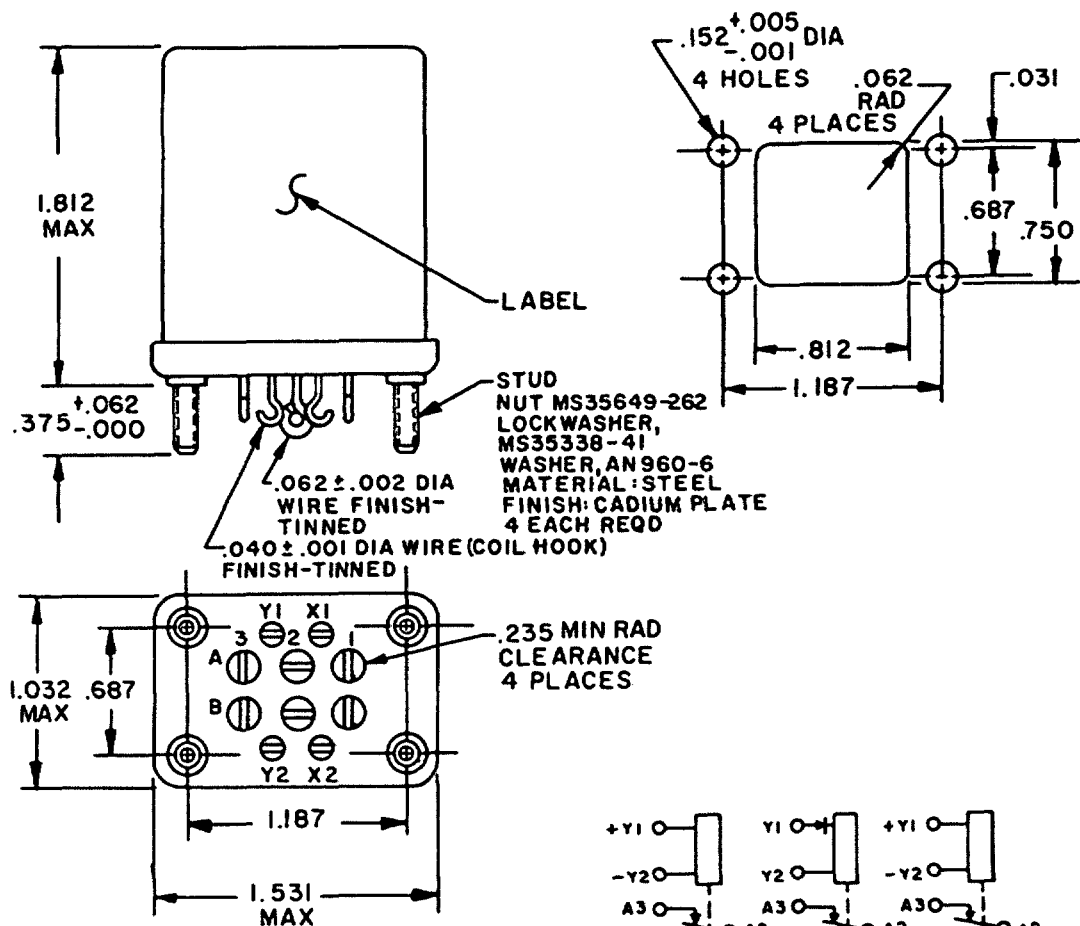


INACTIVE FOR NEW DESIGN AFTER 5 JUN 87  
NO SUPERSEDING STANDARD  
(FOR NEW DESIGN USE MIL-R-6106/50)

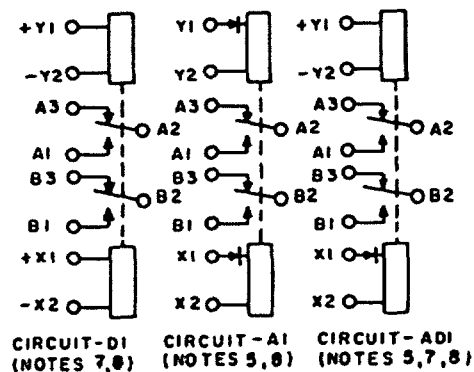
**User activities:** Army -  
Navy -  
Air Force -

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.**



Inches	mm
.000	0.00
.001	0.03
.002	0.05
.005	0.13
.031	0.79
.040	1.02
.062	1.57
.152	3.86
.187	4.75
.235	5.97
.375	9.53
.687	17.45
.750	19.90
.812	20.62
1.032	26.21
1.531	38.99
1.812	46.02



⑤ ENTIRE STANDARD REVISED

P.A. <b>AIR FORCE - 85</b> Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT, TYPE 1, MAGNETIC LATCH, STUD MOUNTED, SOLDER HOOKS, HERMETICALLY SEALED	MILITARY STANDARD  <b>MS25466</b>
Procurement Specification		SUPERSEDES:	PAGE 1 OF 5

DD FORM 672  
1 MAY 73  
AMSC N/A

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

DISTRIBUTION STATEMENT A.

Approved for public release; distribution is unlimited.

945-0745-20

**5 JUN 87**

REVISÉ

**APPROVED 1 Mar 1963**

User activities: Army -  
Navy -  
Air Force -Review activities: Army -  
Navy - EC  
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  $\pm 0.010$ .
4. Terminal numbers need not appear on relay header provided there is affixed to the relay a suitable legible circuit diagram that permanently and positively identifies each terminal location specified hereon.
5. The use of diodes on ac relays is optional. Actual application must be shown on label.
6. Shock, vibration, and acceleration requirements applicable with coils de-energized.
7. Relay is magnetically latched in both positions. Caution note to observe polarity must appear on relays with dc coils.
8. Caution note to observe polarity must appear on relays with dc coils.
9. In the event of a conflict between the test of this standard and the references cited herein, the text of this standard shall take precedence.
10. 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 25466-	Type	Coil	Terminal type	Mounting or mating socket	Max weight in pounds
D1	I	dc	Solder hook	Stud	0.30
A1	I	ac	Solder hook	Stud	0.32
AD1	I	ac-dc	Solder hook	Stud	0.32

APPROVED 1 Mar 1963  
REVISED ① ENTIRE STANDARD REVISED

P.A. <b>AIR FORCE - 85</b> Other Cust Navy - AS	International interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT, TYPE I, MAGNETIC LATCH, STUD MOUNTED, SOLDER HOOKS, HERMETICALLY SEALED	MILITARY STANDARD
Procurement Specification MIL-R-6106		SUPERSEDES:	MS25466
			PAGE 2 OF 5

User activities: Army -  
Navy -  
Air Force -

Review activities: Army - EC  
Navy -  
Air Force -

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TABLE II. Operating characteristics.

MS part no.	Coil data										Time - (milliseconds maximum)					
	Coil	Nominal		Max		Max pick-up voltage			Drop-out voltage	Operate $\frac{3}{}$	Release $\frac{4}{}$	Contact bounce				
		Volts $\frac{1}{}$	Freq. Hz	Res $\Omega$	Volts	Amperes	Normal $\frac{3}{}$	High temp test				Cont current test	Main	Aux		
D1	X1, X2 Y1, Y2	28	dc	N/A	29	0.17	18	18	19.8	N/A	25	N/A	2	2		
A1	X1, X2 Y1, Y2	115	400 $\frac{5}{}$	N/A	122	0.07	90	90	95	N/A	25	N/A	2	2		
AD1	X1, X2	115	400 $\frac{2}{}$	N/A	122	0.07	90	90	95	N/A	25	N/A	2	2		
	Y1, Y2	28	dc	N/A	29	0.17	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/ MS25466-A1 and -AD1 may be used on 60 Hz if maximum ambient temperature is limited to +85 C (maximum coil current shall be 0.077 ampere).  
3/ Over the temperature range.  
4/ With nominal coil voltage.  
5/ From nominal coil voltage.

FED. SUP CLASS  
5945

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

International  
Interest

## TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 POT,  
TYPE I, MAGNETIC LATCH, STUD MOUNTED, SOLDER  
HOOKS, HERMETICALLY SEALED

MILITARY STANDARD

MS25466

Procurement Specification  
MIL-R-6106

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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 <sup>3</sup>	28 V dc		115 V ac, 1 phase		115/200 V ac, 3 phase 1/			See appropriate notes
		Main	Aux	Main	Aux	Main	Aux	Aux	
		NO	NC	NO	NC	400 Hz	160 Hz	400 Hz	
Resistive	100	10	10	10	6	10	6	6	
Inductive	100								
Inductive	20	6	6	10	4	10	4	4	
Motor	100	4	4	4	3	4	3	3	
Lamp	100	2	2	2	1.5	2	1.5	1.5	
Transfer load									2/
Mechanical life reduced current	400	2.5	2.5	2.5	2	2.5	2	2	
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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APPROVED 1 MAR 1963 REVISED (D) ENTIRE STANDARD REVISED

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

International  
Interest

TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT,  
TYPE I, MAGNETIC LATCH, STUD MOUNTED, SOLDER  
HOOKS, HERMETICALLY SEALED

MILITARY STANDARD

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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.

Review activities: Army - Navy - EC Air Force - II  
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 (sea level)  
Coil to case 1,000 V rms Initial After life tests 1,000 V rms 1,000 V rms  
Aux contacts  
All other points 1,500 V rms 1,125 V rms  
Dielectric strength (altitude) (When mounted in mating socket)  
Coil to case 80,000 ft  
Aux contacts 250 V rms  
All other points 350 V rms  
Max contact drop initial 0.150 volt  
After life test 0.175 volt  
Overload current 40 amperes dc, 60 amperes ac, 50 amperes dc, 80 amperes ac  
Rupture current Continuous  
Duty rating MIL-STD-461  
RFI specification (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

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### TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT, TYPE I, MAGNETIC LATCH, STUD MOUNTED, SOLDER HOOKS, HERMETICALLY SEALED

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