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CSA C500.1:24
National Standard of Canada

Benchmark energy factor (BEF) assessment of industrial refrigeration systems

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CSA C500.1:24
June 2024

Title: *Benchmark energy factor (BEF) assessment of industrial refrigeration systems*

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Published in June 2024 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3

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ICS 97.130.20, 27.015
ISBN 978-1-4883-5017-7

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Preface

This is the first edition of CSA C500.1, *Benchmark energy factor (BEF) assessment of industrial refrigeration systems.* It supersedes CSA C500, which was published in 2018 under the title *Monitoring and energy performance measurement of industrial refrigeration systems (IRS) using benchmark energy factor (BEF) concepts*.

CSA C500 has been separated into two Standards: CSA C500.1, which incorporates the requirements for refrigerated spaces and processes; and CSA C500.2, which incorporates the refrigeration requirements at a facility level.

The following are the major ways in which this Standard differs from the relevant corresponding parts of CSA C500:

a) The Standard has been aligned with more recent BEF standards in terms of document structure, language, terminology, and definitions.
b) Essential load and energy determination have been simplified and user inputs have been reduced to make the Standard more user-friendly.
c) Essential performance factors used for essential load and energy have been confirmed or updated.
d) Required corrections and recommendations identified from the validation study have been incorporated.

CSA Group acknowledges that the development of this Standard was made possible, in part, by the financial support of BC Hydro, Efficiency Manitoba, Electricity Canada, FortisBC, Hydro-Québec, Independent Electricity System Operator (IESO), and the Québec Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs.

This Standard was prepared by the Subcommittee on Industrial Refrigeration Systems, under the jurisdiction of the Technical Committee on Energy Efficiency of Industrial Equipment and Systems and the Strategic Steering Committee on Performance, Energy Efficiency, and Renewables, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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