AZSR165

65 AMP MINIATURE POWER RELAY

FEATURES:
- Dielectric strength: > 4000 Vrms
- 65 Amp switching capability
- Contact gap: > 3.0 mm
- Clearance / creepage > 10 mm
- Insulation: class F
- UL: E365652
- TUV: B0887930008
- CQC: 17002178200

CONTACTS

Arrangement | SPST (1 Form A)
---|---

Ratings

Resistive load:
- Max. switched power: 28800VAC
- Max. switched current: 65A
- Max. switched voltage: 480VAC

Rated Load

UL/TUV/CQC

65A at 480 VAC, Res., 1k cycles, 85°C

Making 10A, Carrying 65A, Breaking 10A @480VAC, Res., 100k cycles, 85°C

Making 20A, Carrying 65A, Breaking 20A @480VAC, Res., 30k cycles, 85°C

Material | AgSnO2, AgNi

Resistance

< 100mΩ initially (at 6V, 1A, voltage drop method)
< 10 mΩ initially (at 10A, voltage drop method)

COIL

Power

At pickup Voltage | 1246 mW (typical)
Max. Continuous Dissipation | 2.2 W at 20°C (68°F) ambient
Temperature Rise | 70°C Max. at Rated voltage, 85°C

Temperature | Max. 155 °C (311°F) class F

Life Expectancy | Minimum operations
Mechanical | 1000,000 cycles Min.
Electrical | See UL/TUV/CQC ratings

Operate Time | 40 ms Max. at nominal coil voltage
Release Time | 10 ms Max. at nominal coil voltage (with no coil suppression)

Dielectric Strength

(at sea level for 1min.)

4000 Vrms (coil to contacts)
2500 Vrms (between open contacts)

Surge Voltage | 10 kV @1.2/50μs (coil to contacts)

Insulation Resistance | 1,000MΩ min. at 20°C 500VDC 50% RH

Holding voltage | Greater than 40% of nominal coil voltage

Dropout | Greater than 5% of nominal coil voltage

Ambient Temperature

Operating Storage

At rated coil voltage
-40°C (-40°F) to 85°C (185°F)
-40°C (-40°F) to 105°C (221°F)

Vibration | 1.5 mm DA at 10-55 Hz
Shock | 10g
Enclosure | P.B.T, Polyester
Terminals | Tinned copper alloy, P.C.

Max. Solder Temp. | 270°C (518°F)
Max. solder time | 5 seconds
Weight | 76g

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.
**AZSR165**

### RELAY ORDERING DATA

#### COIL SPECIFICATIONS@ 20°C

<table>
<thead>
<tr>
<th>Nominal Coil VDC</th>
<th>Must Operate VDC</th>
<th>Min. holding VDC</th>
<th>Max. Continuous VDC</th>
<th>Coil Resistance Ω ±10%</th>
<th>ORDER NUMBER</th>
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</thead>
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<td>4.5</td>
<td>2.4</td>
<td>6.6</td>
<td>16.5</td>
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<td>4.8</td>
<td>13.2</td>
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<td>26.4</td>
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<td>AZSR165-1A-24DL</td>
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</tbody>
</table>

#### NOMENCLATURE

AZSR165 - 1A E -12D L (XXX)

I. Basic Series AZSR165  
II. Contact Form 1A: 1 form A  
III. Contact Material Blank: AgNi E: AgSnO₂  
IV. Coil Voltage 6, 9, 12, 24VDC.  
V. Height 41.5mm  
VI. Special code Additional numbers or letters, which does not designate construction features or ratings

### MECHANICAL DATA

#### PC BOARD LAYOUT

![PC BOARD LAYOUT](image)

#### WIRING DIAGRAM

![WIRING DIAGRAM](image)

Tolerance: ±0.5mm