STANDARDS UPDATE NOTICE (SUN)
ISSUED: September 18, 2024

STANDARD INFORMATION

If the project requires any changes to the Certification Data Report outside of Section 1, then this SUN applies.

Standard: CSA C22.2 No. 31
Standard ID: Switchgear Assemblies [CSA C22.2#31:2023 Ed.12]
Previous Standard ID: Switchgear Assemblies [CSA C22.2#31:2018 Ed.11]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **October 31, 2025**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: No action is required for currently certified products. If modifications to the product after the effective date require an evaluation and/or testing, then the product must undergo re-evaluation to the new requirements.

Overview of Changes:

- Scope revisions
- Addition of automatic transfer switch requirements to high voltage switchgear assemblies
- Addition of expulsion type fuse testing requirements
- Revisions to Pressurized gas insulated switchgear

Specific details of new/revised requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.
1	Info	**Scope**
1.3		This Standard does not apply to a) switchboards for power distribution (see CSA C22.2 No. 244); b) switchboards for communication circuits; c) panelboards (see CSA C22.2 No. 29); d) industrial control equipment (see CSA C22.2 No. 14); e) low-voltage assemblies consisting of separately supported enclosed switches; f) enclosed circuit breakers (see CSA C22.2 No. 5); g) service meters with interconnection between them enclosed in raceways; and h) individual low-voltage switchgear and controlgear switching devices such as contactors or proximity switches (see CSA C22.2 No. 60947 series and Note 2 below). Notes: 1) Manufacturers and installers of switchgear assemblies approved under this Standard should take due note of the Canadian Electrical Code, Part I, with respect to the location of switchgear devices in areas where certain components might not be acceptable. 2) The terms “switchgear” and “switchgear assemblies” used within the content of this Standard refer to assemblies primarily intended to provide protection and control of either low- or high-voltage feeder and sub- feeder circuits in connection with the generation, transmission, distribution, and conversion of electric power. These terms should not be confused with the IEC terms “switchgear” and “controlgear” used within the context of the CSA C22.2 No. 60947 series of standards which cover individual or combinations of individual low-voltage switching devices intended for the control, measurement, or regulation of energy-consuming equipment.

CLAUSE	VERDICT	COMMENT
8	Info	**High-voltage switchgear assemblies**
8.2	Info	**Construction**
8.2.2	Info	**Electrical spacings**
8.2.2.3		For rated maximum voltages of 15 kV and less, when buses and connections are insulated or insulating barriers are used to supplement an air gap, either a) the minimum metal-to-metal spacing shall be not less than 50% of that specified in Table 4, and the insulation without the air gap shall be capable of withstanding a 50 or 60 Hz test voltage equal to 75% of the applicable value specified in Table 6 in accordance with the test method specified in Clauses 8.5.1.1and 8.5.1.2; b) the buses, connections, and any insulating barriers shall be capable of withstanding the impulse test voltage and, when required, partial discharge test voltage specified in Clause 8.5.1.3and Table 5; or c) partial discharge tests shall be performed on switchgear assemblies that use a non-restoring dielectric as the primary insulation, e.g., solid dielectric between live parts and grounded metal or between live parts of different phases. (No other media such as air, oil, or gas is part of the solid dielectric insulation system.)
8.2.3		***New clause added;*** **Automatic transfer switches** Automatic transfer switches rated 4000 A or less and over 1000 V that transfer electrical load to a locally generated power supply upon failure of the normal supply shall comply with CSA C22.2 No. 178.3 unless marked in accordance with Clause 8.4.8.
8.4	Info	**Marking**
8.4.8		***New clause added;*** If the transfer scheme does not comply with CSA C22.2 No. 178.3, as permitted by Clause 8.2.3of this Standard, the following marking shall appear on the single line diagram specified in Clause 5.4of this Standard: THIS TRANSFER SCHEME IS NOT AN AUTOMATIC TRANSFER SWITCH.
8.5	Info	**Tests**
8.5.1	Info	**Dielectric strength tests**
8.5.1.4		***New clause added;*** Switchgear with utility supplied instrument transformers shall be designed to meet the dielectric level for its applicable voltage rating, as proven by type test. When utility supplied instrument transformers are installed at the factory, the shipping split containing the metering section shall be production tested to the lowest dielectric level corresponding to either the supplied instrument transformer rating or the service equipment rating.

CLAUSE	VERDICT	COMMENT
8.5.5		***New clause added;*** **Expulsion-type fuse test** Pursuant to Clause 8.2.1.4, the expulsion-type fuses not equipped with condensers or mufflers shall be subjected to an interruption test in accordance with Clause 9.4 of IEEE C37.41 or similar equivalent procedure to the short time current rating for which the fuse is rated to interrupt. Results of the tests shall demonstrate that a) the enclosure including viewing windows can withstand the forces resulting from the operation of the fuse; b) there is no operation-impairing deformation or effect on the enclosure and its doors, latches, and interlocks (if present), and no internal components are affected except fuse; and c) during each fuse fault operation, adjacent phases shall neither operate nor be affected such as to be ready for immediate reenergizing once failed fuse is replaced.
Annex F	Info	**Pressurized gas insulated switchgear**
F.4	Info	**Construction**
F.4.4	Info	**Construction requirements**
F.4.4.11		The maximum gas leakage of gas-filled compartments provided with a means for refilling shall be ~~1%~~ 0.5% for SF6 or SF6 mixtures, or 1% for other gases per year as verified by Clause F.6.6. The maximum gas leakage of gas-filled compartments of the sealed type intended not to be subjected to leakage shall be 0.1% per year as verified by Clause F.6.6.