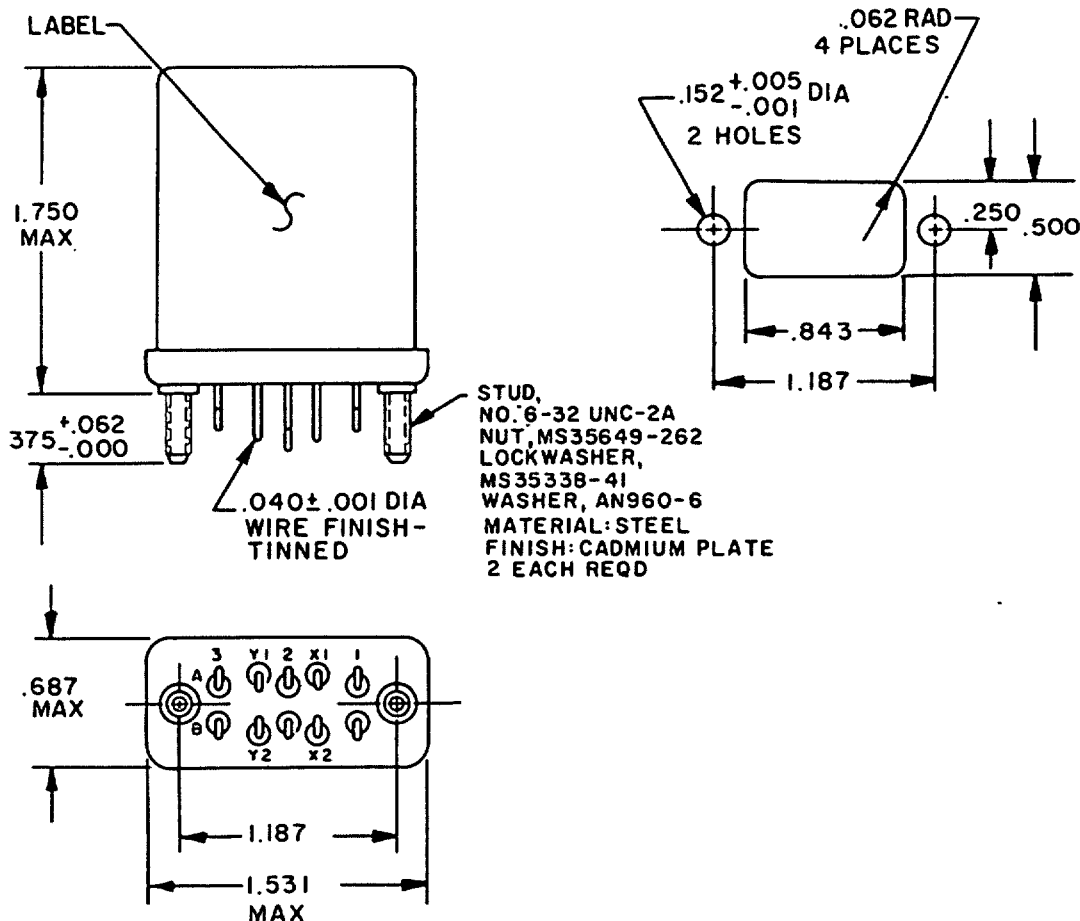


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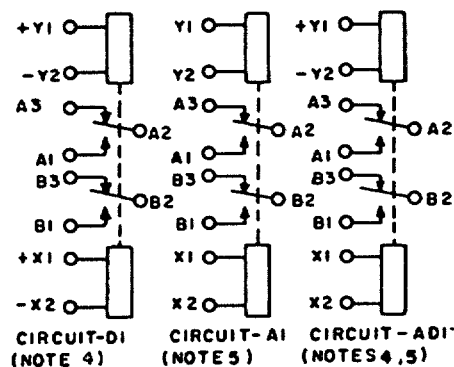
INACTIVE FOR NEW DESIGN AFTER 5 JUN 87
NO SUPERSEDING STANDARD.
(FOR NEW DESIGN USE MIL-R-6106/38)

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

User activities: Army -
Navy -
Air Force -

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			
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 MS25465
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Review activities: Army - EC
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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	60 Hz	400 Hz	60 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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TITLE

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

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Review activities:

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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)
80,000 ft
Coil to case 250 V rms
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.
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