

AZ742

8 A DPDT MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low height: 15.7 mm
- Epoxy sealed version available
- 8 Amp switching — double pole contacts
- AC and DC coils
- Isolation spacing greater than 10 mm
- Proof tracking index (PTI/CTI) 250
- Surpasses requirements of VDE 0631/0700
- UL, CUR file E43203; VDE 119918



CONTACTS

Arrangement	DPDT (2 Form C) DPST (2 Form A)
Ratings	Resistive load: Max. switched power: 240 W or 2000 VA Max. switched current: 8 A Max. switched voltage: 150* 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 VDE	8 A at 250 VAC resistive 8 A at 250 VAC
Material	Silver nickel or silver nickel gold plated
Resistance	< 100 milliohms initially

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
Temperature Rise	26°C (47°F) at nominal coil voltage
Max. Temperature	115°C (239°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.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 3 x 10 ⁷ 1 x 10 ⁵ at 8 A 240 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	1000 megohms min. at 500 VDC, 20°C, 50% RH
Dropout	Greater than 10% of nominal coil voltage - DC Greater than 15% of nominal coil voltage - AC
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 90°C (194°F) - DC coils -40°C (-40°F) to 75°C (167°F) - AC coils -40°C (-40°F) to 115°C (239°F)
Vibration	0.062" DA at 10–55 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



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3/3/04W

AZ742

RELAY ORDERING DATA

COIL SPECIFICATIONS - DC COIL				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm, $\pm 10\%$	2 Form A	2 Form C
3	2.1	7.6	22	AZ742-2A-3D	AZ742-2C-3D
5	3.5	12.7	60	AZ742-2A-5D	AZ742-2C-5D
6	4.2	15.3	90	AZ742-2A-6D	AZ742-2C-6D
9	6.3	22.9	200	AZ742-2A-9D	AZ742-2C-9D
12	8.4	30.6	360	AZ742-2A-12D	AZ742-2C-12D
18	12.6	45.9	710	AZ742-2A-18D	AZ742-2C-18D
24	16.8	61.2	1,440	AZ742-2A-24D	AZ742-2C-24D
36	25.2	92.0	3,140	AZ742-2A-36D	AZ742-2C-36D
48	33.6	122.0	5,700	AZ742-2A-48D	AZ742-2C-48D
60	42.0	153.0	7,500	AZ742-2A-60D	AZ742-2C-60D
110	77.0	280.0	25,200	AZ742-2A-110D	AZ742-2C-110D

COIL SPECIFICATIONS - AC Coil					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA $\pm 10\%$	Coil Resistance $\pm 10\%$	2 Form C
12	9.0	18.0	63.0	100	AZ742-2C-12A
24	18.0	36.0	31.3	400	AZ742-2C-24A
48	36.0	72.0	15.6	1550	AZ742-2C-48A
60	45.0	90.0	12.5	2600	AZ742-2C-60A
110	82.5	165.0	6.8	8900	AZ742-2C-110A
115	86.3	172.5	6.5	9600	AZ742-2C-115A
120	90.0	180.0	6.3	10200	AZ742-2C-120A
220	165.0	330.0	3.4	35500	AZ742-2C-220A
230	172.5	345.0	3.3	38500	AZ742-2C-230A
240	180.0	360.0	3.1	42500	AZ742-2C-240A

HARDWARE ORDERING DATA
DESCRIPTION
Socket
ORDER NUMBER
ST484-U1
DESCRIPTION
Retainer
ORDER NUMBER
ST482-3

* Add suffix "E" for sealed version. "For gold plated contacts substitute "-2AG" for "-2A" or "-2CG" for "-2C".

MECHANICAL DATA

WIRING DIAGRAMS
VIEWED TOWARDS TERMINALS

2 Form C 2 Form A

PC BOARD LAYOUT
VIEWED TOWARDS TERMINALS

* Not used on 2 Form A relay

ST484-U1 HARDWARE

RETAINING CLIP

ST482-3

Viewed toward terminals

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



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