

AZSR180

Preliminary

80 A POWER RELAY

FEATURES

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

RoHS compliant !



CONTACTS

Arrangement	SPST (1 Form A)
Ratings	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.
Rated Load	80 A at 277 VAC, resistive
Material	Silver tin oxide
Resistance	< 50 milliohms initially

COIL

Power At Pickup Voltage (typical)	270 mW
Max. Continuous Dissipation	2.0 W at 20°C (68°F) ambient
Temperature Rise	15°C (27°F) at nominal coil voltage
Temperature	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 .

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁵ 3 x 10 ⁴ at 30 A 250 VAC Res.
Operate Time (typical)	40 ms at nominal coil voltage
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 2500 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C 500 VDC 50% RH
Insulation (according to DIN VDE 0110, IEC 60664-1)	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature Operating	At nominal coil voltage -40°C (-40°F) to 85°C (185°F)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Weight	105 grams
Packing unit in pcs	10 per inner carton / 100 per carton box

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

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RELAY ORDERING DATA

COIL SPECIFICATIONS - SPST (1 FORM A)					
Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	ORDER NUMBER
12	9.00	4.0	24.0	300	AZSR180-1AE-12D
24	18.00	8.0	48.0	1200	AZSR180-1AE-24D

MECHANICAL DATA

Dimensions: 40.0, 25.0, 49.2, 2.0, 4.5

PC BOARD LAYOUT

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

Viewed toward terminals

Dimensions: 2.8 x 0.8 (2x), 6.5 x 2 (4x), 8.2, 14.7, 3.5, 22.8, 10.0

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.

Dimensions in mm. Tolerance: $\pm .25$ mm