

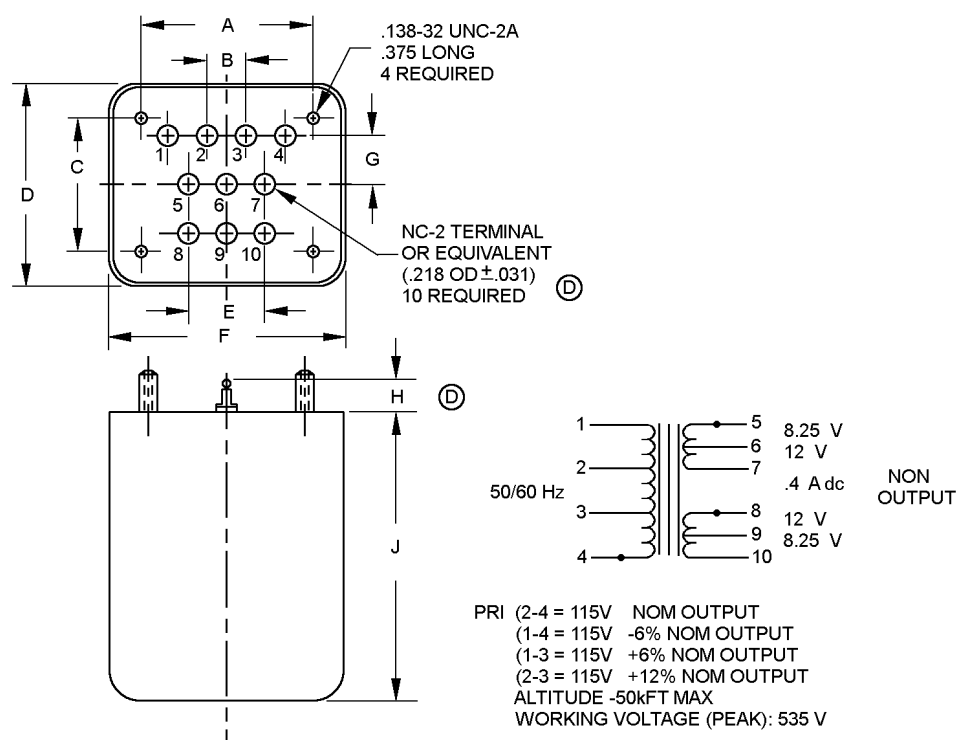
MIL-PRF-27/157E
w/AMENDMENT 2
20 June 2024
SUPERSEDING
MIL-PRF-27/157E
w/AMENDMENT 1
1 November 2016

PERFORMANCE SPECIFICATION SHEET

TRANSFORMER POWER, STEPDOWN

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

The requirements for acquiring the product described herein shall consist
of this specification sheet and the latest issue of [MIL-PRF-27](#).



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance on overall case dimensions is $\pm .000$, $-.125$ inch.
4. Tolerance on terminal position dimensions is $\pm .016$ inch.
5. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configurations



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Dim	Inches	mm
A	1.688	42.88
B	.312 Typ.	7.92 Typ.
C	1.438	36.53
D	2.062	52.37
E	.625	15.88
F	2.312	58.72
G	.500 Typ.	12.70 Typ.
H	.438 Max	11.13 Max.
J	3.125 +.000/-.188	79.38 +.000/-4.78

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

Electrical ratings: See table I.

TABLE I. Electrical ratings. 1/

Dash no.	Primary voltage	Secondary voltage			
		(5-6)	(6-7)	(8-9)	(9-10)
01	(2-4): 115V, 50/60 Hz	8.25 V	12.0 V	12.0 V	8.25 V
	(1-4): 115V, 50/60 Hz	7.76 V	11.28 V	11.28 V	7.76 V
	(1-3): 115V, 50/60 Hz	8.74 V	12.72 V	12.72 V	8.74 V
	(2-3): 115V, 50/60 Hz	9.24 V	13.44 V	13.44 V	9.24 V

Primary current (1-4): 0.15 ampere.

Secondary current:

(5-7): 0.4 ampere.

(8-10): 0.4 ampere.

VA: 16.

Working voltage (peak): 535 volts.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Metal encased.

Terminals: Solder terminal, Lundey #199E or equivalent.

Terminal height: .438 inch (11.13 mm) maximum.

Weight: 32.63 ounce, maximum.

Altitude: 50,000 feet, maximum.

Operating temperature range: -55°C to +130°C.

Terminal strength: [MIL-STD-202-211](#), test condition A, 5 pounds and test condition E, 8.0 ounce-inch.

Shock: [MIL-STD-202-213](#), test condition H.

Dielectric withstanding voltage:

At sea level: 1,500 volts rms.

At reduced barometric pressure: 670 volts rms.

Electrical characteristics:

No load: With 115 V and 60 Hz in (2-4):

Current in (2-4): 120 mA, maximum.

Power in (2-4): 1.5 watts, maximum.

Voltage across (5-7): 22.7 volts, ±3 percent.

Voltage across (8-10): 22.7 volts, ±3 percent.

Rated load: With 115 volts and 60 Hz across (2-4):

Voltage across (5-7): 20.25 volts, ±5 percent.

Voltage across (8-10): 20.25 volts, ±5 percent.

DC resistance:

(1-4): 27.4 ohms, ±25 percent.

(8-10): 2.6 ohms, ±25 percent.

(5-7): 2.43 ohms, ±25 percent.

Polarity: Additive, with terminals 1 and 5, and 7 and 8 connected.

Temperature rise: 40°C with 115 volts rms, 60 Hz across (2-4) at an ambient temperature of 90°C.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/157-01.

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to [MIL-PRF-27](#), this document references the following:

MIL-STD-202-211 MIL-STD-202-213

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Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA – CC

Preparing activity:
DLA - CC

(Project 5950-2024-015)

Review Activities:

Army – AR, CR4, MI
Navy – AS, MC, OS
Air Force – 19

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.