

# **Industrial control equipment**



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## **Industrial control equipment**

### **1 Scope**

#### **1.1**

This Standard applies to control and protective devices, and accessory devices, rated at not more than 1500 V, for starting, stopping, regulating, controlling, or protecting electric motors, generators, heating apparatus, or other equipment used to control an industrial process that is intended to be installed and used in non-hazardous locations in accordance with the rules of the *Canadian Electrical Code, Part I*.

#### **Notes:**

- (1) *Examples of the industrial control devices covered by this Standard are manual and magnetic starters and controllers; thermal and magnetic overload relays; push-button stations (including selector switches and pilot lights); control circuit switches and relays; float-, flow-, pressure-, and vacuum-operated switches; resistors and rheostats; proximity switches; time-delay relays and switches; resistors and rheostats intended for heating and lighting, including those for motor generator fields; and control devices intended for heating and lighting.*
- (2) *The term "control" as used throughout this Standard applies to both starters and controllers.*
- (3) *Electrical instruments, such as meters, that can be included as part of control equipment are not covered by this Standard.*

#### **1.2**

This Standard also applies to assemblies of industrial control and protective devices, and includes motor control centres and assemblies of automatic control and process equipment.

#### **1.3**

Certain equipment intended for use with electric elevators, air-conditioning and refrigeration equipment, cranes and hoists, electronic and solid-state control equipment, and "TV"-rated relays, etc., can be subject to additional requirements not included in this Standard.

#### **1.4**

This Standard does not apply to equipment covered by other CSA Standards, such as power supplies, programmable logic controllers, assemblies of equipment intended solely for the distribution of power, assemblies for controlling power factor, switches other than manual motor controllers, and electrical components intended to protect circuits other than motor branch-circuits.

## **2 Reference publications and general requirements**

### **2.1 Reference publications**

#### **2.1.1**

Where reference is made to CSA Standards of the *Canadian Electrical Code, Parts I and II*, such reference shall be considered to refer to the latest available edition and revision thereto. This Standard refers to the following such Standards and the year dates shown indicate the latest editions available at the time of printing:

C22.1-02

*Canadian Electrical Code, Part I*