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Communication-Type Battery Chargers

National Electrical Manufacturers Association

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Foreword

This Standards Publication provides definitions, minimum requirements, and test methods for communications type battery chargers.

This Standards Publication was prepared by the Industrial Battery Charger Committee of the NEMA Power Electronics Section. During the preparation of this Standard, the Committee was composed of the following active participants:

Tony Cosentino—Power Conversion Products, Inc.
Don Henry—La Marche Manufacturing Company
John Mitchell—RELTEC
David Muhlrad—Ratelco Electronics, Inc.
Dan Skinner—Solidstate Controls Inc.
Grover Wilson—Prestolite Power Corporation

User needs and safety considerations were addressed during the preparation of this Standard. This Standard has been reviewed and approved by the Battery Council International, Chicago, Illinois.

To facilitate consideration by the International Electrotechnical Commission, this Standards Publication is written according to the IEC Directives for the drafting and presentation of international standards. Clauses 1 to 10 are normative (equivalent to the designation of "NEMA Standard"); any informative matter (equivalent to the designation of "Authorized Engineering Information") in these clauses is contained in notes or is so indicated. Annexes A and B are informative.

The NEMA Power Electronics Section will periodically review this Standard and revise it as necessary to reflect advancing technology. Proposed or recommended revisions should be submitted to:

Vice President, Engineering Department
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This Standards Publication was developed by the NEMA Power Electronics Section. Section approval of the standard does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the Power Electronics Section was composed of the following members:

American Power Conversion—West Kingston, RI
Best Power, A Division of General Signal—Necedah, WI
Cyberex, Inc.—Mentor, OH
EPE Technologies Inc.—Palatine, IL
Georator Corporation—Manassas, VA
La Marche Manufacturing Company—Des Plaines, IL
Liebert Corporation—Irvine, CA
Power Paragon, Inc.—Anaheim, CA
Solidstate Controls Inc.—Columbus, OH
Toshiba International Corporation—Houston, TX

Section 1
SCOPE

This Standards Publication covers stabilized constant-potential-type filtered or unfiltered battery chargers which are designed to supply direct-current power from an alternating-current source to charge a float-type battery and simultaneously power the connected telecommunication system load. These battery chargers provide transformer isolation of the direct-current output from the alternate-current input and are designed for stationary mounting and continuous operation.