

# AZSR131

## 35 AMP MINIATURE POWER RELAY

### FEATURES

- 35 Amp switching capability
- 4.5 kV dielectric strength, 10 kV surge
- Wide contact gap (2.3 mm) version available
- UL Class F insulation system (155°C)
- Standard EN 60335 -1 (GWT) approved version available
- TÜV: B 17 04 88793 005
- UL/cUR File: E365652



### CONTACTS

Arrangement	SPST -N.O. (1 Form A)
Ratings (max.) switched power switched current switched voltage	(resistive load) 9695 VA 35 A 277 VAC
Rated Loads UL	26 A at 277 VAC, resistive, 85°C, 50k cycles 35 A at 277 VAC, resistive, 85°C, 30k cycles
TÜV	22 A at 277 VAC, resistive, 85°C, 100k cycles 26 A at 277 VAC, resistive, 85°C, 50k cycles 33 A at 277 VAC, cos phi 0.8, 85°C, 50k cycles 35 A at 277 VAC, cos phi 0.8, 85°C, 30k cycles
Contact material	AgSnO <sub>2</sub> (silver tin oxide)
Contact gap standard version option (200) version	1.8 mm 2.3 mm
Initial resistance	< 100 mΩ (1 A / 6 V - voltage drop method)

### COIL

Nominal coil DC voltages	5, 9, 12, 18, 24, 48
Dropout voltage	> 10% of nominal coil voltage >
Holding voltage	35% of nominal coil voltage
Coil power nominal max. continuous at pickup voltage	1.4 W 2 W 790 mW
Temperature Rise	70°C (158°F) at nom. coil voltage, 35 A/85°C
Max. temperature	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 Mechanical	(minimum operations) 3 x 10 <sup>5</sup> (1.8 mm contact gap version) 1 x 10 <sup>5</sup> (2.3 mm contact gap version)
Electrical standard version option (200) version	3 x 10 <sup>4</sup> at 35 A, 277 VAC, resistive 3 x 10 <sup>4</sup> at 35 A, 277 VAC, cos phi 0.8
Operate Time	20 ms (max.) at nominal coil voltage
Release Time	10 ms (max.) at nominal coil voltage, without coil suppression
Dielectric Strength standard version option (200) version	4500 V RMS coil to contact 2500 V RMS between open contacts 3500 V RMS between open contacts (at sea level for 1 min.)
Surge voltage coil to contact	10 kV (at 1.2 x 50 μs)
Isolation spacing clearance creepage	≥ 6.4 mm ≥ 7.5 mm
Insulation Resistance	1000 MΩ (min.) at 20°C, 500 VDC, 50% RH
Temperature Range operating	(at nominal coil voltage) -40°C (-40°F) to 85°C (185°F)
Vibration resistance	0.062" (1.5 mm) DA at 10-55 Hz
Shock resistance	20 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P. C.
Soldering max. Temperature max. Time	270 °C 5s
Cleaning max. Solvent Temp. max. Immersion Time	80°C (176°F) 30 seconds
Packing unit in pcs	50 per tray / 500 per carton box

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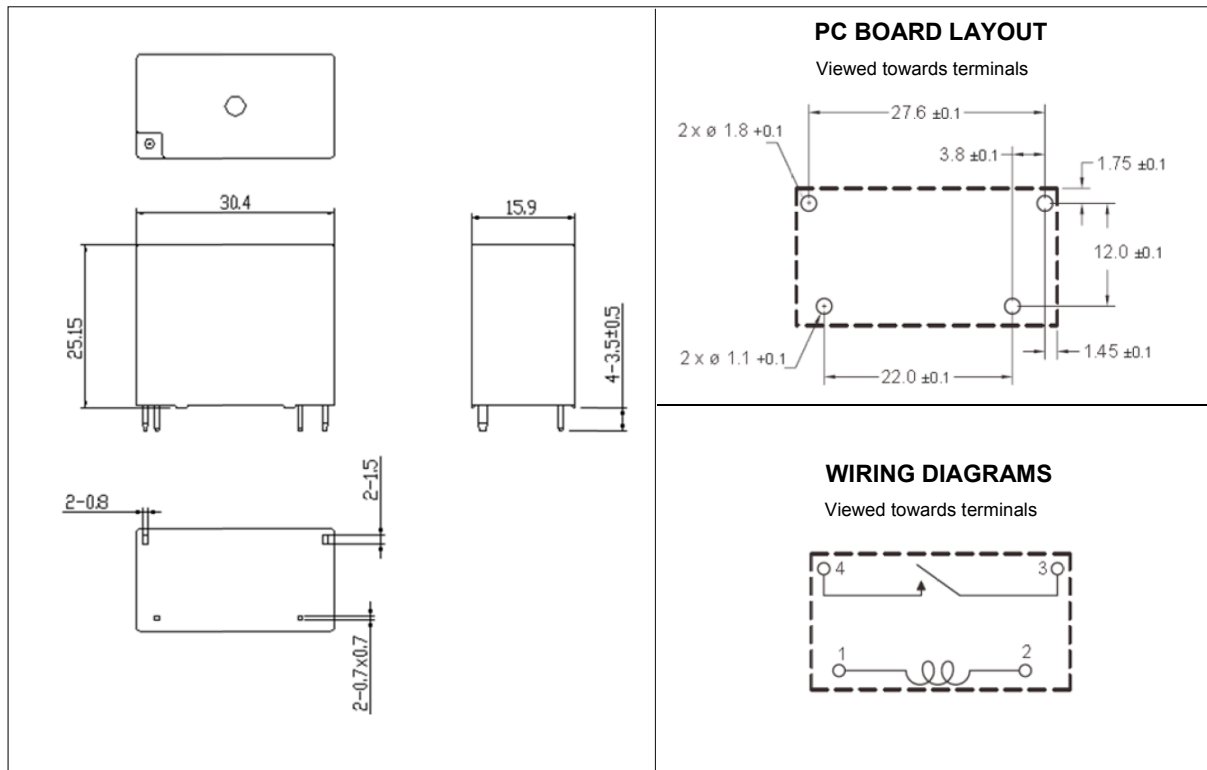
## COIL VOLTAGE SPECIFICATIONS

Standard version 1.8mm Contact gap					
Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Cont. VDC	Resistance Ohm $\pm 10\%$	ORDER NUMBERING
5	3.5	1.75	6	18	AZSR131-1AE-5D
9	6.3	3.2	10.8	58	AZSR131-1AE-9D
12	8.4	4.2	14.4	103	AZSR131-1AE-12D
18	12.6	6.3	21.6	230	AZSR131-1AE-18D
24	16.8	8.4	28.8	410	AZSR131-1AE-24D
48	33.6	16.8	57.6	1650	AZSR131-1AE-48D

(200) version 2.3mm Contact gap					
Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Cont. VDC	Resistance Ohm $\pm 10\%$	ORDER NUMBERING
5	3.75	1.75	6	18	AZSR131-1AE-5D (200)
9	6.75	3.2	10.8	58	AZSR131-1AE-9D (200)
12	9.0	4.2	14.4	103	AZSR131-1AE-12D (200)
18	13.5	6.3	21.6	230	AZSR131-1AE-18D (200)
24	18	8.4	28.8	410	AZSR131-1AE-24D (200)
48	36	16.8	57.6	1650	AZSR131-1AE-48D (200)

\* Add suffix "GW" after the "D" of the order number for EN 60335-1 (GWT).

## MECHANICAL DATA



Dimensions in mm. Tolerance:  $\pm 0.3$  mm unless otherwise stated