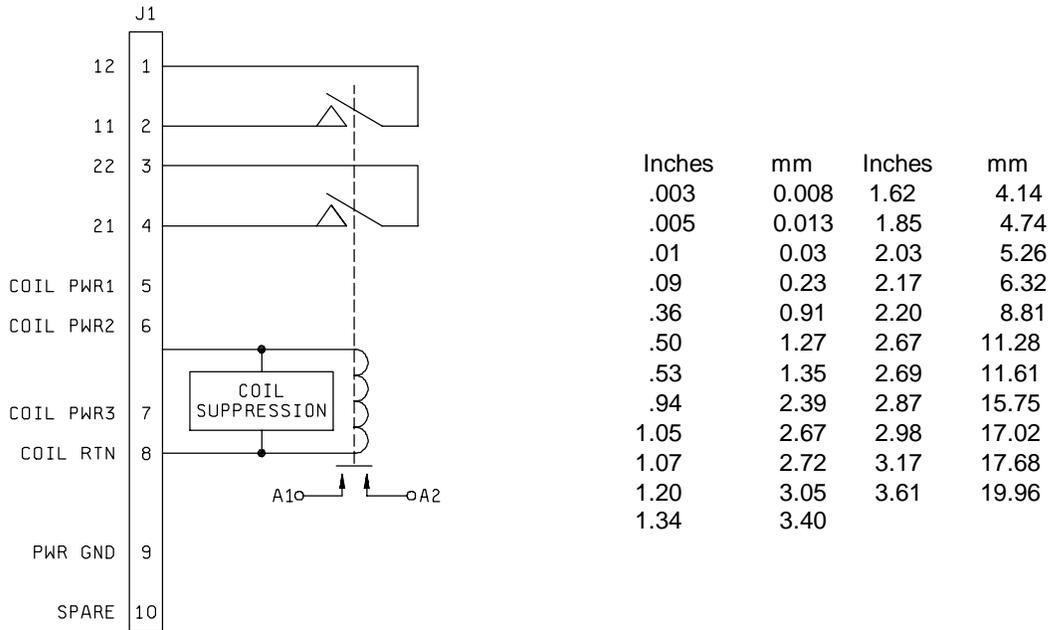
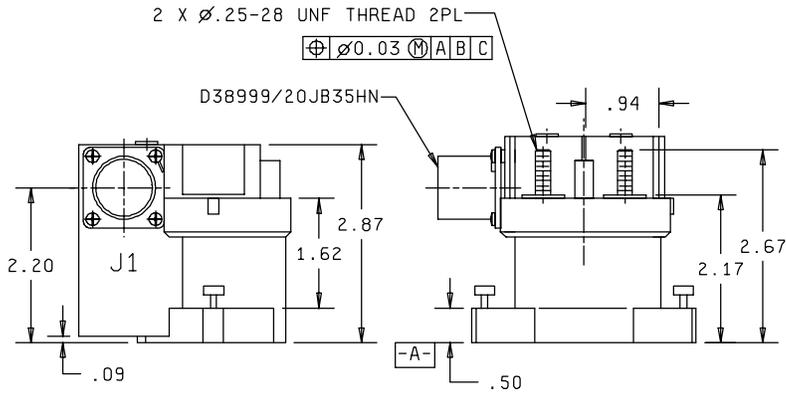


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CIRCUIT DIAGRAM

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± 0.010 (0.25 mm) for three place decimals, $\pm .03$ (0.76 mm) for two place decimals, and $\angle x^\circ = \pm 1^\circ$.

FIGURE 1. Dimensions and configurations - Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Configuration: 1PST, normally open.

Terminations: See figure 1.

Seal: Hermetic.

Weight: 19.4 ounces (550 grams) maximum.

Rated coil voltage: 28 V dc.

Maximum coil voltage: 32 V dc.

Pickup voltage:

Nominal: 16 V dc at +25°C.

Nominal: 18 V dc at -40°C to +71°C.

High temperature test: 19 V dc.

Continuous current test: 22 V dc.

Dropout voltage: 1.5 V dc minimum.

Hold voltage:

5.6 V dc at +25°C.

7.0 V dc at -40°C to +71°C.

Voltage rating:

Main contacts: 270 V dc.

Auxiliary contacts: 28 V dc.

Current rating:

Main contacts:

Resistive: 120 amperes.

Inductive: 80 amperes.

Motor: 50 amperes.

Auxiliary contacts:

Resistive: .1 amperes at 28 V dc.

Coil resistance, at +25°C, ± 5 percent:

Pickup: 7 ohms.

Hold: 90 ohms.

Contact voltage drop:

Before life: .150 mV, maximum

After life: .175 mV, maximum.

Operate time: 26 milliseconds maximum.

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Release time: 15 milliseconds maximum.

Contact bounce time:

Main, N.O.: 4 milliseconds maximum.

Auxiliary, N.O.: 4 milliseconds maximum.

Duty rating: Continuous.

Overload current: 200 amperes dc.

Rupture current: 300 amperes dc, 20 cycles.

Coil transient suppression: 42 V dc maximum.

Life:

Electrical, inductive, motor, resistive load: 50,000 cycles, each.

Mechanical, reduced load: 100,000 cycles.

Insulation resistance: 100 megohms minimum.

Dielectric withstanding voltage:

Sea level: 1,250 V rms from main contacts (closed) to all other points.

50,000 feet: 500 V rms from main contacts (closed) to all other points..

Temperature range:

Operating: -40°C to +71°C.

Non-operating: -40°C to +85°C

Vibration

Sinusoidal: 10 g, in accordance with method 204 of 202.

Frequency range: 10-2,000 Hz.

Random: 3.1 g rms overall, in accordance with method 204 of 202.

<u>Frequency</u>	<u>Shock level (Test condition in accordance with method 214 of MIL-STD-202)</u>
10 Hz	0.002g ² /Hz
100 Hz-1000 Hz	0.01g ² /Hz

Acceleration: 15 g.

Maximum altitude rating:

Operating: 20,000 feet.

Non-operating: 50,000 feet.

Shock: 20 g's in accordance with method 213 of MIL-STD-202.

Marking: Marking shall be in accordance with MIL-PRF-32085. In addition, relays shall be marked with the ESDS identifier as specified in MIL-STD-1285.

Part or Identifying Number (PIN): M32085/1-(dash number from table I and suffix letter designating failure rate level.)

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TABLE I. Dash numbers and type of loads tested during life.

Dash number	Type of loads tested during life
100	Resistive
101	Resistive and Motor
110	Resistive and Inductive
111	Resistive, Inductive and, Motor

Custodians:
Army – CR
Air Force – 11
DLA – CC

Preparing activity:
DLA – CC

(Project 5945-1130-01)

Review activities:
Air Force - 99