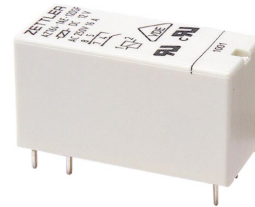


AZ764

16 A SPDT MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low height: 15.7 mm
- Epoxy sealed version available
- 16 Amp switching (High inrush version 80A available)
- AC and DC coils
- Isolation spacing greater than 10 mm
- Proof tracking index (PTI/CTI) 250
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1) EN 60335-1 (VDE 0700, part 1)
- UL, CUR file E43203
- VDE file 40012572



CONTACTS

| | |
|--------------------|--|
| Arrangement | SPDT (1 Form C) SPST (1 Form A) |
| Ratings | Resistive load: Max. switched power: 480 W or 4000 VA Max. switched current: 16 A Max. switched voltage: 300 VDC* or 400 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. |
| Rated Load | |
| UL, CUR | 16 A at 250 VAC General Use |
| VDE | 16 A at 250 VAC |
| Material | Silver cadmium oxide, silver nickel or silver tin oxide |
| Resistance | < 100 milliohms initially |

GENERAL DATA

| | |
|--|--|
| Life Expectancy Mechanical Electrical | Minimum operations 3 x 10 ⁷ 7 x 10 ⁴ at 16 A 250 VAC res. |
| Operate Time (typical) | 7 ms at nominal coil voltage |
| Release Time (typical) | 3 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 contact sets 1000 Vrms between open contacts |
| Insulation Resistance | 10 ⁵ megohms min. at 500 VDC, 20°C, 50% RH |
| Insulation (according to DIN VDE 0110, IEC 60664-1) | B250 at 1 Form C, flux proof version C250 at other relay versions Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC |
| Dropout DC coils AC coils | Greater than 10% of nominal coil voltage Greater than 15% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage -40°C (-40°F) to 85°C (185°F) - DC coils -40°C (-40°F) to 70°C (158°F) - AC coils -40°C (-40°F) to 105°C (221°F) |
| Vibration | Break contacts: 5 g at 20...500 Hz Make contacts: 20 g at 30...500 Hz |
| Shock | 20 g |
| Enclosure | P.B.T. polyester, UL-94 : V0 |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | 270°C (518°F) |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | 80°C (176°F) |
| Max. Immersion Time | 30 seconds |
| Weight | 14 grams |
| Packing unit in pcs | 20 per carton tube / 1000 per carton box |

COIL

| | |
|------------------------------------|---|
| Power | |
| At Pickup Voltage (typical) | 200 mW (DC coil) .422 VA (AC coil) |
| Max. Continuous Dissipation | 1.7 W at 20°C (68°F) ambient 1.7 VA at 20°C (68°F) ambient |
| Temperature Rise | 26°C (47°F) at nominal coil voltage |
| Max. Temperature | 155°C (311°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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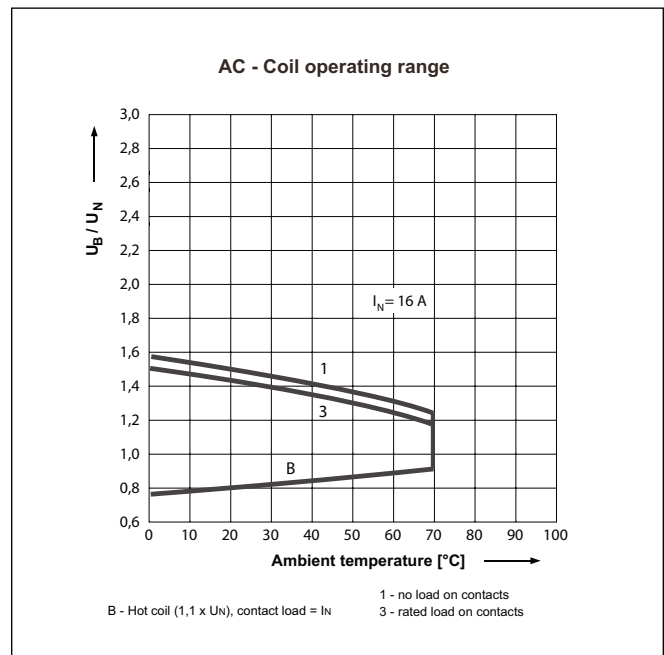
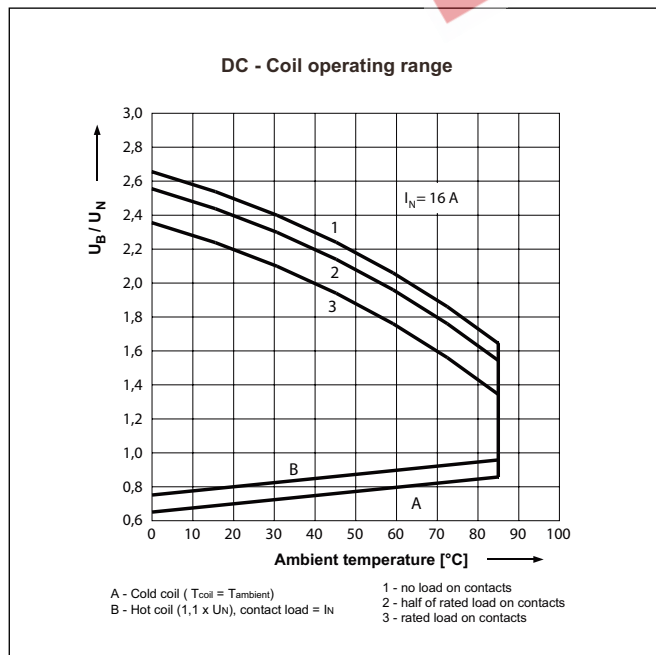
RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC COIL | | | | ORDER NUMBER* | |
|-------------------------------|------------------|---------------------|--------------------------------|----------------|----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance Ohm $\pm 10\%$ | 1 Form A | 1 Form C |
| 3 | 2.1 | 7.6 | 22 | AZ764-1AH-3D | AZ764-1CH-3D |
| 5 | 3.5 | 12.7 | 60 | AZ764-1AH-5D | AZ764-1CH-5D |
| 6 | 4.2 | 15.3 | 90 | AZ764-1AH-6D | AZ764-1CH-6D |
| 9 | 6.3 | 22.9 | 200 | AZ764-1AH-9D | AZ764-1CH-9D |
| 12 | 8.4 | 30.6 | 360 | AZ764-1AH-12D | AZ764-1CH-12D |
| 18 | 12.6 | 45.9 | 710 | AZ764-1AH-18D | AZ764-1CH-18D |
| 24 | 16.8 | 61.2 | 1,440 | AZ764-1AH-24D | AZ764-1CH-24D |
| 36 | 25.2 | 92.0 | 3,140 | AZ764-1AH-36D | AZ764-1CH-36D |
| 48 | 33.6 | 122.0 | 5,700 | AZ764-1AH-48D | AZ764-1CH-48D |
| 60 | 42.0 | 153.0 | 7,500 | AZ764-1AH-60D | AZ764-1CH-60D |
| 110 | 77.0 | 280.0 | 25,200 | AZ764-1AH-110D | AZ764-1CH-110D |

| COIL SPECIFICATIONS - AC COIL | | | | | ORDER NUMBER* | |
|-------------------------------|------------------|---------------------|-------------------------------|--------------------------------|----------------|----------------|
| Nominal Coil VAC | Must Operate VAC | Max. Continuous VAC | Nominal Current mA $\pm 10\%$ | Coil Resistance Ohm $\pm 10\%$ | 1 Form A | 1 Form C |
| 12 | 9.0 | 18.0 | 63.0 | 100 | AZ764-1AH-12A | AZ764-1CH-12A |
| 24 | 18.0 | 36.0 | 31.3 | 400 | AZ764-1AH-24A | AZ764-1CH-24A |
| 48 | 36.0 | 72.0 | 15.6 | 1,550 | AZ764-1AH-48A | AZ764-1CH-48A |
| 60 | 45.0 | 90.0 | 12.5 | 2,600 | AZ764-1AH-60A | AZ764-1CH-60A |
| 110 | 82.5 | 165.0 | 6.8 | 8,900 | AZ764-1AH-110A | AZ764-1CH-110A |
| 115 | 86.3 | 172.5 | 6.5 | 9,600 | AZ764-1AH-115A | AZ764-1CH-115A |
| 120 | 90.0 | 180.0 | 6.3 | 10,200 | AZ764-1AH-120A | AZ764-1CH-120A |
| 220 | 165.0 | 330.0 | 3.4 | 35,500 | AZ764-1AH-220A | AZ764-1CH-220A |
| 230 | 172.5 | 345.0 | 3.3 | 38,500 | AZ764-1AH-230A | AZ764-1CH-230A |
| 240 | 180.0 | 360.0 | 3.1 | 42,500 | AZ764-1AH-240A | AZ764-1CH-240A |

* "1AH" or "1CH" denote silver cadmium oxide contacts.
 Substitute "E" for "H" at "1AH" or "1CH" for silver tin oxide contacts.
 Remove the "H" at "1AH" or "1CH" for silver nickel contacts.
 Add suffix "E" at the end of order number for sealed version.

Substitute "1AT" for "1AH" for high inrush 80A silver tin oxide contacts (available on 1 Form A and DC coils only).



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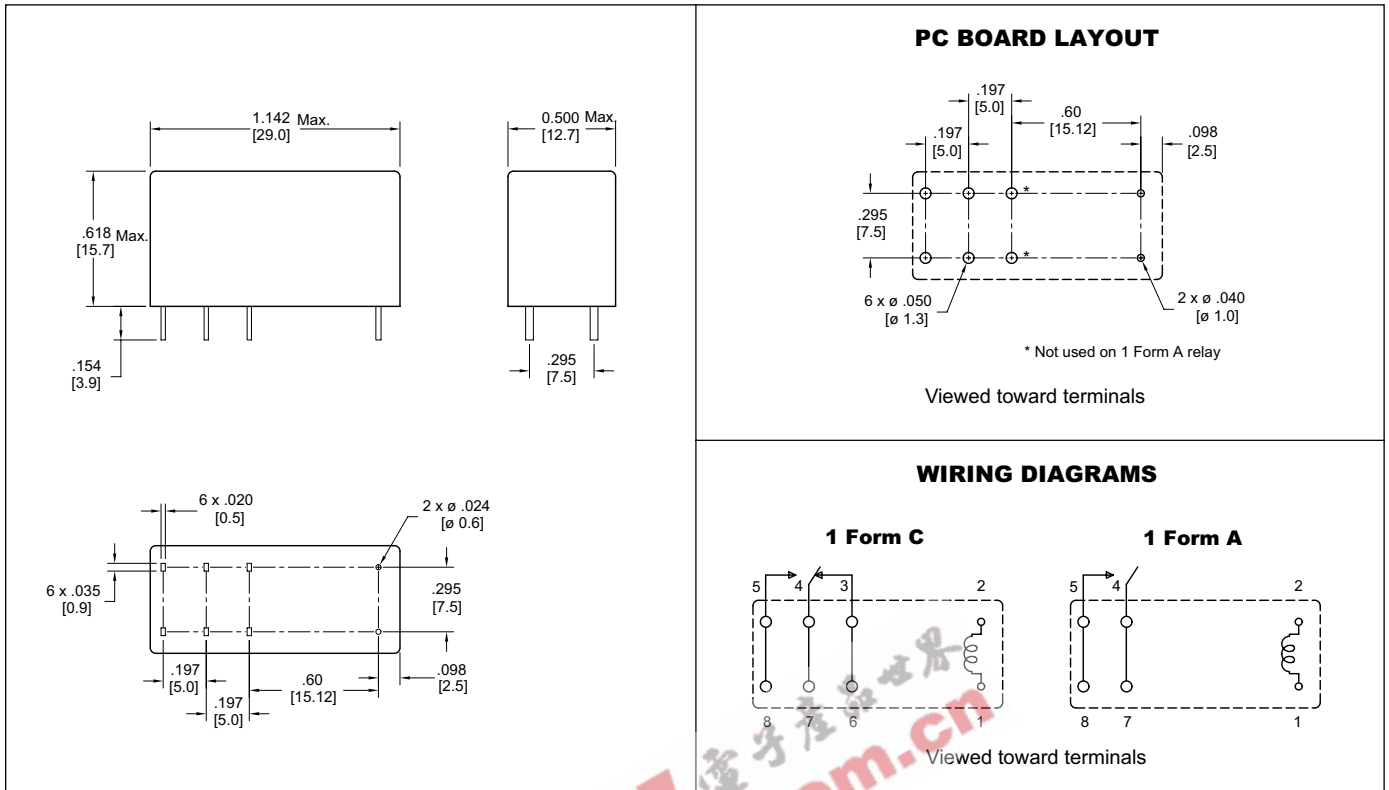
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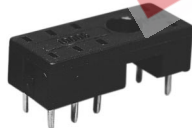
MECHANICAL DATA



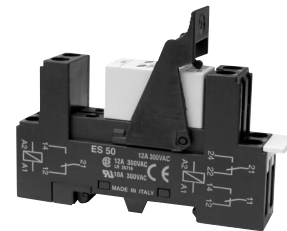
Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010''$

ACCESSORIES

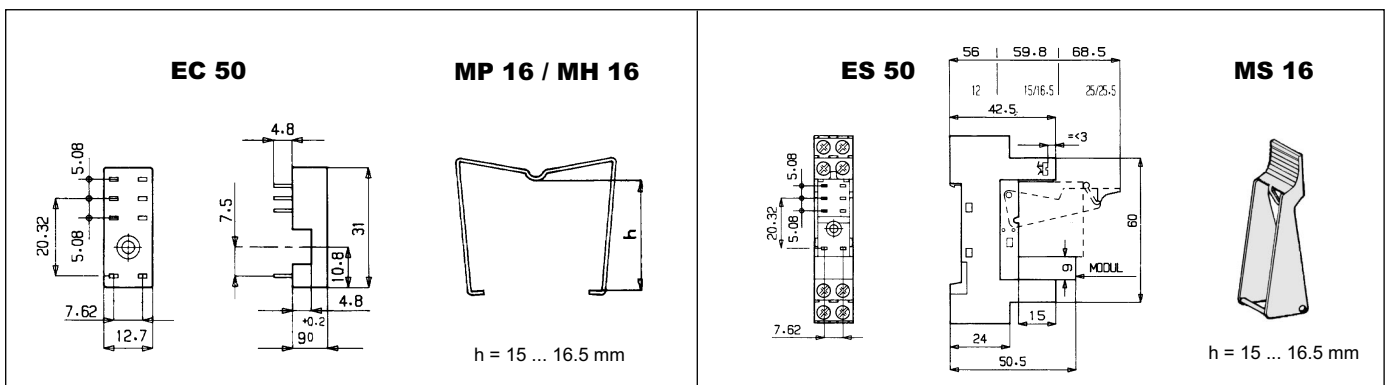
For P.C.B. mount: Socket EC 50
Retaining Clip MP 16 / MH 16



For DIN rail mount: Socket ES 50
Retaining Clip MS 16



MECHANICAL DATA



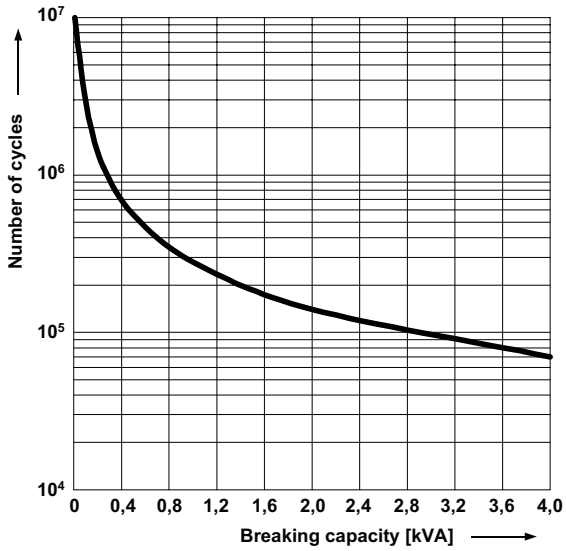
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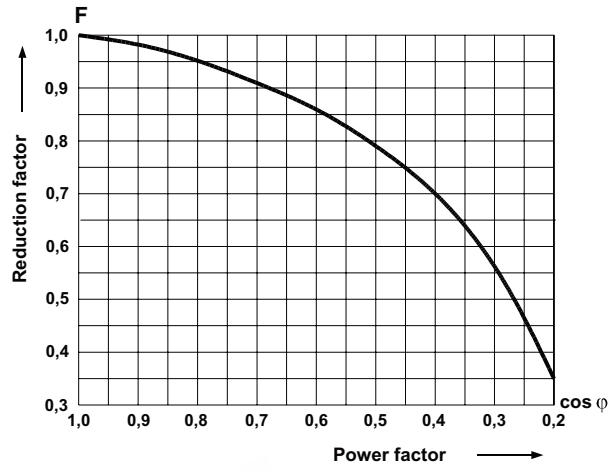
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Electrical life at 250 VAC, resistive load



Electrical life reduction factor at inductive AC load



$$N_{\cos \varphi} = N \times F$$

Max. DC resistive load breaking capacity

