CERTIFICATION Notice

An Urgent Bulletin from CSA Group

Industrial Control Equipment No. 59 **Effective Date: January 6, 2022**

Date: May 10, 2018 **Apply Before July 6, 2021**

Announcing: Publication of CSA Standard C22.2 No. 286-17, Industrial Control Panels and Assemblies and revisions to Special Industrial Control Panel program

See Attachment 1 for affected Class Numbers.

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

Who is affected?

Manufacturers of Industrial Control Panels under both model certification and Special Industrial Control Panel (SICP) program.

What do you do?

1. The revisions outlined in this Certification Notice will not require testing, but will require updates to your Certificate(s) of Compliance & Report(s). 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.
2. 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.

Approvals:

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

Background and Rationale:

This Notice first announces the publication of a new edition of standard CSA C22.2 No. 286-17, Industrial Control Panels and Assemblies.

In addition this notice additionally serves to announce revisions to the Special Industrial Control Panel (SICP) program, summarized as replacement of C22.2 No. 14 with C22.2 No. 286 as primary evaluation standard for CAN control panels and replacement of existing CPC series manufacturing control checklists with revised checklists CPC-100 (C22.2 No. 286 full checklist) or Product Tracking Sheet, PTS-1 (short form tracking sheet).

See attachment 2 for an overview of the revisions to C22.2 No. 286-17 when compared to previous edition C22.2 No. 286-15. See attachment 3 for an overview of differences between C22.2 No. 286-17 and standard for industrial control equipment, C22.2 No. 14-13, as applicable to control panels.

For questions specific to your file or products contact your CSA Group technical staff associate.
Go to http://www.csagroup.org/services/testing-and-certification/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 1-910-590-9666, 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.

Visit us at www.csagroup.org where you can click on "Contact Us" for the online phone listing of our Offices and Partners.

ATTACHMENT 1

Affected Class Numbers

3211 07, INDUSTRIAL CONTROL EQUIPMENT – Miscellaneous Apparatus **
3211 09, INDUSTRIAL CONTROL EQUIPMENT - Special Industrial - Control Panels
3211 89, INDUSTRIAL CONTROL EQUIPMENT - Special Industrial - Control Panels - Certified to US Standards *
3218 09, INDUSTRIAL CONTROL EQUIPMENT - Special (Custom) Industrial Con - Assemblies for Hazardous Locations
3218 89, INDUSTRIAL CONTROL EQUIPMENT - Special (Custom) Industrial Con - Assemblies for Hazardous Locations - Certified to US Standards *

Note:
** - Revisions to this class to include C22.2 No. 286 for control panels under model certification.
* - Products under these classes included only as a result to changes to overall SICP program (i.e. manufacturing control checklists).

ATTACHMENT 2

Overview of the non-editorial revisions to C22.2 No. 286-17 as compared to previous edition C22.2 No. 286-15

Clause(s)	**Summary of Changes**
2	Added reference to C22.2 No. 0.19.
3	Clarified definition of Accepted Component. Added definitions for Enclosed-Type Assembly and Open-Type Assembly.
4.1.4	Clarification of requirements for accepted components.
4.2	Added specificity for enclosed-type assemblies and additional compliance requirements of walk-in enclosures with the CE Code Part I.
4.3.1.12	Revised to specify control circuit bonding conductor sizing per 4.3.1.6.
4.6.7	Revised to make more general for any components used.
4.7.9	Added references to C22.2 No. 4 and No. 5, in addition to No. 14.
4.8.1.8	Revised to specify a control panel employing a combination motor controller with instantaneous-trip circuit breaker and overload relay.
4.8.2.1	Added exclusion of other than Class 2 types.
4.9.1	Revised requirement to clarify supplementary protection only suitable where branch circuit protection is not required, or is already provided.
4.10, 5.29	Added requirement that each supply circuit shall be provided with disconnecting means or shall be marked per 5.29.
4.12	Added references to temperature test, 7.2, as means for compliance determination.
4.12.7, 5.11	Revised ambient temperature rating marking to always be applicable (default value is 0-40 Celsius).
4.14, Table 11	New Section outlining electrical spacings requirements as specified in replaced Table 11.
6.1	Added reference to No. 0.19 for additional information on service entrance.
6.1.12	Added requirement for instructions on applicable construction of neutral assembly (previously specified in clause 6.1.17, now deleted).
6.3.1	Revised to make explicit non-hazardous location applications of IS barrier control panels.
7	New Section added for tests either required, or that may be applied if required by a specific panel construction.
7.2, Tables 16, 18-21	Temperature test added if required by Section 4.12. Values in new Table 16. Supporting properties for testing in new tables 18-21.
7.3	Dielectric Strength test added as required for production line.
7.4	Resistance to Impact test added for panels with observation windows.
Table 10	Added entry for fuseholders.
Table 17	New table for bushings dimensions.

ATTACHMENT 3

Overview of differences between C22.2 No. 286-17 and standard for industrial control equipment, C22.2 No. 14-13, as applicable to control panels. General note: Since No. 14 is intended for general industrial control equipment, and not specifically towards Industrial Control Panels. As such, any No. 14 sections not referenced in table below should be considered to not be directly applicable to panels.

Section(s), Clauses(s)		**Summary of differences between the two standards**
No. 286	**No. 14**	
1	1	Scope - Control Panels and assemblies up to 1500 V, up from 750 V assemblies. Allows ambient temperatures outside 0-40 Celsius. Added list of equipment excluded from industrial control panels requirements due to coverage under other programs.
4.1	4.1	Components - Acceptance criteria expanded.
4.2	4.2	Enclosures - Shall be approved or shall be evaluated per No. 94.1 or per No. 14 requirements (not replicated within No. 286).
4.3	4.16	Grounding and Bonding - Removed amended impedance test value (based on ampere rating of device under No. 14, now default No. 0.4 test value). Added need for evaluation of suitability of DIN rail-mounted terminations. Size of grounding conductor table (Table 31 in No. 14) replaced with reference to CE Code Part I requirements. Added requirements for multiple systems and additional bonding provisions.
4.4	4.14.1.4	Field Wiring Terminations – Added ampacity for terminations for devices intended for industrial heating controllers. Removed requirement for thickness of insulation of rubber or thermoplastic. Added notes for compliance to CE Code Part I, applicable product standards, and allowance for aluminum conductors.
4.6	4.13	Internal Wiring - Added requirements for wiring of motors, heating loads, etc. per CE Code, Part I; avoiding contact with heat generating components; individual component standard wiring requirements; and ground and bonding conductors.
4.7	4.1	Installation of Components – Added requirements regarding non-approved components; parts used in class 2 limited energy circuit, branch and feeder disconnects standards, and manual motor controllers.
4.8.1	4.11.1	General Protection – General motor branch circuit requirements revised to reflect practices for industrial control panels. Combination motor controllers accepted as branch circuit protection with additional requirements specified.
4.9	4.11.1.7	Supplementary Protection – Expanded and enhanced requirements for supplementary protectors including required short circuit current ratings, use for control circuits, and suitable application codes for various purposes.
4.10	-	Explicit requirements for disconnecting means for each supply circuit added in compliance with CE Code guidelines.
4.11	4.11.3	Instantaneous Trip Breakers – Revised requirements to specify compliance with Section 28 of CE Code and no loads other than motor control circuit.
4.12	4.2.6	Temperature – Combined requirements for enclosure thermal insulation with overall consideration of thermal effects within control panels, added means for compliance via temperature testing, and added requirements for heating means for reduced external ambients.
4.13	-	Assembly Short Circuit Current Rating(s) – New requirements collecting various criteria involved in determining panel SCCR (previously only required for panel with overload relay).
4.14	4.15	Electrical Spacings – Drastically simplified spacings requirements for panels (for example, methods A and B from No. 14 removed from consideration).
5	5	Markings – Added requirement to mark “industrial control panel (assembly)”, short circuit current rating, enclosure type rating (enclosed panels only), external ambient temperature range, and additional markings specific for panel applications.
6.1	4.17	Service Entrance Equipment – Specific reference to No. 0.19 requirements added, additional requirements for servicing and adjusting added, and additional marking requirements added.
6.2	-	Electric Heating Controllers – New requirements and markings in place for panels for heating loads.
6.3	4.18	Use of Intrinsic Safety Barriers – Requirements clarified for intent not for hazardous locations.
6.4	-	Oil and Gas Burning - New requirements and markings in place for panels for control of gas and oil burning equipment.

Section(s), Clauses(s)		Summary of differences between the two standards
No. 286	**No. 14**	
6.5	-	Compressor Controllers - New requirements in place for panels for control of air compressors.
6.6	-	Motor Control Centres - New requirements in place for modifications to motor control centre units/sections.
7.2	6.2	Temperature Test – Optional test requirements added (from original No. 14 content) if required to verify thermal compliance of panel/components in panel from 4.12.
Annex C	-	New Annex outlining means for calculating available fault current depending upon rating and impedance of transformers.
Annex D	-	New Annex summarizing application guidelines for us of supplementary protectors.
Annex E	-	New Annex providing details on application of required production line dielectric testing.