

# AZ692/AZ693

## 10 AMP MINIATURE POWER RELAY

### FEATURES

- Isolation spacing greater than 8 mm
- Dielectric strength 4000 Vrms coil to contact
- Approvals/Standards include UL, VDE, IEC
- Single pole — Forms A, B, C available
- 10 Amp switching
- Life expectancy to 30 million operations
- Epoxy sealed version for automatic wave soldering and cleaning
- UL, CUR file E44211; VDE 4120–4940–4002/A1



### CONTACTS

<b>Arrangement</b>	SPDT (1 Form C) SPST (1 Form A and 1 Form B)
<b>Ratings</b>	Resistive load: Max. switched power: 300 W or 2500 VA Max. switched current: 10 A; 64 A for 2 ms Max. switched voltage: 150* VDC or 380 VAC <b>UL Rating</b> 10 A at 24 VDC or 115 VAC 1/4 HP 120 VAC motor load 10 A at 250 VAC B 300 pilot duty  * If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Material</b>	Silver cadmium oxide
<b>Resistance</b>	< 30 milliohms initially (at rated current, voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	Standard coil: 337 mW Sensitive coil: 234 mW
<b>Max. Continuous Dissipation</b>	1.9 W at 20°C (68°F) ambient 1.4 W at 40°C (104°F) ambient
<b>Temperature Rise</b>	Standard: 40°C (72°F) at nominal coil voltage Sensitive: 26°C (47°F) at nominal coil voltage
<b>Temperature</b>	Max. 110°C (230°F)

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 30 million operations 1 x 10 <sup>5</sup> at 10 A, 30 VDC or 115 VAC 2 x 10 <sup>5</sup> at 8 A, 250 VAC
<b>Operate Time (typical)</b>	6 ms at nominal coil voltage
<b>Release Time (typical)</b>	2 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	4000 Vrms coil to contact 1000 Vrms between open contacts
<b>Insulation Resistance</b>	10,000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b>  <b>Storage</b>	At nominal coil voltage Standard: -55°C (-67°F) to 70°C (158°F) Sensitive: -55°C (-67°F) to 80°C (176°F) Both: -55°C (-67°F) to 110°C (230°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>	20 g
<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>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	17 grams

### NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Unsealed relays should not be dip cleaned.
4. Specifications subject to change without notice.



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## INTERNATIONAL APPROVALS

Passed International Electrical Code IEC 380	
<b>Germany</b>	VDE 0860/8.81 paragraphs 10, 14 VDE 0806/8.81 paragraphs 7, 11, 15, 16, 29 VDE 0631/9.77 paragraphs 9, 12, 14 VDE 0730/T.1/3.72 paragraph 22 VDE 0435/9.72 (with production monitoring)
<b>U.S.A.</b>	UL File E44211

RELAY ORDERING DATA: Single Pole .138 Spacing

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Sealed
5	8	38	3.5	AZ692-125-2	AZ2692-125-2
6	10	58	4.2	AZ692-112-2	AZ2692-112-2
12	19	215	8.4	AZ692-08-2	AZ2692-08-2
24	35	740	16.8	AZ692-560-2	AZ2692-560-2
48	74	3,200	33.6	AZ692-04-2	AZ2692-04-2

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Sealed
5	8	47	3.5	AZ692-118-52	AZ2692-118-52
6	10	80	4.2	AZ692-010-52	AZ2692-010-52
12	21	330	8.4	AZ692-071-52	AZ2692-071-52
24	41	1,200	16.8	AZ692-052-52	AZ2692-052-52
48	80	4,700	33.6	AZ692-518-52	AZ2692-518-52

\*Substitute "4 or 54," "6 or 56" in place of "2 or 52" to indicate 1 Form A and 1 Form B respectively.

## HARDWARE ORDERING DATA — AZ692†

DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST482-U1	Retainer	ST482-2

† See following pages for diagram

## MECHANICAL DATA

<p>*SEALED VERSION STAND OFF .025 (0.6)</p>	<p><b>AZ692</b> <b>PC BOARD LAYOUT</b> <b>Viewed toward terminals</b></p>	<p><b>WIRING DIAGRAM</b></p> <table border="0"> <tr> <td>I FORM C (SPDT)</td> <td>I FORM B (SPDT - NC)</td> <td>I FORM A (SPDT - NO)</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p>Viewed toward terminals</p>	I FORM C (SPDT)	I FORM B (SPDT - NC)	I FORM A (SPDT - NO)						
I FORM C (SPDT)	I FORM B (SPDT - NC)	I FORM A (SPDT - NO)									

Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "



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RELAY ORDERING DATA: Single Pole .100 Spacing

STANDARD RELAYS: 1 Form C (SPDT)					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Sealed
5	8	38	3.5	AZ693-125-2	AZ2693-125-2
6	10	58	4.2	AZ693-112-2	AZ2693-112-2
12	19	215	8.4	AZ693-08-2	AZ2693-08-2
24	35	740	16.8	AZ693-560-2	AZ2693-560-2
48	74	3,200	33.6	AZ693-04-2	AZ2693-04-2

SENSITIVE RELAYS: 1 Form C (SPDT)					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Sealed
5	8	47	3.5	AZ693-118-52	AZ2693-118-52
6	10	80	4.2	AZ693-010-52	AZ2693-010-52
12	21	330	8.4	AZ693-071-52	AZ2693-071-52
24	41	1,200	16.8	AZ693-052-52	AZ2693-052-52
48	80	4,700	33.6	AZ693-518-52	AZ2693-518-52

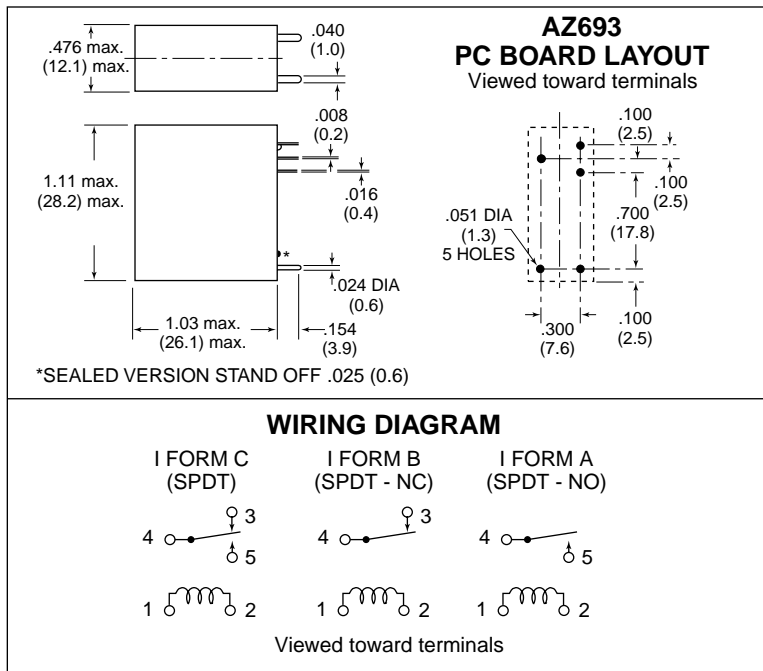
\*Substitute "4 or 54," "6 or 56" in place of "2 or 52" to indicate 1 Form A and 1 Form B respectively.

## HARDWARE ORDERING DATA — AZ693†

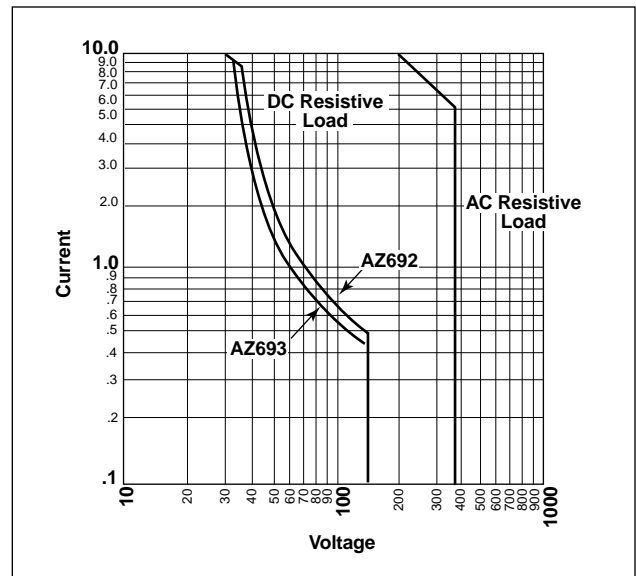
DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST483-U1	Retainer	ST482-2

† See following pages for diagram

## MECHANICAL DATA



## MAXIMUM SWITCHING CAPACITY



Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "



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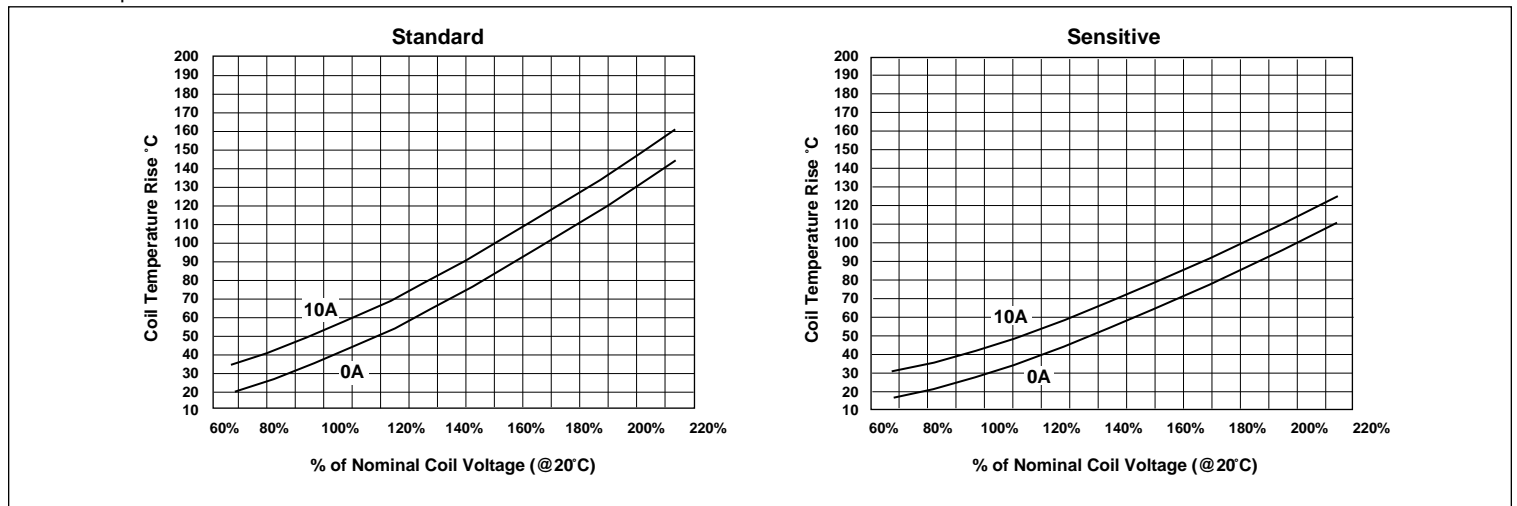
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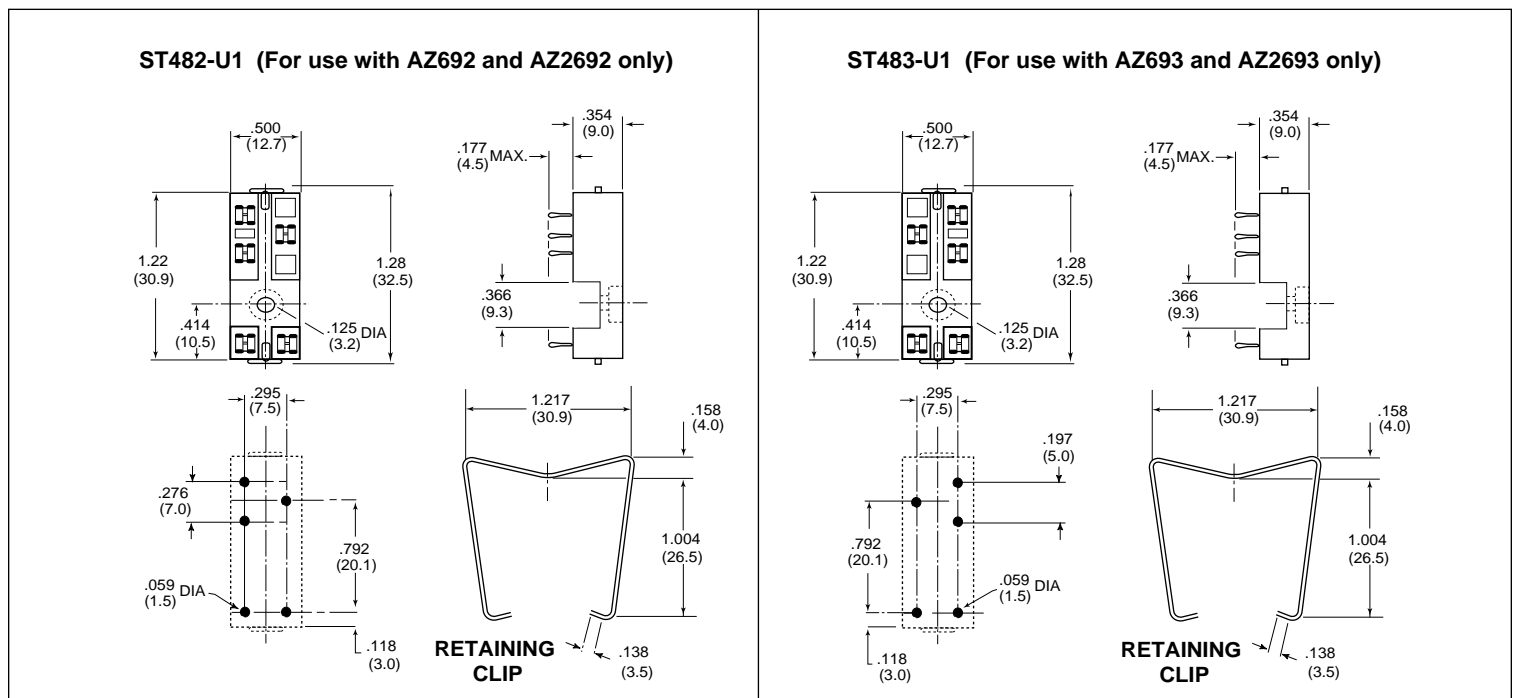
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## Coil Temperature Rise



## HARDWARE SPECIFICATIONS



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"



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