

Regulatory Compliance Standards for Anti-Restart Functionality

OSHA (U.S. Occupational Safety and Health Administration 29 CFR #1910.213. (b) (3)*)

"On applications where injury to the operator might result if motors were to restart after a power failure, provisions shall be made to prevent machines from automatically restarting upon restoration of power." *Electrical Controls for Wood Working Machinery

IEC (International Electrotechnical Commission)

60601-1 v.3 standard for OEM restart protection

11.8 Interruption of the power supply / SUPPLY MAINS TO ME EQUIPMENT

ME EQUIPMENT shall be so designed that an interruption and restoration of the power supply shall not result in a HAZARDOUS SITUATION other than interruption of its intended function.

NOTE – This can require testing at several durations and ME EQUIPMENT states.

Compliance is checked by interruption and restoration of relevant power supplies.

NFPA 79 (National Fire Protection Association Electrical Standard for Industrial Machinery 2015 Edition)

"7.5.3 Restarting. Upon restoration of the voltage or upon switching on the incoming supply, automatic or unintentional restarting of the machine shall be prevented when such a restart causes a hazardous condition." And Annex A: "A.3.3.103 Undervoltage Protection. The principal objective of this device is to prevent automatic restarting of the equipment."

NEC 2014 (NFPA 70: National Electrical Code, International Electrical Code Series)

430.43 Automatic Restarting: "A motor overload device that can restart a motor automatically after overload tripping shall not be installed if automatic restarting of the motor can result in injury to persons."

CSA (Canadian Standards Association C22.1-98)

Under voltage protection required for motors: "When automatic restarting is liable to create a hazard, the motor control device shall provide low-voltage protection." (Canadian Electrical Code, Part 1, 28-312) Automatic restart after overload: "Where automatic restarting of a motor after a shutdown on overload could cause injury to persons, the overload or overheating devices protecting the motor shall be arranged so that automatic restarting cannot occur."



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