

DMMS IEC 61730-1:2023 - Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction

Abstract

IEC 61730-1:2023 specifies and describes the fundamental IEC 61730-1:2023 Identical Adoption 3 construction requirements for photovoltaic (PV) modules in order to provide safe electrical and mechanical operation. Specific topics are provided to assess the prevention of electrical shock, fire hazards, and personal injury due to mechanical and environmental stresses. This document pertains to the particular requirements of construction. IEC 61730-2 defines the requirements for testing. Modules with modified construction are qualified as described in IEC TS 62915.

This document lays down requirements for terrestrial PV modules suitable for long-term operation in open-air climates with 98th percentile module operating temperatures of 70 °C or less. Guidelines for modules to be used at higher operating temperatures are described in IEC TS 63126. This document is intended to apply to all terrestrial flat plate module materials, such as crystalline silicon module types as well as thin-film modules.

This document defines the basic requirements for various applications of PV modules, but it cannot be considered to encompass all national or regional codes.