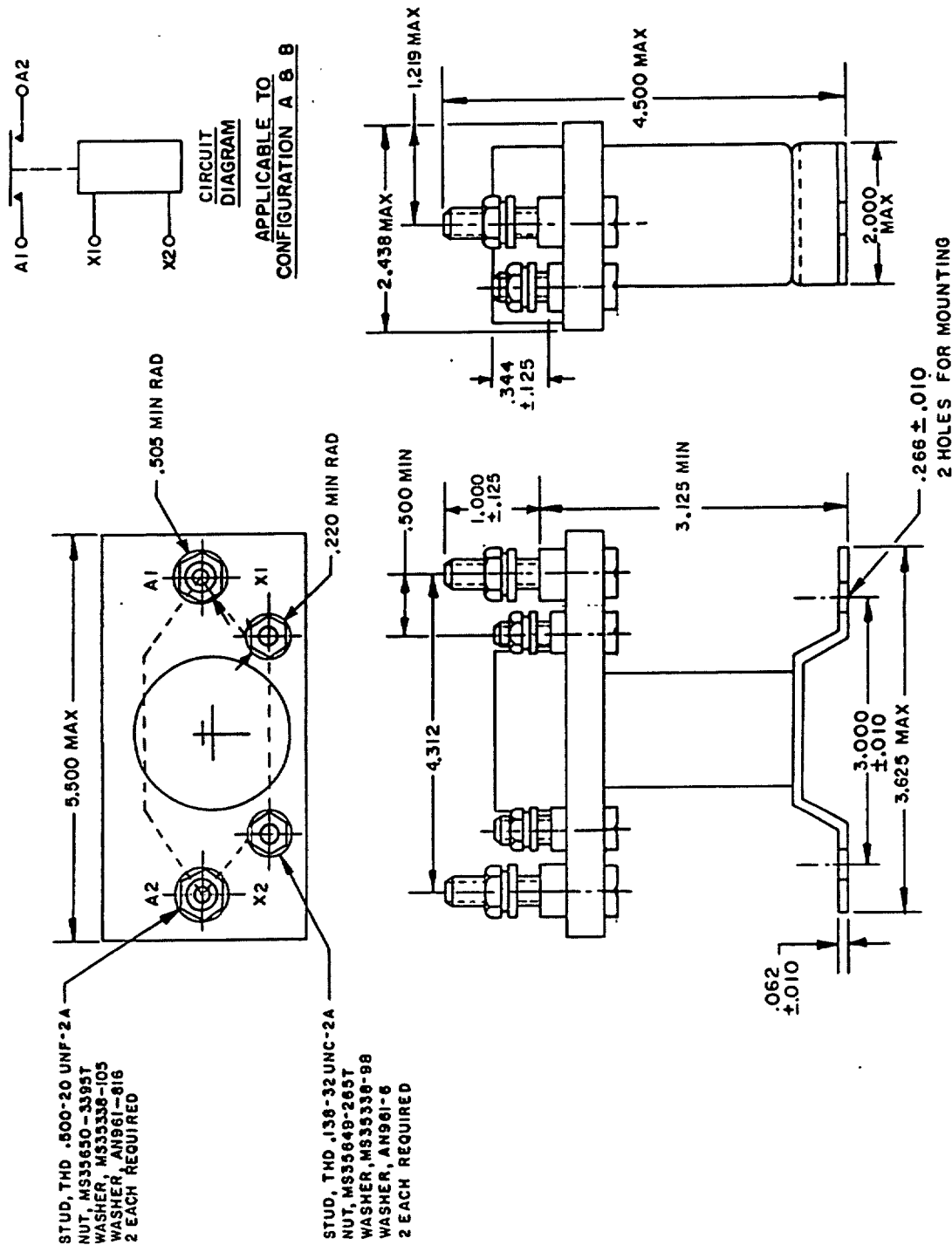


THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODDS SPECIFIED IN THE SOLICITATION: MIL-R-6108

THIS SPECIFICATION IS APPROVED FOR USE BY all Departments and Agencies of the Department of Defense.

Form Approved
OMB No. 0704-0188



(K) Denotes changes

(K) CONFIGURATOR A. Outline drawing (for details see tables I and II).

PREPARING ACTIVITY: Air Force-85
CUSTODIANS: ARMY - NAVY - AS
AIR FORCE - DLA -

REVIEW:

USER:

PROJECT NUMBER: 5945-0841-03

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

MILITARY SPECIFICATION SHEET

TITLE
RELAYS, ELECTROMAGNETIC,
400 AMPERES, 1 PST, N.O. TYPE II
NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24185K 25 July 1990

SUPERSEDING

MS24185J 31 Jan 1990

AMSC N/A

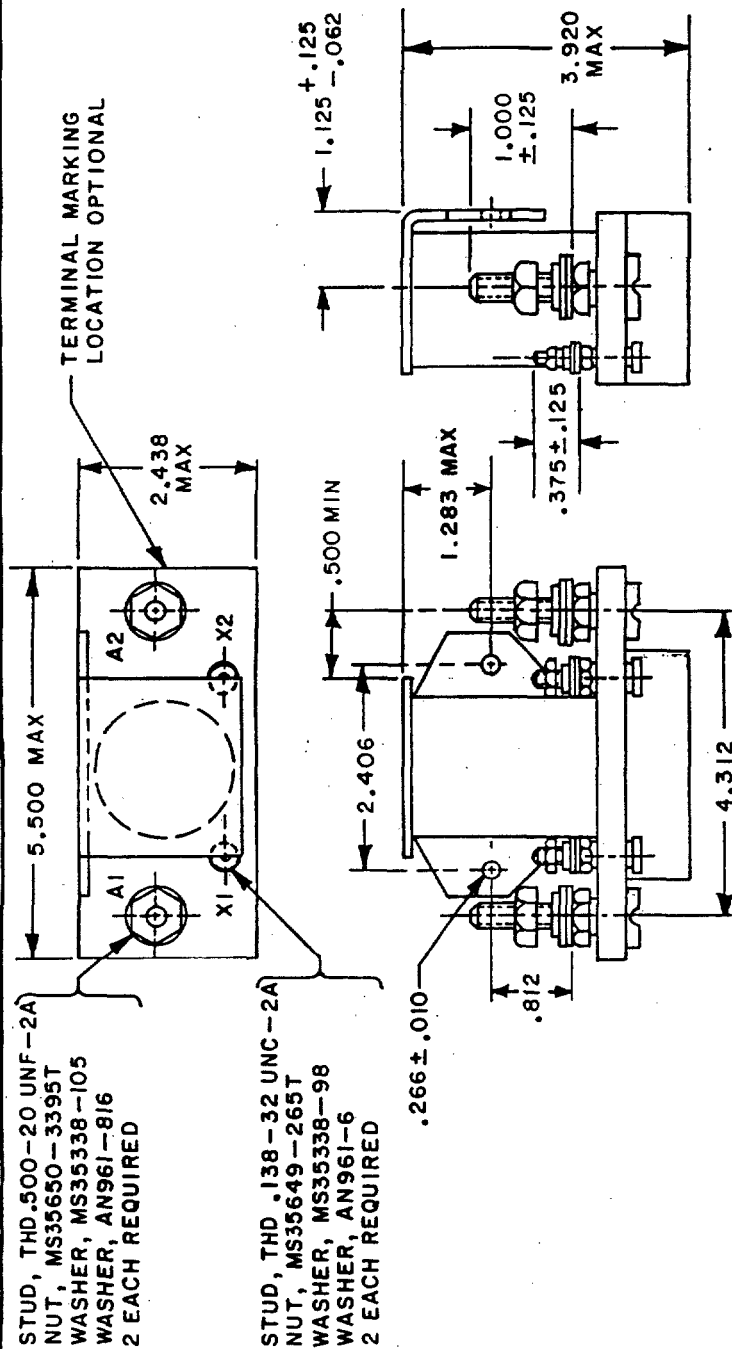
FSC 5945

Page 1 of 5

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-R-6106

THIS SPECIFICATION IS APPROVED FOR USE BY all Departments and Agencies of the Department of Defense.

Form Approved
OMB No. 0704-0188



CONFIGURATION B Outline drawing (for details see tables I and II).

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.010	0.25	.500	12.70	2.406	61.11	2.438	61.93
.062	1.57	.505	12.83	2.438	61.93	3.000	76.20
.090	2.29	.812	20.62	3.125	79.38	3.625	92.08
.125	3.18	1.000	25.40	3.920	99.57	4.312	109.52
.138	3.51	1.125	28.58	4.500	114.30	5.500	139.70
.220	5.59	1.219	30.96				
.266	6.76	1.273	32.33				
.375	9.52	1.281	32.54				
.475	12.06	2.000	50.80				

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only. (K)
3. Unless otherwise specified, tolerance is $\pm .062$ (1.57 mm).
4. Additional flat washer may be used for terminal seat.
5. Terminal temperature rise under continuous current conditions, 95°C. Intermediate current to be conducted at 71°C.
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.
8. Shape of relay optional within envelope dimensions.

PREPARING ACTIVITY: Air Force-85
 CUSTODIANS: ARMY - NAVY - AS
 AIR FORCE - DLA -

REVIEW:
 USER:
 PROJECT NUMBER: 5945-0841-03
 DISTRIBUTION STATEMENT

MILITARY SPECIFICATION SHEET
 TITLE
 RELAYS, ELECTROMAGNETIC,
 400 AMPERES, 1 PST, N.O. TYPE II
 NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24185K

SUPERSEDING

MS24185J

31 Jan 1990

AMSC N/A

FSC 5945

TABLE II. Operating characteristics.

1/ For Government Logistics support MS24185-D1 shall be used in lieu of AN3380-2.

2/ For Government Logistics support MS24185-D2 shall be used in lieu of AN3380-1.

CAUTION: Use of any coil voltage less than nominal coil voltage will compromise the operation of the relay.

- 1/ Over the temperature range.
- 2/ With nominal coil voltage.
- 3/ From nominal coil voltage.
- 4/ From nominal coil voltage.

Form Approved
OMB No. 0704-0188

Previous editions are obsolete

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	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	
Resistive	50	400												
Inductive	10	100												
Inductive														
Motor	50	400												
Lamp														
Transfer load														2/
Mechanical life reduced current	100	100												
Intermediate current	50	40												

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.

PREPARING ACTIVITY: Air Force-85
CUSTODIANS: ARMY - NAVY - AS
AIR FORCE - DLA -

REVIEW:
USER:
PROJECT NUMBER: 5945-0841-03

DISTRIBUTION STATEMENT

MILITARY SPECIFICATION SHEET

TITLE
RELAYS, ELECTROMAGNETIC,
400 AMPERES, 1 PST, N.O. TYPE II
NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24185 K

SUPERSEDING
MS24185J

31 Jan 1990

AMSC N/A

FSC 5945

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-R-6108

THIS SPECIFICATION IS APPROVED FOR USE BY all Departments and Agencies of the Department of Defense.

Environmental characteristics

Temperature range -55°C to +71°C
Max altitude rating 50,000 ft
Shock G-level 25 g's
Duration 6 - 9 ms
Max duration contact opening 2 ms

Vibration - Sinusoidal (See table IV)

Vibration - Random

High shock

Acceleration

N/A

N/A

10 g's

TABLE IV. Vibration levels.

5-10 Hz	10-55 Hz	55-250 Hz	250-500 Hz	500-1500 Hz
.08 DA	.06 DA	2 g's	2 g's	

Qualification by similarity (See table V)

TABLE V. Qualification by similarity.

Part number	Loads		Dynamics 1/		Environmental	
	Type 1	Type 1 ER				
MS24185-	A B C D E F	A B C A B C				
D1	4		2		4	
D2	4		2		4	

1/ For Group C testing, each dash number shall be tested to meet vibration requirements.

Electrical characteristics

Insulation resistance, Initial
After life or environmental tests
Dielectric strength (sea level)

	Initial		After life tests	
	28 V dc	115 V ac	28 V dc	115 V ac
Coil to case	1,250 V rms	N/A	1,000 V rms	N/A
Aux contacts	1,250 V rms	N/A	1,000 V rms	N/A
All other points	1,250 V rms	N/A	1,000 V rms	N/A

Dielectric strength (altitude)

	28 V dc	115 V ac
Coil to case	500 V rms	N/A
Aux contacts	500 V rms	N/A
All other points	500 V rms	N/A

Max contact drop initial

After life test

Overload current

Rupture current

Duty rating

RFI specification

(Applicable to coil circuits of ac operated relays)

0.150 volt
0.175 volt
(N.O.) 3200 amperes
(N.O.) 4000 amperes
Continuous
MIL-STD-461

Form Approved
OMB No. 0704-0188

PREPARING ACTIVITY: Air Force-85
CUSTODIANS: ARMY -
AIR FORCE -
NAVY - AS
DLA -
REVIEW:
USER:
PROJECT NUMBER: 5945-0841-03
DISTRIBUTION STATEMENT

TITLE
MILITARY SPECIFICATION SHEET
RELAYS, ELECTROMAGNETIC,
400 AMPERES, 1 PST, N.O. TYPE II
NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER
MS24185K
SUPERSEDING
MS24185 J 31 Jan 1990
AMSC N/A FSC 5945