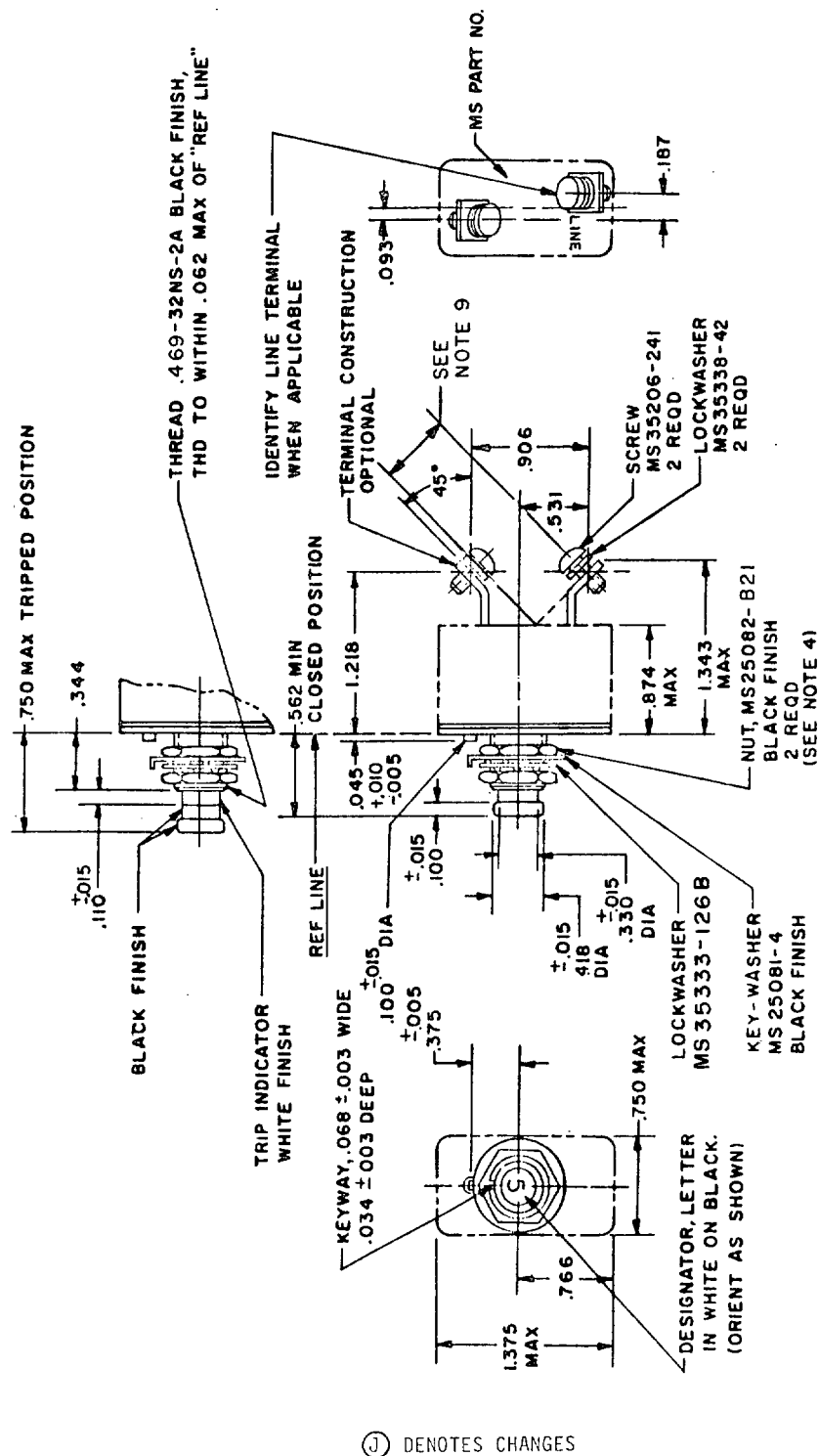


User activities: Army -  
Navy -  
Air Force -

Review activities: Army -  
Navy -  
Air Force - 99

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### CONFIGURATION A (BUSHING MOUNT)

APPROVED 22 APR 1959  
REVISED (F) 17 AUG 1975 (G) 29 NOV 1976 (H) 2 MAY 1978 (I) 12 APR 84 (J) 12 JUN 86

P.A AF - 85	International interest	TITLE	MILITARY STANDARD
Other Cust NAVY - AS ARMY - ER	SEE NOTE 6	① CIRCUIT BREAKER, TRIP-FREE, RECYCLING, PUSH-PULL, 3 THROUGH 35 AMPERES, TYPE I	MS24510
Procurement Specification MIL-C-5809		SUPERSEDES:	PAGE 1 OF 5

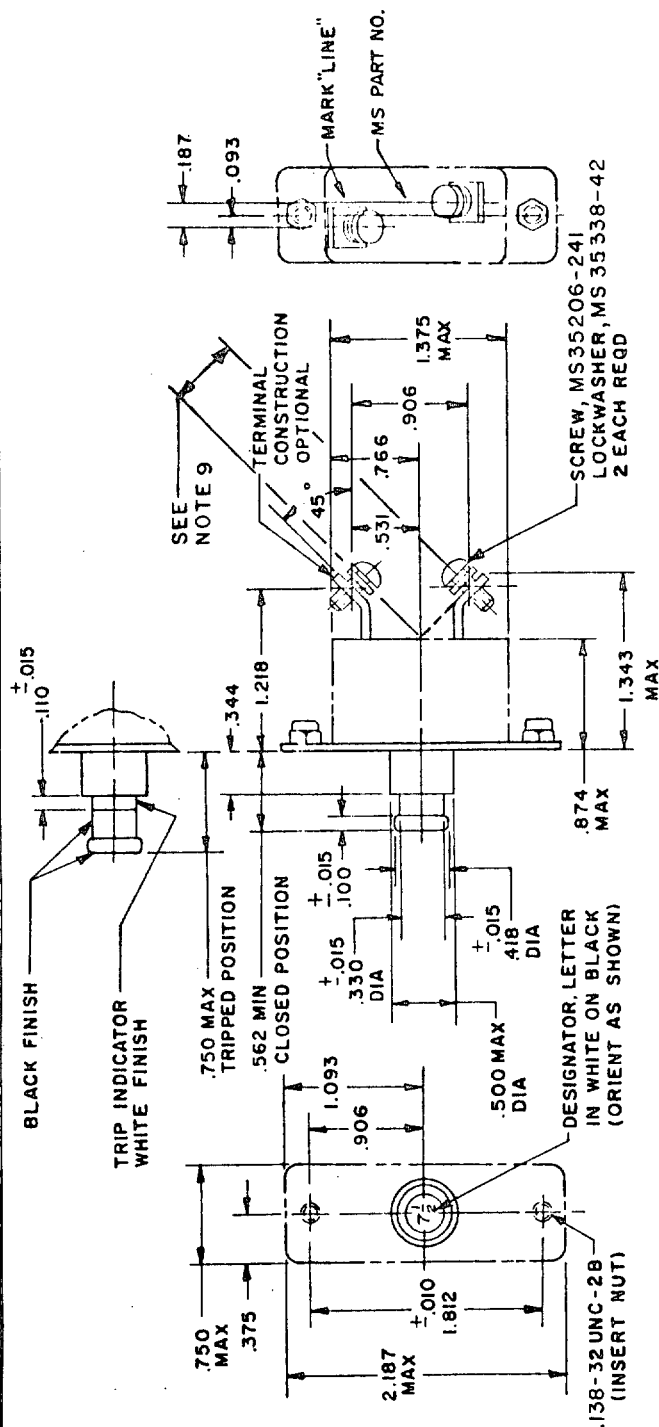
AMSC N/A RM  
2-15-73

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(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5925-0168

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



CONFIGURATION B (COVER PLATE MOUNT)

## NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is  $\pm .031$  (.79 mm) for decimals and  $\pm 2^\circ$  for angles.
3. Phantom lines indicate that contour is optional provided maximum dimensions are not exceeded.
4. Trip-free requirements per 6.4.6.1 of MIL-C-5809.
5. Mounting nut torque: 65 pound-inches maximum.
6. Certain provisions of this standard are subject of international agreement ASCC 12/3. When revision or cancellation of this standard is proposed, the departmental custodians will inform their respective departmental standardization office so that appropriate action may be taken respecting the international agreement concerned.
7. 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.
8. 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.
9. .425 minimum typical clearance from center line of screw to case.

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Other Cust NAVY - AS ARMY - ER	SEE NOTE 6	① CIRCUIT BREAKER, TRIP-FREE, RECYCLING, PUSH-PULL, 3 THROUGH 35 AMPERES, TYPE I	MS24510
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TABLE I

ELECTRICAL AND MECHANICAL CHARACTERISTICS										
DASH NUMBER	CAPACITY AMPERES	VOLTAGE DROP MAX	WEIGHT MAX LBS	OPERATING FORCE MAX LBS		ENDURANCE CYCLES				MECH NO LOAD
				PULLOUT	RESET	RESISTIVE		INDUCTIVE		
						AC	DC	AC	DC	
-2	3	.75	↑	↑	↑	↑	↑	↑	↑	↑
-5	5	.65								
-7 1/2	7.5									
-10	10									
-15	15									
-20	20									
-25	25									
-30	30									
-35	35									
		.50	.078	8	12	(a) 5,000	(b) 5,000	(a) 5,000	(b) 1,000	10,000
		↓	↓	↓	↓	↓	↓	6 TO 7 LAG P.F.	↓	↓

(a) 400 CYCLE 115/200 VOLT SYSTEM, TESTED AT  $120 \pm 5$  VOLTS 380-420 HZ.(b) 28 VOLT DC SYSTEM, TESTED AT  $30 \pm 2$  VOLTS.

TABLE II

TABLE 11 DETAIL CALIBRATION REQUIREMENTS-TRIP TIME IN SECONDS																		
DASH NUMBER	+25° C					-40° C					+71° C							
	PERCENT RATED CURRENT					PERCENT RATED CURRENT					PERCENT RATED CURRENT							
	115	145	200	400	600	138	175	200	400	600	80	125	200	400	600			
-X	NO TRIP 1 HOUR MAX	TRIP WITHIN 1 HOUR	40-100	3-22	1-10	NO TRIP 1 HOUR MAX	TRIP WITHIN 1 HOUR	↑	↑	↑	NO TRIP 1 HOUR MAX	TRIP WITHIN 1 HOUR	↑	↑	↑			
-5																		
-7 1/2			10 to 70	0.75 to 7.0	0.25 to 2.5													
-10			11	11	11													
-15			11	11	11													
-20			11	11	11													
-25			11	11	11													
-30			11	11	11													
-35			11	11	11													

AMBIENT TEMPERATURE TOLERANCE  $\pm 2^\circ\text{C}$ 

(\*) Not applicable

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ARMY - ERSEE  
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TABLE III

DASH NUMBER	RUPTURE CURRENT (AMPERES) REQUIREMENTS TEST DESIGNATION PER MIL-C-5809							
	A	B	C	D	E	F	G	H
							1 Ø	3 Ø
							1 Ø	3 Ø
-3	↑	↑	↑	↑	↑	↑	↑	↑
-5	↑	↑	↑	↑	↑	↑	↑	↑
-7 1/2	↑	↑	↑	↑	↑	↑	↑	↑
-10	↑	↑	↑	↑	↑	↑	↑	↑
-15	3,500	3,500	6,000	6,000	1,000	1,500	(*)	(*)
-20	↓	↓	↓	↓	↓	↓	↓	↓
-25	↓	↓	↓	↓	↓	↓	↓	↓
-30	↓	↓	↓	↓	↓	↓	↓	↓
-35	↓	↓	↓	↓	↓	↓	↓	↓

(\*)NOT APPLICABLE

TABLE IV

ENVIRONMENTAL PERFORMANCE	
MAX OPERATING ALTITUDE-FT	70,000
OPERATING AMBIENT TEMP RANGE	-40°C TO +71°C
VIBRATION	MIL-STD-202, METHOD 204, CONDITION A
SHOCK	30 G, MIL-STD-202, METHOD 213A, TEST J
ACCELERATION	10 G

MILITARY PART NUMBER. THE MILITARY PART NUMBER SHALL CONSIST OF THE MILITARY STANDARD NUMBER, THE CONFIGURATION LETTER AND THE DASH NUMBER

EXAMPLE: MS 24510-B-7 1/2

MILITARY STD

CONFIGURATION "B"  
(COVER PLATE MOUNT)7.5 AMPERE  
CURRENT RATING~~-30~~ INACTIVE FOR NEW DESIGN AFTER 1 AUG 1975

NOMINAL VOLTAGE RATING

28 V dc OR 115 V 400Hz

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Air Force -

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APPROVED 22 APR 1959

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Review activities: Army -  
Navy -  
Air Force - 99

User activities: Army -  
Navy -  
Air Force -

P.A AF - 85

Other Cust  
NAVY - AS  
ARMY - ER

Procurement Specification  
MIL-C-5809

International  
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① CIRCUIT BREAKER, TRIP-FREE, RECYCLING,  
PUSH-PULL, 3 THROUGH 35 AMPERES, TYPE I

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CROSS REFERENCE. FOR APPLICABLE CROSS REFERENCE SEE TABLE V. THE EXISTING STOCKS OF SUPERSEDED ITEMS MAY BE USED. WHEN EXHAUSTED, THE SUPERSEDING PARTS SHALL BE USED.

### CROSS REFERENCE

TABLE V

SUPERSEDING NUMBER	SUPERSEDED NUMBERS					
	FSCM 96906	FSCM 82647	FSCM 82647	FSCM 82647	FSCM 82647	FSCM 98749
MS24510-A-3	MS24510-3	D7271-8-3	D7271-1-3	7271-1-3	7271-8-3	
↑ A-5	↑ 5	↑ 8-5	↑ 1-5	↑ 1-5	↑ 8-5	
↑ A-7 1/2	↑ 7 1/2	↑ 8-7	↑ 1-7	↑ 1-7	↑ 8-7	
↑ A-10	↑ 10	↑ 8-10	↑ 1-10	↑ 1-10	↑ 8-10	
↑ A-15	↑ 15	↑ 8-15	↑ 1-15	↑ 1-15	↑ 8-15	
↑ A-20	↑ 20	↑ 8-20	↑ 1-20	↑ 1-20	↑ 8-20	
↑ A-25	↑ 25	↑ 8-25	↑ 1-25	↑ 1-25	↑ 8-25	
↑ A-30	↑ 30	↑ 8-30	↑ 1-30	↑ 1-30	↑ 8-30	
↑ A-35	↑ MS24510-35	↑ -8-35	↑ D7271-1-35	↑ 1-35	↑ 7271-8-35	
↑ B-3		↑ 3-3		↑ 3-3		7136028-3
↑ B-5		↑ 3-5		↑ 3-5		↑ 5
↑ B-7 1/2		↑ 3-7		↑ 3-7		↑ 7
↑ B-10		↑ 3-10		↑ 3-10		↑ 10
↑ B-15		↑ 3-15		↑ 3-15		↑ 15
↑ B-20		↑ 3-20		↑ 3-20		↑ 20
↑ B-25		↑ 3-25		↑ 3-25		↑ 25
↑ B-30		↑ 3-30		↑ 3-30		↑ 30
MS24510-B-35		D7271-3-35		7271-3-35		7136028-35

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REVISED (H) For changes see page 3

① FOR CHANGES SEE PAGES 1, 2, 3, 4 & 5