

K Series Connectors

Product Facts

- Light weight
- Small package size
- Small footprint
- Easy to package in panel assemblies
- Buss bar mount or chassis mount
- Designed to meet the applicable portions of MIL-PRF-6106
- 10X rupture current



TE HARTMAN brand of K Series contactors offer outstanding performance and reliability in a highly efficient package. The HARTMAN brand K-Series are among the smallest and lightest 200-1000 ampere DC contactors available in the aerospace industry.

These highly flexible buss bar mounted or chassis mounted units are designed for either continuous or start duty applications in the DC power distribution systems of military and commercial aircraft and ground vehicles.

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K Series, Rated up to 200 Amps, 28 Vdc

Product Facts

- SPST NO, Double break
- Buss bar or chassis mount available
- Gasket sealed
- Auxiliary contacts available
- Meets many requirements of MIL-PRF-6106



Performance Data

Electrical Characteristics

Contact Arrangement — SPST NO, Double Break
Rated Operating Voltage — 28 Vdc
Resistive Rating — 200 Amps
Rupture Rating — 2,000 Amps

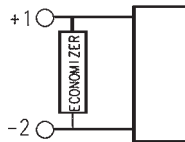
General Characteristics

Temperature Range — -40°C to +85°C
Operating Cycles (Life) at Rated Resistive Load, Min. — 50,000 cycles
Operating Cycles (Life) Mechanical, Min. — 100,000 cycles
Dielectric Strength — All Circuits to Ground — 1,500 Vrms
 Circuit to Circuit — 1,500 Vrms
 Coil to Ground and Aux. Contacts — 1,000 Vrms
Insulation Resistance, Initial — 100 megohm min.
Altitude Max. — 50,000 ft.
Weight, Max. — .31-.41 lbs

Coil Characteristics

Duty Cycle — AC (Type A, See diagram below), Economized (Type B, See diagram below), Economized with suppression (Type C, See diagram below), Continuous or Intermittent (Type D & F, See diagram below), Continuous or Intermittent with suppression (Type E & G, See diagram below)
Operating Voltage, Nom. — 28 Vdc
Pickup Voltage @ 20°C, Max. — 18 Vdc

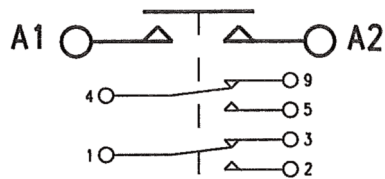
Coil Type



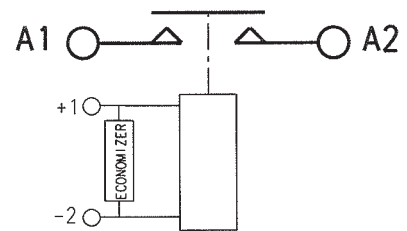
A — Electronic Economized with Suppression

Circuit Configurations

(Consult factory for other available circuit configurations)



Circuit Configuration 1

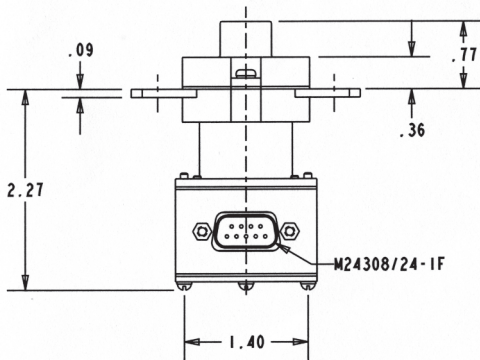
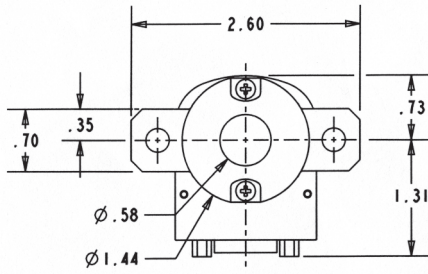


Circuit Configuration 2

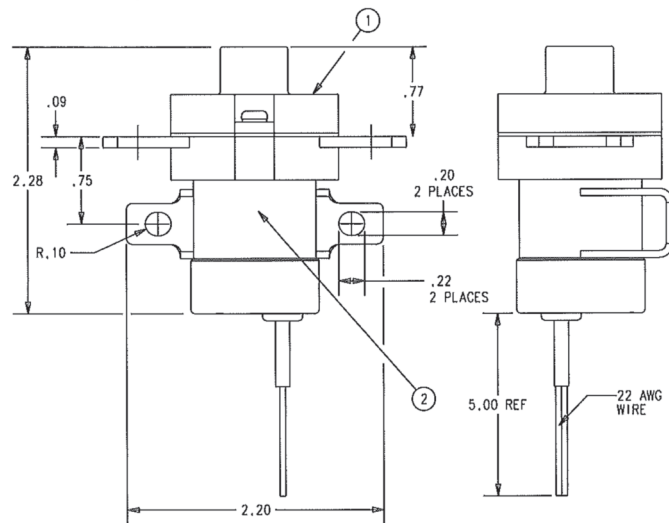
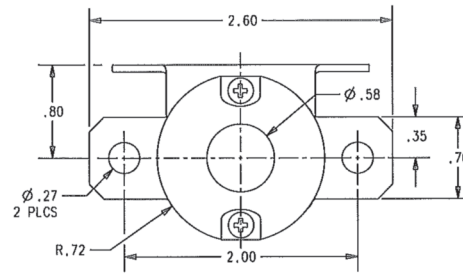
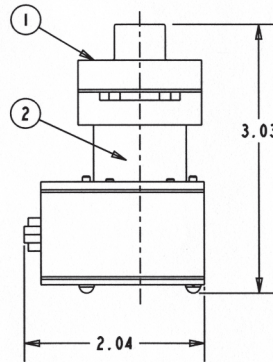
HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
K200A1C	Gasket	B	A	2	5-1616970-9
K200B3C02	Gasket	A	A	1	4-1616968-7
K200B1C	Gasket	C	A	2	6-1616970-0
K200A3C	Gasket	E	A	1	8-1616977-1

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K Series, Rated up to 200 Amps, 28 Vdc (Continued)



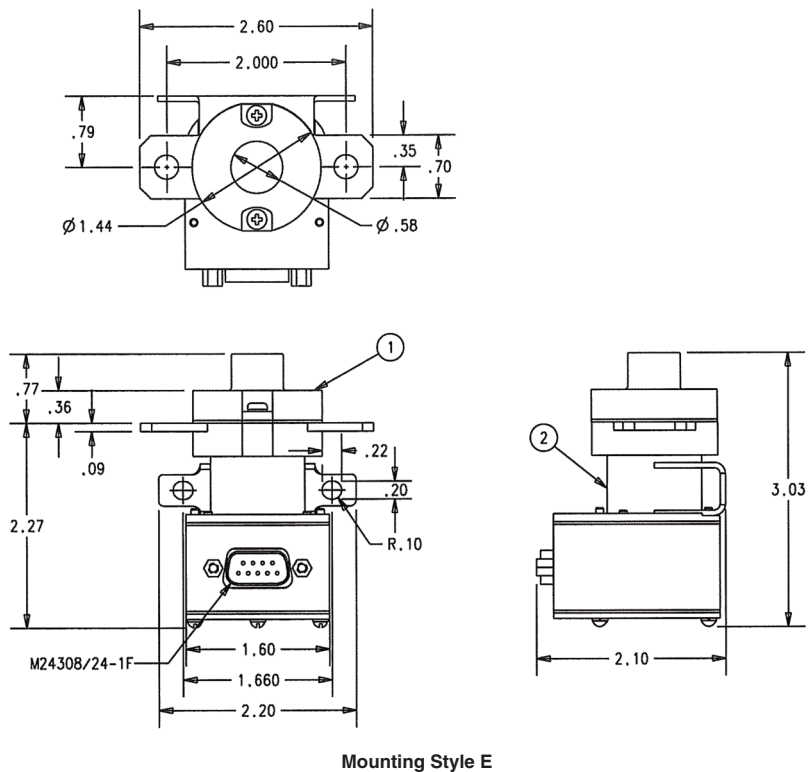
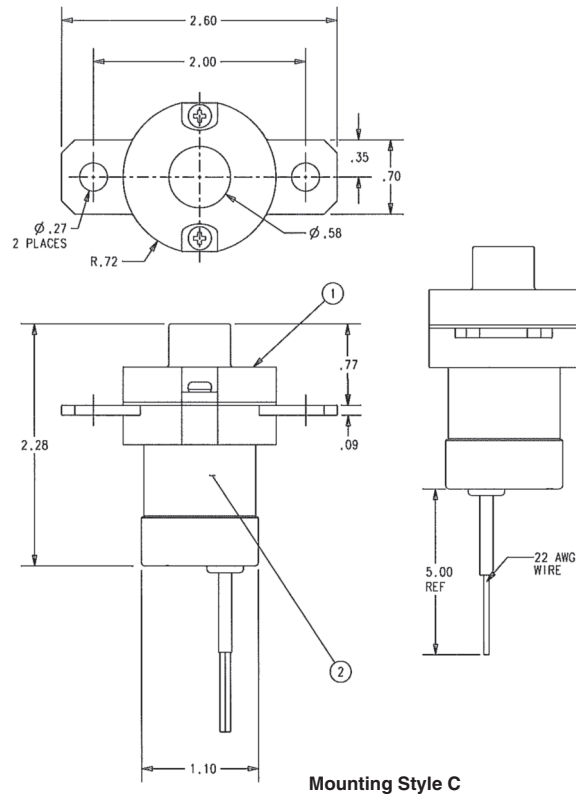
Mounting Style A



Mounting Style B

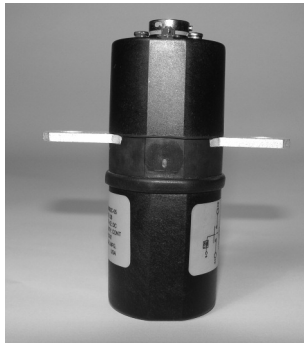
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K Series, Rated up to 200 Amps, 28 Vdc (Continued)



For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K Series, Rated up to 400 Amps, 28 Vdc



Performance Data

Electrical Characteristics

- Contact Arrangement** — SPST NO, Double Break
- Rated Operating Voltage** — 28 Vdc
- Resistive Rating** — 400 Amps
- Overload Rating** — 3,200 Amps
- Rupture Rating** — 4,000 Amps

General Characteristics

- Temperature Range** — -40°C to +85°C
- Operating Cycles (Life) at Rated Resistive Load, Min.** — 50,000 cycles
- Operating Cycles (Life) Mechanical, Min.** — 100,000 cycles
- Dielectric Strength** — All Circuits to Ground — 1,250 Vrms
Circuit to Circuit — 1,250 Vrms
Coil to Ground and Aux. Contacts — 1,000 Vrms
- Altitude, Max.** — 50,000 ft.
- Weight, Max.** — .59 -.75 lbs

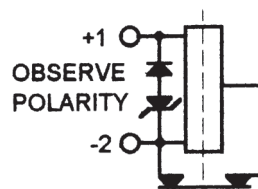
Coil Characteristics

- Duty Cycle** — Economized with suppression (Type A, See diagram below), Continuous (Type B, See diagram below), Intermittent (Type C, See diagram below)
- Operating Voltage, Nom.** — 28 Vdc
- Pickup Voltage @ 250°C, Max.** — 18 Vdc - Economized and continuous duty coil
12 Vdc - Intermittent duty coil
- Dropout Voltage, Max.** — 7 Vdc - Economized and continuous duty
5 Vdc - Intermittent duty coil

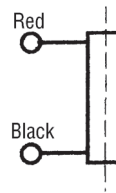
Product Facts

- SPST NO, Double break
- Buss bar or chassis mount design
- Gasket sealed
- Auxiliary contacts available
- Meets many requirements of MIL-PRF-6106

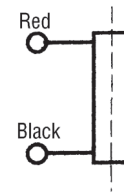
Coil Type



A — Economized with Suppression



B — Continuous

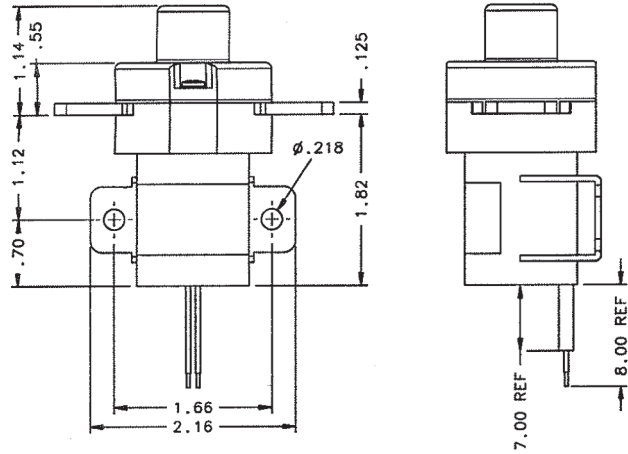
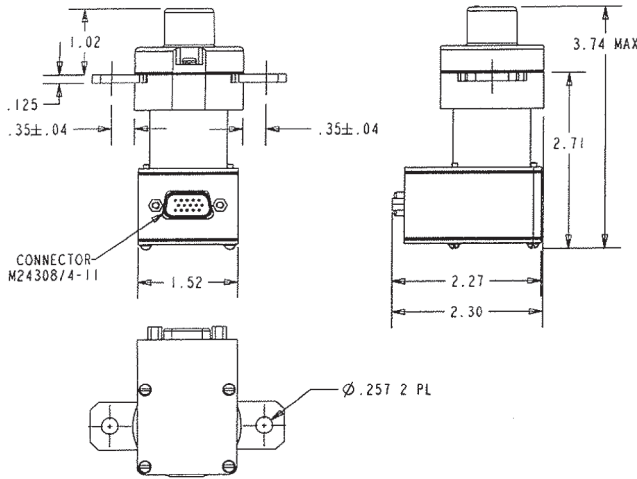
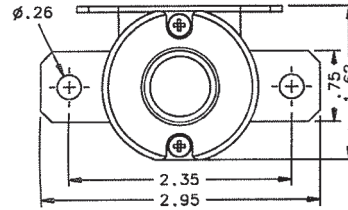
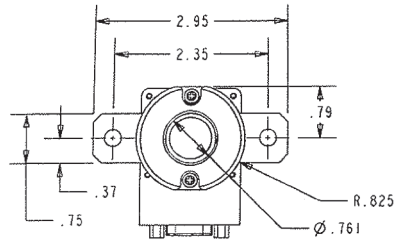


C — Intermittent

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
K4001A3C	Gasket Sealed	F	A	4	6-1616968-5
K4001B3C	Gasket Sealed	A	A	4	4-1616959-0
K400A1D	Gasket Sealed	B	C	1	—
K400A1F	Gasket Sealed	B	B	1	6-1616945-7
K400A4C1	Gasket Sealed	K	A	2	6-1616965-1
K400B1D	Gasket Sealed	E	C	1	8-1616968-4
K400B1F	Gasket Sealed	E	B	1	2-1616921-3
K400B3C05	Gasket Sealed	C	A	6	7-1616941-3
K400B712C	Gasket Sealed	D	A	7	5-1616946-6
K4001B7C	Gasket Sealed	A	A	5	4-1616959-8
K4001A7C	Gasket Sealed	F	A	5	6-1616970-7
K4001B2C	Gasket Sealed	A	A	3	6-1616970-8
K4001A2C	Gasket Sealed	F	A	3	6-1616970-6
K400A1F1	Gasket Sealed	G	B	1	4-1616964-5

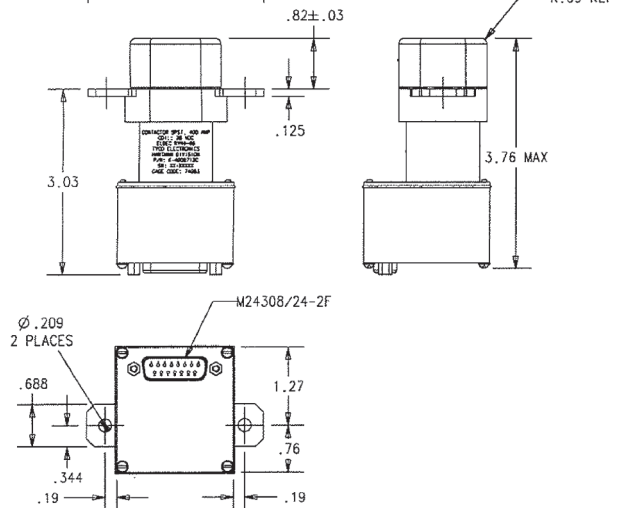
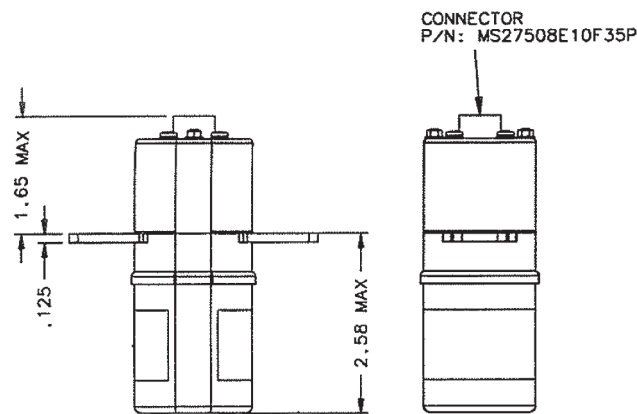
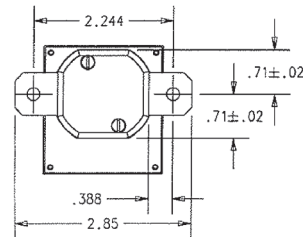
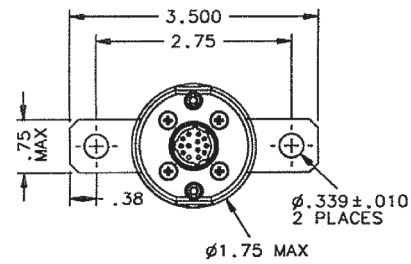
For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K Series, Rated up to 400 Amps, 28 Vdc (Continued)



Mounting Style A

Mounting Style B

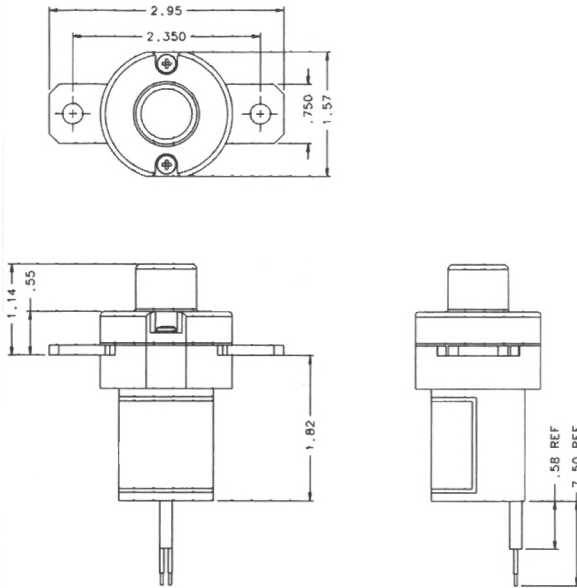


Mounting Style C

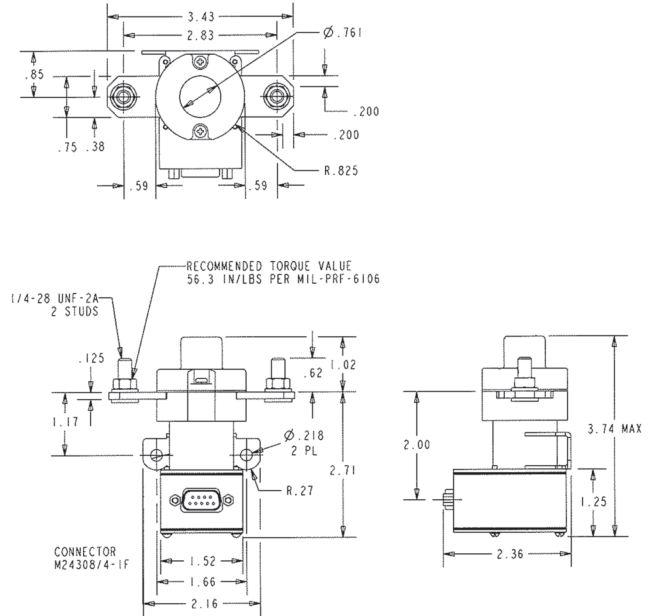
Mounting Style D

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

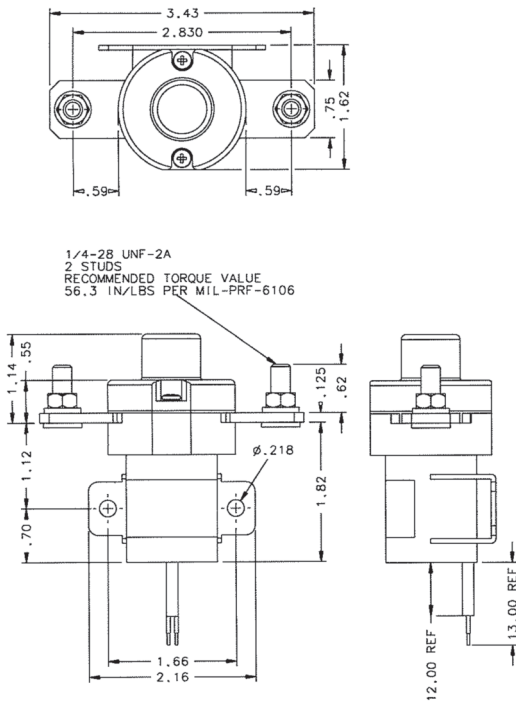
K Series, Rated up to 400 Amps, 28 Vdc (Continued)



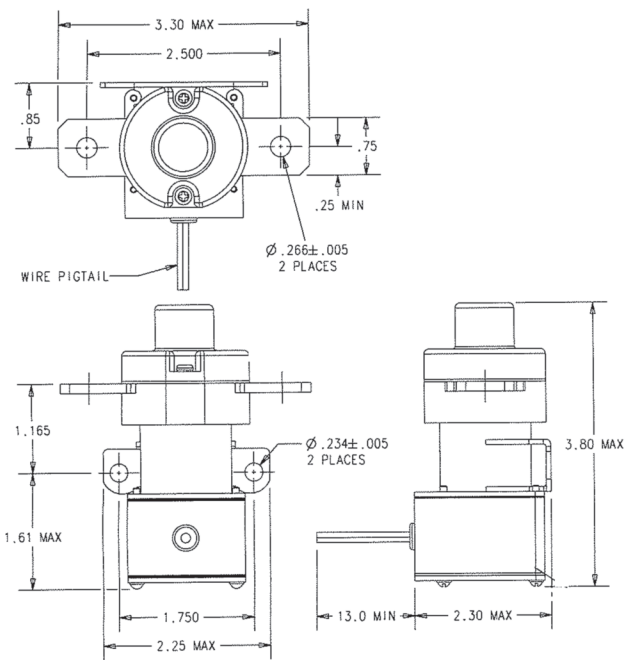
Mounting Style E



Mounting Style F



Mounting Style G

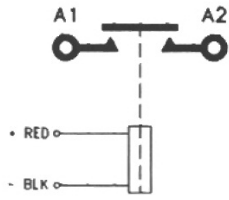


Mounting Style K

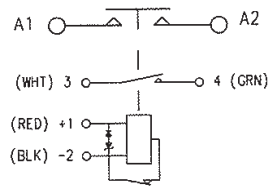
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K Series, Rated up to 400 Amps, 28 Vdc (Continued)

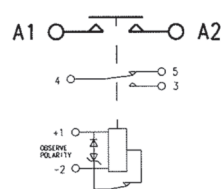
Circuit Configurations (Consult factory for other available circuit configurations)



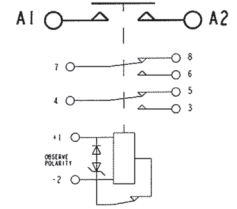
Circuit Configuration 1



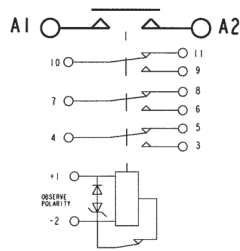
Circuit Configuration 2



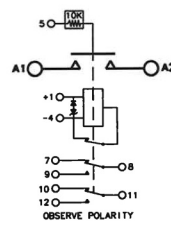
Circuit Configuration 3



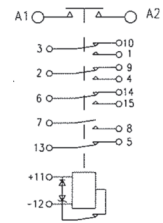
Circuit Configuration 4



Circuit Configuration 5



Circuit Configuration 6



Circuit Configuration 7

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K Series, Rated up to 500 Amps, 28 Vdc



Performance Data

Electrical Characteristics

- Main Contacts** —
- Contact Arrangement** — SPST NO, Double Break
- Rated Operating Voltage** — 28 Vdc
- Resistive Rating** — 500 Amps
- Rupture Rating** — 5,000 Amps
- Auxiliary Contacts** —
- Aux. Contact Arrangement** — 3 SPDT
- Rated Operating Voltage** — 28 Vdc
- Resistive Rating** — 5 Amps
- Lamp Rating** — 1 Amps
- Low Level** — 1 mA @ 28 Vdc

General Characteristics

- Temperature Range** — -55°C to +85°C
- Operating Cycles (Life) at Rated Resistive Load** — 50,000 cycles
- Operating Cycles (Life) Mechanical** — 100,000 cycles
- Altitude** — 50,000 ft.
- Weight, Max.** — .88 lbs
- Operate Time @ 18 Vdc & 85°C, Max.** — 45 msec
- Dropout Time @ 32 Vdc, Max.** — 25 msec

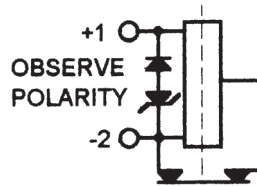
Coil Characteristics

- Duty Cycle** — Continuous, economizing
- Operating Voltage, Nom.** — 28 Vdc
- Pickup Voltage, Max.** — 18 Vdc
- Dropout Voltage** — 1 to 7 Vdc
- Inrush** — 5 Amps
- Hold @ 32 Vdc & -55°C** — 0.272 mA max.

Product Facts

- SPST NO, Double break
- Buss bar or chassis mount designs
- Gasket sealed
- Multiple auxiliary contact choices
- Meets many requirements of MIL-PRF-6106

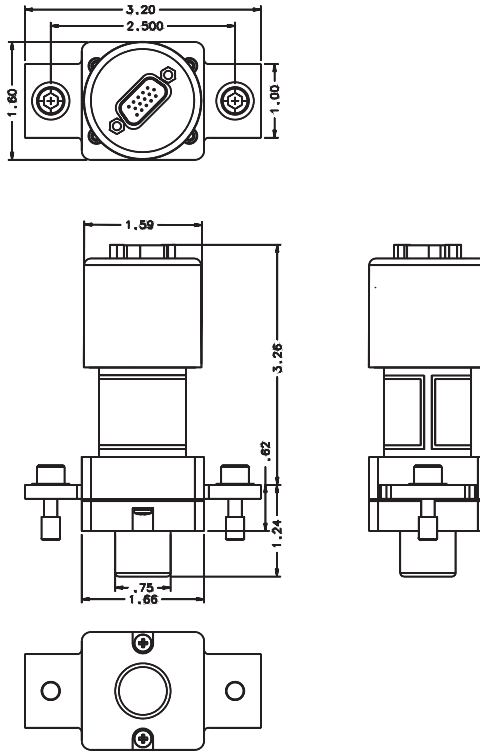
Coil Type



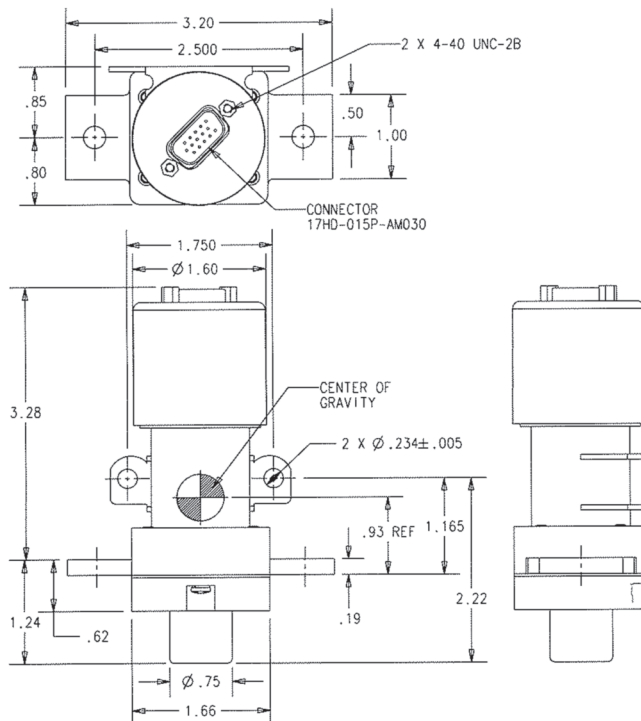
A — Economized with Suppression

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K Series, Rated up to 500 Amps, 28 Vdc (Continued)



Mounting Style A

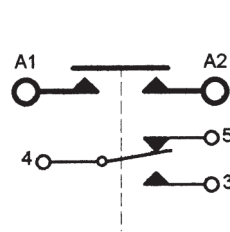


Mounting Style B

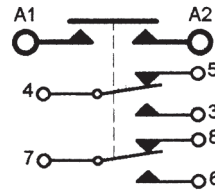
For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K Series, Rated up to 500 Amps, 28 Vdc (Continued)

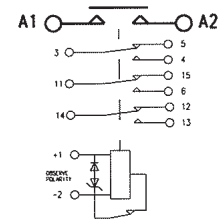
Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1



Circuit Configuration 2



Circuit Configuration 3

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
K500B2C	Gasket Sealed	A	A	1	7-1616927-0
K500A2C	Gasket Sealed	B	A	1	4-1616951-4
K500B3C	Gasket Sealed	A	A	2	7-1616970-0
K500A3C	Gasket Sealed	B	A	2	6-1616970-9
K500B7C01	Gasket Sealed	A	A	3	9-1616965-0
K500A7C01	Gasket Sealed	B	A	3	2-1616970-8

K Series, Rated up to 500 Amps, 28 Vdc — Time Delay

Product Facts

- SPST NO, Double break
- Delay on operator or release
- Chassis Mount (bus bar mount available)
- Gasket sealed
- Meets many requirements of MIL-PRF-6106

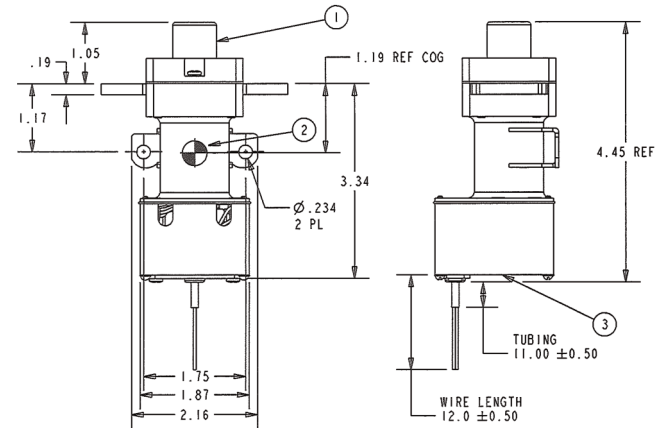
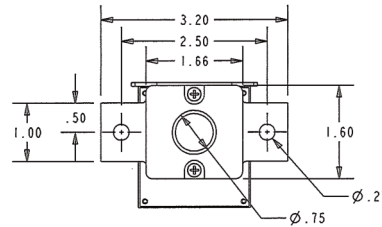
Performance Data

Electrical Characteristics

- Contact Arrangement** — SPST NO, Double Break
- Rated Operating Voltage** — 28 VDC
- Resistive Rating** — 500A
- Rupture Rating** — 5000A
- Delay on operate or release** — See note 1

General Characteristics

- Temperature Range** — -55°C to +85°C
- Minimum Electrical Cycles** — 50,000
- Minimum Mechanical Cycles** — 100,000 @ 125A
- Dielectric Strength** — 1000 Vrms
- Altitude** — 50,000 ft
- Weight, Max.** — 1.0 lbs
- Duty Cycle** — Intermittent or Continuous (See note 2)
- Operating Voltage Range** — 21 - 32 Vdc
- Drop Out Voltage** — 1 to 7 Vdc



NOTES

1. Delay can be tailored to meet customer need. Consult Factory.
2. Intermittent duty coil is recommended for starting applications where significant control voltage sags are possible. Consult factory to specify correct coil duty for your application.

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

K-1000 Series, Rated up to 1,000 Amps, 28 Vdc

Product Facts

- SPST NO, Double break
- Gasket sealed
- Meets many requirements of MIL-PRF-6106

Performance Data

Electrical Characteristics

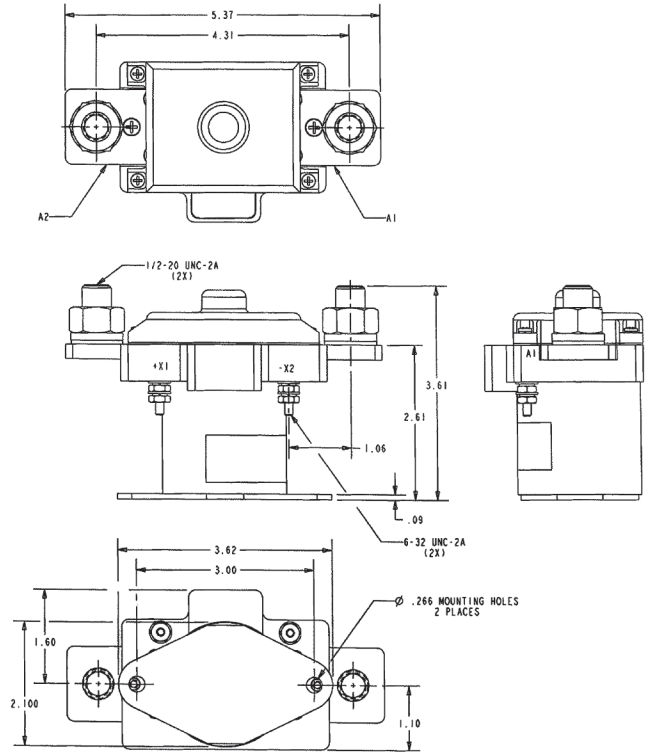
Contact Arrangement — SPST NO, Double Break
Rated Operating Voltage — 28 Vdc
Resistive Rating — 1,000 Amps

General Characteristics

Temperature Range — -55°C to +71°C
Operating Cycles (Life) at Rated Resistive Load — 50,000 cycles
Operating Cycles (Life) Mechanical — 100,000 cycles
Weight, Max. — 2.75 lbs

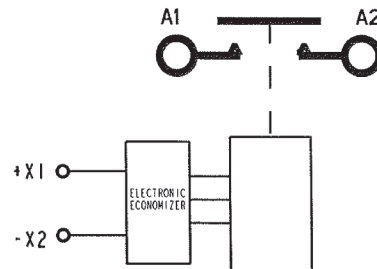
Coil Characteristics

Duty Cycle — Continuous, economizing
Operating Voltage, Nom. — 28 Vdc
Pickup Voltage, Max. @25°C — 18 Vdc
Dropout Voltage — 1 to 8 Vdc
Current, Inrush, Max. @ 30 Vdc — 7.0 Amps
Current, Hold, Max. @ 30 Vdc — 1.0 Amps



Mounting Style A

Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
K-1000A1F03	Gasket Sealed	A	Continuous	1	4-1616966-1

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.