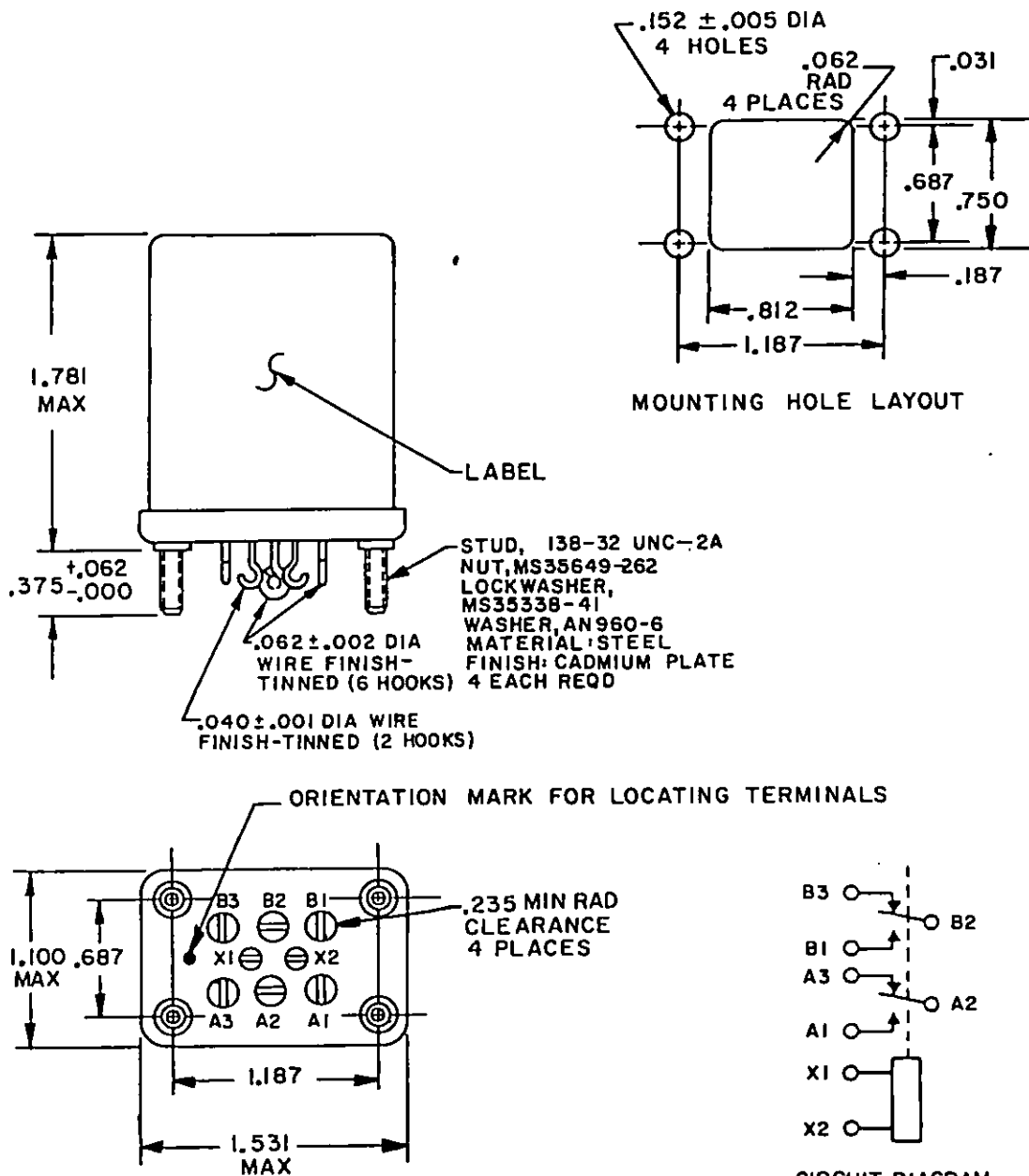


FED. SUP CLASS
5945User activities: Army -
Navy -
Air Force -Review activities: Army - EC
Navy -
Air Force - 11, 99

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G ENTIRE STANDARD REVISED

P.A USAF - 85	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT, TYPE 1, SOLDER TERMINALS, STUD MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD
Other Cust Navy - AS			MS 25273
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 1 OF 5

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1 MAY 73
AMSC N/A

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DISTRIBUTION STATEMENT A.

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Inches	mm
.001	0.03
.002	0.05
.005	0.13
.010	0.25
.031	0.79
.040	1.02
.062	1.57
.138	3.51
.152	3.85
.187	4.75
.235	5.97
.357	9.53
.687	17.45
.750	19.05
.812	20.62
1.100	27.94
1.187	30.15
1.531	38.89
1.781	45.24

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. In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
6. 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.
7. The use of diodes on ac relays is optional. Actual application must be shown on label (dash numbers -A1 and -A2 are inactive for new design).

TABLE I. Dash numbers and characteristics.

Dash number	Type	Coil	Terminal type	Mounting	Max weight in pounds
MS25273-					
D1	I	dc	Solder hook	Stud	0.30
A1 1/	I	ac	Solder hook	Stud	0.32
A2 1/	I	ac	Solder hook	Stud	0.32

1/ Dash number -A1 and -A2 are inactive for new design and shall be used for support of existing systems only.

P.A. USAF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT, TYPE I, SOLDER TERMINALS, STUD MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25273
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 2 OF 5

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Review activities: Army -
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Air Force - 11, 99

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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 $\frac{2}{\underline{\hspace{1cm}}}$	Hold voltage $\frac{2}{\underline{\hspace{1cm}}}$	Operate $\frac{3}{\underline{\hspace{1cm}}}$	Release $\frac{4}{\underline{\hspace{1cm}}}$	Contact bounce		
		Volts $\frac{1}{\underline{\hspace{1cm}}}$	Freq. Hz	Res Ω $\pm 10\%$	Volts	Amperes	Normal $\frac{2}{\underline{\hspace{1cm}}}$	High temp test					Cont current test	Main	Aux
D1	X1, X2	28	dc	175	29	0.20	18	19.5	22.5	1.5	7.0	20	2	2	
A1 $\frac{5}{\underline{\hspace{1cm}}}$ $\frac{6}{\underline{\hspace{1cm}}}$	X1, X2	115	400	N/A	122	0.07	90	95	103	5.0	30	25	2	2	
A2 $\frac{6}{\underline{\hspace{1cm}}}$	X1, X2	115	50/60	N/A	122	0.10	90	95	103	5.0	30	25	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/ MS25273-A1 may be used on 60 Hz if maximum ambient temperature is limited to 85°C (maximum coil current shall be 0.077 ampere).

6/ Inactive for new design.

P.A
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TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES,
2 PDT, TYPE I, SOLDER TERMINALS
STUD MOUNTED, HERMETICALLY SEALED

MILITARY STANDARD

MS 25273

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User activities: Army - Navy - Air Force -

Review activities: Army - Navy - EC Air Force - 11, 99

TABLE 111. 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	
		NU	NC	140 Hz	400 Hz	60 Hz	400 Hz	
Resistive	100	10	10	10	6	10	6	
Inductive	100							
Inductive	20	6	6	6	4	6	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	12.5	12.5	2.5	2	2.5	2	
Intmd current		Applicable per specification						

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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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RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 PDT, TYPE 1, SOLDER TERMINALS STUD MOUNTED, HERMETICALLY SEALED

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Review activities: Army - EC
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User activities: Army -
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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 us
Vibration - sinusoidal
G-level 10 G
Frequency range 5 - 1500 Hz
Acceleration 15 G

Electrical characteristics

Insulation resistance 100 megohms
After life or environmental tests 50 megohms

Dielectric strength (sea level)
Initial 1,000 V rms
After life tests 1,000 V rms

Coil to case 1,500 V rms
Aux contacts 1,125 V rms

All other points

Dielectric strength (altitude)

Coil to case 80,000 ft
250 V rms

Aux contacts

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

Rupture current 50 amperes dc,
80 amperes ac

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 tests not applicable to dash numbers -A1 and -A2.

P.A
USAF - 85
Other Cust
Navy - AS

International
interest

TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES,
2 POT, TYPE I, SOLDER TERMINALS
STUD MOUNTED, HERMETICALLY SEALED

MILITARY STANDARD

MS 25273

Procurement Specification
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