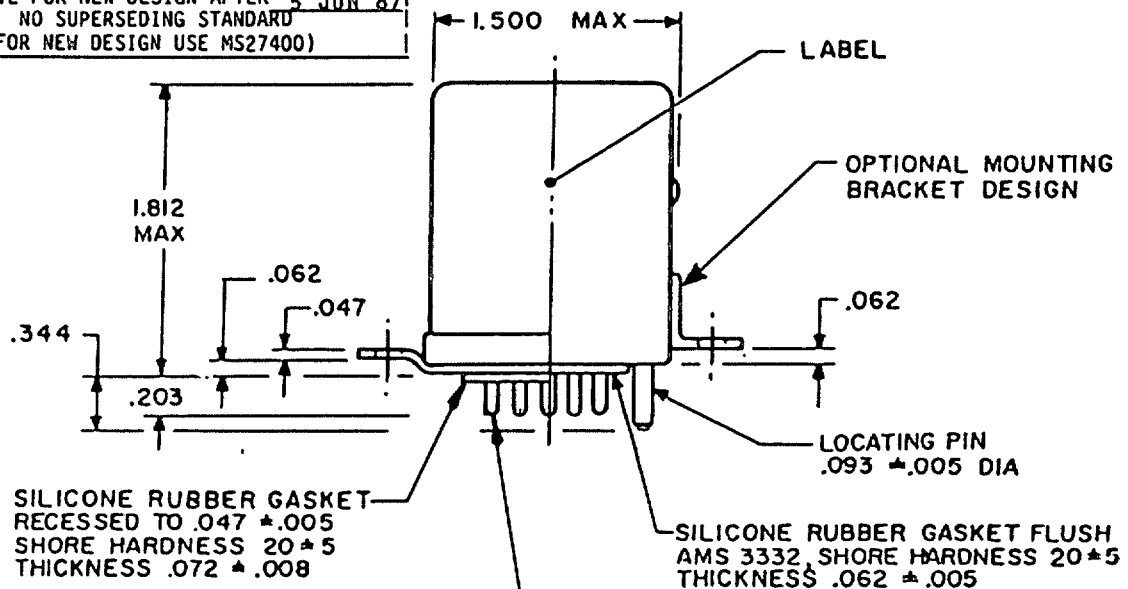
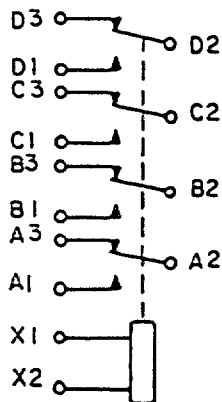


FED. SUP CLASS  
5945INACTIVE FOR NEW DESIGN AFTER 5 JUN 87  
NO SUPERSEDING STANDARD  
(FOR NEW DESIGN USE MS27400)User activities: Army -  
Navy -  
Air Force -Review activities: Army - EC  
Navy -  
Air Force - 11, 99

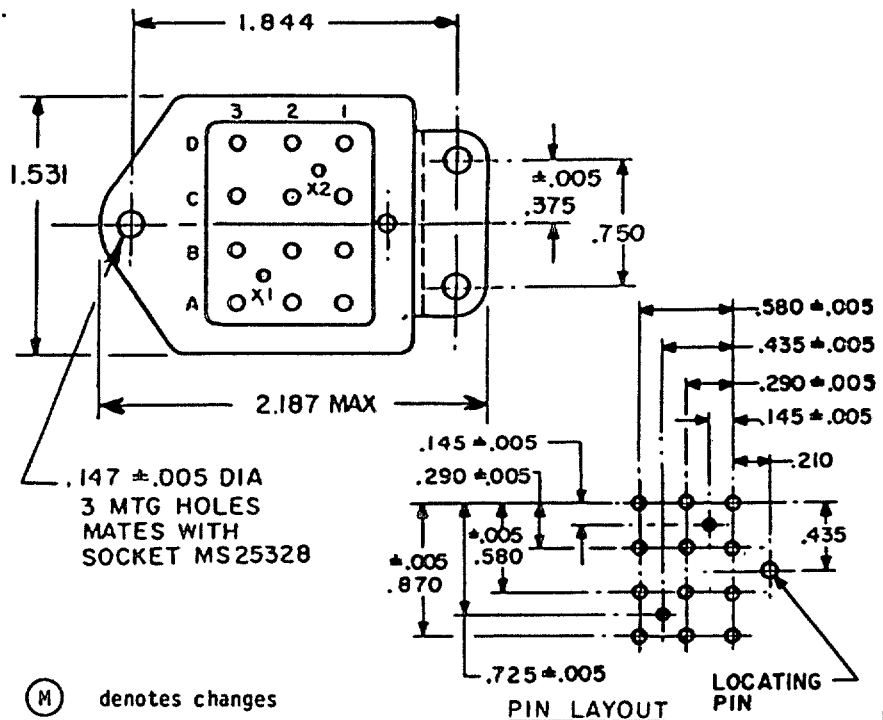
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12 PINS, .0625  $\pm$ .001 DIA  
2 PINS, .010  $\pm$ .001 DIA (X1, X2)  
GOLD PLATE PER MIL-G-45204,  
TYPE II, CLASS I, UNDERPLATING,  
NICKEL 50. TO 150 MICROINCHES  
THICK.



**CIRCUIT DIAGRAM**  
(SEE NOTE 4)



P.A USAF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4 PDT, TYPE I, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD
			MS25327
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 1 OF 5

DD FORM 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE  
1 MAY 73  
AMSC N/A

5945-0792-06

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

APPROVED 12 May 58  
REVISED (M) 20 Jan 1989

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Inches	mm	Inches	mm
.001	0.03	.290	7.37
.005	0.13	.344	8.74
.008	0.20	.375	9.52
.040	1.02	.435	11.05
.047	1.19	.580	14.73
.062	1.57	.725	18.42
.0625	1.588	.750	19.05
.072	1.83	.870	22.10
.093	2.36	1.500	38.10
.145	3.68	1.531	38.89
.147	3.73	1.821	46.02
.203	5.16	1.844	46.84
.210	5.33	2.187	55.55

## 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. The use of diodes on ac relays is optional. Actual application must be shown on label.
5. Pins to be perpendicular to header surface within one degree.
6. Terminal numbers need not appear on relay headers provided there is affixed to the relay a suitable legible circuit diagram that positively and permanently identifies each terminal location specified herein.
7. 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.
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.

TABLE I. Dash numbers and characteristics.

Dash number	Type	Coil	Terminal type	Max weight in pounds
MS25327-				
D1	1	dc	Plug in	.43
A1	1	ac	Plug in	.45

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Review activities: Army - EC  
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(M) TABLE II. Operating characteristics.

MS part no.		Coil data										Time - (milliseconds maximum)					
Coil		Nominal		Max		Max pick-up voltage				Hold voltage $\frac{2}{\underline{\hspace{0.5cm}}}$	Drop-out voltage $\frac{2}{\underline{\hspace{0.5cm}}}$	Operate $\frac{3}{\underline{\hspace{0.5cm}}}$	Release $\frac{4}{\underline{\hspace{0.5cm}}}$	Contact bounce			
						Volts $\frac{1}{\underline{\hspace{0.5cm}}}$	Freq. Hz	Res $\Omega$	Volts					Amperes	Normal $\frac{2}{\underline{\hspace{0.5cm}}}$	High temp test	Cont current test
D1	X1, X2	28	dc	N/A	29	0.350	18	19.5	22.5	7.0	1.5	20	20	2	2		
A1	X1, X2	115	400 $\frac{5}{\underline{\hspace{0.5cm}}}$	N/A	122	0.073	90	95	103	30	5.0	25	50	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/ MS25272-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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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		
		NO	NC	NO	NC	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	
		NO	NC	NO	NC	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 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	2.5	2.5			2.5	2			2.5	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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### 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 G  
G-level 5 - 1500 Hz  
Frequency range  
Vibration - random N/A  
Applicable specification N/A  
Power spectral density N/A  
RMS G min N/A  
Frequency range N/A  
Curve 15 G  
High shock  
Acceleration

### Electrical characteristics

Insulation resistance, initial 100 megohms  
After life or environmental tests 50 megohms  
Dielectric strength (sea level)  
Initial After life tests  
Coil to case 1,000 V rms 1,000 V rms  
Aux contacts  
All other points 1,500 V rms 1,125 V rms  
Dielectric strength (altitude)  
Coil to case 80,000 ft  
500 V rms  
Aux contacts 500 V rms  
All other points 500 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 inspections are not applicable

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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