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IEEE Recommended Practice for Sizing Lead-Acid Batteries for Stationary Applications

STANDARDS

IEEE Power and Energy Society

Developed by the
Energy Storage and Stationary Battery Committee

IEEE Std 485™-2020
(Revision of IEEE Std 485-2010)

IEEE

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Sponsor

Energy Storage and Stationary Battery Committee
of the
IEEE Power and Energy Society

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Abstract: Methods for defining the dc load and for sizing a lead-acid battery to supply that load for stationary battery applications in float service are described in this recommended practice. Some factors relating to cell selection are provided for consideration. Installation, maintenance, qualification, testing procedures, and consideration of battery types other than lead-acid are beyond the scope of this recommended practice. Design of the dc system and sizing of the battery charger(s) are also beyond the scope of this recommended practice.

Keywords: battery duty cycle, cell selection, dc load, full-float operation, IEEE 485™, lead-acid batteries, rated capacity, sizing, stationary applications, valve-regulated lead-acid (VRLA) cell, vented battery, vented lead-acid (VLA)

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The following members of the individual balloting committee voted on this recommended practice. Balloters may have voted for approval, disapproval, or abstention.

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