

MIL-STD-255A

29 January 1957

SUPERSEDING

MIL-STD-255

14 January 1955

MILITARY STANDARD

ELECTRIC VOLTAGES

ALTERNATING AND DIRECT CURRENT



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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON 25, D. C.

29 January 1957

Supply and Logistics
Electric Voltages, Alternating and Direct Current
MIL-STD-255A

1. This standard has been approved by the Department of Defense and is mandatory for use by the Departments of the Army, the Navy, and the Air Force, effective 29 January 1957.

2. In accordance with established procedure, the Standardization Division has designated the Corps of Engineers, the Bureau of Ships, and the Air Force, respectively, as Army-Navy-Air Force custodians of this standard.

3. Recommended corrections, additions, or deletions should be addressed to the Standardization Division, Office of the Assistant Secretary of Defense (Supply and Logistics), Washington 25, D. C.

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1. SCOPE

1.1 COVERAGE.—This standard covers nominal voltage ratings for alternating and direct electric current.

1.2 APPLICATION.—The voltage ratings listed herein shall apply to utilization equipment and new systems.

1.2.1 Exceptions.—This standard does not apply to new or replacement equipment required to operate on existing systems having voltages other than those covered by this standard and to secondary voltages of control and signal transformers supplying low voltages to such circuits. Effort should be made to utilize standard voltages on replacement items when practicable.

2. REFERENCED DOCUMENTS

Not applicable

3. DEFINITIONS

3.1 NOMINAL SYSTEM VOLTAGE.
—Nominal system voltage is the source voltage produced by the generator or power conversion equipment.

3.2 UTILIZATION EQUIPMENT.—Utilization equipment is that equipment using or consuming power directly, such as motors, lights, appliances, electronic gear, etc., but does not include power type switch gear, distribution transformers, etc. These latter types of devices are considered to be part of the power source.

4. GENERAL REQUIREMENTS

4.1 POWER SYSTEMS.—All new systems are to deliver power having one of the nominal system voltages listed herein.

5. DETAIL REQUIREMENTS

5.1 STANDARD AC VOLTAGE RATINGS.—The standard alternating current voltages are as follows:

5.1.1 Nominal System Voltage.

120 (1ph)
120,240 (3ph-3 wire)
120/240 (1ph-3 wire)
120/208 (3ph-4 wire)
240/416 (3ph-4 wire)
450 (3ph-3 wire) (shipboard use)
480 (3ph-3 wire)
277/480 (3ph-4 wire)
2,400 (3ph)
4160 (3ph)
7200/12470 (wye)
7,620/13200 (wye)
13,800 (3ph-3 wire)

5.1.2 Utilization Equipment Nominal Voltage Ratings.

115 (1ph)
115 (3ph)
115/200 (3ph-4 wire) (aircraft use)
208 (3ph)
230 (1ph)
265 (1ph)
416 (3ph)
440 (3ph)
2,300 (3ph)
4,000 (3ph)
13,200 (3ph)

5.2 STANDARD DC VOLTAGE RATINGS.—The standard direct current voltages are as follows:

5.2.1 Nominal System Voltage.

7
14
28
30 (aircraft use)
120
240
250 (submarine use)
500 (submarine use)

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5.2.2 Utilization Equipment Nominal Voltage Ratings.

- 6
- 12
- 24
- 28 (aircraft use)
- 115
- 230
- 250
- 500

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Custodians:

- Army—Corps of Engineers
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Other interest:

- Army—COQSigT
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