

# AZSR190

## 100 AMP MINIATURE POWER RELAY

### FEATURES:

- Dielectric strength 5000Vrms
- 100 Amp switching (version "T" 100Amp)
- Contact gap : 3.6 mm available
- Clearance / creepage > 10mm
- UL : E365652
- TUV : B170988793008



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A)	
<b>Ratings</b>	Resistive load: Max. switched power: 48000VA  Max. switched current: 100A Max. switched voltage: 800VAC	
<b>Rated Load</b>	55A at 690 VAC, Res., 20k cycles, 85°C, [1] 55A at 690 VAC, Res., 30k cycles, 85°C, [2] 55A at 800 VAC, Res., 1k cycles, 85°C, [1][2] 80A at 277VAC Res., 10k cycles, 85°C, [2] 100A at 480 VAC, Res., 1k cycles, 85°C [1] (T version only) 100A at 690 VAC, Res., 1k cycles, 85°C, [2] (T version only)	
<b>UL/TUV</b>		
<b>UL (only)</b>		55A at 480 VAC, Res., 50k cycles, 85°C, [1]
<b>TUV (only)</b>		55A at 480 VAC, Res., 30k cycles, 85°C [1] 30A at 480 VAC, Res., 50k cycles, 85°C [1] 90A at 480 VAC, Res., 1k cycles, 85°C [1]
<b>Material</b>	Silver Nickel [1], Silver Tin Oxide [2]	
<b>Resistance</b>	< 100mΩ initially (at 6V, 1A, voltage drop method)  < 10 mΩ initially (at 10A, voltage drop method)	

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1,000,000 cycles Min. 55A at 480 50,000 cycles
<b>Operate Time(typical)</b>	40 ms Max. at nominal coil voltage
<b>Release Time(typical)</b>	10 ms Max. at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength</b> <b>(at sea level for 1min.)</b>	5000 Vrms(coil to contacts) 2000 Vrms(between open contacts)
<b>Surge Voltage</b>	10KV @1.2/50μs (coil to contacts)
<b>Insulation Resistance</b>	1,000MΩ min. at 20°C 500VDC 50% RH
<b>Holding voltage</b>	Greater than 40% of nominal coil voltage
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>Storage</b>	At rated coil voltage -40°C(-40F )to 85°C(185°F) -40°C(-40F )to 105°C(221°F)
<b>Vibration</b>	1.5mm DA at 10-55 Hz
<b>Shock</b>	10g
<b>Enclosure</b>	P.B.T, Polyester
<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>	85g

### COIL

<b>Power</b> <b>At pickup Voltage</b> <b>Max. Continuous</b> <b>Dissipation</b> <b>Temperature Rise</b>	1080 mW (typical) 2.32 W at 20°C(68°F) ambient 70°C Max. at Rated voltage,85°C
<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.

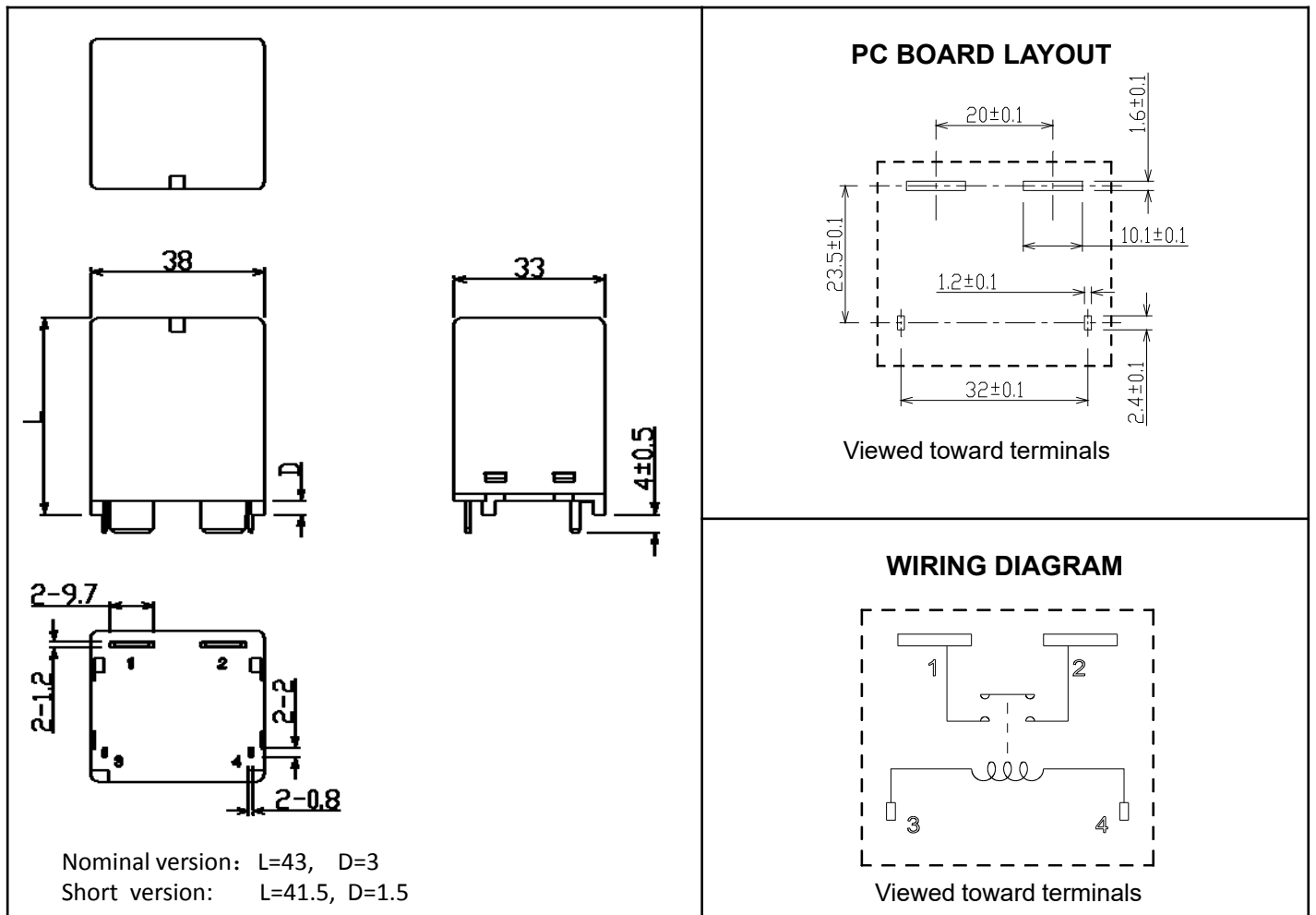
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## RELAY ORDERING DATA

COIL SPECIFICATIONS					ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Min. holding VDC	Max. Continuous VDC	Coil Resistance $\Omega \pm 10\%$	
6	4.5	2.4	6.6	18.8	AZSR190-1A-6D
9	6.75	3.6	9.9	42.2	AZSR190-1A-9D
12	9	4.8	13.2	75	AZSR190-1A-12D
24	18	9.6	26.4	300	AZSR190-1A-24D

\*Add suffix "T" to AZSR190 for high current version. Add suffix "L" for short version (see mechanical data). For Silver Tin Oxide contacts relplace "1A" with "1AE".

## MECHANICAL DATA



Tolerance:  $\pm 0.5\text{mm}$

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This 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.