

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

REV. A	Submitted for recognition as an American National Standard		FEDERAL SUPPLY CLASS 5925	
	NOTICE THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS14154D AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MS14154D. ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED. THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT. ANY MATERIAL RELATING TO QUALIFIED PRODUCT LISTS HAS NOT BEEN ADOPTED BY SAE. THIS MATERIAL WAS PART OF THE ORIGINAL MILITARY SPECIFICATION AND IS REPRINTED HERE FOR HISTORIC REFERENCE ONLY.			
AS14154				
SAENORM.COM : Click to view the full PDF of as14154a				
ISSUED 1997-08 REVISED 1998-01				
PREPARED BY SUBCOMMITTEE AE-8B1				
 SAE The Engineering Society For Advancing Mobility Land Sea Air and Space® 400 Commonwealth Drive, Warrendale, PA 15096-0001		AEROSPACE STANDARD CIRCUIT BREAKER - AIRCRAFT, TRIP-FREE, PUSH-PULL, 3 PHASE, 1 THRU 20 AMP, TYPE 1		AS14154 SHEET 1 OF 4
				REV. A

Technical drawing of a pushbutton switch assembly, showing front, side, and detail views with dimensions and callouts.

Front View Dimensions:

- Overall width: .791 MAX
- Top mounting hole spacing: .375 ± .010
- Overall height: 1.840 MAX
- Mounting hole diameter: .078 ± .005
- Mounting hole spacing: .031 ± .005
- Mounting hole diameter: .395 ± .005
- Mounting hole spacing: .100 ± .015
- Mounting hole diameter: .045 ± .010
- Mounting hole spacing: 1.218
- Overall height: 1.381 MAX
- Mounting hole diameter: .120 MIN
- Mounting hole spacing: .250
- Mounting hole diameter: .191
- Mounting hole spacing: .624

Callouts and Notes:

- AMPERAGE RATING, WHITE ON BLACK MINIMUM HEIGHT .125
- OPTIONAL STABILIZING PADS, LOCATED OVER PHASES A AND C BUSHING HOLES. (SEE REQUIREMENT 2)
- BREAKER IN CLOSED POSITION
- 4375-32 UNS-2A THD TO WITHIN .062 MAX. OF REF. LINE "A"
- MOUNTING NUT M9 25082-C18 BLACK FINISH
- BREAKER IN TRIPPED POSITION
- BLACK
- WHITE TRIP INDICATOR
- BLACK
- LOCKWASHER MS 36333-141
- 45° ± 3°
- LINE TERMINALS
- LOCKWASHER MS 35338-137
- SCREW MS51957-41
- .172 MIN TYP CLEARANCE FROM CENTER OF SCREW TO CASE WHEN USING OPTIONAL OUTLINE
- OPTIONAL TRIANGULAR OUTLINE AS SHOWN BY DOTTED LINES

Table 1 - PUSHBUTTON LENGTH

PUSHBUTTON	A (MAX)	B (MIN)
STANDARD	.75	.470
EXTRA LENGTH	1.125	.845

FIGURE 1 - TRIP-FREE CIRCUIT BREAKER

TABLE II ELECTRICAL AND MECHANICAL CHARACTERISTICS

DASH NUMBER	NOMINAL AMPERAGE RATING (A)	VOLT DROP MAX. (V)	WEIGHT MAX. (LBS)	OPERATING FORCE MAX. (LBS)		ENDURANCE CYCLES RESISTIVE				MECH. NO. LOAD
				PULLOUT	RESET	AC	DC	AC	DC	
1	1	1.10	.15	12	12	5000 1/	none	2500 1/	none	5000
2	2	.75								
2-1/2	2-1/2	.70								
3	3	.55								
4	4	.45								
5	5	.35								
7-1/2	7-1/2	.30								
10	10	.28								
15	15	.28								
20	20	.25								

1/ 400 HZ 115/200 VOLT SYSTEM, TESTED AT 120 ±5 VOLTS 380-400 HZ

TABLE III DETAIL CALIBRATION REQUIREMENTS

NOMINAL AMPERAGE RATING (A)	+25°C					-55°C					+71°C				
	% RATED CURRENT					% RATED CURRENT					% RATED CURRENT				
	110	145	200	500	1000	110	165	200	500	1000	100	145	200	500	1000
-1	MUST HOLD - 1 HOUR MIN.	MUST TRIP - 1 HOUR MAX.	↑	↑	↑	MUST HOLD - 1 HOUR MIN.	MUST TRIP - 1 HOUR MAX.	↑	↑	↑	MUST HOLD - 1 HOUR MIN.	MUST TRIP - 1 HOUR MAX.	↑	↑	↑
-2			↑	↑	↑			↑	↑	↑			↑	↑	↑
-2 1/2			↑	↑	↑			↑	↑	↑			↑	↑	↑
-3			4	0.4	0.10			6	0.55	0.15			3	0.33	0.08
-4			TO	TO	TO			TO	TO	TO			TO	TO	TO
-5			20	2.0	0.53			40	3.5	0.80			20	1.7	.040
-7 1/2	2/	2/	↓	↓	↓	3/	3/	↓	↓	↓	3/	3/	↓	↓	↓
-10			↓	↓	↓			↓	↓	↓			↓	↓	↓
-15			↓	↓	↓			↓	↓	↓			↓	↓	↓
-20			4/	4/	4/			4/	4/	4/			4/	4/	4/

2/ ONE PHASE AT SPECIFIED LOAD AND OTHER PHASES CARRYING RATED LOAD.

3/ BALANCED THREE PHASE LOAD.

4/ SINGLE PHASE LOAD ONLY. TRIP TIME IN SECONDS.