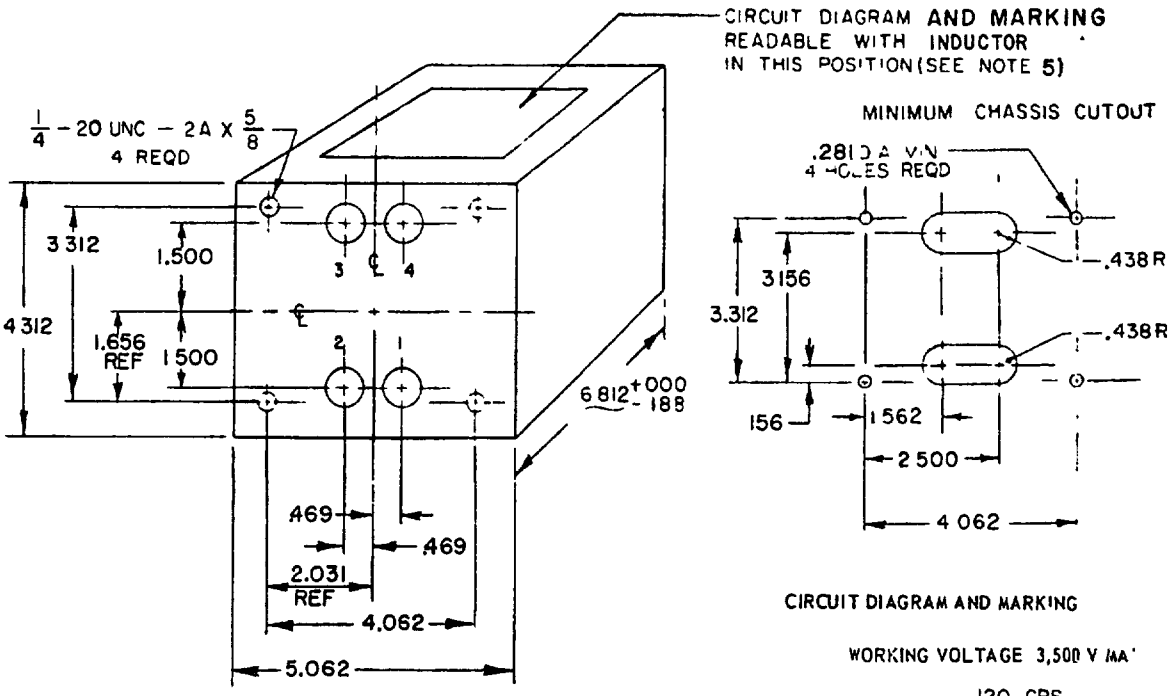
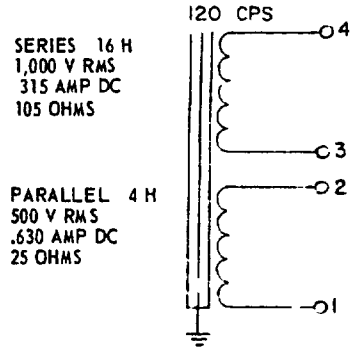
FED SUP CLASS
5950

CASE, MOUNTING, TERMINAL ARRANGEMENT, AND MARKING



CIRCUIT DIAGRAM AND MARKING

WORKING VOLTAGE 3,500 V MAX



MAX ALTITUDE 10,000 FT

INCHES	MM	INCHES	MM
.156	3.96	2.500	63.50
.188	4.78	3.156	80.16
.281	7.14	3.312	84.12
.438	11.13	4.062	103.17
.469	11.91	4.312	109.52
1.500	38.10	5.062	128.57
1.562	39.67	6.812	173.02
1.656	42.06	5/8	15.88
2.031	51.59		

THIS MILITARY STANDARD INACTIVE FOR NEW DESIGN AFTER 28 MAY 1981
NO SUPERSEDING STANDARD

NOTES:
1. All dimensions in inches.
2. Unless otherwise specified, tolerance on overall case dimensions is +.000 (.00 mm), -.125 (3.18 mm).
3. Tolerance on mounting dimensions is ±.047 (1.19 mm). Mounting studs are symmetrically located with respect to the centerlines of the case.
4. Tolerance on terminal positioning dimensions is ±.125 (3.18 mm). Terminals fit within minimum chassis cutout.
5. Type designation, MS part no. and manufacturer's name or code symbol to be marked on side opposite terminals.
6. Referenced document shall be of the issue in effect on date of invitations for bid.
7. For design feature purposes, this standard takes precedence over procurement document referenced herein.
8. Metric equivalents (to the nearest .01 mm) are shown for general information only and are based upon 1 inch = 25.4 mm.

(D) ENTIRE STANDARD REVISED

MS PART NO. MS75002-2

APPROVED 9 JUNE 1958 REVISED (A) 29 NOV 1960 (B) 21 September 1965 (C) 28 MAY 1981 (D) 20 MAY 1982

P A Army-ER Other Cust Navy-EC Air Force-85	TITLE INDUCTOR, POWER, TYPE TF4RX04NA012	MILITARY STANDARD MS 75002
Procurement Specification MIL-T-27	SUPERSEDES	PAGE 1 OF 2

FED SUP CLASS
5950

ELECTRICAL RATING

Inductance:
(1–4) - - - - - - - - - - - - - - - - 16 h min
(1–3) and (2–4) - - - - - - - - - 4 h min
Current:
(1–4) - - - - - - - - - - - - - - - - .315 amp dc
(1–3) and (2–4) - - - - - - - - - .630 amp dc
Voltage:
(1–4) - - - - - - - - - - - - - - - - 1,000 v rms
(1–3) and (2–4) - - - - - - - - - 500 v rms
Frequency - - - - - - - - - - - - - - 120 cps, ±10%

DC resistance
(1–2) - - - - - - - - - - - - - - - - - - - 45 ohms, ±10%
(3–4) - - - - - - - - - - - - - - - - - - - 60 ohms, ±10%
Duty cycle. - - - - - - - - - - - - - - - - Continuous
Life expectancy - - - - - - - - - - - - - 10,000 hr min
Working voltage
(1–4) - - - - - - - - - - - - - - - - - - - 3,500 v max
(1–3) and (2–4) - - - - - - - - - - - - 3,500 v max
Altitude - - - - - - - - - - - - - - - - - - - 10,000 ft max
Operating temperature - - - - - - - - - 105° C max

Note. When numbers in parentheses, eg (1–2), are used, they indicate the winding and the extreme terminals of the winding. When the extreme terminals of both windings are used, eg (1–4), the windings are connected in series, ie, terminals 2 and 3 are connected. When the extreme terminal of one winding and the extreme terminal of another winding are used, eg (1–3) and (2–4), the windings are connected in parallel.

PHYSICAL CHARACTERISTICS

Case size - - - - - - - - - - - - - - - NA
Weight - - - - - - - - - - - - - - - - - 30 lb max
Terminals - - - - - - - - - - - - - - - Solder lug, No. 18 AWG
Terminal height - - - - - - - - - - - 1.625 (41.28 mm) $^{+.000}_{-.688}$ (17.48 mm)
Shock - - - - - - - - - - - - - - - - - Method I, test condition C (50 G)

TEST	ELECTRICAL PROPERTIES				LIMITS
Dielectric withstanding voltage: At sea level	Windings	(1–4)	(1–3)	(2–4)	- - -
	Volts rms	5, 900	5, 900	5, 900	
DC resistance and resistive unbalance	(1–2). 45 ohms (3–4): 60 ohms Resistive unbalance not applicable				±10% ±10%
Inductance and inductive unbalance	With 50 v, 120 cps, and .315 amp dc applied to (1–4) 16 h With 50 v, 120 cps, and .630 amp dc applied to (1–3) and (2–4) 4 h Inductive unbalance not applicable				Min Min
Polarity	Additive, with terminals 2 and 3 connected				- - -
Temperature rise	40° C with 1,000 v, 108 cps, and .315 amp dc applied to (1–4) at an ambient temperature of 65° C				Max

(D) QUALITY ASSURANCE PROVISIONS:
QUALIFICATION INSPECTION: NOT APPLICABLE FOR THIS SPECIFICATION.
QUALITY CONFORMANCE INSPECTION: GROUP A AND B TESTS OF MIL-T-27 SHALL BE APPLICABLE.

APPROVED 9 JUNE 1958 REVISED (A) 29 NOV 1960 (B) SEE PG. 1 FOR CHANGES (D) SEE PG. 2 FOR CHANGES 20 MAY 1982

P.A Army-ER Other Cust Navy - EC Air Force-85	TITLE INDUCTOR, POWER, TYPE TF4RX04NA012	MILITARY STANDARD MS 75002
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DD FORM 25 OCT 63 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE