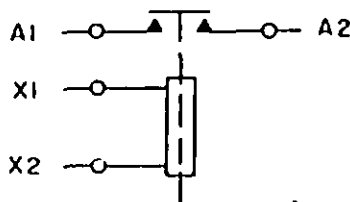
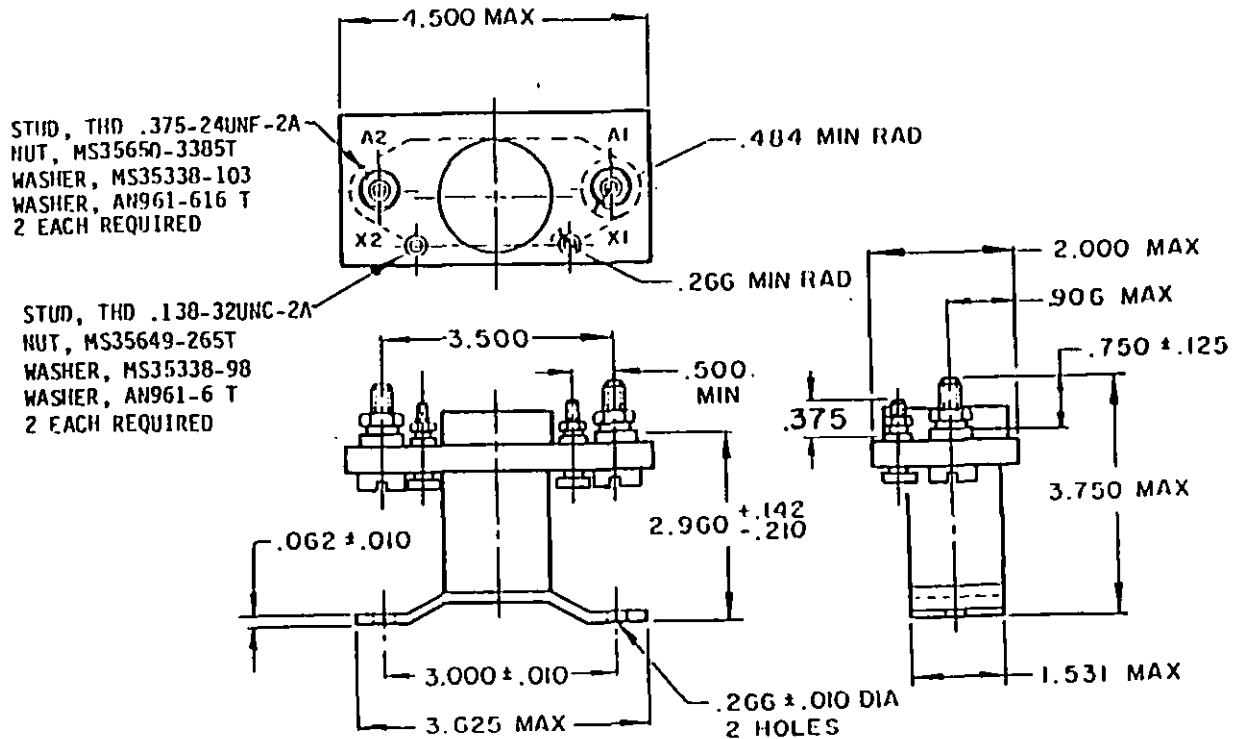


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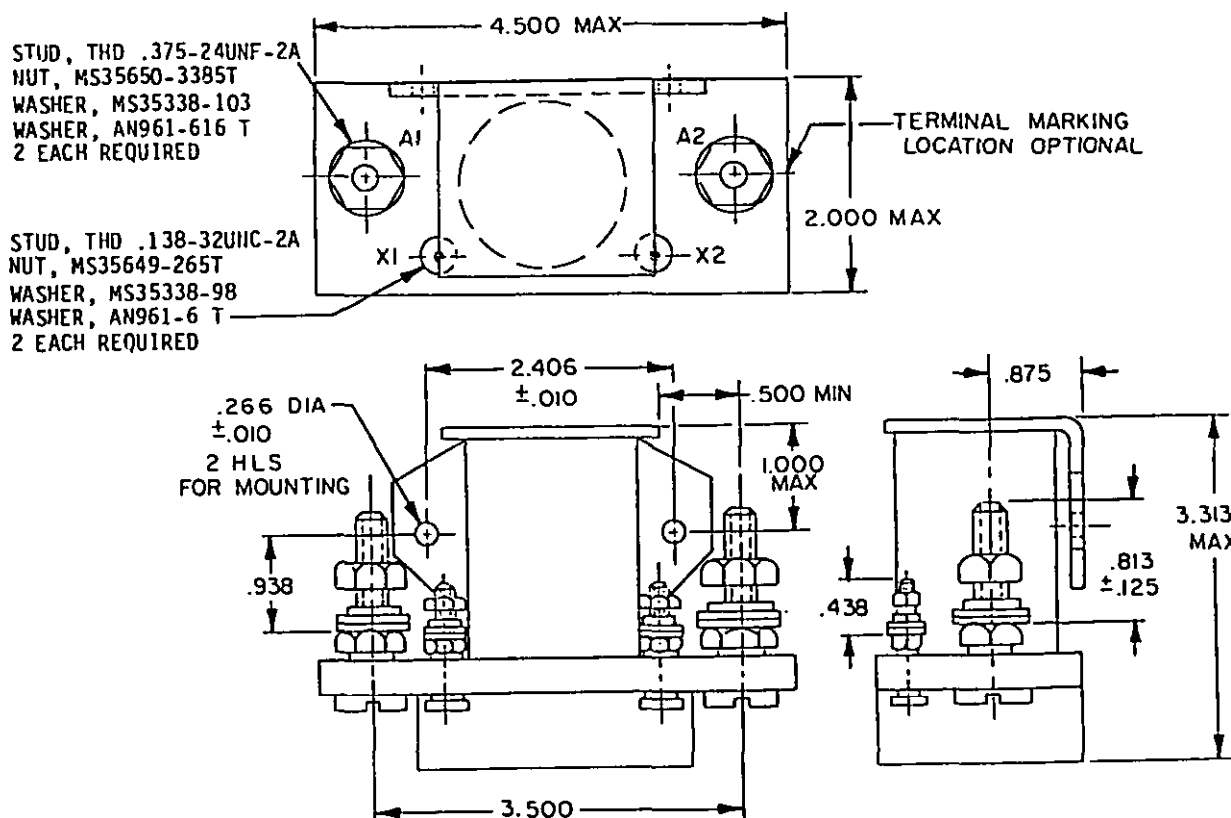
CIRCUIT (applicable to configurations A and B)

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

ENTIRE STANDARD REVISED

PREPARING ACTIVITY: Air Force-85 CUSTODIANS: ARMY - NAVY - AS AIR FORCE - 85 DLA - Air Force- 11, 99 REVIEW: Navy - AS, EC USER: PROJECT NUMBER: 5945-0803-01	TITLE RELAYS, ELECTROMAGNETIC, 200 AMPERES, 1PST (NO), TYPE II, NON-HERMETICALLY SEALED	SPECIFICATION SHEET NUMBER			
		MS24171F	28 Apr 1989		
		SUPERSEDING	MS24171E 24 Sept 82		
		AMSC	N/A	FSC	5945
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CONFIGURATION B. Outline drawing (for details see tables I and II).

Inches	mm	Inches	mm	Inches	mm
.010	0.25	.484	12.30	2.000	50.80
.062	1.57	.500	12.70	2.406	61.11
.125	3.18	.750	19.06	3.960	75.18
.138	3.51	.813	20.66	3.000	76.20
.142	3.61	.875	22.22	3.313	84.15
.210	5.33	.906	23.01	3.500	88.90
.266	6.76	.938	23.83	3.750	95.26
.375	9.52	1.000	25.40	4.500	114.30
.438	11.13	1.531	38.89		

NOTES:

1. Dimensions are in inches.
2. Terminal cover not required.
3. Additional flat washer may be used for terminal seat.
4. Part number MS24171-D1 replaces part no. MS24171-1.
5. This specification sheet takes precedence over documents referenced herein.
6. Referenced documents shall be of the issue in effect on date of invitation for bid.
7. Metric equivalents are given for general information only.
8. Unless otherwise specified, tolerances are ±.062 (1.57 mm).
9. Terminal temperature rise under continuous current conditions, 95°C. Intermediate current to be conducted at 71°C.
10. Shape of relay optional within envelope dimensions.

PREPARING ACTIVITY: Air Force-85 CUSTODIANS: ARMY - NAVY - AS AIR FORCE - 85 DLA - Air Force- 11, 99 REVIEW: Navy - AS, EC USER: PROJECT NUMBER: 5945-0803-01	MILITARY SPECIFICATION SHEET TITLE RELAYS, ELECTROMAGNETIC 200 AMPERES, 1PST (NO), TYPE II, NON-HERMETICALLY SEALED	SPECIFICATION SHEET NUMBER MS24171F SUPERSIDING MS24171E AMSC N/A FSC 5945
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TABLE I. Dash numbers and characteristics.

Dash number	Type	Coil	Terminal type	Mounting or mating socket	Max weight in pounds
MS24171-					
D1	1/	II dc	Stud	Bracket - bottom	1.33
D2	2/	II dc	Stud	Bracket - side	1.33

- 1/ For Government logistics support MS24171-D1 shall be used in lieu of AN3370-2.
2/ For Government logistics support MS24171-D2 shall be used in lieu of AN3370-1.

TABLE II. Operating characteristics.

MS part no.	Coil data					Time (milliseconds - maximum)				
	Nominal		Max		Max pick-up voltage	Hold voltage	Drop out voltage	Operate	Release	Bounce
	Volts 1/	Freq Hz	Resn minimum 25 C	Volts Amperes						
MS24171										
					Normal test 2/	High temp current test 2/		3/	4/	Main Aux
D1	X1, X2	28 dc	59	.60	18	21	22.5	17.0	1.5	10
D2	X1, X2	28 dc	59	.60	18	21	22.5	17.0	1.5	10

- 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. AS
AIR FORCE-85 DLA
Air Force-11, 99
REVIEW: Navy - AS, EC
USER:
PROJECT NUMBER: 5945-0803-01

MILITARY SPECIFICATION SHEET --
TITLE RELAYS, ELECTROMAGNETIC,
200 AMPERES, 1PST (NO), TYPE II,
NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24171F

SUPERSEDING

MS24171E

AMSC

N/A

FSC

5945

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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	
Resistive	50	200				400 Hz	60 Hz	
Inductive	10	100				400 Hz	60 Hz	
Inductive								
Motor	50	200						
Lamp								
Transfer load								2/
Mechanical life reduced current	100	50						
Intermediate current	50	120						

1/ Absence of value indicates relay is not rated for 3 phase application.
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 - AS
Air Force- 11, 99
REVIEW: Navy - AS, EC
USER:
PROJECT NUMBER: 5945-0803-01

MILITARY SPECIFICATION SHEET
TITLE
RELAYS, ELECTROMAGNETIC
200 AMPERES, 1PST (NO), TYPE II,
NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24171F

SUPERSEDING MS24171E

AMSC N/A FSC 5945

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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	500-1,500 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 I/			Environmental		
	Type 1	Type 1 ER							
MS24171-	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 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	1,250 V rms	N/A	1,000 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 0.150 volt
After life test 0.175 volt
Overload current (NO) 1,500 amperes
Rupture current (NO) 2,000 amperes
Duty rating Continuous
RFI spec MIL-STD-461
(Applicable to coil circuits of ac operated relays)

Form Approved
OMB No. 0704-0188

PREPARING ACTIVITY: Air Force-85
CUSTODIANS: ARMY NAVY-AS
AIR FORCE-85 OLA
Air Force- 11, 99
Navy - AS, EC
REVIEW:
USER:
PROJECT NUMBER: 5945-0303-01

TITLE
RELAYS, ELECTROMAGNETIC
200 AMPERES, 1PST (NO), TYPE 11,
NON-HERMETICALLY SEALED

SPECIFICATION SHEET NUMBER

MS24171F

SUPERSEDING MS24171E

AMSC N/A RSC 5945

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