UNIVERSAL ELECTRONIC SUPPLY CO.

The 85 series relay is a panel mounted, screw terminal, open style sequencing relay. This two pole relay has a single coil which operates a ratchet wheel. Control cams, on the ratchet wheel shaft, step from one position to the next on each impulse to the coil. A 50 millisecond pluse will step the relay. Coils are for momentary duty only. The 85 series may be supplied in any sequence up to 12 steps. Contacts are single throw.

GENERAL SPECIFICATIONS (@ 25° C)

Contacts:

Contact Configuration	DPST
Contact Material	Fine Silver
Contact Rating	
120 / 240VAC Resistive	20 Amp
28VDC Resistive	20 Amp
Contact Resistance, Initial	100 milliohms max @ 6VDC

Coil:

Coils Available	AC or DC up to 600V
Nominal Coil Power	18VA 11W
Input Voltage Tolerance - AC	85% to 110% of nominal
Input Voltage Tolerance - DC	80% to 110% of nominal
Drop out voltage	10% of nominal
Duty	Momentary

Timing:

Operate Time (max)	50mS
Release Time (max)	50mS

Dielectric Strength:

Across Open Contacts	1500Vrms
Between Mutually Insulated Points	1500Vrms
Insulation Resistance	1,000 Megohms min @ 500VDC

Temperature:

Operating	-20 to 60°C (-4 to 140°F)
Storage	-40 to 105°C (-40 to 221°F)

Life Expectancy:

Electrical (full load operations)	100,000
Mechanical (no load operations)	500,000

Miscellaneous:

Mounting Position	Any
Enclosure	Open
Weight	25.6oz (650 grams)

**AXA Wire Diagram
(Top View)**
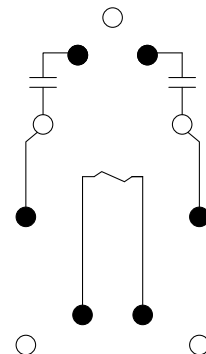
Latching / Sequencing Relays
10 - 100 Amp

Coil Specifications

AC Coil, 50/60HZ		DC Coil	
Nominal voltage	Resistance ohms ±10%	Nominal voltage	Resistance ohms ±10%
24	27	24	62
120	771	120	-
110-125	-	110-125	1475
240	3290	240	6100
440	14700	440	-
550	22000	550	-

Outline Dimensions
Dimensions Shown in inches & (millimeters)

2.67
(67.9)

5.00
(127.1)

3.00
(76.2)

2.38
(60.4)

R .09
(2.3)

.31
(7.9)

4.37
(111.1)
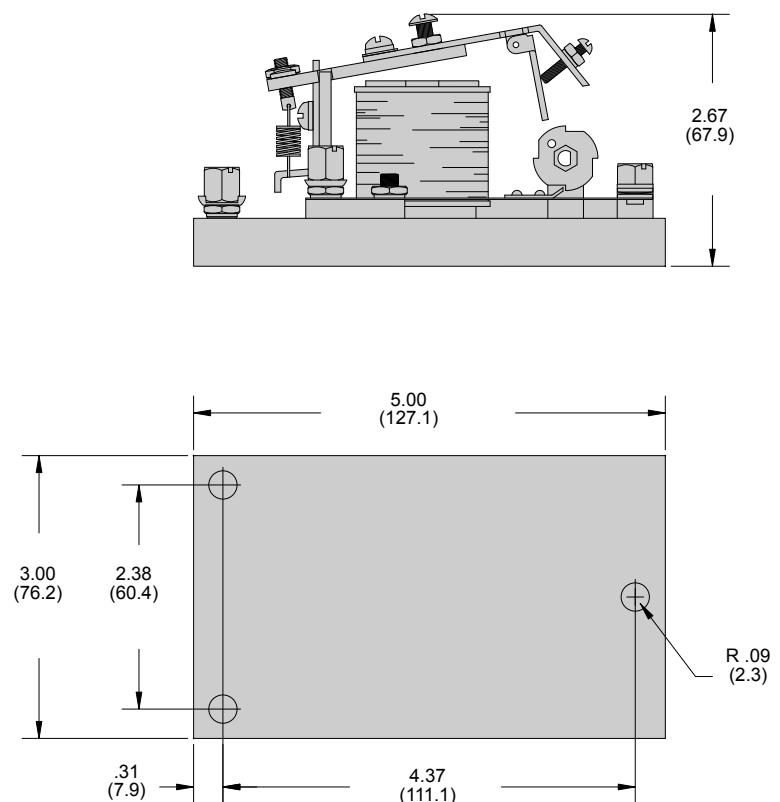
Ordering Code   85   AXA   H3   -120VAC

Series
85

Contact Arrangement
AXA 1 - N.O & 1 - N.C.
BBX (2PST - N.O.)

Options
Open style construction - NO CODE
Sheet Metal Housing - CODE H3

Coil Voltage
AC: 24, 120, 240, 440, 550 (Add VAC)
DC: 24, 115-125, 240 (Add VDC)

Standard Contact Sequences

Relay	Step	1	2	3	4	(Repeat)
85AXA	Contact A	0	X	0	X	
	Contact B	X	0	X	0	
85BXX	Contact A	0	X	0	X	
	Contact B	0	X	0	X	

0 = Contact open   X = Contact closed
*8 Tooth ratchet is standard