

User activities: Army -
Navy -
Air Force -

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

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INACTIVE FOR NEW DESIGN AFTER 30 SEPT 1987 NO SUPERSEDING STANDARD		FED. SUP CLASS 5945	
⑥ ENTIRE STANDARD REVISED			
P.A. AF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 6PDT, 5 AMPERES, TYPE I, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25463
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 1 OF 5

DD FORM 1 MAY 73 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

AMSC N/A

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APPROVED 1 Nov 1960 REVISED ⑥ 30 SEPT 1987

FED. SUP CLASS
5945

Inches	mm	Inches	mm	Inches	mm
.001	0.03	.152	3.86	.608	15.44
.005	0.13	.176	4.47	.704	17.88
.040	1.02	.203	5.16	.750	19.05
.047	1.19	.221	5.61	.792	20.12
.062	1.57	.304	7.72	.880	22.35
.075	1.91	.352	8.94	1.500	38.10
.088	2.24	.375	9.53	1.562	39.67
.093	2.36	.456	11.58	1.812	46.02
.147	3.73	.528	13.41	1.844	46.84
				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 ± 0.005 (0.13 mm).
4. The use of diodes on ac relays is optional. Actual application must be shown on label.
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. Terminal numbers need not appear on relay header. There shall be affixed to the relay a suitable legible circuit diagram that identifies each terminal location.
8. Pins to be perpendicular to header surface within one degree.
9. Relay is magnetically latched in both positions. Caution note to observe polarity must appear on relays with dc coils.
10. Shock, vibration, and acceleration requirement applicable with coils de-energized.

Table I. Dash numbers and characteristics. 1/

Dash number	Type	Coil	Terminal type	Mounting	Max weight in pounds
MS25463-					
D1	I	dc	Plug-in	bracket	0.40
A1	I	ac	Plug-in	bracket	0.42

1/ MS25463-AD1 canceled without replacement.

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			MS25463
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 2 OF 5

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Air Force - 11

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FED. SUP CLASS
5945

TABLE II. Operating characteristics.

MS part no. MS25463-	Coil data										Time - (milliseconds maximum)					
	Coil		Nominal		Max		Max pick-up voltage			Operate 3/ _____	Release 4/ _____	Contact bounce				
	Volts 1/ _____	Freq. Hz	Res Ω	Volts	Amperes	Normal 2/ _____	High temp test	Cont current test			NO	HC	NO	Aux	NC	
D1	X1, X2 Y1, Y2	28	dc		29	0.17	18	18	19.8	25	N/A	2	2			
A1	X1, X2 Y1, Y2	115	400 5/ _____		122	0.07	90	90	95	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/ Over the temperature range.
3/ With nominal coil voltage.
4/ From nominal coil voltage.
5/ MS25463-A1 may be used on 60 Hz if maximum ambient temperature is limited to +85°C, maximum current coil will be 0.077 ampere.

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Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 3 OF 5

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	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	
Resistive	100	5	5		5	4					
Inductive	100										
Inductive	20	3	3		3	2					
Motor	100	1.5	1.5		1.5	1					
Lamp	100	0.8	0.8		0.8	0.6					
Transfer load											2/
Mechanical life reduced current	400	1.25	1.25		1.25	1					
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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AF - 85

Other Cust

Navy - AS

International
Interest

TITLE

RELAYS, ELECTROMAGNETIC, 6PDT,
5 AMPERES, TYPE I, MAGNETIC LATCH,
SOCKET MOUNTED, HERMETICALLY SEALED

MILITARY STANDARD

MS25463

Procurement Specification
MIL-R-6106

SUPERSEDES:

PAGE 4 OF 5

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's
Duration 11 ms
Max duration contact opening 10 μs
Vibration - Sinusoidal 10 g's
G-level 5 - 1,500 Hz
Frequency range 15 g's
Acceleration

Quality conformance inspection

Performance of groups B and C tests are not applicable.

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 1,000 V rms 1,000 V rms
Dielectric strength (altitude) 1/
Coil to case 80,000 ft
500 V rms
Aux contacts
All other points 500 V rms
Max contact drop initial 0.150 volt
After life test 0.175 volt
Overload current 20 amperes
Rupture current 25 amperes
Duty rating Continuous
RFI specification MIL-STD-461
(Applicable to coil circuits of ac operated relays)

1/ When mounted in mating socket

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