

# AZSR180

## 80A POWER RELAY

### FEATURES:

- 80 Amp switching
- Wide contact gap > 2.05 mm
- Holding power <100 mW
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 10 mm
- Double insulation, EN 60730-1 (VDE 0631, part 1)
- Reinforced insulation, EN 60335-1 (VDE 0700, part 1)
- VDE 40044305
- UL, CUR E44211
- CQC certificate 17002162259



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A)
<b>Ratings</b>	Resistive load: Max. switched power: 2400 W or 22160 VA Max. switched current: 80 A (1000 cycles) Max. continuous current: 80 A Max. switched voltage: 150 VDC* or 440 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load</b>	
<b>VDE</b>	80 A at 277 VAC, resistive, 1k cycles, 85 °C 30 A at 263 VAC, AC-7a, 30k cycles, 85 °C
<b>UL</b>	80 A at 277 VAC, resistive, 1k cycles
<b>CQC</b>	80 A at 380 VAC, resistive, 1k cycles, 85 °C 30 A at 380 VAC, resistive, 30k cycles, 85 °C
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	<50 mΩ initially (at 6V,1A,voltage drop method)

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations Mechanical $1 \times 10^5$ Electrical $3 \times 10^4$ at 30 A 250 VAC Res.
<b>Operate Time(typical)</b>	40 ms at nominal coil voltage
<b>Release Time(typical)</b>	5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength</b> <b>(at sea level for 1min.)</b>	5000 Vrms coil to contact 2500 Vrms between open contacts
<b>Insulation Resistance</b>	1,000 MΩ min. at 20 °C 500VDC 50% RH
<b>Insulation</b> <b>(according to</b> <b>DIN VDE 0110,</b> <b>IEC 60664-1)</b>	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient</b> <b>Temperature</b> <b>Operating</b>	At rated coil voltage -40 °C (-40 °F ) to 85 °C (185 °F)
<b>Vibration</b>	0.062" (1.5 mm) at 10–55 Hz
<b>Shock</b>	10g
<b>Enclosure</b>	PA
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270 °C (518 °F)
<b>Max. solder time</b>	5 seconds
<b>Weight</b>	105g
<b>Packing unit in pcs</b>	10 per inner carton / 100 per carton box

### COIL

<b>Power</b>	
<b>At pickup Voltage</b>	270 mW (typical)
<b>Max. Continuous</b>	
<b>Dissipation</b>	2.0 W at 20 °C (68 °F) ambient
<b>Temperature Rise</b>	15 °C (27 °F) at nominal coil voltage
<b>Temperature</b>	Max. 155 °C (311 °F) class F

### NOTES

1. All values at 20 °C (68 °F)
2. Relay may pull in with less than "Must Operate" value
3. Specifications subject to change without notice
4. Recommended PCB cross section 16 mm <sup>2</sup>
5. PCB terminal downward mounting is prefer

**ZETTLER RELAY (XIAMEN) CO., LTD.** [www.zettlercn.com](http://www.zettlercn.com)

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## RELAY ORDERING DATA

COIL SPECIFICATIONS-SPST(1 FORM A)					ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Min. holding VDC	Max. Continuous VDC	Coil Resistance $\Omega \pm 10\%$	
12	9.00	4.0	24.0	300	AZSR180-1AE-12D
24	18.0	8.0	48.0	1200	AZSR180-1AE-24D

## NOMENCLATURE

AZSR180 - 1A E -12D

I II III IV

- I. Basic Series
- II. Contact Form
- III. Contact Material
- IV. Coil Voltage

AZSR180  
 1A: 1 form A  
 E: AgSnO<sub>2</sub>  
 6, 9, 12, 24VDC.

## MECHANICAL DATA

**PC BOARD LAYOUT**

7.0 x 2.5 (4x) 3.3 x 1.3 (2x) 14.7 10.0 22.8 3.5

Viewed toward terminals

**WIRING DIAGRAM**

Viewed toward terminals

It is absolute necessary to provide a connection between pin 3 and 4 (5 and 6) on the PCB to avoid a malfunction of the relay! Check also note 4 on first page, please.

Tolerance:  $\pm 0.25\text{mm}$

Disclaimer: The specification is for reference only. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should evaluate and select the suitable product for their own application. If there is any query, please contact ZETTLER. However, it is the user's responsibility to determine which product should be used only.

免责声明：此规格书仅用于参考。我们不能评估所有可能的应用条件下的性能和参数，所以用户需根据自己的应用评估和选择合适的产品。如有疑问，可以咨询赛特勒；但仍然是用户的责任来选择和使用产品。

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