

INCH-POUND

MIL-PRF-27/235D
14 September 2000
SUPERSEDING
MIL-T-27/235C
8 April 1992

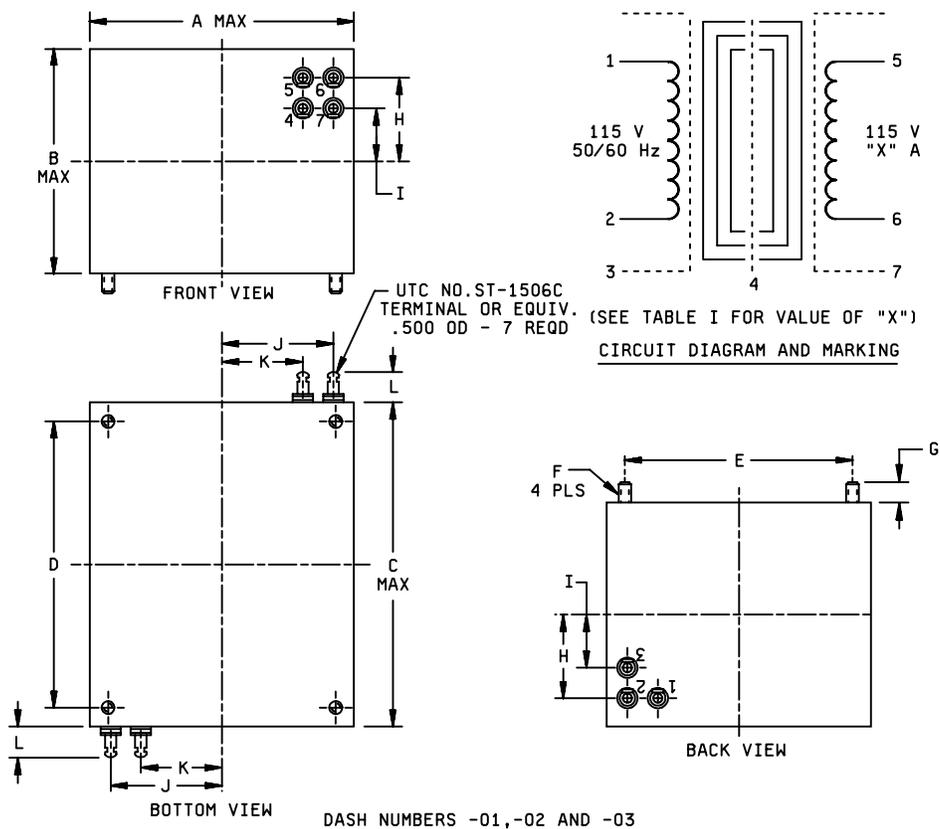
PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS, POWER, ISOLATION, SHIELDED

This specification is approved for use by all Departments and Agencies of the Department of Defense.

INACTIVE FOR NEW DESIGN

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-PRF-27.



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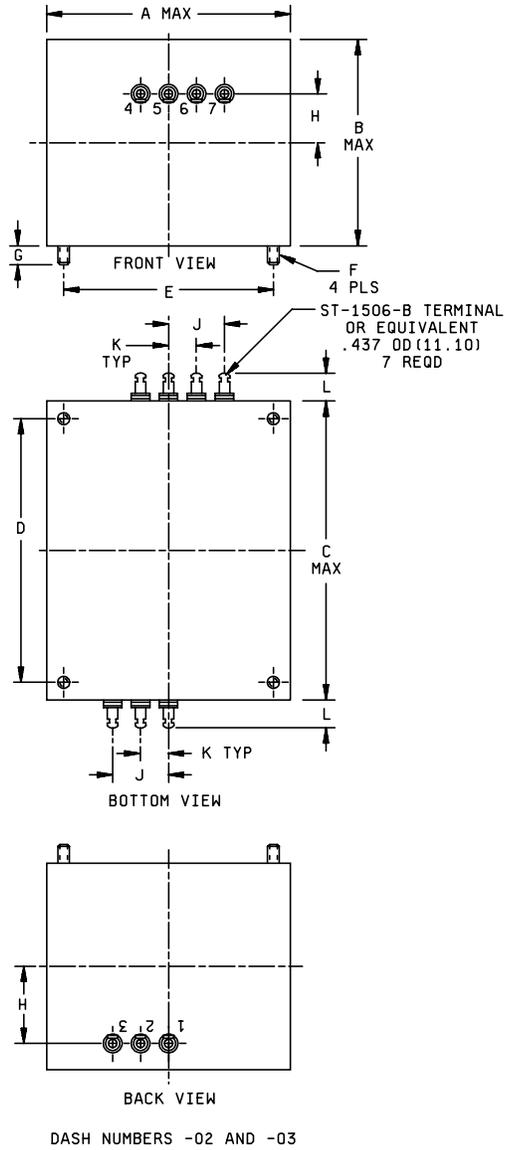


FIGURE 1. Dimensions and configurations. - Continued.

Dash no.	A Max	B Max	C Max	D	E	F	G	H	I	J	K	L
01	6.531 (165.89)	5.531 (140.49)	8.000 (203.20)	7.062 (179.37)	5.625 (142.88)	.3125-18 UNC-2A	.812 (20.62)	2.062 (52.37)	1.312 (33.32)	2.750 (69.85)	2.00 (50.80)	.750 (19.05)
02	4.032 (102.41)	3.032 (77.01)	4.032 (102.41)	3.375 (85.72)	3.375 (85.72)	10-32 UNF-2A	.500 (12.70)	.875 (22.22)	---	1.500 (38.10)	.750 (19.05)	.5625 (14.288)
03	5.344 (135.74)	3.500 (88.90)	5.000 (127.00)	4.312 (109.52)	4.625 (117.48)	10-32 UNF-2A	.500 (12.70)	.875 (22.22)	---	2.000 (50.80)	1.000 (25.40)	.5625 (14.288)
04	5.531 (140.49)	4.531 (115.09)	5.531 (140.49)	4.812 (122.22)	4.812 (122.22)	10-32 UNF-2A	.500 (12.70)	1.625 (41.28)	1.25 (31.8)	2.3125 (58.738)	1.750 (44.45)	.531 (13.49)
05	7.500 (190.50)	7.500 (190.50)	9.000 (228.60)	8.000 (203.20)	6.500 (165.10)	.3125-18 UNC-2A	.937 (23.80)	3.000 (76.20)	2.25 (57.2)	3.25 (82.6)	2.50 (63.5)	.750 (19.05)

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.
4. Unless otherwise specified, tolerance on all dimensions shall be ± 0.031 (0.79 mm).
5. Marking shall be on top of case.
6. Secondary current and the working voltage as specified in table I shall be marked as applicable.

FIGURE 1. Dimensions and configuration - Continued.

TABLE I. Electrical characteristics.

Dash number	Weight (lbs. max)	Secondary current (amperes)	Working voltage		Primary power (VA)	No load		DC resistance		No load secondary volts (5-6)
			Primary (volts)	Secondary (volts)		Primary current (mA)	Primary power (watts)	Primary $\pm 25\%$ (ohms)	Secondary $\pm 25\%$ (ohms)	
<u>1/</u>										
01	35	3.5	175	175	400	400	10	.35	.38	129
02	5.5	.435	175	175	50	150	2.5	11	13	131.5
03	13	1.04	175	175	120	300	5	2.1	3	127.8
04	15.5	1.4	175	175	160	300	5.5	1.5	1.65	128
05	60	8.7	175	175	1000	1000	13.5	.116	.155	123

1/ Qualification testing and approval to M27/235-01 shall be sufficient to grant qualification approval to M27/235-02 through M27/235-05, inclusive.

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REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the winding and terminals of the windings.)

Electrical ratings:

Primary (1-2): 115 volts rms, 50/60 hertz, see table I.

Secondary (5-6): 115 volts rms, see table I.

Working voltage (peak): See table I.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Metal encased.

Material: Brass.

Mounting cover: Cold rolled steel.

Terminals: Brass, solder, lug, insulated, United Transformer Company P/N ST-1506, or equivalent.

Height: See table I.

Weight: See table I.

Operating temperature range: -55°C to +105°C.

Dielectric withstanding voltage (at sea level): 500 volts rms.

Electrical characteristics:

No load: With 115 volts rms, 60 hertz across (1-2), current in (1-2) shall not exceed "X" milliamperes and the power in (1-2) shall not exceed "Y" watts.

Voltage across (5-6): 115 volts rms ± 3 percent. See table I for "X" and "Y" values.

Rated load: With 115 volts, 60 hertz across (1-2), the voltage across (5-6) shall be 115 volts ± 3 percent.

Polarity: Additive with terminals 2 and 6 connected.

Electrostatic shielding: Voltage ratio > 100:1 at 20 kilohertz.

DC resistance: See table I.

Temperature rise: 40°C with 115 volts rms, 60 hertz across (1-2) at an ambient temperature of 65°C.

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Quality assurance provisions:

Qualification inspection: Not applicable.

Quality conformance inspection: Groups A and B test of MIL-PRF-27 shall be applicable.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/235-(dash number from table I).

Custodians:

Army - CR

Navy - EC

Air Force - 11

Preparing activity:

DLA - CC

(Project 5950-1063)

Review activities:

Army - AR, MI

Navy - AS, MC, OS, SH

Air Force - 19, 99