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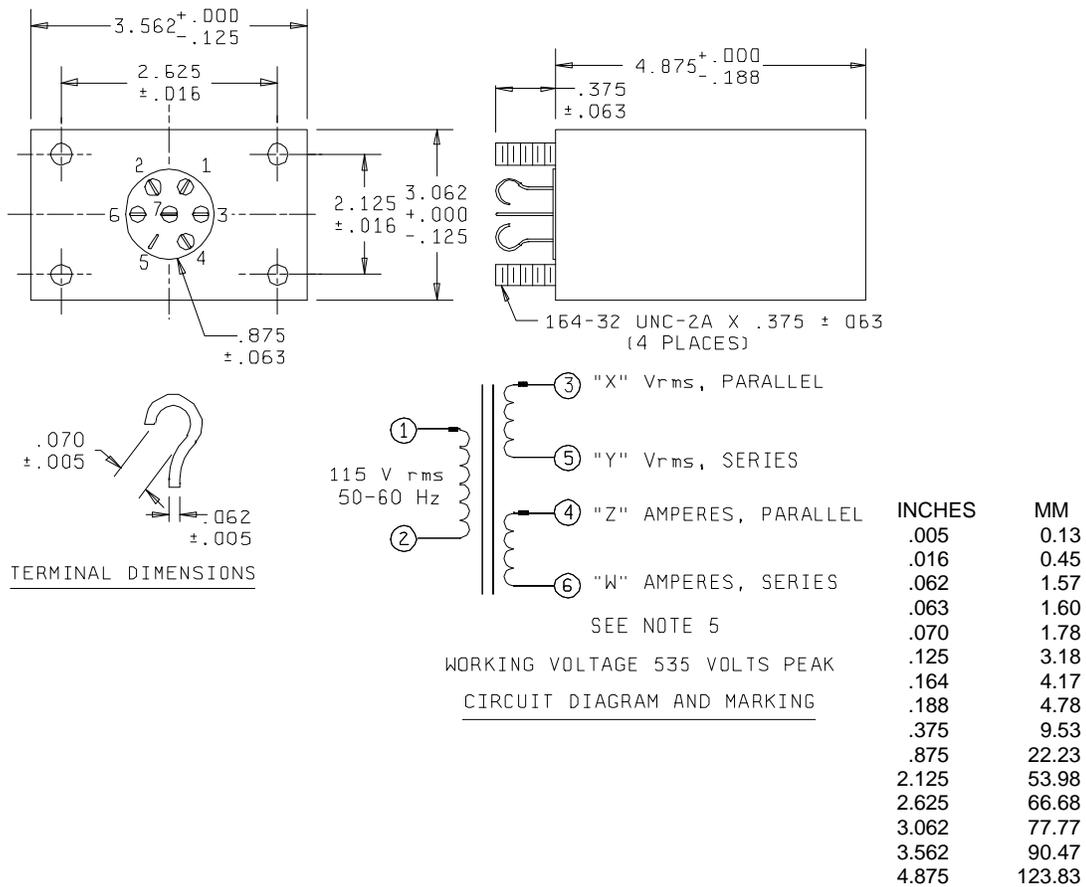
MIL-PRF-27/330B  
 2 April 1984  
 SUPERSEDING  
 MIL-T-27/330A  
 14 January 1983

PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS, POWER, 100 VA TO 140 VA, 60 HZ, TF4S03JA

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

The complete requirements for acquiring the transformer described herein shall consist of this specification and the latest issue of MIL-T-27.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information.
3. Marking shall be on the sides of the case. Terminal identification shall be as shown on the figure.
4. Electrical values shall be marked as specified in table I.
5. For series output connect terminals 4 and 5 together. For parallel output connect pins 3 to 4 and 5 to 6.

(B)

FIGURE 1. Dimensions and configurations.

(B) denotes changes

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

Electrical ratings:

- Primary (1-2): 115 V rms, 50 to 65 Hz.
- Primary dc resistance: 1.49 ohms  $\pm$ 25 percent.
- Secondary: See table I.
- Volt ampere: See table I.
- Working voltage: 535 volts pk.

Design and construction:

- Dimensions and configuration: See figure 1.
- Duty cycle: Continuous.
- Case: Metal enclosed.
- Material: Steel.
- Terminals: Solderable hook terminals.
- Height: .375  $\pm$ .063 inch.
- Diameter: .062  $\pm$ .005 inch.
- Weight: 8.2 pounds, maximum.
- Operating temperature range: -55°C to +130°C.
- Altitude: 10,000 feet.
- Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.
- Dielectric withstanding voltage (each winding, secondary winding shall be connected in parallel):
  - At sea level: 1500 V rms.

Electrical characteristics:

- Rated load: With 115 V rms and 60 Hz in (1-2), and rated current in secondary, secondary voltage shall be as specified in table I within  $\pm$ 3 percent.
- Regulation: 
$$\frac{\text{Voltage (no load)} - \text{Voltage (rated load)}}{\text{Voltage (rated load)}} \times 100$$
 shall not exceed 10 percent
- Polarity: Additive with terminals 2 and 3 connected and 5 and 4 connected.
- Temperature rise: 40°C with 115 V rms, 60 Hz across (1-2) at an ambient temperature of 90°C.
- Marking location: See figure 1.
- Part number: M27/330-(dash number from table I).

TABLE I. Electrical ratings.

Dash number	Secondary voltage (series) volts rms (3-6)	Secondary current (series) amperes (3-6)	Secondary voltage (parallel) volts rms (3-5)	Secondary current (parallel) amperes (3-5)	Secondary dc resistance each winding ohms $\pm 25\%$	Volt amperes
01	10.0	10.00	5.0	20.00	0.0117	100
02	12.6	10.00	6.3	20.00	0.014	126
03	16.0	8.75	8.0	17.50	0.0223	140
04	20.0	7.00	10.0	14.00	0.0335	"
05	24.0	5.80	12.0	11.60	0.0563	"
06	34.0	4.10	17.0	8.20	0.118	"
07	40.0	3.50	20.0	7.00	0.14	"
08	56.0	2.50	28.0	5.00	0.31	"
09	88.0	1.58	44.0	3.16	0.58	"
10	120.0	1.16	60.0	2.32	1.0	"

## QUALITY ASSURANCE PROVISIONS:

## Extent of qualification:

Qualification testing and approval to M27/326-10 and M27/331-08 shall be sufficient to grant qualification approval to MIL-T-27/326 through MIL-T-/331 inclusive, all parts.

Qualification testing and approval to M27/330-10 shall be sufficient to grant qualification approval to M27/330-01 through M27/330-10.

## Custodians:

Army - ER  
Navy - EC  
Air Force - 85

## Preparing activity:

Army - ER  
(Project 5950-0623-46)

## Review activities:

Army - AR  
Navy - OS  
Air Force - 11, 17, 99  
DLA - ES

## User activities:

Army - ME  
Navy - AS, MC  
Air Force - 19

## Agent:

DLA - ES