

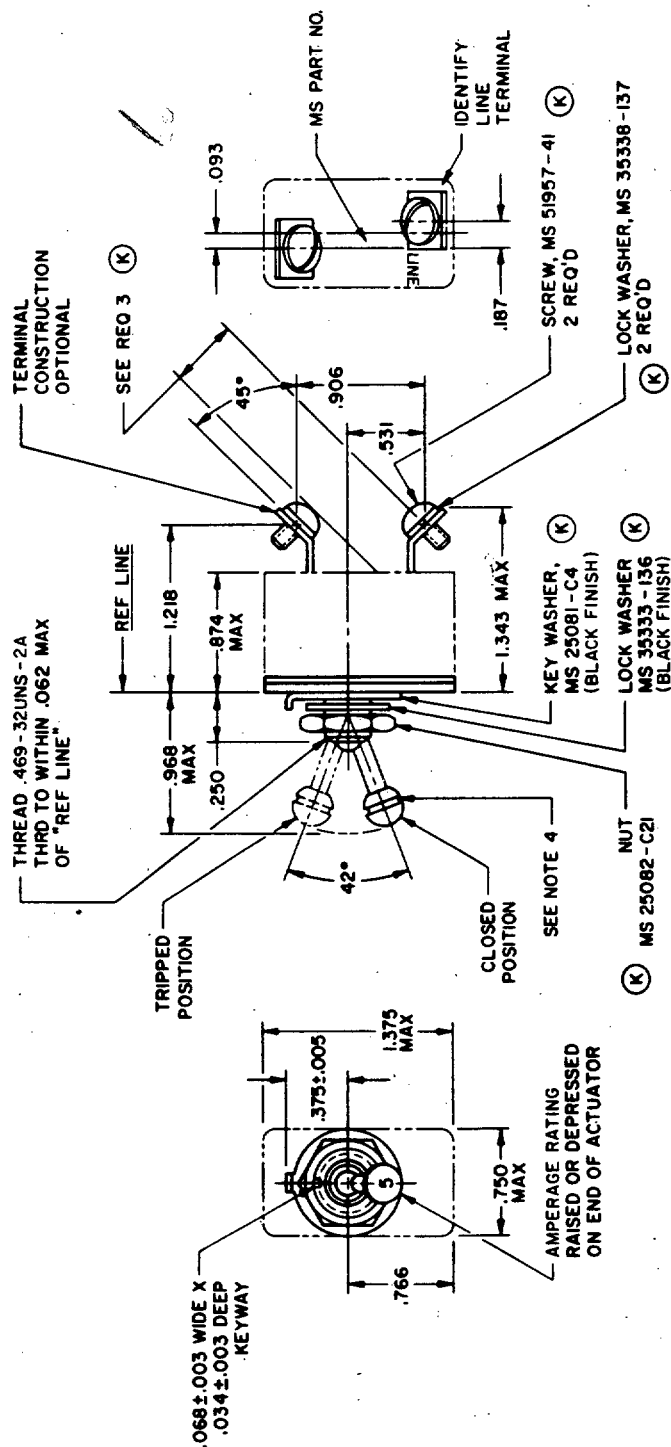
AMSC N/A  
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ARMY  
NAVY  
AIR FORCE

ARMY  
NAVY  
AIR FORCE - 99



(K) DENOTES CHANGE

<b>P.A. NAVY - AS Other Cost</b>  AF - B5 ARMY - ER	<b>International interest</b>  *	<b>TITLE</b>  (K)      Circuit Breaker - Aircraft, Trip-Free, Toggle, 5 Thru 15 Amp, Type I	<b>MILITARY STANDARD</b>  <b>MS 24509</b>
<b>PROCUREMENT SPECIFICATION</b> MIL-C-5809		<b>SUPPLIES:</b>	<b>SHEET</b> 1 <b>OF</b> 5

DD FORM 672-1 (Continued)  
1 MAR 72

**FORWARD EXTENSION OF THIS FORM ARE PROHIBITED.**

**DATE: 2000**

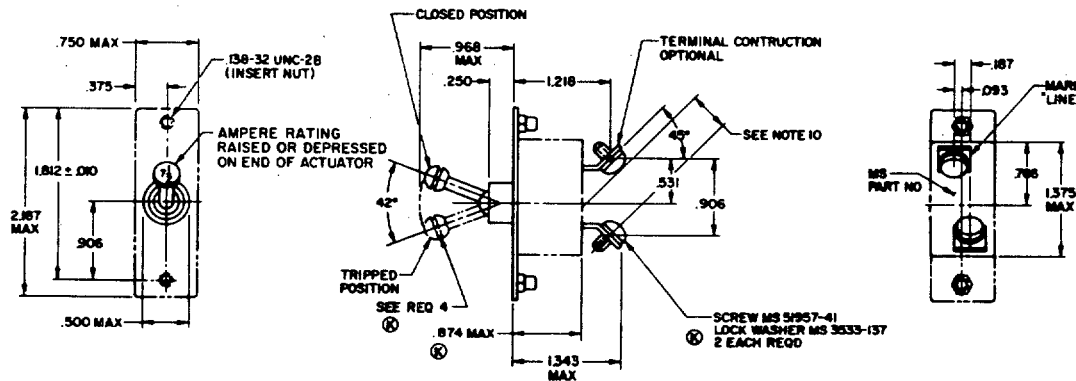
PROJECT NO. 5925-0193

APPROVED	22 APR 59	RECORDED	(H)	12 APR 84	(J)	12 JUN 86	(K)	30 NOV 1987
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FED. SUP CLASS

5925

 USER SYMBOLS:  
 ARMY  
 NAVY  
 AIR FORCE

 REVISION SYMBOLS:  
 ARMY  
 NAVY  
 AIR FORCE - 99


CONFIGURATION B (COVER PLATE MOUNT)

## (K) REQUIREMENTS:

1. The part numbers for circuit breakers in accordance with this specification shall conform to the example below.

MS24509 - A 5

Amperage Rating

Mounting Configuration ("A" or "B")

Basic Part Style

2. Circuit breakers are recycling as defined in MIL-C-5809.
3. .425 min. typ. clearance from centerline of screw to case.
4. Groove indicates trip free action.
5. Mounting nut torque: 65 inch-pounds maximum.

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

REVISION

22 APR 59

APPROVED

P.A. NAVY — AS Other Cost AF - 85 ARMY - ER	International interest ✱	TITLE  (K)      Circuit Breaker - Aircraft, Trip-Free, Toggle, 5 Thru 15 Amp, Type I	MILITARY STANDARD		
			MS 24509		
PROCUREMENT SPECIFICATION MIL-C-5809	SUPERSEDES:		SHEET	2	OF 5

DD FORM 1 672-1 (Coordinate)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PLATE NO. 22669

USE SYMBOLS:  
ARMY  
NAVY  
AIR FORCEREVISION SYMBOLS:  
ARMY  
NAVY  
AIR FORCE - 99

TABLE I

Electrical and mechanical characteristics										
Dash Number	Nominal 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	
-5	5	.65	.087	6	6	1/ 5,000	2/ 5,000	1/ 5,000	2/ 1,000	10,000
-7-1/2	7.5	.50	.087	6	6	5,000	5,000	.6 to	1,000	10,000
-10	10	.50	.087	6	6	5,000	5,000	.7 LAG	1,000	10,000
-15	15	.50	.087	6	6	5,000	5,000	P.F.	1,000	10,000

1/ 400 cycle 115/200 volt system, tested at  $120 \pm 5$  volts 380-420 Hz.2/ 28 volt dc system, tested at  $30 \pm 2$  volts.

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TABLE II

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	80	125
-5	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
-7-1/2			10 to 70	0.75 to 7.0	0.25 to 2.5				
-10									
-15									

Ambient temperature tolerance  $\pm 2^\circ\text{C}$ .

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P.A.  
NAVY - AS  
Other Coast  
AF - RS  
ARMY - ERInternational  
interest  
\*

TITLE

(K)

Circuit Breaker - Aircraft, Trip-Free,  
Toggle, 5 Thru 15 Amp, Type I

MILITARY STANDARD

MS 24509

PROCUREMENT SPECIFICATION  
MIL-C-5809

SUPERSEDES:

SHEET

OF

5

DD FORM 1 MAR 72 672-1 (Continued)

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PLATE NO. 2008

APPROVED 22 APR 59 REVISION (K) FOR CHANGES SEE PAGES 1, 2, 3, 4, &amp; 5

FED. SUP CLASS  
5925USDA SYMBOL:  
ARMY  
NAVY  
AIR FORCEACQUISITION SYMBOL:  
ARMY  
NAVY  
AIR FORCE - 99

TABLE III

Dash number	Interrupting current (amperes) requirements									
	Test designation per MIL-C-5809									
	A	B	C	D	E	F	G		H	
							1Ø	3Ø	1Ø	3Ø
-5	3,500	3,500	6,000	6,000	1,000	1,500	(*)	(*)	(*)	(*)
-7-1/2	3,500	3,500	6,000	6,000	1,000	1,500	(*)	(*)	(*)	(*)
-10	3,500	3,500	6,000	6,000	1,000	1,500	(*)	(*)	(*)	(*)
-15	3,500	3,500	6,000	6,000	1,000	1,500	(*)	(*)	(*)	(*)

(\*) 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	30G, MIL-STD-202, Method 213, TEST CONDITION J
Acceleration	10G

Revised user information is current as of the date of this document.  
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APPROVED 22 APR 59  
REVISION (K) FOR CHANGES SEE PAGES 1, 2, 3, 4, & 5

P.A. NAVY - AS Other Cost AF - 85 ARMY - ER	International interest *	TITLE (K) Circuit Breaker - Aircraft, Trip-Free, Toggle, 5 Thru 15 Amp, Type 1	<b>MILITARY STANDARD</b>
			<b>MS 24509</b>
PROCUREMENT SPECIFICATION MIL-C-5809	SUPERSEDES:	SHEET 4 OF 5	

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PLATE NO. 22005

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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.

TABLE V. Cross reference.

Superseding number	Superseded numbers					
	FSCM 96906	FSCM 82647	FSCM 82647	FSCM 82647	FSCM 82647	FSCM 81349
MS24509-A-3	MS24509-3	D7270-1-3		7270-1-3		MS24509-10
MS24509-A-5	MS24509-5	D7270-1-5		7270-1-5		
MS24509-A-7-1/2	MS24509-7-1/2	D7270-1-7		7270-1-7		
MS24509-A-10	MS24509-10	D7270-1-10		7270-1-10		
MS24509-A-15	MS24509-15	D7270-1-15		7270-1-15		
MS24509-A-20	MS24509-20	D7270-1-20		7270-1-20		
MS24509-A-25	MS24509-25	D7270-1-25		7270-1-25		
MS24509-A-30	MS24509-30	D7270-1-30		7270-1-30		
MS24509-A-35	MS24509-35	D7270-1-35		7270-1-35		
MS24509-B-3		D7270-7-3		7270-7-3		
MS24509-B-5		D7270-7-5	D7270-5-5	7270-5-5	7270-7-5	
MS24509-B-7-1/2		D7270-7-7	D7270-5-7	7270-5-7	7270-7-7	
MS24509-B-10		D7270-7-10	D7270-5-10	7270-5-10	7270-7-10	
MS24509-B-15		D7270-7-15	D7270-5-15	7270-5-15	7270-7-15	
MS24509-B-20		D7270-7-20	D7270-5-20	7270-5-20	7270-7-20	
MS24509-B-25		D7270-7-25	D7270-5-25	7270-5-25	7270-7-25	
MS24509-B-30		D7270-7-30			7270-7-30	
MS24509-B-35		D7270-7-35			7270-7-35	

## (K) NOTES:

1. Dimensions are in inches unless otherwise specified. Tolerance: Decimals  $\pm .031$ ; angles  $\pm 2^\circ$ .
2. Phantom lines indicate that contour is optional provided maximum dimensions are not exceeded.
3. In the event of a conflict between the text of this standard and the references cited herein, the text of the standard shall take precedence.
4. Voltage rating: 28VDC nominal or 115V 400 Hz nominal.

\*CERTAIN PROVISIONS OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT ASCC AIR STD 12/3. WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL AFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED.

5. MS24509-A-3, -20, -25, -30, -35 and MS24509-B-3, -20, -25, -30, -35 are cancelled with no superseding standard.

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<b>PROCURING SPECIFICATION</b> MIL-C-5809	<b>SUPERSEDES:</b>	<b>INSET</b> 5 OF 5	