

# AZ2150W

## 30 AMP MINIATURE POWER RELAY

RoHS compliant !

### FEATURES

- 1.75 mm contact gap
- DC coils up to 48V
- High dielectric strength 4 kV contact to coil
- All plastics PTI 250
- Epoxy sealed versions available
- UL Class F (155°C) standard
- UL, CUR file E44211
- VDE certificate 40023154



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A)
<b>Ratings</b>	Resistive load:  Max. switched power: 900 W or 8310 VA Max. switched current: 30 A Max. switched voltage: 250 VDC* or 440 VAC  *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Ratings UL, CUR</b>	30 A at 277 VAC, General use
<b>VDE</b>	20 A at 250 VAC, AC7a
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 50 milliohm initially (24 V, 1A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	625 mW
<b>Max. Continuous Dissipation</b>	1.7 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	43°C (77°F) at nominal coil voltage
<b>Max. Temperature</b>	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. If higher electrical loads are to be switched by the relay contacts, the vent nib has to be opened prior to use of the relay.

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 2 x 10 <sup>5</sup> 3 x 10 <sup>4</sup> at 30 A 250 VAC Res.
<b>Operate Time</b>	15 ms max. at nominal coil voltage
<b>Release Time</b>	10 ms max. at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	3000 Vrms between open contacts 4000 Vrms contact to coil
<b>Insulation Resistance</b>	1000 megaohms min. at 20°C, 500 VDC 50% RH
<b>Insulation (according to DIN VDE 0110, IEC 60664-1)</b>	C250 Overvoltage category: III Pollution degree: 2 Nominal voltage: 250 VAC
<b>Holding Voltage</b>	Greater than 50% of nominal coil voltage
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature Operating</b>	-40°C (-40°F) to 85°C (185°F)
<b>Vibration</b>	1.5 mm DA at 10-55 Hz
<b>Shock</b>	10 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>	25 grams
<b>Packing unit in pcs</b>	40 per plastic tray / 280 per carton

**ZETTLER electronics GmbH** - A ZETTLER GROUP Company

Junkersstr. 3, D-82178 Puchheim, Germany

phone: +49 89 800 97-0 office@ZETTLERelectronics.com  
fax: +49 89 800 97-200 www.ZETTLERelectronics.com

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>

2015-03-31

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## RELAY ORDERING DATA

COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	
5	3.75	2.5	6.0	22.5	AZ2150W-1AE-5DFT
6	4.50	3.0	7.2	32.5	AZ2150W-1AE-6DFT
9	6.75	4.5	10.8	73	AZ2150W-1AE-9DFT
12	9.0	6.0	14.4	130	AZ2150W-1AE-12DFT
24	18.0	12.0	38.8	520	AZ2150W-1AE-24DFT
48	36.0	24.0	57.6	2,080	AZ2150W-1AE-48DFT

\* Substitute "DEFT" in place of "DFT" for epoxy sealed version.  
Coils 5VDC, 6VDC, 48VDC not VDE approved.

## MECHANICAL DATA

Vent nib. (Please pay attention to note 4 on page 1.)

Dimensions: .690 (17.5), .500 (12.7), 1.25 (31.80), .090 (2.3), 1.06 (26.9), .196 (5.0), .130  $\pm$  .020 /  $\begin{smallmatrix} .010 \\ -0.25 \end{smallmatrix}$  (3.3  $\pm$  0.51), .751 (19.1), .200 (5.1), .045 x .045 (1.14 x 1.14), .032 x .062 (0.81 x 1.57), .025 x .025 (0.63 x 0.63)

### PC BOARD LAYOUT

Dimensions: .500 (12.8), .400 (10.2), 2 x  $\phi$  .079 ( $\phi$  2.0), 1.000 (25.4), 2 x  $\phi$  .044 ( $\phi$  1.1), .150 (3.8), .550 (14.0), .700 (17.8)

Viewed toward terminals

### WIRING DIAGRAM

1 FORM A (SPST-NO)

Viewed toward terminals

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

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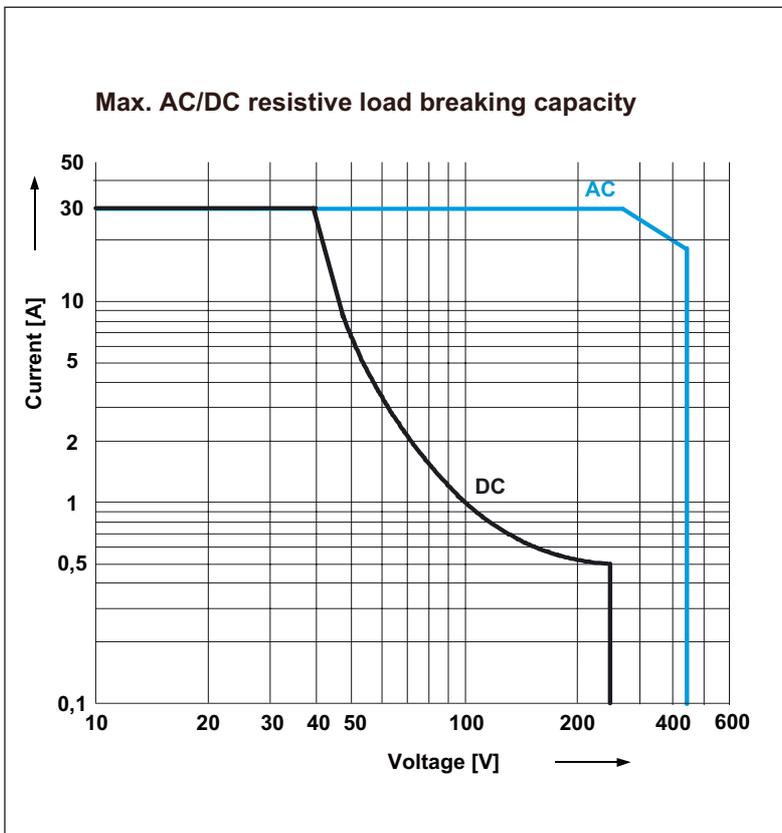
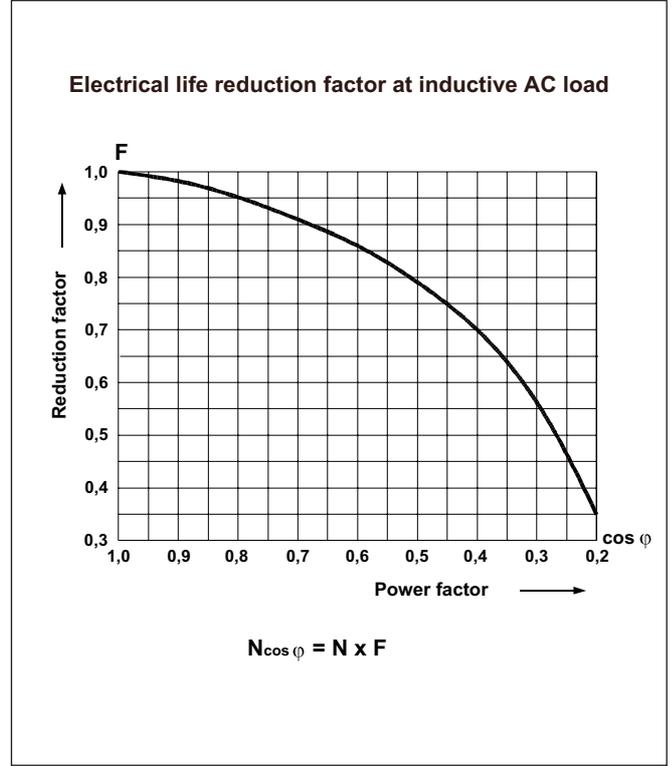
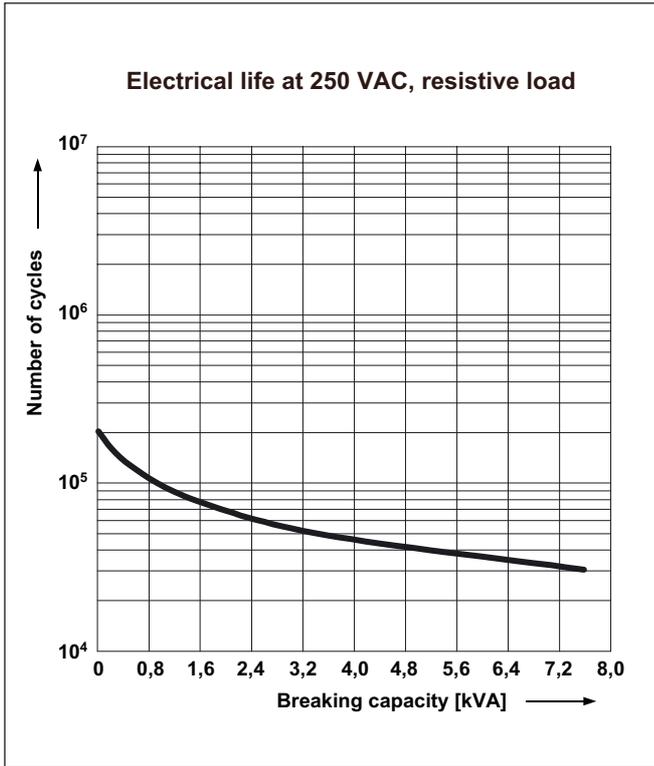
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