

16 AMP LOW PROFILE POWER RELAY

FEATURES

- High power switching (4000 VA)
- High sensitivity, 128 mW pickup
- Low profile (less than .5" height)
- SPST (1 Form A)
- Epoxy sealed version available
- DC coils up to 100 VDC
- UL file E44211



CONTACTS

Arrangement	SPST (1 Form A)
Ratings Heavy Duty	Resistive load: Max. switched power: 480 W, 4000 VA Max. switched current: 16 A Max. switched voltage: 125 VDC* or 250 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL	10 A at 30 VDC, 100k cycles 16 A at 277 VAC, 100k cycles ¹ / ₁₀ HP at 125 VAC, 250 VAC or 277 VAC, 100k cycles
Material	Silver tin oxide
Resistance	< 50 milliohms initially

COIL

Power At Pickup Voltage (typical)	128 mW
Max. Continuous Dissipation	1.8 W at 20°C (68°F)
Temperature Rise	16°C (29°F) at nominal coil voltage
Temperature	Max. 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

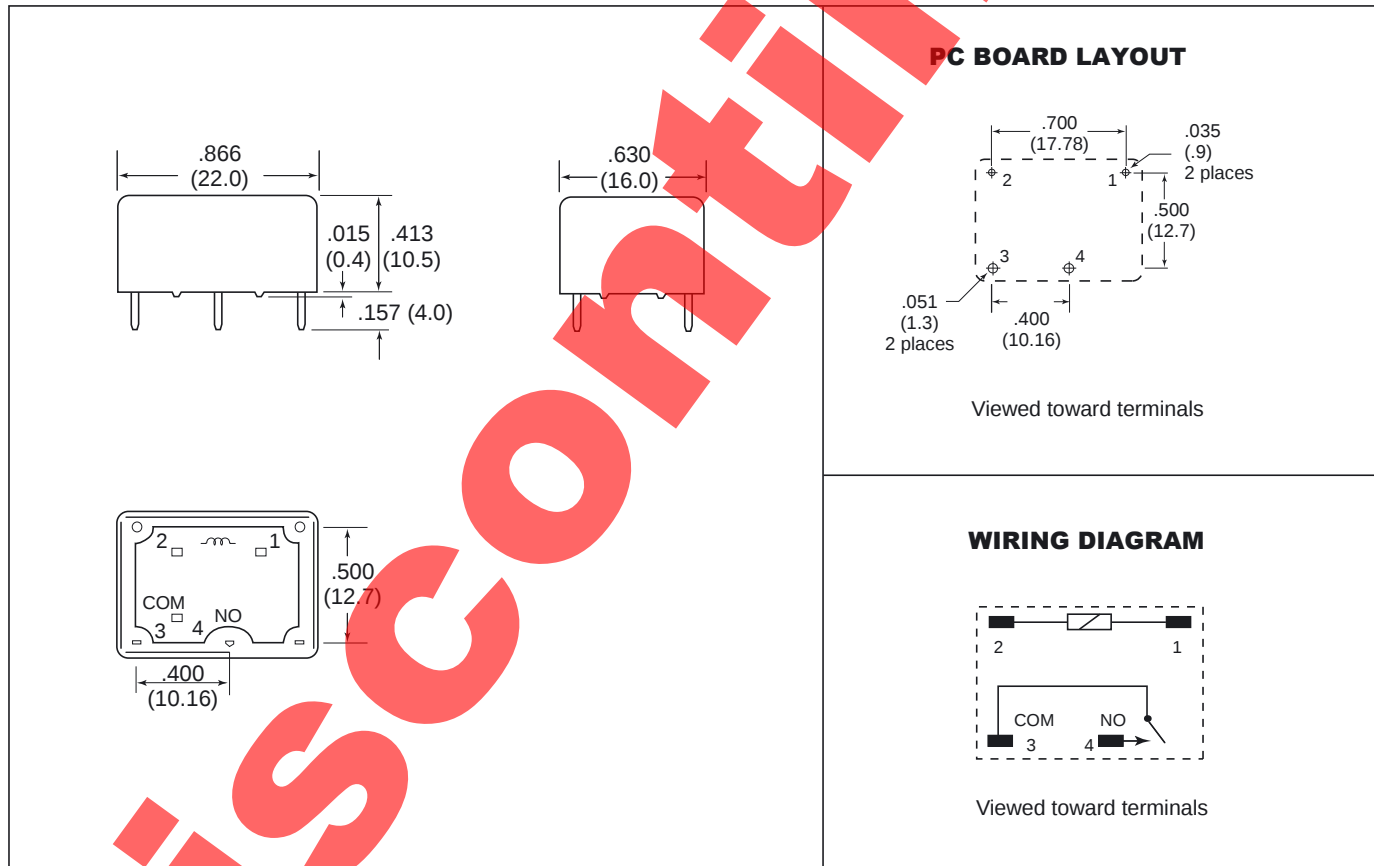
Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 16 A 250 VAC Res.
Operate Time (typical)	10 ms at nominal coil voltage
Release Time (typical)	4 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1500 Vrms coil to contact 1000 Vrms contact to contact
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage 100 V coil ≥ 6 VDC
Ambient Temperature Operating	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) 3-48 V coils -40°C (-40°F) to 60°C (140°F) 100 V coil
Storage	-40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10-55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
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	8 grams
Packing unit in pcs	20 per plastic tube / 1000 per carton box

RELAY ORDERING DATA

COIL SPECIFICATIONS – Standard Coil				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	ORDER NUMBER*
5	4.0	15.0	125	AZ948-1AET-5D
6	4.8	18.0	180	AZ948-1AET-6D
9	7.2	27.0	405	AZ948-1AET-9D
12	9.6	36.0	720	AZ948-1AET-12D
24	19.2	72.0	2,880	AZ948-1AET-24D
48	38.4	144.0	11,520	AZ948-1AET-48D
100	48.0	180.0	18,000	AZ948-1AET-100D

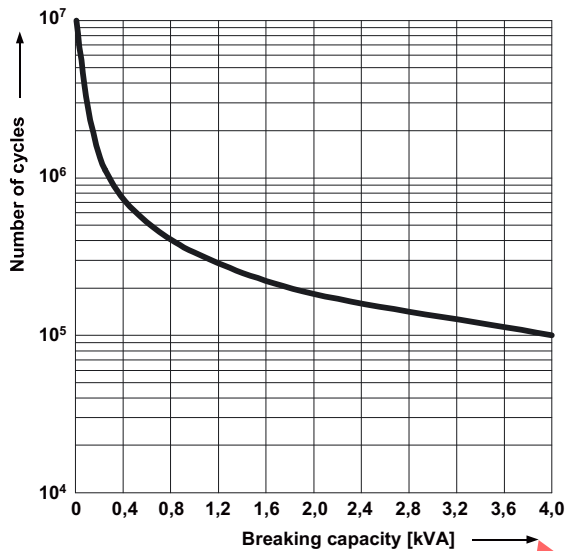
*Add suffix "E" for epoxy sealed version.

MECHANICAL DATA

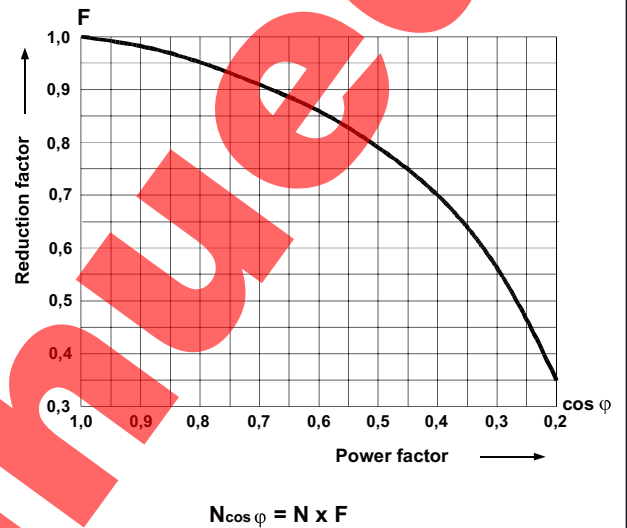


Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "

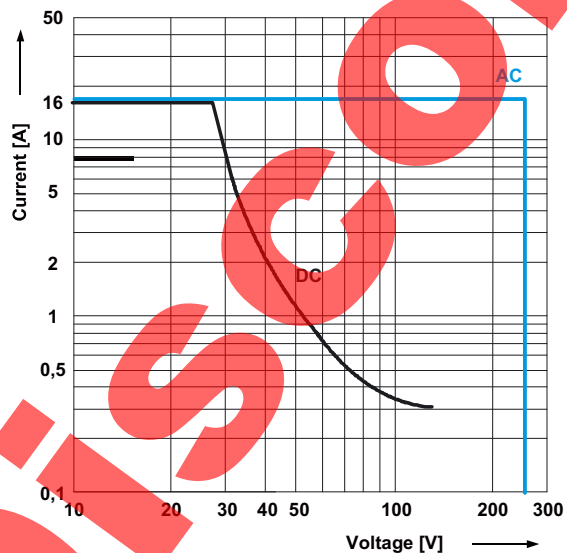
Electrical life at 250 VAC, resistive load



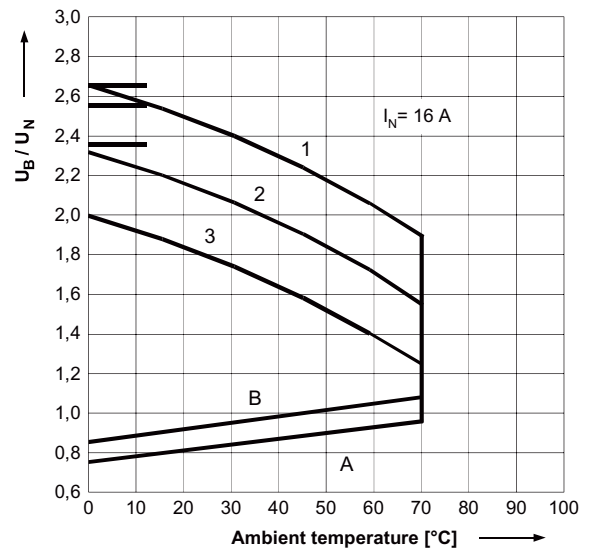
Electrical life reduction factor at inductive AC load



Max. AC/DC resistive load breaking capacity



DC - Coil operating range



A - Cold coil ($T_{\text{coil}} = T_{\text{ambient}}$)
B - Hot coil ($1,1 \times U_N$), contact load = I_N

1 - no load on contacts
2 - half of rated load on contacts
3 - rated load on contacts