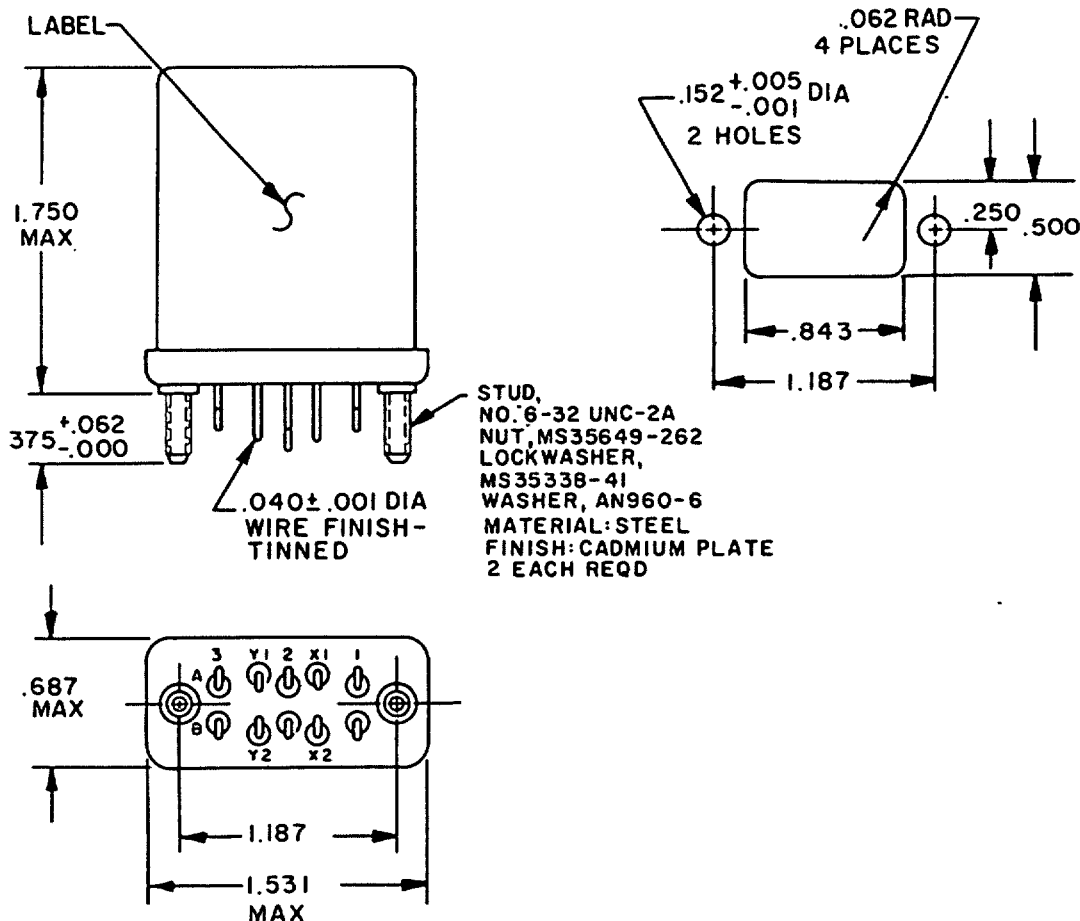


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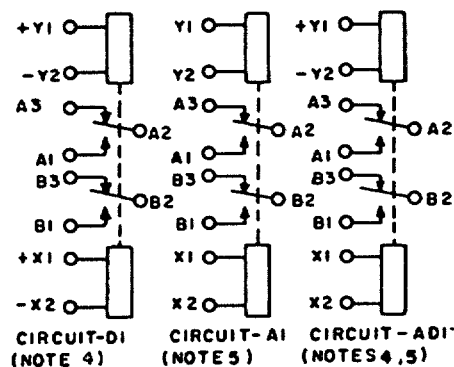
INACTIVE FOR NEW DESIGN AFTER 5 JUN 87
NO SUPERSEDING STANDARD.
(FOR NEW DESIGN USE MIL-R-6106/38)

User activities: Army -
Navy -
Air Force -

Review activities: Army -
Navy - EC
Air Force - 11



| Inches | mm |
|--------|-------|
| .000 | 0.00 |
| .001 | 0.03 |
| .005 | 0.13 |
| .040 | 1.02 |
| .062 | 1.57 |
| .152 | 3.86 |
| .172 | 4.37 |
| .250 | 6.35 |
| .375 | 9.53 |
| .500 | 12.70 |
| .687 | 17.45 |
| .843 | 21.41 |
| 1.187 | 30.15 |
| 1.531 | 39.89 |
| 1.750 | 44.45 |



① ENTIRE STANDARD REVISED

| | | | |
|---|------------------------|---|-------------------|
| P.A AF - 85 | International Interest | TITLE RELAYS, ELECTROMAGNETIC, 2 PDT, 5 AMPERES, TYPE I, MAGNETIC LATCH, SOLDER TERMINALS, STUD MOUNTED, HERMETICALLY SEALED | MILITARY STANDARD |
| Other Cust Navy - AS | | | MS25465 |
| Procurement Specification MIL-R-6106 | SUPERSEDES: | | PAGE 1 OF 5 |

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AMSC N/A

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DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

5945-0745-19

APPROVED 1 Mar 1963 REVISED ① 5 JUN 87

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User activities: Army -
Navy -
Air Force -Review activities: Army - EC
Navy -
Air Force - 11

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .010$ (0.25 mm).
4. Terminal numbers need not appear on relay headers provided there is affixed to the relay a suitable legible circuit diagram that permanently and positively identifies each terminal location specified herein.
5. The use of diodes on ac relays is optional. Actual application must be shown on label.
6. Relay is magnetically latched in both positions. Caution note to observe polarity must appear on relays with dc coils.
7. Shock, vibration, and acceleration requirements application with coils de-energized.
8. In the event of conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
9. Referenced Government documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this standard to the extent specified herein.

TABLE I. Dash numbers and characteristics.

| Dash number | Type | Coil | Terminal type | Mounting or mating socket | Max weight in pounds |
|-------------|------|-------|---------------|---------------------------|----------------------|
| MS 25465- | | | | | |
| D1 | I | dc | Solder hook | Stud | 0.18 |
| A1 | I | ac | Solder hook | Stud | 0.19 |
| AD1 | I | ac-dc | Solder hook | Stud | 0.19 |

APPROVED 1 Mar 1963
REVISED
ENTIRE STANDARD REVISED

| | | | |
|--|---------------------------|---|---|
| P.A. AIR FORCE - 85 Other Cust Navy - AS | International interest | TITLE RELAYS, ELECTROMAGNETIC, 2 PDT, 5 AMPERES, TYPE I, MAGNETIC LATCH, SOLDER TERMINALS, STUD MOUNTED, HERMETICALLY SEALED | MILITARY STANDARD MS25465 |
| Procurement Specification MIL-R-6106 | | SUPERSEDES: | PAGE 2 OF 5 |

FED. SUP CLASS
5945User activities: Army -
Navy -
Air Force -Review activities: Army - EC
Navy - EC
Air Force - II

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TABLE II. Operating characteristics.

| MS part no. MS25465- | Coil data | | | | | | | | | | Time - (milliseconds maximum) | | | | | | | |
|----------------------------|------------------|----------------------|-----------------|----------|-------|---------------------|-----------------------|----------------------|-------------------------|------------------------|-------------------------------|-------------------------|------|-----|----|----|----|----|
| | Coil | Nominal | | Max | | Max pick-up voltage | | | Drop- out voltage | Operate 4/ _____ | Release 5/ _____ | Contact bounce | | | | | | |
| | | Volts 1/ _____ | Freq. Hz | Res Ω | Volts | Amperes | Normal 3/ _____ | High temp test | | | | Cont current test | Main | Aux | | | | |
| | | | | | | | | | | | | | | | | | | |
| D1 | X1, X2 Y1, Y2 | 28 | dc | N/A | 29 | 0.12 | 18 | 18 | 19.8 | N/A | 25 | N/A | 2 | 2 | NO | NC | NO | NC |
| A1 | X1, X2 Y1, Y2 | 115 | 400 2/ _____ | N/A | 122 | 0.06 | 90 | 90 | 95 | N/A | 25 | N/A | 2 | 2 | | | | |
| AD1 | X1, X2 Y1, Y2 | 115 | 400 2/ _____ | N/A | 122 | 0.06 | 90 | 90 | 95 | N/A | 25 | N/A | 2 | 2 | | | | |
| | | 28 | dc | N/A | 29 | 0.12 | 18 | 18 | 19.8 | N/A | 25 | N/A | 2 | 2 | | | | |

1/ CAUTION: Use of any coil voltage less than nominal coil voltage will compromise the operation of the relay.
 2/ MS25465-A1 and -AD1 may be used on 60 Hz if maximum ambient temperature is limited to +85 C (maximum coil current shall be 0.066 ampere).
 3/ Over the temperature range.
 4/ With nominal coil voltage.
 5/ From nominal coil voltage.

| | | | |
|---|---------------------------|---|-------------------|
| P.A AIR FORCE Other Cust NAVY - AS | International Interest | TITLE RELAYS, ELECTROMAGNETIC, 2 PDT, 5 AMPERES, TYPE 1, MAGNETIC LATCH, SOLDER TERMINALS, STUD MOUNTED, HERMETICALLY SEALED | MILITARY STANDARD |
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Review activities: Army - EC
Navy - EC
Air Force - II

User activities: Army -
Navy -
Air Force -

TABLE III. Rated contact load (amperes per pole) (case grounded).

| Type of load | Life operating cycles X 10 ³ | 28 V dc | | | 115 V ac, 1 phase | | | 115/200 V ac, 3 phase 1/ | | | See appropriate notes |
|------------------------------------|--|------------------------------|------|-----|-------------------|--------|-------|--------------------------|-------|--------|-----------------------------|
| | | Main | | Aux | Main | | Aux | Main | | Aux | |
| | | NO | NC | NO | NC | 400 Hz | 60 Hz | 400 Hz | 60 Hz | 400 Hz | |
| Resistive | 100 | 5 | 5 | | | 5 | 4 | | | | |
| Inductive | 100 | | | | | | | | | | |
| Inductive | 20 | 3 | 3 | | | 3 | 2 | | | | |
| Motor | 100 | 1.5 | 1.5 | | | 1.5 | 1 | | | | |
| Lamp | 100 | 0.8 | 0.8 | | | 0.8 | 0.6 | | | | |
| Transfer load | | | | | | | | | | | 2/ |
| Mechanical life reduced current | 400 | 1.25 | 1.25 | | | 1.25 | 1 | | | | |
| Intmd current | | Applicable per specification | | | | | | | | | |

1/ Absence of value indicates relay is not rated for 3-phase applications.
2/ Transfer load indicates relay suitable for transfer between unsynchronized ac power supplies at rating indicated.

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P.A.
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/ NAVY - AS

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Interest

TITLE

RELAYS, ELECTROMAGNETIC, 2 PDT, 5 AMPERES,
TYPE I, MAGNETIC LATCH, SOLDER TERMINALS,
STUD MOUNTED, HERMETICALLY SEALED

MILITARY STANDARD

MS25465

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User activities: Army - Navy - Air Force -

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Environmental characteristics

Temperature range -70°C to +125°C
Max altitude rating 80,000 ft
Shock G-level 50 G
Duration 11 ms
Max duration contact opening 10 μs
Vibration - sinusoidal 10 μs
G-level 10 G
Frequency range 5 - 1500 Hz
Acceleration 15 G

Electrical characteristics

Insulation resistance, initial 100 megohms
After life or environmental tests 50 megohms

Dielectric strength initial (sea level)

| | Initial | After life tests |
|--------------|-------------|------------------|
| Coil to case | 1,000 V rms | 1,000 V rms |

Aux contacts

All other points 1,000 V rms 1,000 V rms

Dielectric strength (altitude) (When mounted in mating socket)

| | |
|--------------|-----------|
| Coil to case | 80,000 ft |
|--------------|-----------|

Aux contacts

| | |
|------------------|-----------|
| All other points | 250 V rms |
|------------------|-----------|

Max contact drop initial 0.150 volt
After life test 0.175 volt
Overload current 20 amperes
Rupture current 25 amperes
Duty rating Continuous
RFI specification MIL-STD-461
(Applicable to coil circuits of ac operated relays)

Quality conformance inspection

Performance of groups B and C testing are not applicable.

P.A.
AIR FORCE - 85
Other Cust
NAVY - AS

International
Interest

TITLE

RELAYS, ELECTROMAGNETIC, 2 PDT, 5 AMPERES,
TYPE I, MAGNETIC LATCH, SOLDER TERMINALS,
STUD MOUNTED, HERMETICALLY SEALED

MILITARY STANDARD

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