

NQ Panelboard with Fingersafe IP2X per IEC60529 Covers

Class 1640

Retain for future use.

Introduction

Schneider Electric has introduced Fingersafe IP2X per IEC60529 covers for NQ Panelboards. These covers reduce the risk of accidental contact with energized parts during OSHA and NFPA 70E allowable energized work. This document outlines the procedure followed to verify compliance of the Fingersafe IP2X per IEC60529 covers to the standard.

IP codes designation

In accordance with IEC60529, IP designators refer to a coding system to indicate the degrees of protection provided by an enclosure where the first numeral indicates the degree of protection against access to hazardous parts, ingress of solid foreign objects, and the second numeral indicates the degree of protection against ingress of water and to give additional information in connection with such protection.

IP2X

The number 2 located in the first characteristic numeral shows that the Fingersafe IP2X per IEC60529 covers provide protection against access to hazardous parts with a finger.

The X located in the second characteristic numeral signifies that the Fingersafe IP2X per IEC60529 covers were not evaluated for protection against water ingress.

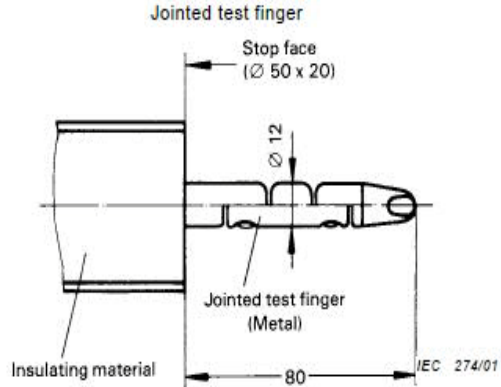
Testing procedure

Testing was performed at the Schneider Electric Monterrey Development and Innovation Center Laboratory. The lab is capable of a wide range of electrical and mechanical tests including overload, electrical and mechanical endurance, temperature rise, dielectric withstand, environmental, mechanical tension, and compression testing. Testing services are typically conducted per industry standards such as UL, ANCE, IEC or customer supplied requirements. Certification testing for UL and NOM standards is available.

Two representative NQ panelboards with IP2X covers were tested under the following conditions:

- Both units were in a clean and new condition with all parts in place and mounted in the manner stated by the manufacturer.
- None of the units were energized at the time of testing.
- None of the parts of the tested units were in motion.

A jointed test finger meeting the specifications of the standard was connected to a diagnostic circuit and inserted through the various openings of the Fingersafe IP2X per IEC60529 covers while applying a force of 10 N +/- 10%.



Testing results

Throughout the testing of the units, the jointed test finger never came into contact with any of the hazardous parts. This was verified by the constant monitoring of the diagnostic circuit and in all instances a proper clearance distance was kept. This test verifies that Fingersafe IP2X per IEC60529 covers are compliant to the standard.

