



DASH NOS 08 THROUGH 32

Ltr	Dimensions		Inches	mm
	Inches	mm		
G	2.75 ±.015	69.9 ±0.38	.005	0.13
H	2.71 ±.015	68.8 ±0.38	.010	0.25
J	2.31 ±.015	58.7 ±0.38	.080	2.03
K	2.21 ±.015	56.1 ±0.38	.115	2.92
L	2.25 ±.015	57.2 ±0.38	.169	4.29
M	.750 ±.031	19.05 ±0.79	.187	4.75
N	1.00 ±.031	25.4 ±0.79	.200	6.08
			.250	6.35
			.380	8.89
			.500	12.70

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information.
3. Marking shall be on the top and sides of case.
4. Dimensional tolerance shall be ±.031 (0.79 mm) unless otherwise specified.
5. Dimensions G and H to be measured at top of transformer.

FIGURE 1. Dimensions and configuration - Continued.

MIL-T-27/343E

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 voltage (1-2): 115 volts rms, 400 ±20 hertz.

Secondary voltage and current (3-5): See table I.

Voltampere: 175 voltamperes.

Working voltage (1-2): 535 volts peak.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Diallyl phthalate.

Terminals: Turret type.

Height: See figure 1.

Weight: 2.2 pounds, maximum.

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

Altitude: 70,000 feet.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.

Dielectric withstanding voltage (each winding):

At sea level: 1500 volts rms.

At reduced barometric pressure: 1.25 times the peak working voltage specified.

Electrical characteristics:

Rated load: With 115 volts rms and 400 Hz in (1-2), and rated current in secondary, the voltage across (3-5) shall be as specified in table I.

DC resistance:

(1-2): 0.7 ohm ±25 percent.

(3-5): See table I.

Temperature rise: 45°C with 115 volts rms, 400 hertz across (1-2) at an ambient temperature of 85°C, full load terminals (3-5).

Regulation:
$$\frac{\text{Voltage (no load)} - \text{Voltage (rated load)}}{\text{Voltage (rated load)}} \times 100 \quad (\text{shall not exceed 10 percent}).$$

Polarity: Additive, with terminals 2 and 3 connected.

Marking location: See figure 1.

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Part or Identifying Number (PIN): M27/343- (dash number from table I).

TABLE I. Electrical ratings.

Dash number M27/343	Secondary voltage (3-5) (V rms) $\pm 5\%$ (CT)	Secondary current (3-5) (amperes)	Secondary DCR (3-5) (ohms) $\pm 25\%$
-01	5.0	35.0	.0020
-02	6.3	27.8	.0026
-03	8.0	22.0	.0046
-04	10.0	17.5	.0053
-05	12.6	13.9	.011
-06	14.0	12.5	.013
-07	16.0	10.9	.014
-08	18.0	9.7	.015
-09	20.0	8.75	.017
-10	22.0	7.9	.018
-11	25.0	7.0	.035
-12	28.0	6.25	.049
-13	31.0	5.65	.052
-14	35.0	5.0	.098
-15	39.0	4.48	.110
-16	43.0	4.06	.114
-17	48.0	3.65	.160
-18	55.0	3.17	.196
-19	63.0	2.77	.20
-20	70.0	2.5	.25
-21	80.0	2.18	.34
-22	90.0	1.94	.38
-23	100.0	1.75	.52
-24	110.0	1.59	.72

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TABLE I. Electrical ratings - Continued.

Dash number M27/343	Secondary voltage (3-5) (V rms) ±5% (CT)	Secondary current (3-5) (amperes)	Secondary DCR (3-5) (ohms) ±25%
-25	123.0	1.42	.81
-26	138.0	1.26	1.14
-27	157.0	1.1	1.31
-28	175.0	1.0	1.87
-29	200.0	.875	2.65
-30	220.0	.790	2.92
-31	26.0	6.730	0.044
-32	115.0	1.520	0.72

QUALITY ASSURANCE PROVISIONS:

Extent of qualification:

- Ⓔ Qualification testing and approval to M27/338-26 and M27/343-30 shall be sufficient to grant qualification approval to MIL-T-27/338 through MIL-T-27/343 inclusive, all parts.
- Ⓔ Qualification testing and approval to M27/343-30 shall be sufficient to grant qualification approval to M27/343-01 through M27/343-32.

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85

Review activities:

Army - AR, ME
Navy - AS, MC, OS
Air Force - 17, 19, 99
DLA - ES

Preparing activity:

Army - ER

Agent:

DLA - ES

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