

Contactor SPST Busbar Mounting



JDA8510MCAA

400 Amp / 28 VDC

AMETEK Switch contactors are known for reliability and performance in critical applications like those found in aerospace power distribution systems.

A contactor is an electromechanical device used to switch high current loads with a remote low current control signal. When power is applied to the control assembly, the energized coil causes the contact assembly to move. In a normally open (NO) configuration, this will cause the contacts to close when the power is applied to the coil and then open again when the coil is no longer energized.

The JDA8510MCAA contactor is rated for 400 amp continuous duty and utilizes an economizer coil to reduce the power to under 200 mA required to keep the contactor closed. The solenoid is sealed in a very compact configuration with a total weight under 380 g. This contactor also includes auxiliary contacts rated at 4 amps.

COMMON APPLICATIONS:

- 1 Aerospace Power Distribution Panels
- 2 Military

GENERAL SPECIFICATIONS:

- 1 400 Amp Inductive Load
- 2 Continuous Duty
- 3 28 VDC Nominal
- 4 Economized Coil
- 5 Busbar Mounting
- 6 -55°C to 85°C
- 7 80,000 Ft Altitude
- 8 3 PDT, 2 PST - 1 NO/NC
- 9 MIL-R-6106J

SPECIFICATIONS

CONSTRUCTION DATA

- Busbar mount
- Gasket sealed
- Weight: 0.68 lbs (308 g) Max
- Connector: M24308/24-26F

MAIN CONTACT DATA

- Configuration: SPST, NO (double break)
- Voltage - nominal: 28 VDC
- Load ratings:
 - Resistive load: 400 A
 - Inductive load: 200 A (L/R = 5 ms)
 - Motor load: Inrush - 1,200 A, Break - 200 A
 - Rupture: 3,200 A (50 Cycles)
- Contact voltage drop:
 - Initial: 120 mV Max
 - After life test: 175 mV Max
- Contact voltage drop - after life test: 175 mV Max

AUXILIARY CONTACT DATA

- Configuration: 3 PDT, 2 PST - 1 NO 1 NC, (double break)
- Voltage - nominal: 28 VDC
- Load ratings:
 - Resistive: 4 A
 - Inductive: 2 A (L/R = 5 ms)
 - Low level: 2 mA

COIL DATA

- Duty: continuous - economized
- Current:
 - Inrush: 6 A Max @ 28 VDC and 25°C
 - Hold: 200 mA Max @ 28 VDC and 25°C
- Nominal voltage: 28 VDC
- Maximum voltage: 32 VDC
- Pickup voltage: 18 VDC Max @ 85°C
- Dropout voltage: 7.0 VDC Max @ 85°C
- Coil suppression: ±42 VDC Nominal

OPERATIONAL TIMES DATA

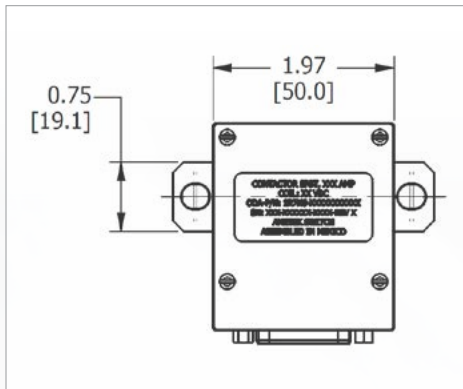
- Operate time: <30 ms @ 28 VDC
- Release time: <20 ms @ 28 VDC
- Bounce time: <5 ms @ 28 VDC

ENVIRONMENTAL DATA

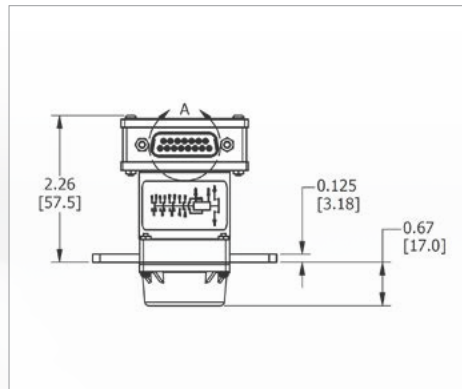
- Temperature: -55°C to 85°C
- Altitude: 80,000 Ft (Per RTCA DO-160G)

ENDURANCE DATA

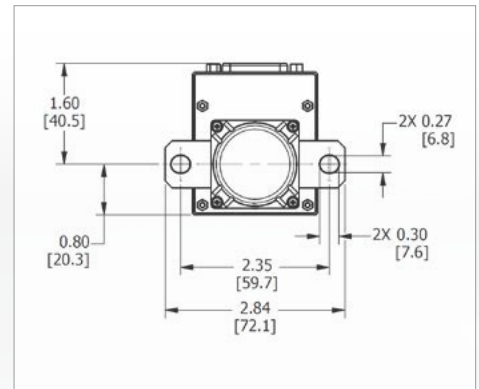
- Mechanical life: 100,000 cycles
- Electrical life:
 - Resistive: 50,000 cycles
 - Inductive: 10,000 cycles
 - Motor: 50,000 cycles
- Tested in accordance with specified sections of MIL-R-6106J and RTCA DO-160G



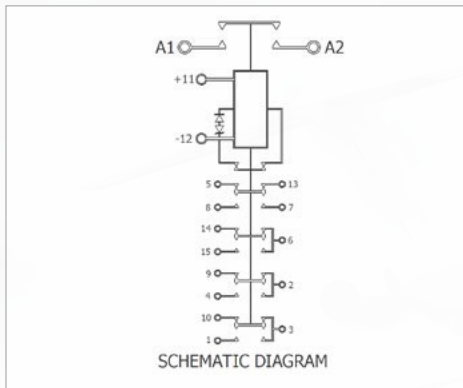
Top View



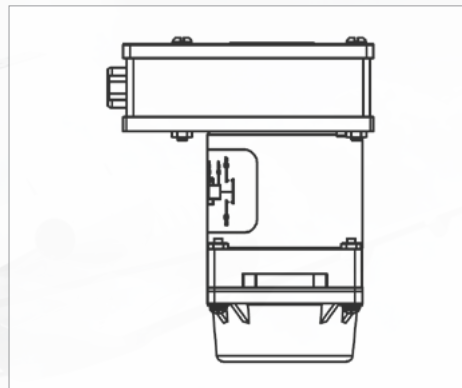
Front View



Bottom View



Schematic



Side View



Connector Pin Detail

WORLD HEADQUARTERS

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