

K1K06X Contactor

1000Vdc/1000A Bi-Directional Power Switching
SPST-NO Form X

Product Facts:

- Lowest cost, smallest 1000A/1000V hermetically sealed contactor in the industry
- Bottom mount or Bus Bar Mount
- Hermetically Sealed – Operates in explosive/harsh environments without oxidation or contamination of contacts, including long periods of non-operation.
- Typical applications include Ground Vehicle Power Systems, power/motor control circuit isolation, Circuit Protection and safety. Suitable for Low Voltage up to 1000Vdc power switching.
- Electronic Two-Coil Economizer with Internal Suppression
- SPST-NO Auxiliary Contact



AEROSPACE,
DEFENSE & MARINE

Kilovac Brand

PRODUCTION DATA SHEET

09-21-18 Rev

PH. 805-220-2020 FAX 805-220-2075
550 LINDEN AVE, CARPINTERIA, CA 93013

K1K06X Contactor

Dimensions shown for reference only. Specifications subject to change.

CAGE CODE

18741

SCALE

NONE

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General Specifications

Physical Data		Units
Contact Arrangement: Main Contacts		SPST-NO (form X)
Aux Contacts		SPST-NO
Dimensions		See Figure 1
Weight, Nominal	kg	1.02
Environmental Data		
Shock, 11ms ½ sine (operating)	G peak	20
Sine Vibration, 20 G _{pk}	Hz	55-2000
Operating Temperature Range	°C	-40 to +105
Electrical Data		
Voltage Rating: Main Contacts Switching (max)	Vdc	1000
Current Rating, Continuous: Main Contacts (1)	A	+/-1000
Short Term Current		1200A/180s
Contact Resistance: Main Contacts	mΩ	0.4 max @ rated current
Resistive Load Performance (DC-1):		
50A/1000Vdc	Cycles	25k
130A/1000Vdc		10k
200A/1000Vdc		3.5k
100A/600Vdc		10k
240A/600Vdc		2k
1200A/1000Vdc (Break Only)		4 cycles
650A (make only)	Cycles	50
Maximum Short Circuit Current (1/2 cycle, 60 Hz) (through closed contacts)	A	6000
Mechanical Life	Cycles	100,000
Dielectric Withstand Voltage:		
Between Open Contacts	Vrms	2800
Contacts to Coil	Vrms/Vdc	2800/4000
Insulation resistance		
Terminal to Terminal/ Terminals to Coil	MΩ	100 min @ 500Vdc (new) 50 min @ 500Vdc (end of life)
Auxiliary Contact Rating:	W	1A/30Vdc
Switching Life at Max Rating	Cycles	100k
Auxiliary Contact Resistance (max over life)	Ohms	1
Minimum Load	Vdc/mA	5Vdc/5mA

Coil Data @ 20C (Internal Two-Coil Economizer)

Coil Voltage Range	Vdc	24Vdc Nom 32Vdc Max	12Vdc Nom 16Vdc Max
Maximum Pickup Current (nom)	A	5.5	5.5A
Nominal Holding Current (nom)	A	0.33	.80
Pickup Voltage (max)	Vdc	18	9
Dropout Voltage (max)	Vdc	10	6
Pickup Pulse (max)	ms	75	100
Coil Resistance +/-5%	Ω	4.7 Pickup/72 Hold	2.5 Pickup/15 Hold
Coil Holding Power	W	8	8.5
Main Contacts:		50	
Operate Time (Max)	ms		
Operate Bounce (Typ.)	ms	5	
Release (Typ.)	ms	8	

(1) At 25C Ambient with 4X 4/0 conductor or equivalent. Recommended connection, TE PN 321878-1.



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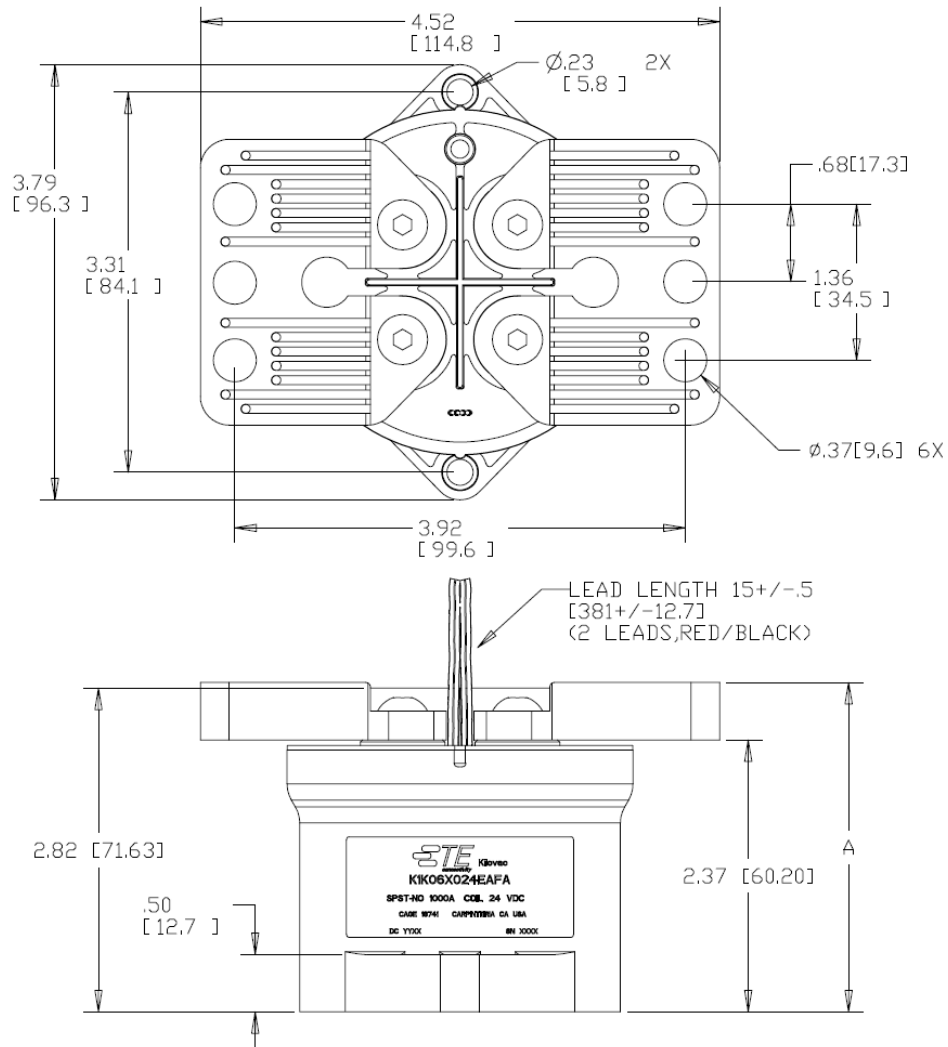
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Figure 1 Product Dimensions



Dimension A:

Terminal Option F, dimension = 2.87[72.9]

Terminal Option G, dimension = 2.56[65.0]

Terminal Option H, dimension = 2.37[50.2]

All Dimensions +/- .03"

Coil Wire:

Red = Vdc+

Black = RTN

White(2X) = Aux Contact

All Wires 22AWG, M22759/11



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PN Selection

	K	1K	06	X	024E	A	F	A
K = Kilovac								
1K = 1000V/1000A								
06 = Size 06 (EV202 Package)								
X = Form X, Normally Open								
012E = 12V Coil Economized								
012H = 12V Coil Economized w/SPST-NO Aux								
024E = 24V Coil Economized								
024H = 24V Coil Economized w/SPST-NO Aux								
A = 15-inch coil leads								
F = Finned Heat Sink Bus Bar (Nickel Plated Aluminum)								
G = Flat Bus Bar (Nickel- Plated Copper)								
H = 4X 1/4-20 UNC Female Threads, .187" deep. (2)								
A = Bottom Mount								

(2) User furnished bus bar must be equivalent to 4X 4/0 conductor. Torque to 45-55 in-lbs. per connection (5.1 – 6.2 NM)



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