American National Standard for Electricity Meters—
0.1, 0.2, and 0.5 Accuracy Classes

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Approved: February 17, 2017

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Foreword (This foreword is not part of American National Standard C12.20)

This American National Standard establishes acceptable performance criteria for electricity meters. Accuracy class designations, current class designations, voltage and frequency ratings, test current values, service connection arrangements, pertinent dimensions, form designations, and environmental tests are covered.

The existing C12.20 standard has been revised with the intent to bring it up to date in an industry that is changing dramatically because of both technology and regulatory matters.

Major changes in this edition include testing under harmonic conditions, addition of a 0.1% accuracy class, clarification that non-Blondel applications are not covered by this standard, and addition of specifications for the optical test output port.

In memoriam to Herman Millican: Herman had a passion for standards and members of SC16 felt fortunate to know and learn from him.

Suggestions for improvement to this standard are welcome. They should be sent to:

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This standard was processed and approved for submittal to ANSI by Accredited Standards Committee for Electricity Metering, C12. At the time the committee approved this standard, the C12 Main Committee had the following members:

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1 Scope

This standard establishes the physical aspects and acceptable performance criteria for 0.1, 0.2, and 0.5 accuracy class electricity meters meeting Blondel's Theorem. Where differences exist between the requirements of this standard and the most current version of ANSI C12.1 and ANSI C12.10, the requirements of this standard shall prevail.