

High Voltage Vacuum Relay

Features

Physical:

- Hermetically Sealed: arc contained
- Maintenance free

Environmental:

- Temperature range -55°C to 125°C
- 50G Shock

Ratings:

- Meets requirements of MIL-R-83725
- QPL version available
- 3.5 kVdc
- 1.5kV @ 32 MHz
- 25 Adc carry

Coil Voltage:

- 12, 26.5, 115 Vdc Standard



CI Technologies™
advanced control electronic solutions

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 TANNER 90/4/23

CHKD. BY GREAVES 90/4/24

DWG NO.

HC-1 SERIES

CAGE CODE

18741

SCALE

NA

SHEET

1 of 5

ENG APPV/

GREAVES

90/4/24

General Specifications

K

Physical Data

Units

Contact Arrangement		SPDT
Form		C
Weight	oz	1

Environmental Data

Shock, 11ms ½ sine	g_{peak}	50
Vibration, 30 g_{peak}	Hz	55-2000
Operating Temperature Range	°C	-55 to +125

Electrical Data

Test Voltage (dc or 60 Hz)	kV_{peak}	5
Rated Operating Voltage		
Dc or 60 Hz	kV_{peak}	3.5
2.5 MHz	kV_{peak}	2.5
16 MHz	kV_{peak}	2.0
32 MHz	kV_{peak}	1.5
Continuous Current Carry capability		
Dc or 60 Hz	A	25
2.5 MHz	A	14
16 MHz	A	9
32 MHz	A	7
Coil Hi-Pot	Vrms	500
Contact Capacitance		
Between Open Contacts	pF	2.0
Open Contacts to Ground	pF	2.5
Contact Resistance, maximum	Ohms	0.010
Mechanical Life	cycles	2,000,000

Mechanical Data

Operate Time, Maximum	ms	6
Release Time, Maximum	ms	6

1. RATINGS LISTED ARE FOR 25 °C SEA LEVEL CONDITIONS.
2. RELAY BASE MUST BE GROUNDED



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THIRD ANGLE PROJECTION



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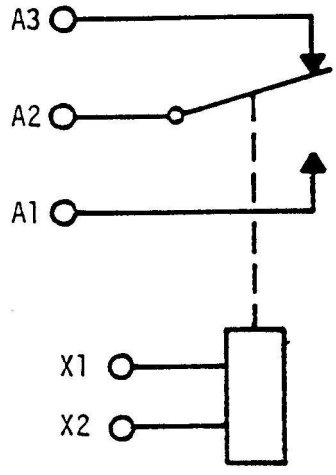
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Coil Data

	Units	HC-1/12VDC	HC-1	HC-1/115VDC
Coil Voltage, nominal	Vdc	12	26.5	115
Pickup Voltage, maximum	Vdc	8	16	80
Drop-out Voltage	Vdc	.5-5	1-10	5-50
Coil Resistance (± 10%)	Ohms	80	335	6000

Schematic



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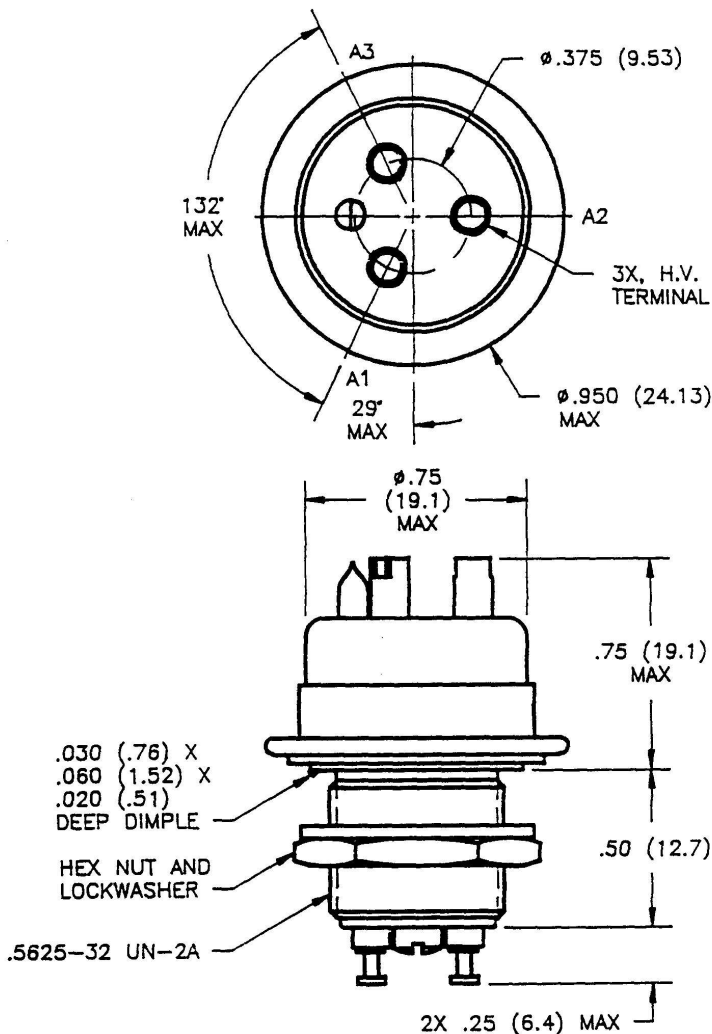
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Part Drawing

K



Dimensions in Inches
 (Dimensions in Parentheses are in Millimeters)
 Tolerances except as noted
 .xx = $\pm .03$
 .xxx = $\pm .010$
 $\angle x^\circ = \pm 2^\circ$
DO NOT SCALE DWG.

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Revisions

REV.	DESCRIPTION		DATE	APP.
H	Revised Pages 1, 3, and 4	ECO 8421	91/04/12	RG
J	Revised Pages 1 and 4	ECO 9018	93/05/18	RG
K	New Template	DCO 11856	99/9/21	RJG



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