

High Voltage Vacuum Relay

Features

Physical:

- SPST, normally closed
- Smaller, low-power actuator
- High current carry rating
- Low current leakage at 8kV
- Vacuum dielectric for power switching low current loads
- Meets requirements of MIL-R-83725, QPL versions available
- Meets IEC 62D and ANSI requirements for cardiac defibrillator devices

Environmental:

- -55°C to 125°C
- 30G shock, 10G vibration

Power Rating:

- 12 Amp carry at 8kVdc
- 5kV at 32MHz

Coil Voltage & Power:

- See table



Preliminary Specifications.
Subject to change.

CII Technologies™
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P.O. Box 4422, Santa Barbara, CA 93140
Phone (805) 684-4560 Fax (805) 684-9679

E-Mail: info@ciitech.com

Internet: <http://www.ciitech.com/>

TITLE

High Voltage Vacuum Relay

PREP. BY

Sterling Altobell

CHKD. BY

DWG NO.

K47B

ENG APRVL

CAGE CODE

18741

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General Specifications**Physical Data**

	Units	K47B
Contact Arrangement		SPST-NC
Form		B
Dimensions		See drawing
Weight, Maximum	oz	0.9

Environmental Data

Shock, 11ms ½ sine (operating)	g_{peak}	30
Vibration, 55-1000 Hz	g_{peak}	10
Operating Temperature Range	°C	-55 to +125

Electrical Data

Test Voltage	kV peak	9
Rated Operating Voltage		
dc or 60 Hz	kV _{peak}	8
2.5 MHz	kV _{peak}	7.5
16 MHz	kV _{peak}	7
32 MHz	kV _{peak}	5
Continuous Current Carry, Maximum		
dc or 60 Hz	A RMS	12
2.5 MHz	A RMS	10
16 MHz	A RMS	5
32 MHz	A RMS	3
Coil Hi-Pot	V RMS	500
Contact Capacitance		
Between Open Contacts	pH	1.2
Open Contacts to Ground	pH	1.2
Contact Resistance	mΩ	0.030
Mechanical Life	cycles	2000000
Mechanical Data		
Operate Time ¹ , Maximum	ms	10
Release Time, Maximum	ms	10

1. Operate Time, Release Time, and Contact Bounce are all measured with the relay stabilized at 25 C and operated with nominal coil voltage. Operate Time includes bounce. For normally closed relays, operate time refers to opening of the relay (i.e. operating the coil) and release time to closing the relay



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K47B

THIRD ANGLE PROJECTION



THIS DRAWING
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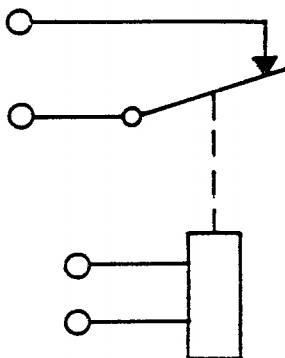
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Coil & Electronics Data

	Units	K47B234 K47B232	K47B334 K47B332
Coil Voltage, Nominal	Vdc	12	26.5
Pickup Voltage, Maximum	Vdc	8	16
Drop-Out Voltage	Vdc	.5-5	1-10
Coil Resistance	Ω	230	920

Schematic

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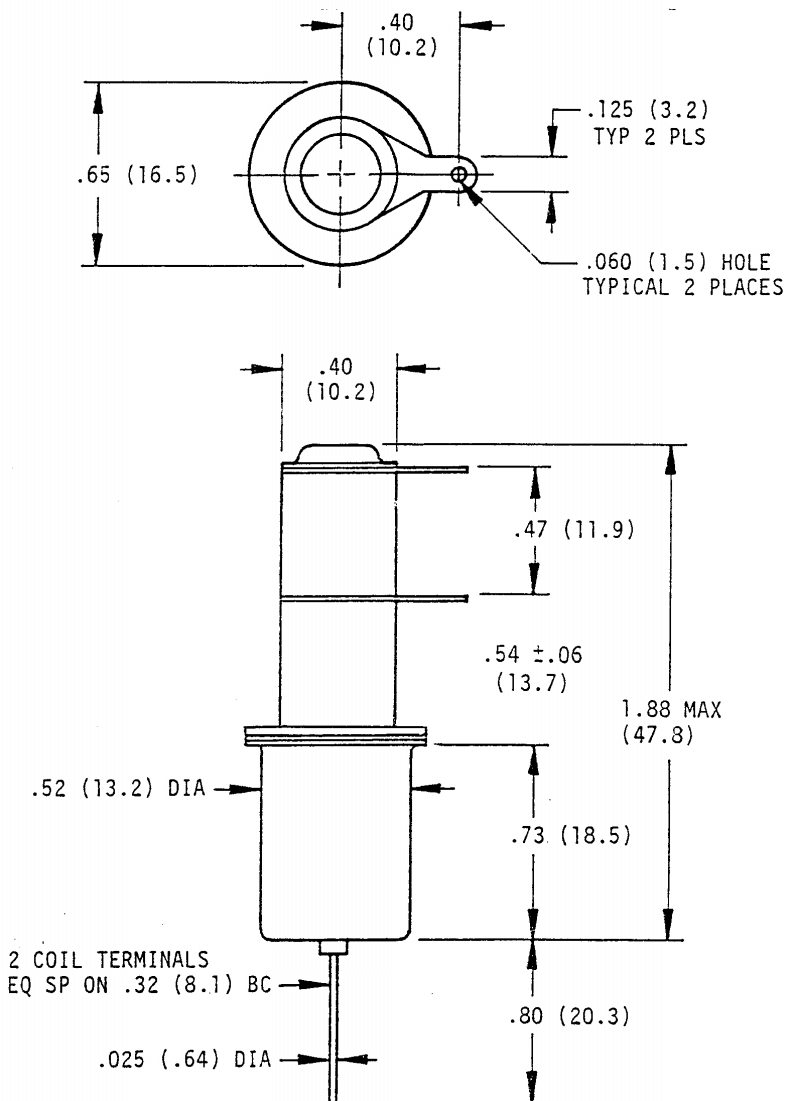
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Part Drawing**Dimensions in Inches**

(Dimensions in Parentheses are in Millimeters)

Tolerances Accepted as Noted

.xx = ± .03

.xxx = ± .010

∠ x° = ± 2°

DO NOT SCALE DWG.

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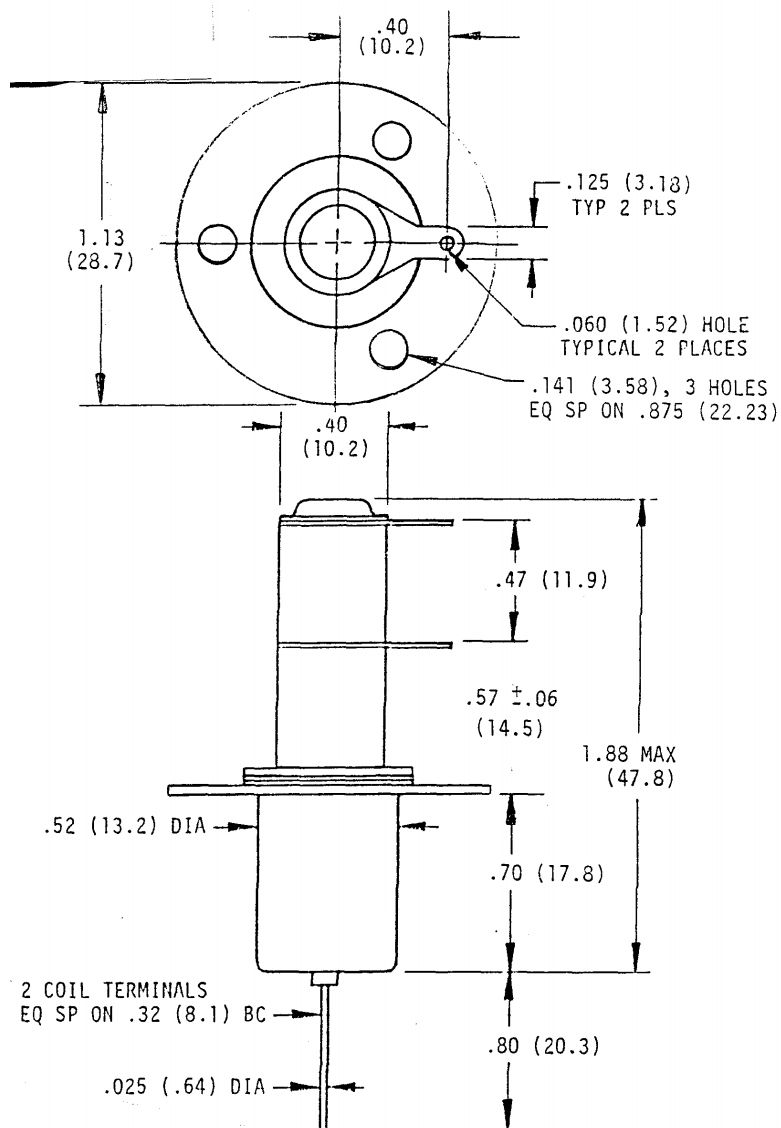
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Revisions

REV.	DESCRIPTION	DATE	APP.
A	Initial Concept	87/01/14	RG
B	Revised Pages 1 and 2	89/10/07	RG
C	Revised Pages 1, 2, 4, and 5	88/12/09	RG
D	Revised Pages 1, 2, 4, and 5	90/07/02	RG
E	New Template	99/04/15	JCM
F	Revised pages 1,2,3	99/12/14	SA



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