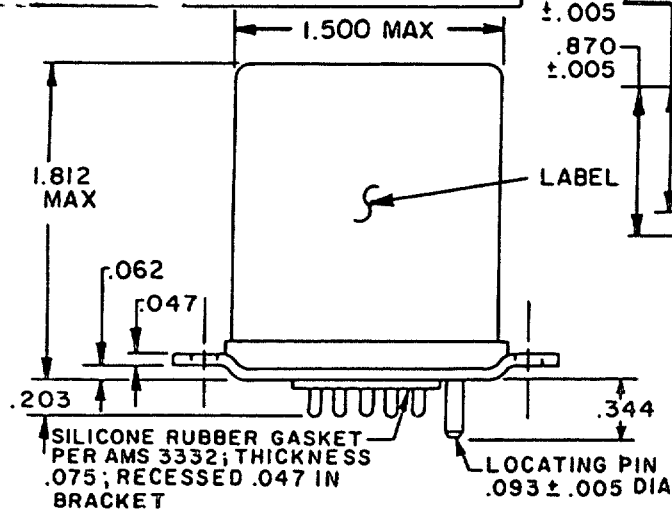
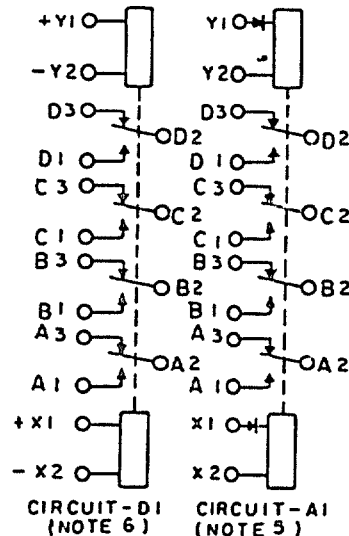
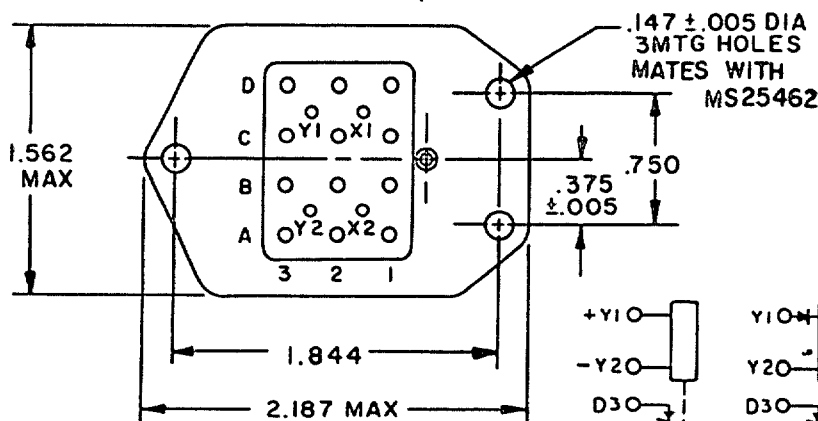


User activities:
Army -
Navy -
Air Force -Review activities:
Army -
Navy - EC
Air Force - 11

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-6106/51)

12 PINS, .0625 ± .0010 DIA
 4 PINS .040 ± .001 DIA (X1, X2, Y1, ND Y2)
 GOLD PLATED, MIL-G-45204, TYPE II, CLASS I, UNDERPLATING,
 NICKEL 50 TO 150 MICROINCHES THICK



Inches	mm
.000	0.00
.001	0.03
.005	0.13
.040	1.02
.047	1.19
.062	1.57
.0625	1.59
.093	2.36
.145	3.86
.147	3.73
.203	5.16
.290	7.37
.344	8.74
.375	9.53
.435	11.05
.580	14.73
.725	18.42
.870	22.10
1.500	38.10
1.562	39.67
1.812	46.02
1.844	46.84
2.187	55.55

(H) denotes changes

P.A. AIR FORCE - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4 PDT, TYPE I, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25461
Procurement Specification MIL-R-6106	SUPERSEDES:	PAGE 1	OF 5

DD FORM 672
1 MAY 73

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5945-0791-04

AMSC 11/A

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

APPROVED 1 NOV 1960 REVISED (F) 5 JUN 87 (G) 29 APR 88 (H) 20 Jan 1989

FED. SUP CLASS.
5945User 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 ± 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. In the event of conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
8. 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.
9. Shock, vibration, and acceleration requirements application with coils de-energized.
10. Pins to be perpendicular to header surface within one degree.

TABLE 1. Dash numbers and characteristics.

Dash number MS 25461-	Type	Coil	Terminal type	Max weight in pounds
D1	I	dc	Plug in	0.40
A1	I	ac	Plug in	0.42

P.A. AIR FORCE - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4 PDT, TYPE I, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25461
Procurement Specification MIL-R-6106	SUPERSEDES:	PAGE 2 OF 5	

REVISED (H) FOR CHANGES SEE PAGE 5

APPROVED 1 Nov 1960

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

User activities: Army -
Navy -
Air Force -

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AIR FORCE - 85
Other Cust
NAVY - AS

International
Interest

TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4 POT,
TYPE I, MAGNETIC LATCH, SOCKET MOUNTED,
HERMETICALLY SEALED

MILITARY STANDARD

MS25461

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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 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	0.17	18	18	19.8	N/A	25	N/A	2	2	NO	NC	NO	NC
A1	X1, X2 Y1, Y2	115	400 5/ _____	N/A	122	0.07	90	90	95	N/A	25	N/A	2	2	NO	NC	NO	NC

- 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/ MS25461-A1 may be used on 60 Hz if maximum ambient temperature is limited to +85°C (maximum coil current shall be 0.077 ampere).

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APPROVED 1 NOV 1960

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User activities: Army -
Navy -
Air Force -

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

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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
Resistive	100	10	10	10	6	10	6	
Inductive	100							
Inductive	20	6	6	10	4	10	4	
Motor	100	4	4	4	3	4	3	
Lamp	100	2	2	2	1.5	2	1.5	
Transfer load								2/
Mechanical life reduced current	400	2.5	2.5	2.5	2	2.5	2	
Intnd 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.
AIR FORCE -85
Other Cust
NAVY - AS

International
Interest

TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4 PDT,
TYPE I, MAGNETIC LATCH, SOCKET MOUNTED,
HERMETICALLY SEALED

MILITARY STANDARD

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Procurement Specification
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SUPERSEDES:

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

FED. SUP CLASS
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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
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

	1,500 V rms	1,125 V rms
All other points		

Dielectric strength (altitude)

	80,000 ft	250 V rms
Coil to case		

Aux contacts

	350 V rms
All other points	

Max contact drop initial

After life test

Overload current

	0.150 volt
	0.175 volt
	40 amperes dc,
	60 amperes ac
	50 amperes dc,
	80 amperes ac

Rupture current

Duty rating

RFI specification

(Applicable to coil circuits of ac operated relays)

MIL-STD-461

Quality conformance inspection

Performance of groups B and C tests are not applicable.

(H)

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.

P.A. AIR FORCE - 85 Other Cust NAVY - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4 PDT, TYPE 1, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25461
Procurement Specification MIL-R-6106	SUPERSEDES:	PAGE 5 OF 5	

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