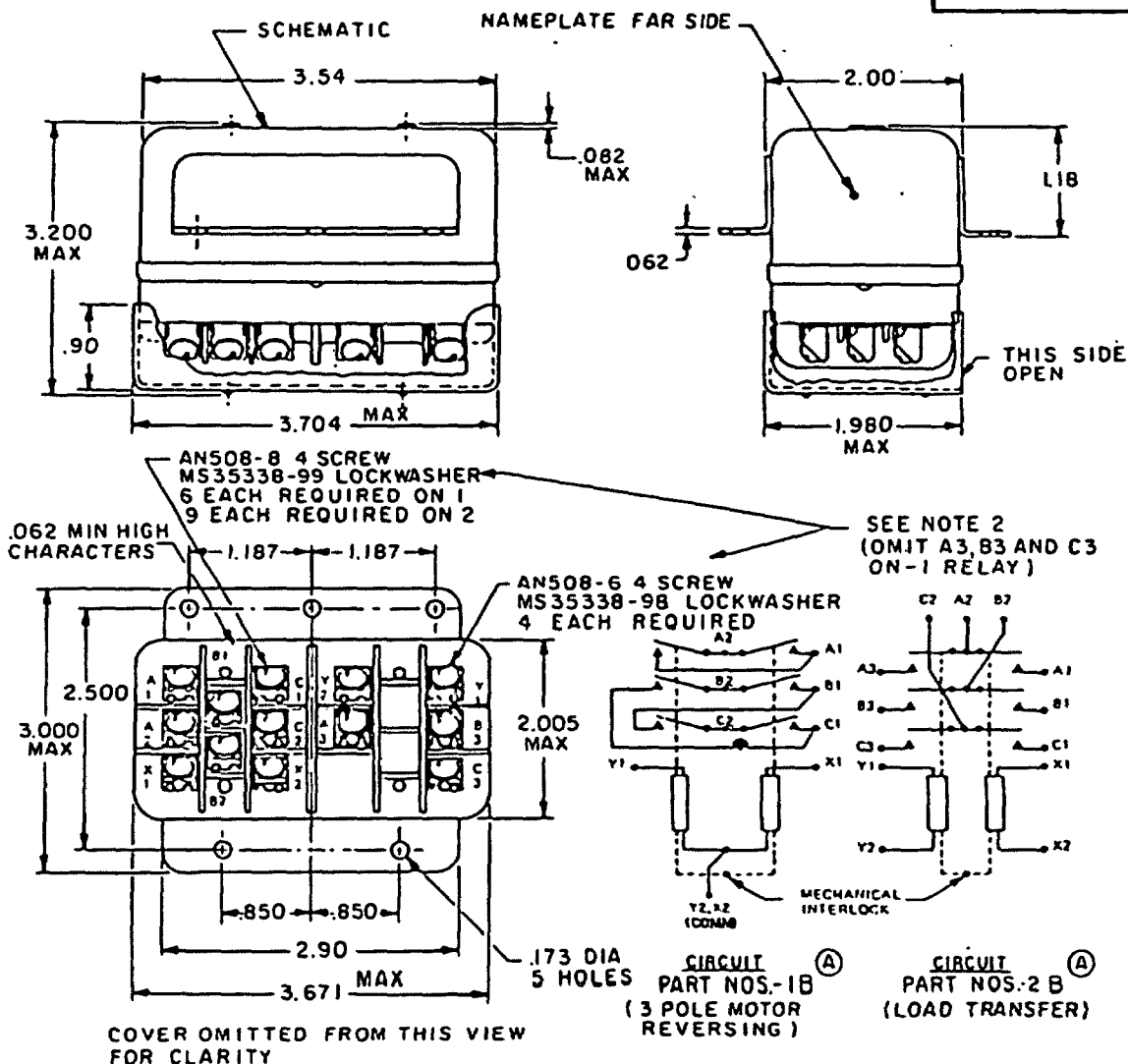


THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-R-6106

THIS SPECIFICATION IS APPROVED FOR USE BY all Departments and Agencies of the Department of Defense.



Inches	mm	Inches	mm
.062	1.57	2.005	50.93
.082	2.08	2.500	63.50
.173	4.39	2.90	73.66
.850	21.59	3.000	76.20
.90	22.86	3.200	81.28
1.18	29.97	3.54	89.92
1.187	30.15	3.671	93.24
1.980	50.29	3.704	94.08
2.00	50.80		

NOTES:

- Dimensions are in inches unless otherwise specified, tolerances are decimals-XX $\pm .030$, XXX $\pm .010$.
- Power terminals capable of accepting MS25036-53 lugs. Coil terminals capable of accepting MS25036-7 lugs.
- Referenced Government documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this standard to the extent specified herein.

(F) Denotes Changes

PREPARING ACTIVITY: Air Force-85
CUSTODIANS: ARMY - NAVY -
AIR FORCE - DLA -

REVIEW: Air Force-99
USER:
PROJECT NUMBER: 5945-F712

MILITARY SPECIFICATION SHEET
TITLE RELAY, ELECTROMAGNETIC, 20
AMPERES, 3 PST, MECHANICAL INTER-
LOCK, (CENTER OFF) LOAD TRANSFER,
TYPE I, HERMETICALLY SEALED.

SPECIFICATION SHEET NUMBER

MS27706F 16 March 1990

SUPERSEDING
MS27706E

30 April 1987

AMSC - N/A

FSC - 5945

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Page 1 of 3

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(F) TABLE I. Dash number and characteristics.

MS part no.	Coil	Terminal types	Mounting	Max weight in pounds
MS27706	Type X Y			
-18 -28	I Idc Idc	Screw	Bracket	1.4

(F) TABLE II. Operating characteristics.

MS part no.	Coil data										Time-milliseconds-max			
	Nominal		Max		Max pick-up voltage 2/		Drop-out voltage 2/		Hold voltage 2/		Operate 3/		Release 4/	
	Volts 1/	Freq Hz	Res Ω	Volts	Amp	Nominal 2/	High temp test	Cont current test	Drop-out voltage 2/	Hold voltage 2/	Operate 3/	Release 4/	Main	Aux
MS27706														
-18, -28	X-Y	28	dc	-	29	.25	18	19.5	22.5	1.5	7.0	20	10	5

1/ CAUTION: The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 2/ Over the temperature range.
 3/ With nominal coil voltage.
 4/ From nominal coil voltage.

PREPARING ACTIVITY: Air Force-85
 CUSTODIANS: ARMY - NAVY -
 AIR FORCE - DLA -

REVIEW: Air Force-99
 USER:

PROJECT NUMBER: 5945-F712

MILITARY SPECIFICATION SHEET
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SPECIFICATION SHEET NUMBER

16 March 1990

SUPERSEDING
 MS27706E

30 April 1987

AMSC - N/A

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THIS SPECIFICATION IS APPROVED FOR USE BY all Departments and Agencies of the Department of Defense.

Form Approved
OMB No. 0704-0188

Table III. Rated contact load (amperes per pole) case grounded.

Type of load	Life operating cycles x 10 ³	28 V dc		115 V ac, Phase				115/200 V ac, J Phase				See appropriate notes
		Main	Aux	Main	Aux	400 Hz	60 Hz	Main	Aux	400 Hz	60 Hz	
Resistive	100	20	-	20	15	-	-	20	15	-	-	-
Inductive	20	15	-	-	-	-	-	-	-	-	-	-
Inductive	100	-	-	20	20	-	-	20	20	-	-	-
Motor	100	20	-	20	12	-	-	20	12	-	-	-
Lamp	100	5	-	5	5	-	-	5	5	-	-	-
Transfer load	10	-	-	20	-	-	-	20	-	-	-	2/
Mechanical life	400	5	-	5	5	-	-	5	5	-	-	2/
Reduced current												
Min Current												

Applicable per specification

1/ Absence of value indicates relay is not rated for 3 phase applications.

2/ Transfer load indicates relay suitable for transfer between unsynchronized ac power supplied at rating indicated.

Environmental characteristics	Electrical characteristics
Temperature range -70°C to +125°C	Insulation resistance Initial After life or environmental test 100 megohms 50 megohms
Max altitude rating 80,000 Ft	Dielectric strength (sea level): Initial After life tests
Shock G-level 25 G	Coil to case 1250 V rms 1050 V rms
Duration 11 ms	Aux contacts 1500 V rms 1125 V rms
Max duration 2 ms	All other points 80,000 Ft. 500 V rms
Vibration: Sinusoidal: G-level 10 G	Dielectric strength (altitude) Coil to case 500 V rms
Frequency range Non operate: G-level 15 G	Aux contacts 500 V rms
Frequency range Acceleration 15 G	Max contact drop Initial After life test 150 volts 175 volts
	Overloading current 80 Amperes dc, 120 amperes ac Rupture current 100 Amperes dc, 150 amperes ac Duty rating continuous RFI spec MIL-STD-461 (Applicable to coil circuit of ac operated relays)

PREPARING ACTIVITY: Air Force-85
CUSTODIANS: ARMY. NAVY.
AIR FORCE. DLA.

REVIEW: Air Force-99
USER:
PROJECT NUMBER: 5945-F712

MILITARY SPECIFICATION SHEET
TITLE RELAY, ELECTROMAGNETIC, 20
AMPERES, 3 PST, MECHANICAL INTER-
LOCK, (CENTER OFF) LOAD TRANSFER,
TYPE 1, HERMETICALLY SEALED.

SPECIFICATION SHEET NUMBER

16 March 1990

SUPERSEDING
MS 27706E

30 April 1987

AMSC. N/A

FSC. 5945

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