

APPROVED 20 SEPT 1957 REVISED (E) 19 FEB 1975 (F) 10 DEC 81 (G) 31 AUG 82

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

Review activities: Army - AS, EC  
Navy - AS, EC  
Air Force - 99, 11

User activities: Army -  
Navy -  
Air Force -

MS PART NO.		COIL DATA										TIME-MILLISECONDS - MAX ±2/									
S	L	Volts	Freq Hz	RES Ω	Inductance mH	Capacitance pF	Max Pick-Up Voltage			Drop Out Voltage V	Hold Voltage V	Operate Release	Source								
							Normal V	High Temp Test	Cont Current Test				Main		Aux						
MS2415201	X172	28	DC	22	92		18	21	22.5	1.5	7.0	20	15	2.5	-	-	-				
	Y172																				

  

TYPE OF LOAD	LIFE OPERATING CYCLES × 10 <sup>3</sup>	28 VDC						115 VAC, 1 PHASE						115/200 VAC, 3 PHASE 3/						See Appropriate Notes
		Main			Aux			Main			Aux			Main			Aux			
		NO	NC	NO	NC	NO	NC	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz	400 Hz	60 Hz			
RESISTIVE	50	25	-	-	-	-	25	-	-	-	-	25	-	-	-	-	-	-	-	
INDUCTIVE	10	25	-	-	-	-	25	-	-	-	-	25	-	-	-	-	-	-	-	
INDUCTIVE																				
MOTOR	50	25	-	-	-	-	25	-	-	-	-	25	-	-	-	-	-	-	-	
LAMP																				
TRANSFER LOAD																				
MECHANICAL LIFE REDUCED CURRENT	100	6.3	-	-	-	-	6.3	-	-	-	-	6.3	-	-	-	-	-	-	-	
MIN CURRENT	50	2.5					2.5					2.5								

FED. SUP CLASS  
5945

P.A  
AF-85

Other Cust  
NAVY-AS

International  
Interest

TITLE

RELAY, 25 AMP, 3PDT, N.O. TYPE II,  
NON-HERMETICALLY SEALED  
(MECHANICALLY INTERLOCKED)

MILITARY STANDARD

MS 24152

Procurement Specification  
MIL-R-6106

SUPERSEDES:

PAGE 2 OF 3

DD FORM 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 20 SEPT 57 REVISED (G) FOR CHANGES SEE PAGE 3

FED. SUP CLASS  
5945**ENVIRONMENTAL CHARACTERISTICS**

TEMPERATURE RANGE . . . . . -55 TO +71 °C  
 MAX ALTITUDE RATING . . . . . 50,000 FT  
 SHOCK G-LEVEL . . . . . 25 G  
 DURATION . . . . . 6-9 ms  
 MAX DURATION CONTACT OPENING . . . . . 2 ms  
 VIBRATION - SINUSOIDAL (SEE CHART BELOW)  
 G-LEVEL . . . . . G  
 FREQUENCY RANGE . . . . . Hz  
 VIBRATION-RANDOM  
 APPLICABLE SPEC . . . . . N/A  
 POWER SPECTRAL DENSITY . . . . . N/A  
 RMS G MIN  
 FREQUENCY RANGE . . . . . N/A  
 CURVE  
 HIGH SHOCK . . . . . N/A  
 ACCELERATION . . . . . 10 G

**ELECTRICAL CHARACTERISTICS**

MIN INSULATION RESISTANCE, INITIAL . . . . . 100 MEGOHMS  
 AFTER LIFE OR ENVIRONMENTAL TESTS . . . . . 50 MEGOHMS  
 DIELECTRIC STRENGTH (SEA LEVEL) . . . . . 2-5 SECONDS  

	Initial	After Life Tests
250 VDC	115 VAC	250 V
COIL TO CASE	1250	N/A
AUX CONTACTS	1250	N/A
ALL OTHER POINTS	1250	1500

DIELECTRIC STRENGTH (ALTITUDE) . . . . . 1 MINUTE  

	250 VDC	115 VAC
COIL TO CASE	500	N/A
AUX CONTACTS	500	N/A
ALL OTHER POINTS	700	700

MAX CONTACT DROP - INITIAL . . . . . 150 VOLTS  
 AFTER LIFE TEST . . . . . 175 VOLTS  
 OVERLOAD CURRENT (N.O.) . . . . . 200 AMPS  
 RUPTURE CURRENT (N.O.) . . . . . 250 AMPS  
 DUTY RATING . . . . . CONTINUOUS  
 RFI SPEC . . . . .  
 (APPLICABLE TO COIL CIRCUITS OF AC OPERATED RELAYS)

**NOTES, APPLICATION**

- 1/ Over temperature range.
- 2/ With nominal coil voltage.
- 3/ Absence of value indicates relay is not rated for 3 phase applications.
- 4/ Transfer load indicates relay suitable for transfer between unsynchronized AC power supplies at rating indicated.

DASH NO.	VIBRATION LEVEL				
	5-10 Hz	10-55 Hz	55-250 Hz	250-500 Hz	500-1500 Hz
D1	.08 GA	.06 GA	2Gs	2Gs	

**Qualification By Similarity.**

Part Number	Loads						Dynamics 1/			Environmental		
	Type I			Type I ER			A	X	Y	A	B	C
	A	B	C	D	E	F						
MS24152-D1	4						2			4		

- 1/ All units must be tested, reference amendment 1, appendix 1, MIL-R-6106, construction, internal.

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P.A. AF-85 Other Cust NAVY-AS	International Interest	TITLE RELAY, 25 AMP, 3PDT, N.O. TYPE II NON-HERMETICALLY SEALED (MECHANICALLY INTER LOCKED)	MILITARY STANDARD  MS24152
Procurement Specification MIL-R-6106	SUPERSEDES:		PAGE 3 OF 3