FEDERAL SUPPLY CLASS
5925

RATIONALE

5 YEAR REVIEW AND CLEAN UP DRAWING TO ENSURE PRODUCT IS AS SUPPLIED.

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: SAE AS58091.

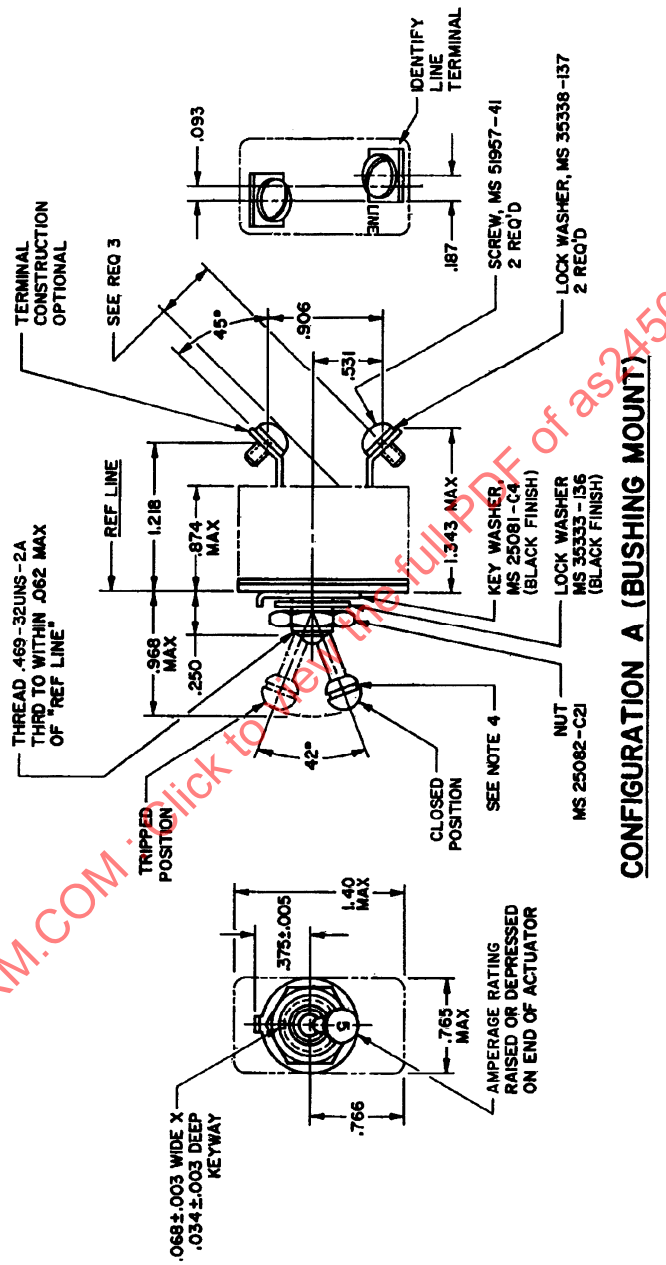


FIGURE 1

THIRD ANGLE PROJECTION

ISSUED 1999-07 REVISED 2007-04

CUSTODIAN: SAE AE-8/AE-8B1

PROCUREMENT SPECIFICATION: AS58091

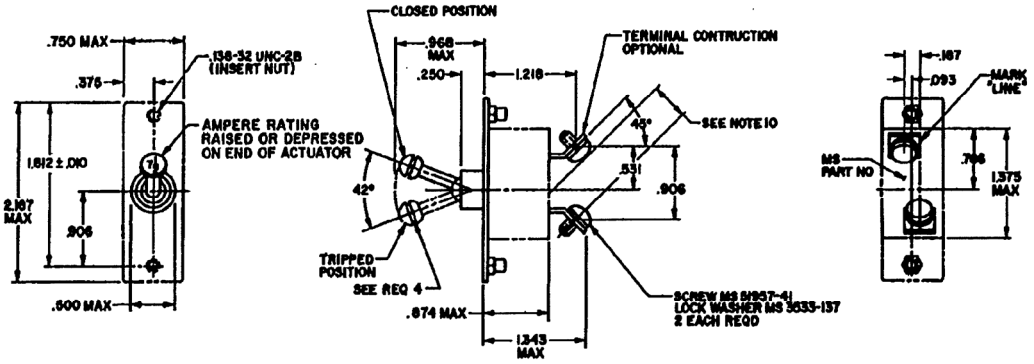
SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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

AS24509
SHEET 1 OF 4

REV. A

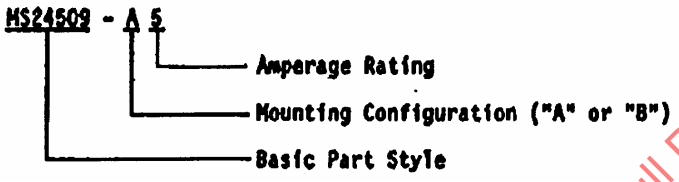


CONFIGURATION B (COVER PLATE MOUNT)

FIGURE 2

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 AS58091.
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 1

Electrical and mechanical characteristics										
Dash Number	Nominal Capacity Amperes	Voltage Drop Max	Weight Max Lb	Operating force max lb		Endurance cycles				Mech No Load
						Resistive		Inductive		
				Pullout	Reset	AC	DC	AC	DC	
-5	5	.65	.087	6	6	5,000 1/	6,000 2/	5,000 1/	1,000 2/	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/ 115/200 volt 400 Hz system, tested at 120 ± 5 volts 380-420 Hz.
2/ 28 volt dc system, tested at 30 ± 2 volts.

TABLE 2

Detail calibration requirements - trip time in seconds									
Dash Number	+25 °C Percent rated current					-40 °C Percent rated current		+71° 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 ±2 °C.

TABLE 3

Interrupting current (amperes) requirements										
Dash number	Test designation per AS58091									
	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 4

ENVIRONMENTAL PERFORMANCE	
Max operating altitude - FT	70,000
Operating ambient temp range	-40 TO +71 °C
Vibration	MIL-STD-202, Method 204, Condition A
Shock	30G, MIL-STD-202, Method 213, TEST CONDITION J
Acceleration	10G