

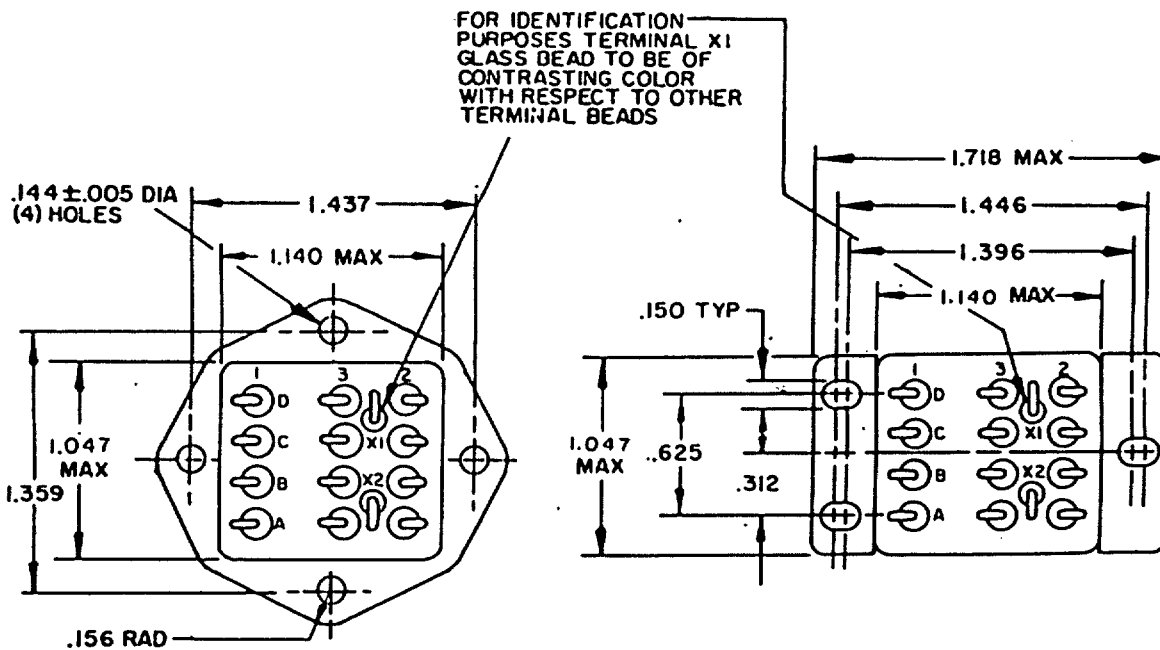
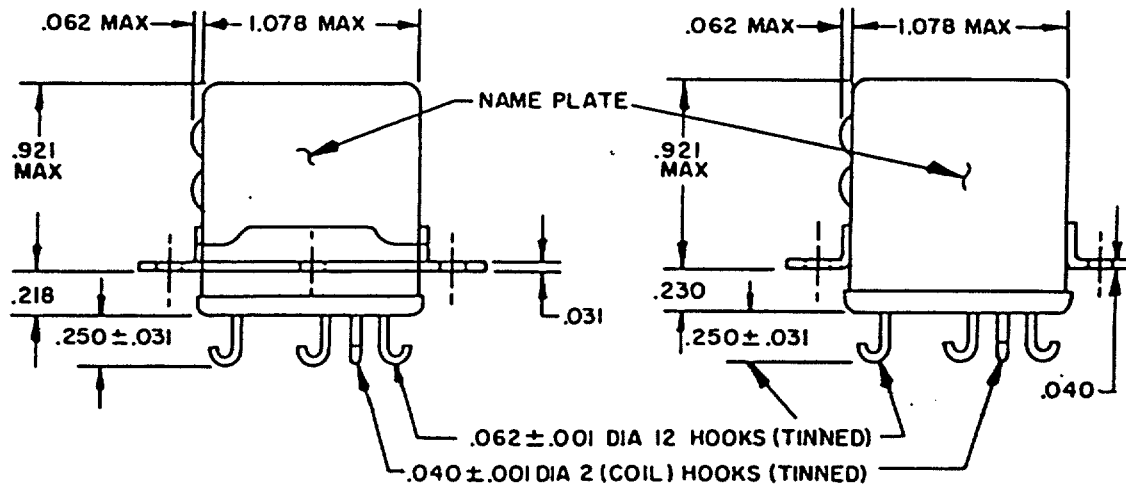
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FED. SUP CLASS  
 5945

User activities:  
 Army -  
 Navy -  
 Air Force -

Review activities:  
 Army - EC  
 Navy -  
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DASH NUMBERS 1 AND 2

DASH NUMBERS 3 AND 4

(J) denotes changes

P.A. USAF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4PDT, TYPE 1, SOLDER HOOKS HERMETICALLY SEALED	MILITARY STANDARD <b>MS27255</b>
Procurement Specification MIL-R-6106	SUPERSEDES:	PAGE 1 OF 6	

APPROVED 9 Nov 1964 REVISED (H) 5 JUN 87 (J) 10 FEB 89

DD FORM 672  
 1 MAY 73  
 AMSC N/A

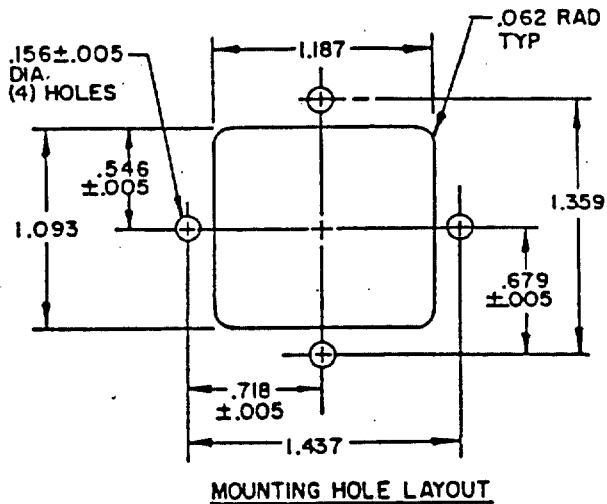
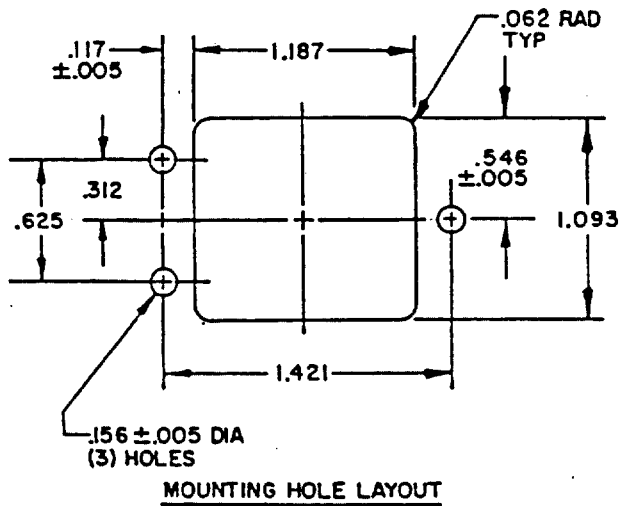
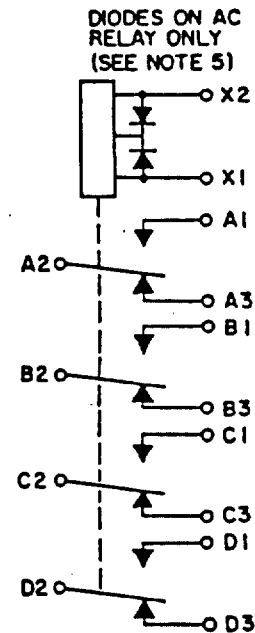
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5945-0798-03

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DASH NUMBERS 1 AND 2DASH NUMBERS 3 AND 4

P.A. USAF - 85	International interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 4PDT, TYPE I, SOLDER HOOKS, HERMETICALLY SEALED	MILITARY STANDARD
Other Cust Navy - AS			<b>MS27255</b>
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 2 OF 6

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Inches	mm	Inches	mm	Inches	mm
.001	0.03	.218	5.54	1.047	26.59
.005	0.13	.230	5.84	1.078	27.38
.031	0.79	.250	6.35	1.093	27.76
.040	1.02	.312	7.92	1.140	28.96
.062	1.57	.315	13.87	1.187	30.15
.117	2.97	.546	15.88	1.359	34.52
.144	3.66	.679	17.25	1.396	35.46
.150	3.81	.718	18.24	1.437	36.50
.156	3.96	.921	23.39	1.446	36.73
				1.718	43.64

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are  $\pm 0.010$  (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 identifies each terminal location specified.
5. The use of diodes on ac relays is optional. Actual application must be shown on label.
6. 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.
7. 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	Mounting or mating socket	Max weight in pounds
MS27255-					
1	I	ac	Solder hook	Bracket	.20
2	I	dc	Solder hook	Bracket	.20
3	I	ac	Solder hook	Bracket	.20
4	I	dc	Solder hook	Bracket	.20

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(J) TABLE II. Operating characteristics.

IMS part no.	Coil data										Time (milliseconds-maximum)						
	Coil	Nominal		Max		Max pick-up voltage			Hold voltage 2/	Drop-out voltage 2/	Operate 3/	Release 4/	Contact bounce				
						Volts 1/	Freq. Hz	Res $\Omega$					Volts	Amperes	Normal 2/	High temp test	Cont current test
		NO	NC	NO	NC												
-1 and -3	ac	115	400	N/A	120	.04	90	95	103	30	5.0	15	30	3	5		
-2 and -4	dc	28	N/A	160	29	.20	18	19.5	22.5	7.0	1.5	10	10	3	5		

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.

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## TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES,  
4PDT, TYPE I, SOLDER HOOKS, HERMETICALLY  
SEALED

MILITARY STANDARD

MS27255

Procurement Specification  
MIL-R-6106

SUPERSEDES:

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APPROVED

9 Nov 1964

REVISED

(J) For changes see pages 4 and 6

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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	1400 Hz	160 Hz	400 Hz	160 Hz	400 Hz	160 Hz	
Resistive	100	10	10		10			10			
Inductive					10			10			
Inductive	50	10	10								
Motor	100	5	5		5			5			2/
Lamp	100	3	3		3			3			2/
Transfer load											3/
Mechanical life reduced current	400	2.5	2.5								
Intmd current		Applicable per specification									

1/ Absence of value indicates relay is not rated for 3 phase applications.

2/ 100,000 operations - on NO contacts, and 50,000 operations on NC contacts at 28 V dc.

3/ Transfer load indicates relay suitable for transfer between unsynchronized ac power supplies at rating indicated.

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Other Cust  
Navy - ASInternational  
Interest

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DD FORM 672  
1 MAY 73

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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 20 G  
 G-level 10 - 2,000 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 N/A  
 High shock N/A  
 Acceleration 15 G

Electrical characteristics

Insulation resistance, initial 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  
 Aux contacts  
 All other points 1,500 V rms  
 1,000 V rms  
 Dielectric strength (altitude)  
 Coil to case 80,000 ft  
 250 V rms  
 Aux contacts  
 All other points 350 V rms  
 Max contact drop initial  
 After life test 0.150 volt  
 0.175 volt  
 Overload current 40 amperes dc  
 50 amperes dc  
 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 tests are not applicable.

1/ Dielectric rating may be improved by suitable insulation of terminals and wiring after installation.

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