# CERTIFICATION



# An Urgent Bulletin from CSA Group

**Industrial Control Equipment No. 56** 

Date: December 6, 2017

Effective Date: January 6, 2022

Apply Before July 6, 2021

Announcing: Publication of CSA Standard C22.2 No. 301-16, Industrial Electrical Machinery See Attachment 1 for affected Class Numbers.

To purchase the Standard, visit us at www.shop.csa.ca

## Who is affected?

Manufacturers of industrial electrical equipment comprised of interconnected mechanical, electrical, or electronic industrial equipment which operates in a coordinated manner.

# What do you do?

- CSA Group Service Delivery staff will contact you to address compliance with each revision as applicable to the product designs covered in your affected Certification Reports. In addition to updates to your Certificate(s) of Compliance & Report(s), testing may be required to comply with these revisions.
- Please respond within thirty (30) days of receiving CSA Group's "Application for CSA Certification Services" and "Quotation" communication. You must respond no later than July 6, 2021 in order to guarantee the update to your certification is completed by January 6, 2022. If testing is needed, we will inform you of the samples required.

## Approvals:

Products may be submitted at any time for certification to the new standard.

## **Background and Rationale:**

This Notice announces the publication of standard CSA C22.2 No. 301-16, Industrial Electrical Machinery, which is a new standard but also serves to supersede existing standards C22.2 No. 73 – Electrically-Equipped Machine Tools and C22.2 No. 105 – Electrical Equipment for Woodworking Machinery.

This notice additionally serves to announce two new certification services, specific to industrial electrical machinery, to CAN and US requirements. See attachment 2 for an overview of the structure and scope of C22.2 No. 301 used for CAN certification under new class 3883-01. New class 3883-81 for US Certification uses existing standard, NFPA 79 and UL's Outline of Investigation for Factory Automation Equipment, SU 2011.

For questions specific to your file or products contact your CSA Group technical staff associate.

Go to http://www.csagroup.org/services/testing-andcertification/certified-product-listing/ and enter your Master Contract # and the class numbers associated with this Notice to determine which of your products are affected.

## For technical questions on this Certification Notice

Contact Mike Lusk by phone 216.328.8102, fax 704.552.0683 or e-mail mike.lusk@csagroup.org

The standard edition or amendments announced in this Notice may be used for certification as of the date of issue of this Notice. The "Effective date" in this Notice is the date on which the current requirements, applicable to Certified products listed in the affected class numbers, expire and the standard edition or amendments announced in this Notice become the only requirements that may be used for certification.

In the event that currently certified products do not comply with the latest requirements outlined in this Notice after the "effective date", the certification of such models may be discontinued.



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# **ATTACHMENT 1**

# Affected Class Numbers

Class No:

# **New Class Numbers:**

3883 01, Industrial Electrical Machinery

Requirements:

CSA Standard C22.2 No 0 General Requirements - Canadian Electrical Code, Part II

CSA Standard C22.2 No. 301 Industrial Electrical Machinery

3883 81, Industrial Electrical Machinery - Certified to US Requirements

Requirements:

SU 2011 Factory Automation Equipment

NFPA 79 Industrial Machinery

# **Existing Class Numbers Affected by this Notice:**

3881 04, Tools, Machine\*

3881 05, Tools, Woodworking Machinery\*

Note: \* - Products under these classes to be reviewed by effective date to updated requirements.

# **ATTACHMENT 2**

Overview of contents and the scope of CSA C22.2 No. 301-16 – Industrial Electrical Machinery

- 0 Introduction
- 1 Scope
- 2 Reference publications
- 3 Definitions
- 4 Construction requirements
- 5 Electrical supply
- 6 Shock protection
- 7 Equipment protection
- 8 Grounding and bonding
- 9 Control circuits and control functions
- 10 Operator interface and machine-mounted controls
- 11 Control equipment
- 12 Conductors and cables
- 13 Wiring methods
- 14 Electric motors
- 15 Servo drives and motors
- 16 Receptacles and lighting
- 17 Marking and warnings
- 18 Technical documentation
- 19 Type testing and verification

Impedance test

Insulation resistance test

Dielectric strength test

Residual voltage protection test

Leakage current test

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## Functional test

Annex A (normative) — French translations of cautions, warnings, and safety instructions

Annex B (informative) — Grounding and bonding

Annex C (informative) — Guidelines for the use of supplementary protectors

# 1 Scope

## 1.1

This Standard applies to industrial electrical machinery comprising interconnected mechanical, electrical, or electronic industrial equipment operating in a coordinated manner.

## 1.2

This Standard applies to equipment rated at not more than 1000 V intended to be installed and used in non-hazardous locations in accordance with the rules of the *Canadian Electrical Code*, *Part I*.

## 1.3

This Standard applies to equipment that is

- a) permanently installed;
- b) mobile:
- c) relocatable; or
- d) self powered.

## 1.4

The industrial equipment covered by this Standard is intended for use in an ambient temperature of 0 °C to 40 °C.

#### 1.5

This Standard does not specify additional and special requirements that can apply to electrical equipment that

- a) is intended for use in open air (i.e., outside buildings or other protective structures);
- b) will use, process, or produce potentially explosive material (for example paint or sawdust);
- c) is intended for use in potentially explosive and/or flammable atmospheres;
- d) has special risks when producing or using certain materials; and
- e) is intended for use in mines.

# 1.6

This Standard does not apply to portable equipment connected by a cord and plug and operated by hand as covered by CSA C22.2 No. 71.1.

## 1.7

This Standard does not apply to self-propelled work platforms.

# 1.8

This Standard does not specify additional and special requirements that can apply to electrical welding equipment within the scope of CSA C22.2 No. 60 or CSA/CAN E60974-1.

## 1.9

This Standard may be used to supplement but does not replace requirements that already exist in a published CSA component standard.

## 1.10

In this Standard, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

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