tyco Electronics

HARTMAN Aerospace Power Products

KSeriesContactors

DC Electrically Held Units

For factory-direct application assistance, contact the HARTMAN product team at (419) 521-9500, Fax (419) 526-2749.

K Series contactors are among the smallest, lightest 200-400amp contactors currently available in the aerospace industry. They are designed for use in DC power distribution systems for private, military and commercial aircraft; or ground vehicle applications.

Built to meet or exceed the requirements of Mil-R-6106

Buss Bar Mount Version

Chassis Mount Version

Part No.*	Voltage	Current Rating	Mounting
K-200A3C	28Vdc	200 Amps	Chassis
K-200B3C	28Vdc	200 Amps	Buss Bar
K-300A5C	28Vdc	300 Amps	Chassis
K-300B5C	28Vdc	300 Amps	Buss Bar
K-400A5C	28Vdc	400 Amps	Chassis
K-400B5C	28Vdc	400 Amps	Buss Bar

** Each have 2 Form Z auxiliary contacts and coil suppression*

Features

Physical
- Environmentally sealed
- Repairable
- 0.50 lbs. - 0.75 lbs.

Environmental
- Temperature range -55° to +85°C
- 25G shock
- 10G vibration

Power switching
- S.P.S.T. normally open
- 28 Volts
- 200-400A make/carry/break
- 1000-2000A inrush
- 2000-4000A maximum interrupt

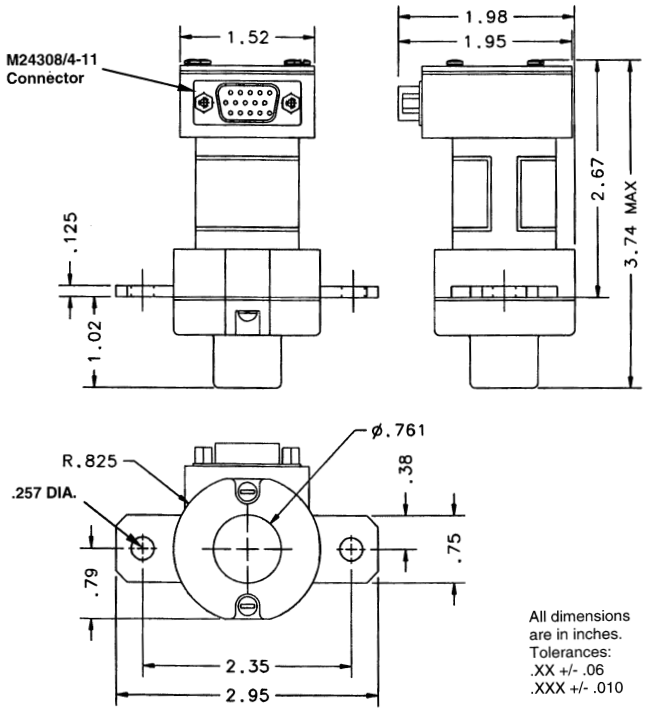
Auxiliary switching**
- Up to 2 Form Z
- Up to 2 Form C
- 5 ampere 28 Vdc or 115 Vac

Coil voltage and power
- 28V/9.1W nominal
- Self economizing

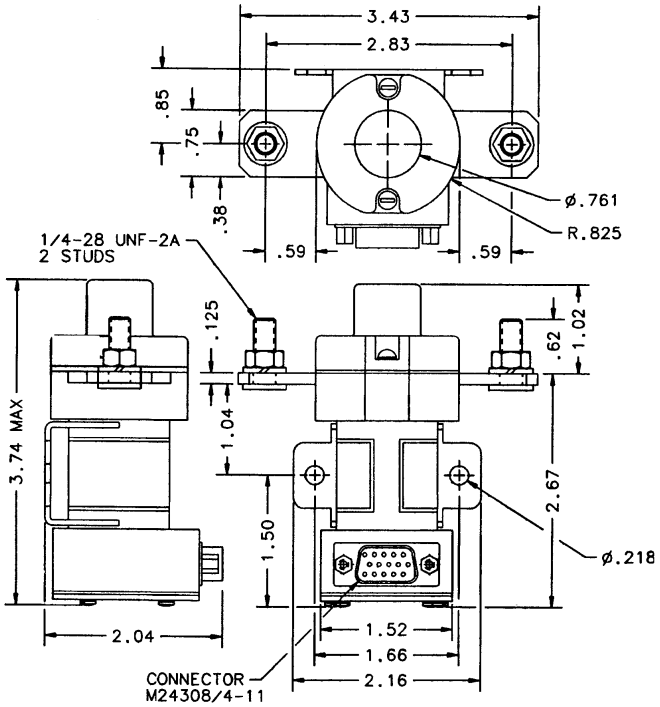
*** Other auxiliary arrangements or no auxiliary contacts available*

Typical Contactor Dimensions

Buss Bar Mount Version



Chassis Mount Version



Note : Dimensions shown are for K-300 Series contactors. K-200 Series contactors are slightly smaller in size; K-400 Series contactors are slightly larger in size.

Catalog (web doc only)
Revised 5-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

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GeneralOperatingSpecifications

Physical Data

Main contact arrangement	SPST-NO
Form	X
Auxiliary contact arrangement	Up to 2 Form Z or C
Weight	0.50 lbs - 0.75 lbs

Environmental Data

Shock, 11ms 1/2 sine (operating)	25 Gpeak
Vibration, sine 10-2000 Hz	10 Grms
Vibration, random 10-2000 Hz	5 Grms
Operating temperature range	-55 to +85°C
Storage temperature range	-55 to +125°C

Main Contacts Electrical Data

Rated operating voltage	32 Vdc maximum
Load polarity (make, carry, break)	Bi-directional
Continuous current carry	200 Amps/300 Amps/400 Amps
In-rush current	1000 Amps/1500 Amps/2000 Amps
Maximum interrupt (50 times)	2000 Amps/3000 Amps/4000 Amps
Electrical current switching life @ 28Vdc	
Resistive load (make, carry, break)	50K cycles minimum
Motor load (make, carry, break)	50K cycles minimum
Inductive load (make, carry, break)	50K cycles minimum
Maximum contact voltage drop @ rated amps (see note 2)	0.125 Vdc
Insulation resistance @ 500 Vdc	100 Milliohms
Dielectric withstanding voltage @ sea level (leakage less than 1.0 mA, 1 minute continuous)	1800 Vrms

Auxiliary Contacts Electrical Data

Rated operating voltage	28 Vdc/115 Vac
Load polarity (make, carry, break)	Bi-directional
Continuous current carry	5 Amps
Low level (see note 1)	1 mA

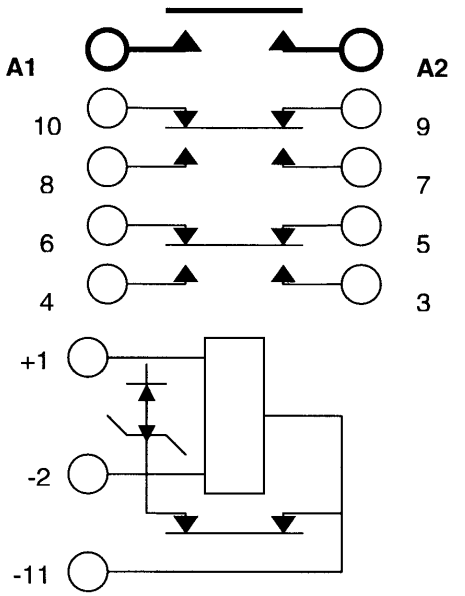
Mechanical Data

Operate time @ 18-32 Vdc	35 Ms maximum
Dropout time @ 18-32 Vdc	20 Ms maximum
Bounce @ 18-32 Vdc	4 Ms maximum
Mechanical life @ 25% rated resistive load	100K cycles

Coil Data

Duty cycle	Continuous
Maximum operate voltage	32 Vdc
Nominal operate voltage	28 Vdc
Maximum pickup voltage	16 Vdc
Maximum dropout voltage (see note 3)	9 Vdc
Coil current @ 32 Vdc and -55°C	
Inrush (12 mS max)	5.5 Amps maximum
Holding	0.400 Amps maximum
Nominal coil resistance @ 22°C	
Pickup	5.5 ohms
Holding	86.5 ohms
Nominal coil power	9.1 watts
Coil transient suppression	42 Vdc maximum

Typical Schematic Diagram



Notes

1. Auxiliary contacts are gold plated. 1 mA rating does not apply if contacts have switched loads above 1 mA.
2. 150 mV After Life test.
3. Dropout is 3.5 Vdc max when used as a start contactor with the coil center tap utilized.

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