

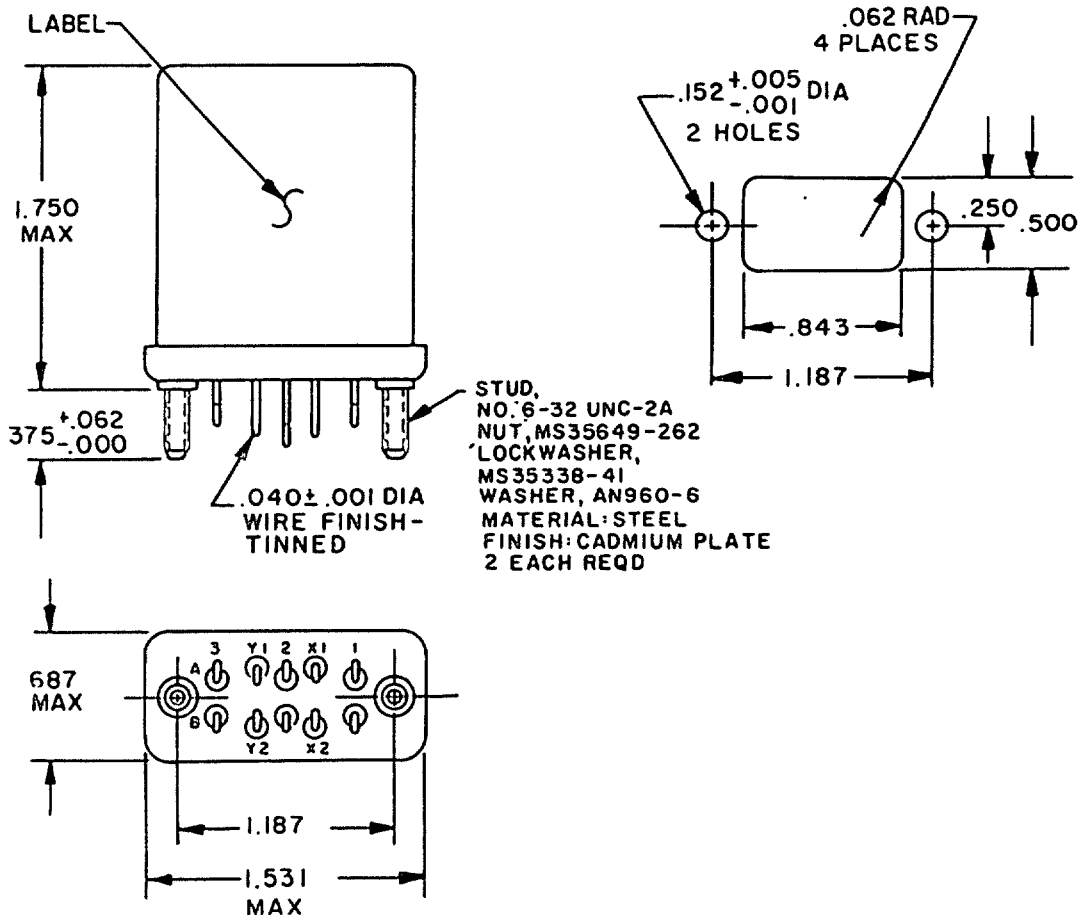
User activities: Army -
Navy -
Air Force -

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

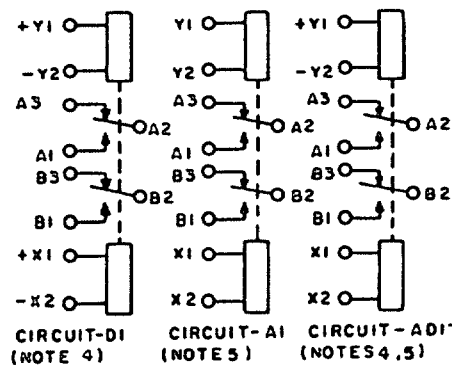
This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

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

FED. SUP CLASS
5945



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



(E) denotes changes

P.A. AF - 85	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 2 POT, 5 AMPERES, TYPE 1, 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

DD FORM 1 MAY 73 672
AMSC N/A

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

5945-0791-05

APPROVED 1 Mar 1963
REVISED (E) 20 Jan 1989

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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 ± 0.010 (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 MS 25465-	Type	Coil	Terminal type	Mounting or mating socket	Max weight in pounds
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 (E) For changes see page 5

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
Procurement Specification MIL-R-6106		SUPERSEDES:	MS25465
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User activities: Army - Navy - Air Force -
 Review activities: Army - Navy - EC Air Force - 11

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Review activities: Army - 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 3/	Release 4/	Contact bounce					
		Volts 1/	Freq. Hz	Res Ω	Volts	Amperes	Normal 2/	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 5/	N/A	122	0.06	90	90	95	N/A	25	N/A	2	2		
AD1		X1, X2 Y1, Y2	115	400 5/	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/ Over the temperature range.
- 3/ With nominal coil voltage.
- 4/ From nominal coil voltage.
- 5/ 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).

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P.A.
AIR FORCE
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
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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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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	250 V rms
Coil to case		

Aux contacts

	250 V rms
All other points	

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.

(E)

Group A acceptance reports shall be submitted to the preparing activity on a yearly basis in order to retain qualification for this military standard sheet.

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