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Reviewer activities: Army
Navy
Air Force

User activities: Army
Navy
Air Force

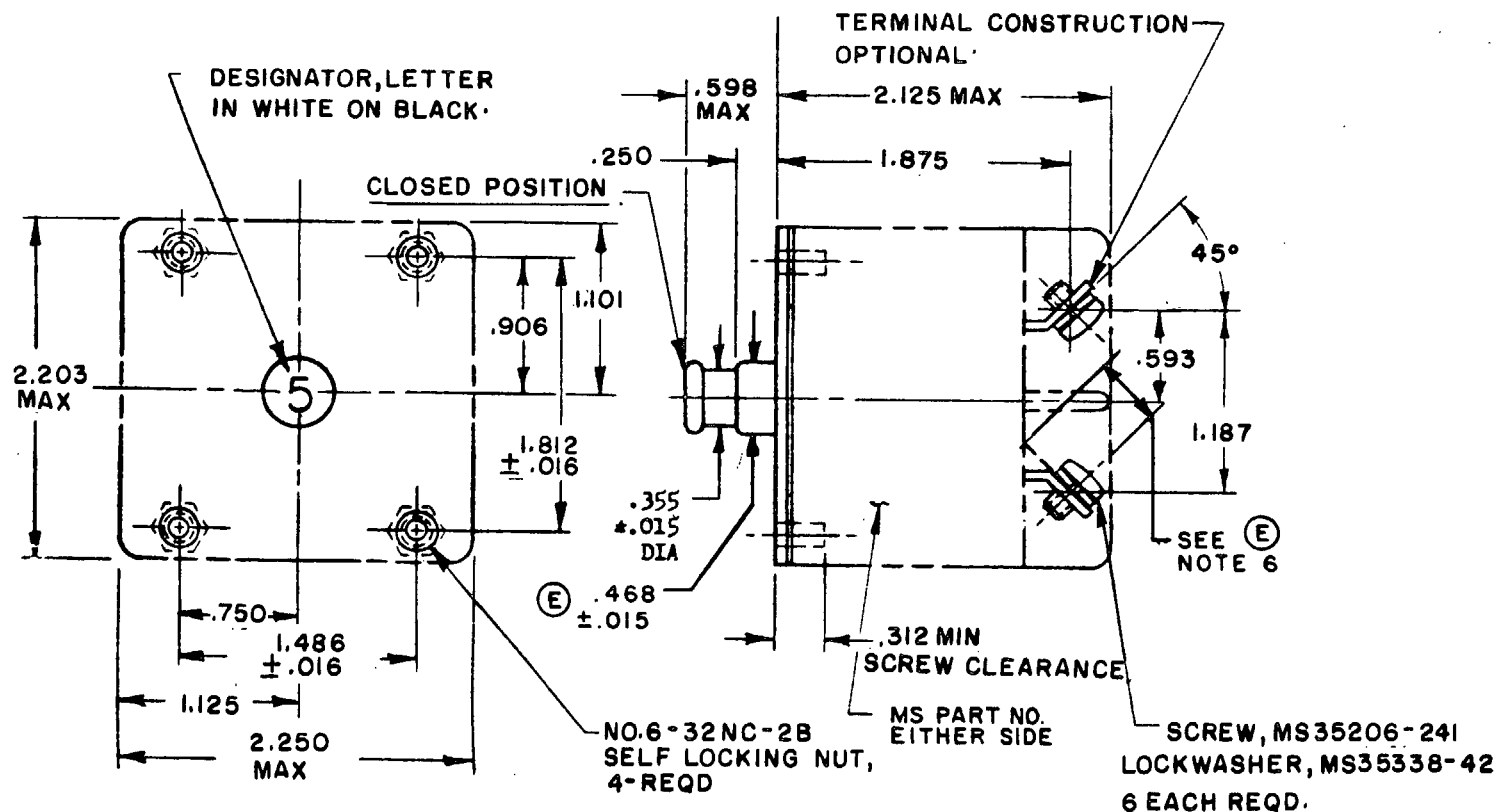
DD FORM 672
1 SEP 63

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5925-0148-1

P.A. USAF - 85 Other Cust: AS NAVY - ER ARMY - ER Procurement Specification MIL-C-5809	International Interest (SEE NOTE)	TITLE CIRCUIT BREAKER-AIRCRAFT, TRIP-FREE, PUSH-PULL, 3-PHASE, 5 THRU 60 AMP., TYPE 1	MILITARY STANDARD MS 21984
SUPERSEDES: MS25378 (AER) MS24549 (ASG)		SHEET 1 OF 4	

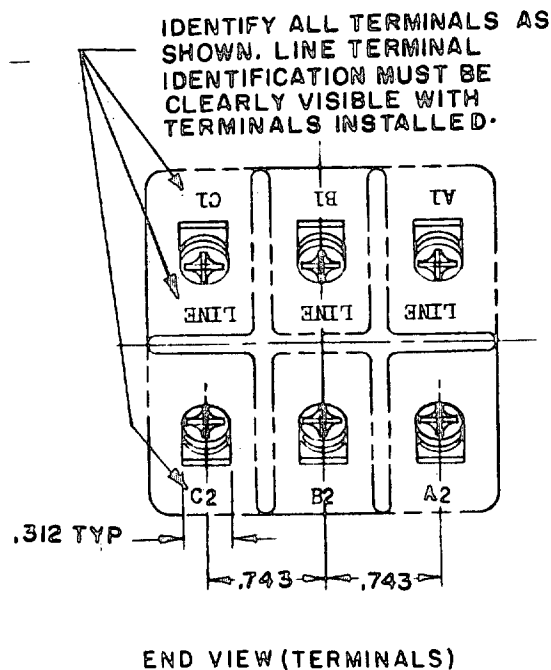
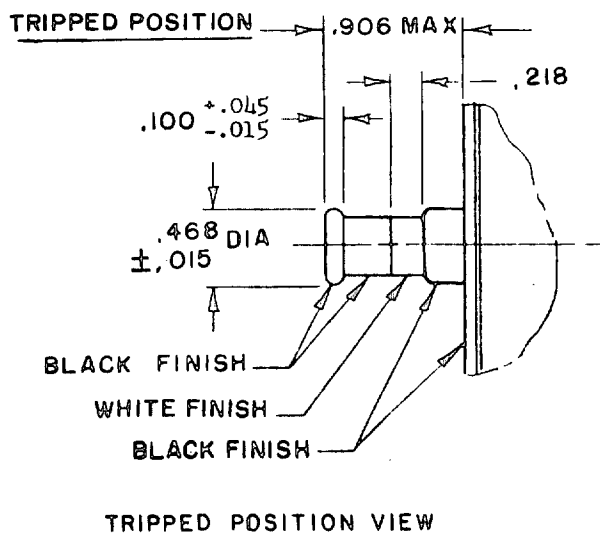
(E) DENOTES CHANGES



APPROVED 30 JAN 61

REVISED (A) 7 JUN 61 (B) 10 JULY 68 (C) 27 FEB 69 (D) 24 JUNE 71 (E) 12 APR 84

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NOTES:

1. Dimensions 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. Trip free requirements per paragraph 6.4.6.2 of MIL-C-5809
4. Interchangeability relationship: MS21984 parts are interchangeable with MS25378 and MS24549 parts of the same dash numbers.
5. Certain provisions of this standard are subject of international agreement ASCC 12/3. When revision or cancellation of this standard is proposed, the departmental custodians will inform their respective departmental standardization office so that appropriate action may be taken respecting the international agreement concerned.
6. .425 min. typ. clearance from CL of screw to case.

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN. REFERENCE DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

P.A. USAF - 85	International Interest	TITLE	MILITARY STANDARD
Other Cust NAVY - AS ARMY - ER	(SEE NOTE)	CIRCUIT BREAKER-AIRCRAFT, TRIP-FREE, PUSH-PULL, 3-PHASE, 5 THRU 60 AMP., TYPE I	MS 21984
Procurement Specification MIL-C-5809		SUPERSEDES: MS25378(AER) MS24549(ASG)	SHEET 2 OF 4

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TABLE I

Dash number	Capacity amperes	Electrical and mechanical characteristics								
		Voltage drop Max	Weight Max lbs	Operating force max lbs		Endurance cycles				
						Resistive		Inductive		Mech no load
				Pullout	Reset	AC	DC	AC	DC	
-5	5	0.3	0.5	8	15	(a)	None	(a)	None	5,000
-7 1/2	7.5	"	"	"	"	5,000	"	5,000	"	"
-10	10	"	"	"	"	"	"	"	"	"
-15	15	"	"	"	"	"	"	"	"	"
-20	20	"	"	"	"	"	"	"	"	"
-25	25	"	"	"	"	"	"	"	"	"
-30	30	"	"	"	"	"	"	"	"	"
-35	35	"	"	"	"	"	"	"	"	"
-50	50	"	"	"	"	"	"	"	"	"
-60	60	"	"	"	"	"	"	"	"	"

(a) 400 cycle 115/200 volt system, tested at 120 $\pm$ 5 volts 380-420 Hz.

TABLE II

Rupture current (amperes) requirements													
Dash number	Test designation per MIL-C-5809												
	A				B				C	D	E	F	G
	10	30	10	30	10	30	10	30					10
-5	*	*	*	*	*	*	*	*	*	*	*	*	2,500
-7 1/2	"	"	"	"	"	"	"	"	"	"	"	"	1,500
-10	"	"	"	"	"	"	"	"	"	"	"	"	2,500
-15	"	"	"	"	"	"	"	"	"	"	"	"	1,500
-20	"	"	"	"	"	"	"	"	"	"	"	"	"
-25	"	"	"	"	"	"	"	"	"	"	"	"	"
-30	"	"	"	"	"	"	"	"	"	"	"	"	"
-35	"	"	"	"	"	"	"	"	"	"	"	"	"
-50	"	"	"	"	"	"	"	"	"	"	"	"	"
-60	"	"	"	"	"	"	"	"	"	"	"	"	"

(*) Not applicable.

NOMINAL VOLTAGE RATING

115 volts (E)
 400 Hz line to neutral or 200 volts
 400 Hz line to line.

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Other Cust NAVY - AS ARMY - ER	(SEE NOTE)	CIRCUIT BREAKER-AIRCRAFT, TRIP-FREE, PUSH-PULL, 3-PHASE, 5 THRU 60 AMP., TYPE I	MS21984
Procurement Specification MIL-C-5809	SUPERSEDES: MS25378(AER) MS24549(ASG)	SHEET 3 OF 4	

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TABLE III

Dash number	Detail calibration requirements - trip time in seconds																	
	+25°C						-55°C						+71°C					
	Percent rated current						Percent rated current						Percent rated current					
	100	105	138	145	200	400	1,000	130	160	200	400	1,000	70	110	200	400	1,000	
-5	*	HR MAX	HR	HR MAX	10	2	.35	HR MAX	HR	(*)	(*)	(*)	HR MAX	HR	(*)	(*)	*	
-7 1/2	=	HR MAX	1 -	HR MAX	to	to	to	HR MAX	1 -	=	=	=	HR MAX	1 -	=	=	=	
-10	=	HR	1 -	HR	70	10	2.0	HR	1 -	=	=	=	HR	1 -	=	=	=	
-15	=	HR	1 -	HR	(c)	(c)	(c)	HR	1 -	=	=	=	HR	1 -	=	=	=	
-20	=	HR	1 -	HR	=	=	=	HR	1 -	=	=	=	HR	1 -	=	=	=	
-25	=	HR	1 -	HR	=	=	=	HR	1 -	=	=	=	HR	1 -	=	=	=	
-30	=	HR	1 -	HR	=	=	=	HR	1 -	=	=	=	HR	1 -	=	=	=	
-35	=	HR	1 -	HR	=	=	=	HR	1 -	=	=	=	HR	1 -	=	=	=	
-50	=	HR	1 -	HR	=	=	=	HR	1 -	=	=	=	HR	1 -	=	=	=	
-60	=	HR	1 -	HR	=	=	=	HR	1 -	=	=	=	HR	1 -	=	=	=	
		(b)	(b)	(a)				(b)	(b)				(b)	(b)				

- (a) Unbalanced three phase load. (One phase at specified overload. Other phases carrying rated current)
- (b) Balanced three phase load unless otherwise indicated.
- (c) Single phase load only. (No load other phases)
- (d) Ambient temperature tolerance $\pm 2^\circ\text{C}$.
- (*) Not applicable.

TABLE IV

Environmental Performance	
Max operating altitude - FT	60,000
Operating ambient temp range	-55°C to +71°C
Vibration	MIL-STD-202, Method 204, condition A
Shock	30G MIL-STD-202, Method 213 Test J
Acceleration	10G

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