

REV.
B

AS14154

RATIONALE

FEDERAL SUPPLY CLASS
5925

CORRECT ERRORS AND UPDATE SPECIFICATIONS PRIOR TO AND FROM THE ORIGINAL CONVERSION FROM NAVAIR CONTROL TO SAE CONTROL AND INCLUDE ADDITIONAL CHANGES REQUESTED BY NAVAIR TO REFLECT REQUIREMENTS THAT ARE BEING USED IN THE MILITARY.

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.

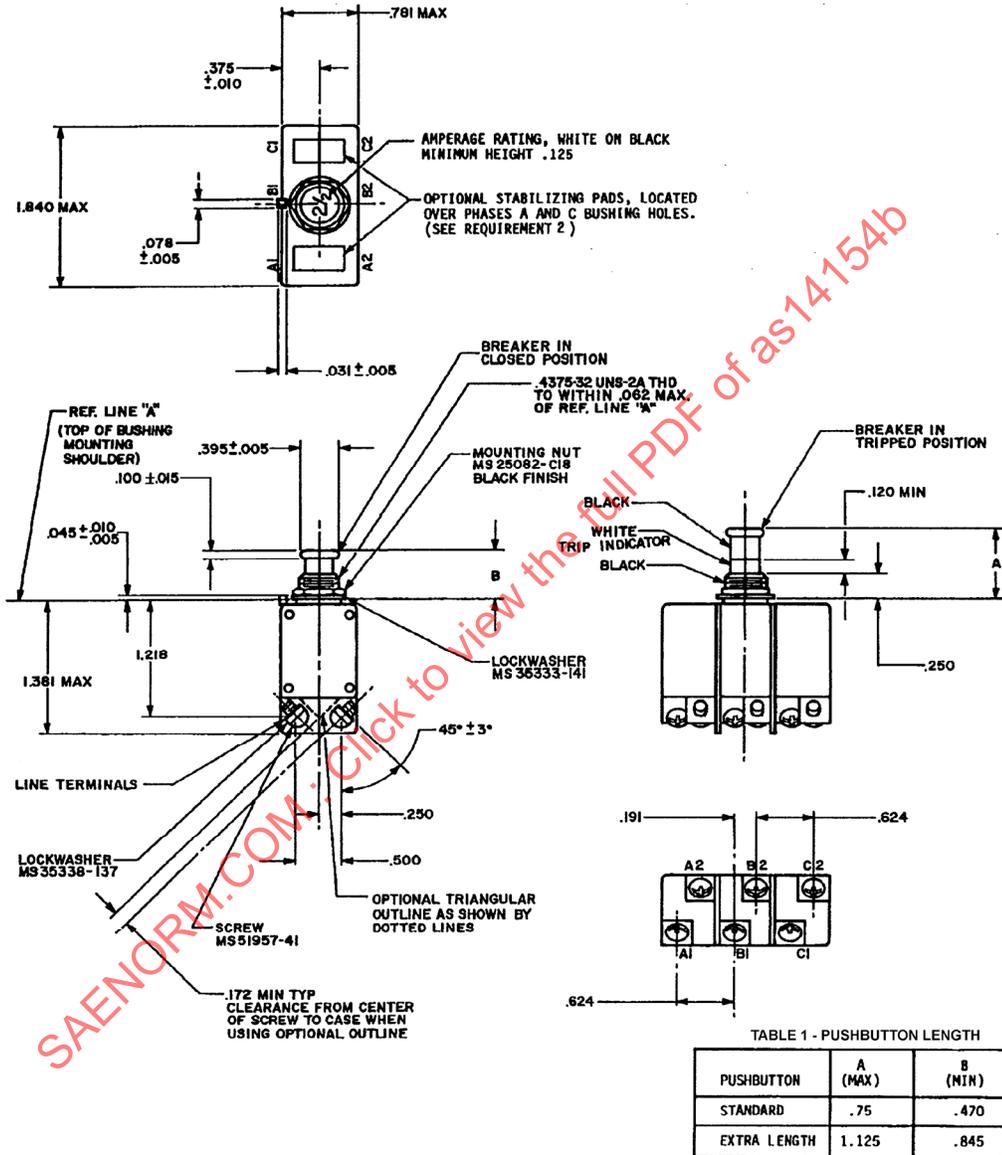
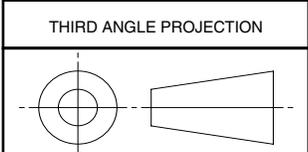


FIGURE 1 - TRIP-FREE CIRCUIT BREAKER



CUSTODIAN: SAE AE-8/AE-8B1

PROCUREMENT SPECIFICATION: AS58091

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

CIRCUIT BREAKER - AIRCRAFT, TRIP-FREE, PUSH-PULL, 3 PHASE, 1 THRU 20 AMP, TYPE 1

AS14154
SHEET 1 OF 3

REV. B

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ISSUED 1997-08 REVISED 2007-02

TABLE 2 - ELECTRICAL AND MECHANICAL CHARACTERISTICS

DASH NUMBER	NOMINAL AMPERAGE RATING (A)	VOLT DROP MAX (V)	WEIGHT MAX (LB)	OPERATING FORCE MAX (LB)		ENDURANCE CYCLES				MECH. NO. LOAD
				PULLOUT	RESET	RESISTIVE		INDUCTIVE		
						AC	DC	AC	DC	
1	1	1.10	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
2	2	.75	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
2½	2-1/2	.70	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
3	3	.55	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
4	4	.45	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
5	5	.35	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
7½	7-1/2	.30	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
10	10	.28	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
15	15	.28	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000
20	20	.25	.15	18	12	5000 ^{1/}	NONE	2500 ^{1/}	NONE	5000

^{1/} 115/200 VOLT 400 HZ SYSTEM, TESTED AT 120 ± 5 VOLTS 380 TO 400 HZ

TABLE 3 - 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. ^{1/2/}	MUST TRIP - 1 HOUR MAX. ^{1/2/}	4 TO 20 ^{3/}	0.4 TO 2.0 ^{3/}	0.10 TO 0.53 ^{3/}	MUST HOLD - 1 HOUR MIN. ^{2/}	MUST TRIP - 1 HOUR MAX. ^{2/}	6 TO 40 ^{3/}	0.55 TO 3.5 ^{3/}	0.15 TO 0.80 ^{3/}	MUST HOLD - 1 HOUR MIN. ^{2/}	MUST TRIP - 1 HOUR MAX. ^{2/}	3 TO 20 ^{3/}	0.33 TO 1.7 ^{3/}	0.08 TO .40 ^{3/}
-2															
-2½															
-3															
-4															
-5															
-7½															
-10															
-15															
-20															

- ^{1/} ONE PHASE AT SPECIFIED LOAD AND OTHER PHASES CARRYING RATED LOAD.
- ^{2/} BALANCED THREE PHASE LOAD.
- ^{3/} SINGLE PHASE LOAD ONLY. TRIP TIME IN SECONDS.

TABLE 4 - INTERRUPTING CAPACITY REQUIREMENTS - AMPERES

NOMINAL AMPERAGE RATING (A)	TEST DESIGNATION PER AS58091											
	A		B		C	D	E	F	G		H	
	10	30	10	30					10	30	10	30
-1	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-2	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-2½	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-3	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-4	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-5	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-7½	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-10	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-15	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200
-20	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2000	1200	2000	1200

* NOT APPLICABLE