

INCH-POUND

MIL-DTL-3661/60D

24 January 2025

SUPERSEDING

MIL-L-3661/60C

w/AMENDMENT 2

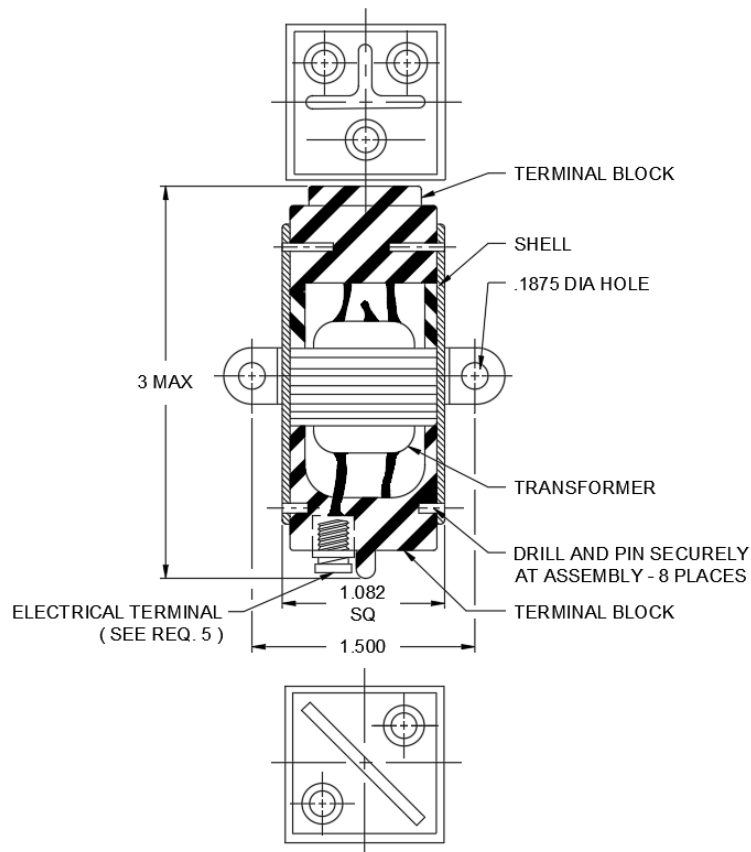
24 June 2003

DETAIL SPECIFICATION SHEET

Lampholder, Transformer, Light, Indicator, Style LH93

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
MIL-DTL-3661.



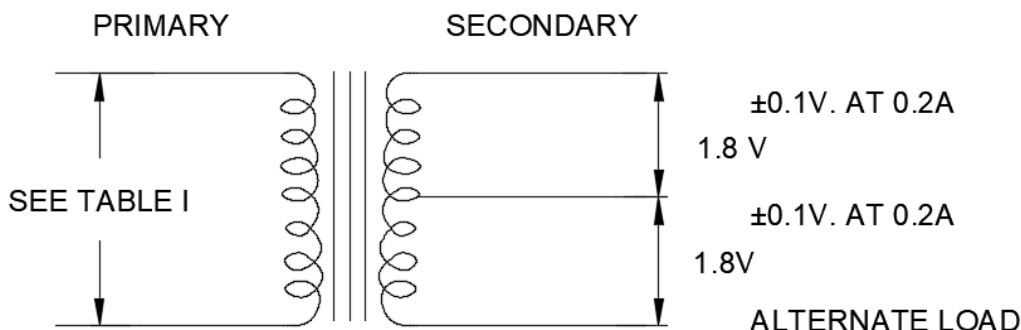
Inches	mm
.1875	4.76
1.082	27.48
1.500	38.10
3	76.20

FIGURE 1. Style LH93 transformer



NOTES:

1. All dimensions are in inches. Unless otherwise specified, tolerances are ± 0.015 inch (0.40 mm) for decimals.
2. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based on 1 inch = 25.4 mm.

FIGURE 2. Wiring diagramTABLE I: Primary transformer voltage rating.

Type designation	Voltage
LH93/1	12
LH93/2	26
LH93/3	117
LH93/4	450

Superseding date: Style LH93/3 and style LH93/4 transformers supersede the type IL transformers of MIL-T-16315 (NAVY) and the type B-27D and B-27E, respectively of Drawing 9000-S6202-73907.

REQUIREMENTS:

1. Qualification: Not required.
2. Material:
 - a. Terminal block: Type MME and MAI-60 of ASTM D5948.
 - b. Shells: Brass.
 - c. Electrical terminal: Brass.
3. Finish: Exposed metal parts, black nickel.
4. Design and construction: See figures 1 and 2.
5. Transformers: Center tap of transformer secondary shall be grounded to face plate of indication light housing.
6. Electrical terminals: Electrical terminals shall be prided by using number 6-32 round head corrosion resistant steel or brass machine screws 1/4 inch (6.35 mm) long and inserts securely attached to the terminal blocks. Molded separations, at least 1/8 inch (3.18 mm) high, and 3/32 inch (2.38 mm) wide shall be provided between the terminals to prevent shortouts when electrical connections are made using terminal lugs.
7. Dielectric withstanding voltage: At sea level shall be 1,000 volts alternating current (a.c.).
8. Voltage regulation: With rated voltage impressed on the primary of the transformer, the low secondary voltage shall be 2.0 ± 0.1 volts with both 2.5 volt, 0.2 ampere lamps burning and 2.5 ± 0.3 volts with one lamp removed. Load conditions are 0 (no load) and 0.5 ampere full load.
9. Shock: Method II.
10. Temperature rise: Transformers shall be capable of operation continuously with rated voltage impressed across the primary and rated output on the secondary without exceeding a temperature rise of 32 °C. the standard ratings shall be as shown in table I.

QUALITY ASSURANCE PROVISIONS

First article inspection: First article inspection of transformers shall consist of the following:

- a. Visual and dimensional examination.
- b. Shock.
- c. Vibration.
- d. Dielectric with withstanding voltage.
- e. Voltage regulation (as specified herein).
- f. Temperature rise (as specified herein).

Quality conformance inspection: Quality conformance inspection of transformers shall consist of the following:

- a. Visual and dimensional examination.
- b. Dielectric withstanding voltage.

Sampling for quality conformance inspection: A random sample of lenses shall be selected from each lot in accordance with MIL-STD-1916, verification level I. Any transformer in the sample containing one or more defects or failing to conform to the dielectric withstanding voltage test shall be rejected. If the number of nonconforming transformers in any sample exceeds the acceptance number for that sample, the lot represented by the sample shall be rejected.

Tests:

Temperature rises: Temperature rise with rated output and primary voltage shall be measured with the transformer installed in the enclosing case and with the cover securely fastened in place. For the 1-hour intermittent duty, the measurements shall be made at the end of 1 hour. Temperature rise shall be determined by the resistance method (see requirement 10).

Voltage regulation: Voltage regulation to determine conformance with requirement 8 shall be made while the transformer is still hot, immediately following the temperature rise test.

Intended use: Transformers are intended for use with indicator lights in conjunction with 60 or 400 Hertz a.c. systems.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR
Navy - AS
Air Force - 11
DLA - CC

Preparing Activity:

DLA - CC
(Project 6210-2025-004)

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>.