



# Low-voltage fuses — Part 19: Photovoltaic fuses



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## Fuses – Part 19: Photovoltaic Fuses

### 1 Scope

1.1 This Part applies to fuses for photovoltaic (PV) systems rated up to 1500 Vdc.

1.2 Fuses for photovoltaic (PV) systems are intended to be used for the protection of photovoltaic strings or arrays and their associated wiring to provide protection against overloads or short circuits within the marked electrical ratings in accordance with the Canadian Electrical Code (CSA C22.1 Canadian Electrical Code Part I) in Canada, the Standard for Electrical Installations, NOM-001-SEDE, in Mexico and the National Electrical Code (NEC), NFPA-70, in the United States of America.

1.3 These types of fuses are not intended to protect downstream inverter components, such as capacitors and against the discharge of such capacitors back into the arrays.

### 2 General

2.1 This Part is intended to be read together with the Standard for Low-Voltage Fuses - Part 1: General Requirements, NMX-J-009/248/1-ANCE ♦ CAN/CSA C22.2 No. 248.1-11 ♦ UL 248-1, hereafter referred to as Part 1. The requirements of Part 1 apply unless modified by this Part.

2.2 For products intended for use in Canada, general requirements are given in CAN/CSA-C22.2 No. 0, General Requirements – Canadian Electrical Code, Part II.

### 3 Characteristics

#### 3.1 Classification

3.1.1 Fuses for photovoltaic (PV) systems shall:

- a) Be non-renewable; and
- b) Have an minimum interrupting rating of 10 kA minimum.

#### 3.2 Voltage rating

3.2.1 The voltage rating may be up to 1500 Vdc. Preferred ratings are 600 V, 750 V, 1000 V, 1250 V, and 1500 V.