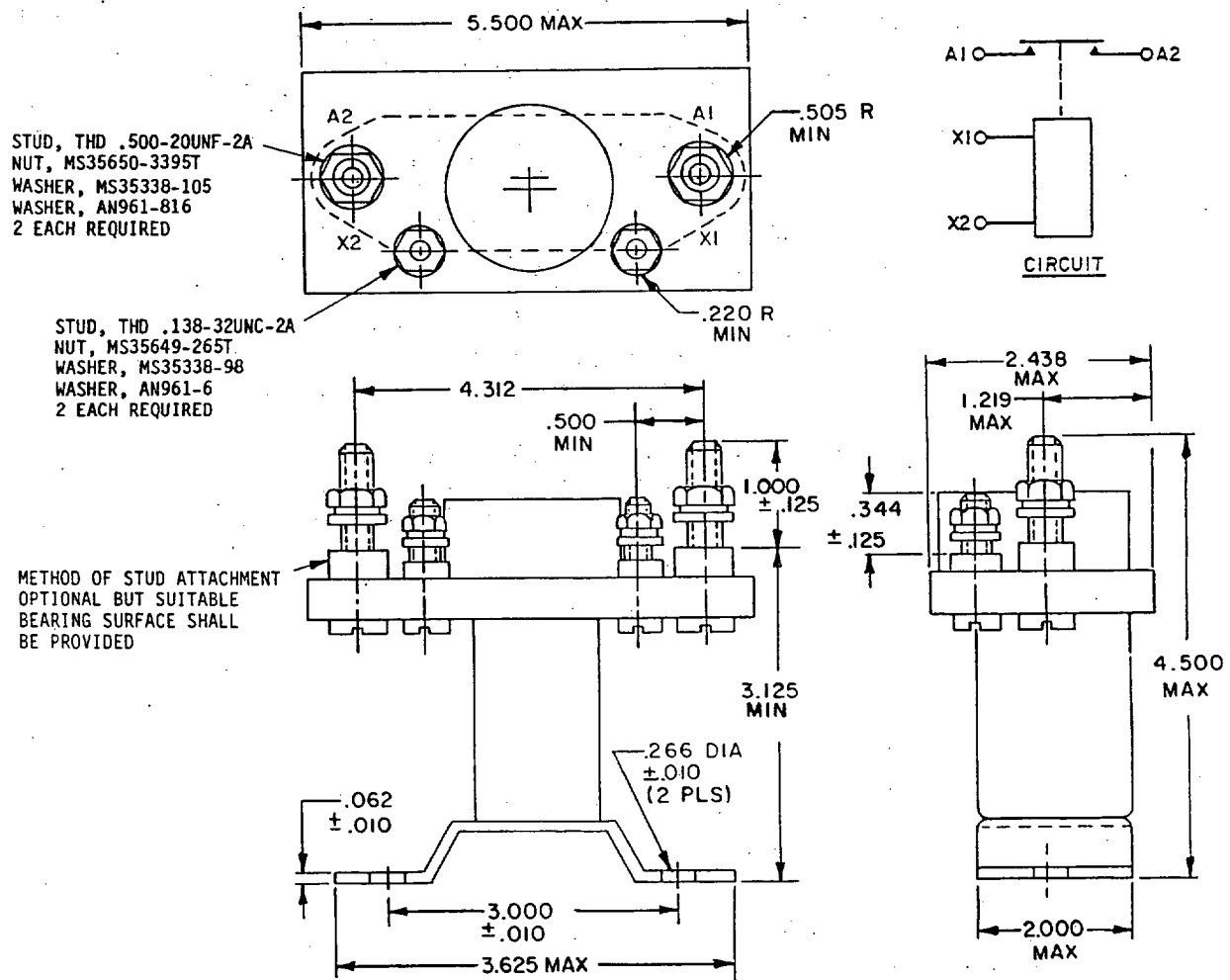


THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-R-6106

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

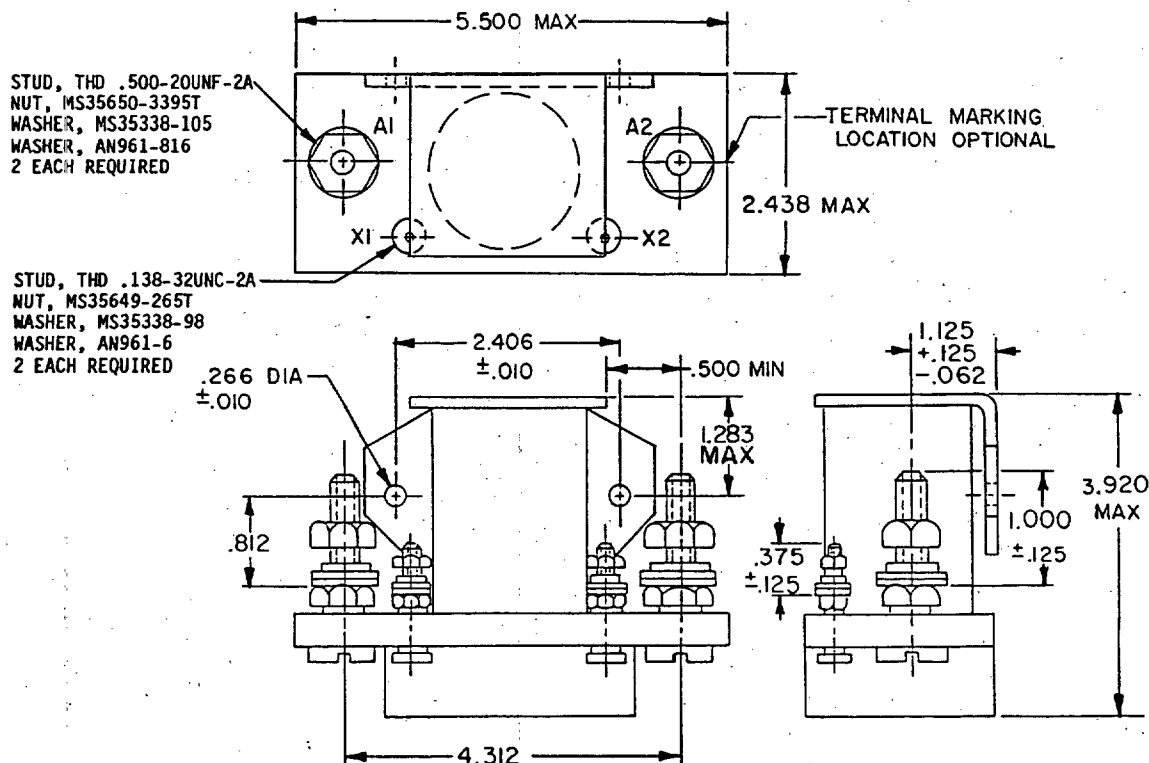
(K) Denotes change

PREPARING ACTIVITY: Air Force-85 CUSTODIANS: ARMY - NAVY - AS AIR FORCE - 85 DLA -	<b>MILITARY SPECIFICATION SHEET</b> TITLE RELAYS, ELECTROMAGNETIC, 400 AMPERES, 1PST (N O), TYPE III, NON-HERMETICALLY SEALED	SPECIFICATION SHEET NUMBER MS24179K 25 July 1990
REVIEW: Air Force-99, Navy-EC USER:		SUPERSADING MS24179J 31 Jan 1990
PROJECT NUMBER: 5945-0841-02		AMSC N/A FSC 5945
DISTRIBUTION STATEMENT	A: Approved for public release; distribution is unlimited.	

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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

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

Inches	mm	Inches	mm
.010	0.25	1.000	25.40
.062	1.57	1.125	28.58
.125	2.36	1.219	30.96
.146	3.71	1.273	32.33
.157	3.99	2.000	50.80
.220	5.59	2.406	61.11
.266	6.76	2.438	61.92
.344	8.74	3.000	76.20
.375	9.53	3.356	85.24
.500	12.70	3.635	92.33
.505	12.83	3.920	99.57
.812	20.62	4.312	109.52
.936	23.77	4.500	114.30
		5.500	139.70

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
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 - 85 DLA -	TITLE <b>MILITARY SPECIFICATION SHEET</b> RELAYS, ELECTROMAGNETIC, 400 AMPERES, 1PST (N O), TYPE III, NON-HERMETICALLY SEALED	SPECIFICATION SHEET NUMBER MS24179 K SUPERSEDING MS24179 J 31 Jan 1990 AMSC N/A FSC 5945
REVIEW: Air Force-99, Navy-EC USER: PROJECT NUMBER: 5945-0841-02	DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited	

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

(K) TABLE I. Dash numbers and characteristics.

Dash number MS24179-	Type Coil	Terminal type Mounting or mating socket	Max weight in pounds
D1 1/ D2 2/	III dc III dc	Stud Bracket - bottom Bracket - side	2.6 2.6

- 1/ For Government logistics support MS24179-D1 shall be used in lieu of AN3381-2.  
 2/ For Government logistics support MS24179-D2 shall be used in lieu of AN3381-1.

TABLE II. Operating characteristics.

MS part no.	Coil data					Time (milliseconds - maximum)										
	Coil	Nominal		Max	Max pick-up voltage	Hold voltage	Drop out voltage	Operate	Release	Bounce						
		Volts $\frac{1}{\underline{\hspace{1cm}}}$	Freq Hz							Resn +15% -10%	Volts/Amperes	Normal $\frac{2}{\underline{\hspace{1cm}}}$	High temp test	Cont current $\frac{2}{\underline{\hspace{1cm}}}$	age test	NO
D1	X1, X2	28	dc	29	3.4	7.5	8.75	9.4	3.0	0.5	20	15	5.0			
D2	X1, X2	28	dc	29	3.4	7.5	8.75	9.4	3.0	0.5	20	15	5.0			

- 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.

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

REVIEW: Air Force-99, Navy-EC  
 USER:  
 PROJECT NUMBER: 5945-0841-02

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

MILITARY SPECIFICATION SHEET  
 TITLE RELAYS, ELECTROMAGNETIC,  
 400 AMPERES, 1PST (N O),  
 TYPE III, NON-HERMETICALLY  
 SEALED

SPECIFICATION SHEET NUMBER

MS24179K

SUPERSEDING

MS24179J

31 Jan 1990

AMSC

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5945

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(K) 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	NO	NC	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz		60 Hz		
Resistive	50																			
Inductive	10																			
Inductive																				
Motor	50																			
Lamp																				
Transfer load																		2/		
Mechanical life reduced current	100																			
Intermediate minimum current																				

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 - 85 DLA -  
REVIEW: Air Force-99, Navy-EC  
USER:  
PROJECT NUMBER: 5945-0841-02

**MILITARY SPECIFICATION SHEET**  
TITLE RELAYS, ELECTROMAGNETIC, 400  
AMPERES, 1PST (N O), TYPE  
III, NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24179K

SUPERSEDING  
MS24179J

31 Jan 1990

AMSC

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ENVIRONMENTAL CHARACTERISTICS

Temperature range -55° to +71°C  
Maximum 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 N/A  
High shock N/A  
Acceleration 10 g's

TABLE IV. Vibration levels.

5-10 Hz	10-55 Hz	55-250 Hz	250-500 Hz	500-1500 Hz
1.08	1.06 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	Type 1 ER						
MS24179	A	B	C	D	E	F	A	B	C
ID1	4						2		
ID2	4						2		

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

ELECTRICAL CHARACTERISTICS

Insulation resistance, initial 100 megohms  
After life or environmental tests 50 megohms  
Dielectric strength (sea level) 2-5 seconds

	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	1,800 V rms	N/A	1,350 V rms	N/A

Dielectric strength (altitude) 1 minute

	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 0.175 volt  
After life test 0.200 volt  
Overload current (NO) 3200 amperes  
Rupture current (NO) 4000 amperes  
Duty rating Intermittent  
RFI specification MIL-STD-461  
(Applicable to coil circuits of ac operated relays)

PREPARING ACTIVITY: Air Force-85  
CUSTODIANS: ARMY - NAVY-EC  
AIR FORCE- 85 DLA -  
REVIEW: Air Force-99, Navy-EC  
USER:  
PROJECT NUMBER: 5945-0841-02  
DISTRIBUTION STATEMENT

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

SPECIFICATION SHEET NUMBER  
MS24179K  
SUPERSEDING  
MS24179J 31 Jan 1990  
AMSC N/A FSC 5945