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AS24509

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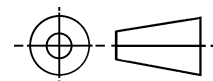
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THIRD ANGLE PROJECTION



ISSUED 1999-07

PREPARED BY SAE SUBCOMMITTEE AE-8B1

PROCUREMENT SPECIFICATION: MIL-C-5809

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AEROSPACE STANDARD

CIRCUIT BREAKER - AIRCRAFT, TRIP-FREE,
TOGGLE, 5 THRU 15 AMP, TYPE I

AS24509
SHEET 1 OF 5

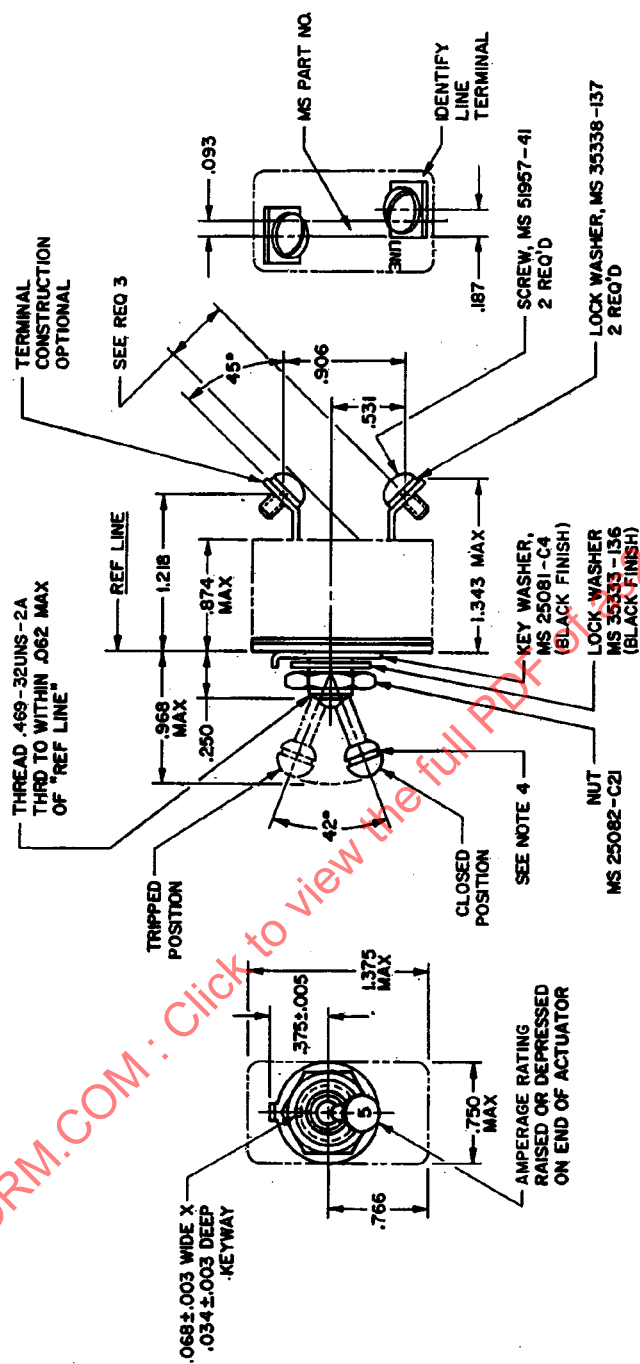
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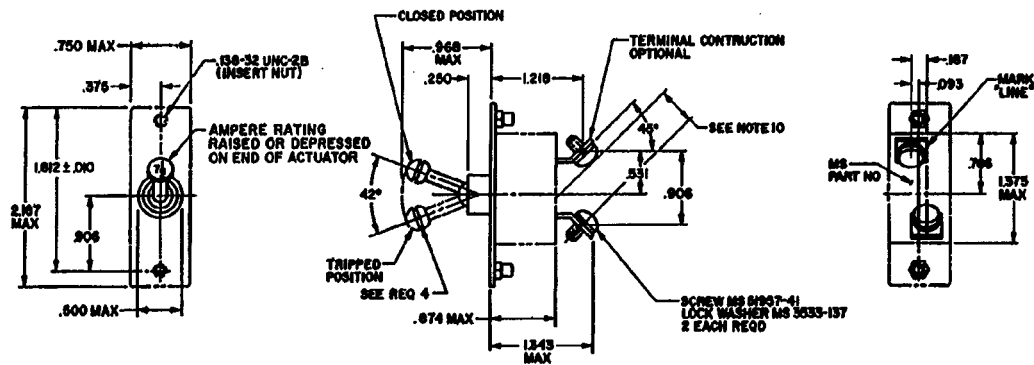
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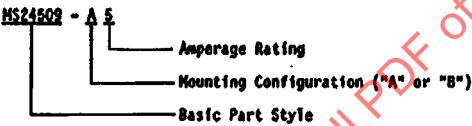




CONFIGURATION B (COVER PLATE MOUNT)

REQUIREMENTS:

1. THE PART NUMBERS FOR CIRCUIT BREAKERS IN ACCORDANCE WITH THIS SPECIFICATION SHALL CONFORM TO THE EXAMPLE BELOW.



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.

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 ± 5 volts 380-420 Hz.

2/ 28 volt dc system, tested at 30 ± 2 volts.

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 $\pm 2^\circ\text{C}$.

TABLE III

Inter. ptin, current (amperes) requirements										
Dash number	Test designation per MIL-C-5809									
	A	B	C	D	E	F	G	H	I	J
	1P	3P	1P	3P	1P	3P	1P	3P	1P	3P
-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