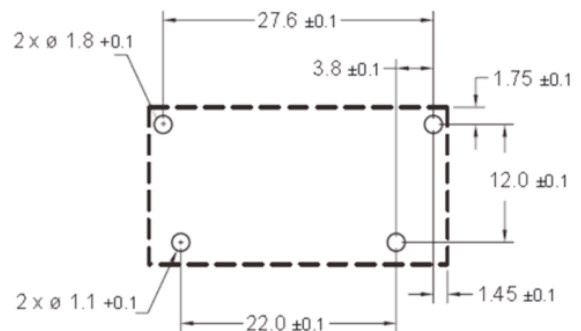
MECHANICAL DATA

Dimensions in mm. Tolerance: \pm 0.3mm



PC BOARD LAYOUT

Viewed towards terminals. Dimensions in mm.



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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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