§ 111.54–3

have at least the standard 40 degrees C ambient temperature calibration.


§ 111.54–3 Remote control.

Remotely controlled circuit breakers must have local manual means of operation.

[CGD 81–030, 53 FR 17847, May 18, 1988]

Subpart 111.55—Switches

§ 111.55–1 General.

(a) Each switch must meet Article 404 of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1).

(b) Each switch that is in the weather must be in a watertight enclosure and be externally operable.


§ 111.55–3 Circuit connections.

The load side of each circuit must be connected to the fuse end of a fused-switch or to the coil end of a circuit breaker, except a generator which is connected to either end of a circuit breaker.

Subpart 111.59—Busways

§ 111.59–1 General.

Each busway must meet Article 368 of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1).


§ 111.59–3 No mechanical cooling.

A busway must not need mechanical cooling to operate within its rating.


Subpart 111.60—Wiring Materials and Methods

§ 111.60–1 Construction and testing of cable.

(a) Each marine shipboard cable must meet all the requirements for construction and identification of either IEEE 1580, UL 1309, IEC 6092–353, or NPFC MIL–C–24640A or NPFC MIL–C–24643A (all five standards incorporated by reference; see 46 CFR 110.10–1), including the respective flammability tests contained therein, and must be of a copper-stranded type.

(b) Each cable constructed to IEC 60903–3–533 must meet the flammability requirements of Category A of IEC 60332–3–22 (incorporated by reference; see 46 CFR 110.10–1).

(c) Medium-voltage electric cable must meet the requirements of IEEE 1580 and UL 1072 (incorporated by reference; see 46 CFR 110.10–1), where applicable, for cables rated above 5,000 volts.

(d) Electrical cable that has a polyvinyl-chloride insulation with a nylon jacket (Type T/N) must meet the flammability requirements of Category A of IEC 60332–3–22 (incorporated by reference; see 46 CFR 110.10–1).

(e) Electrical cable regardless of construction must meet, at a minimum, all of the performance and marking requirements of section 5.13 of IEEE 1580.


§ 111.60–2 Specialty cable for communication and RF applications.

Specialty cable such as certain co-axial cable that cannot pass the flammability test contained in IEEE 1580, test VW–1 of UL 1581, or Category A of IEC 60332–3–22 (all three standards incorporated by reference; see 46 CFR 110.10–1) because of unique properties of construction, must:

(a) Be installed physically separate from all other cable; and

(b) Have fire stops installed—

(1) At least every 7 meters (21.5 feet) vertically, up to a maximum of 2 deck heights;

(2) At least every 15 meters (46 feet) horizontally;

(3) At each penetration of an A or B Class boundary;

(4) At each location where the cable enters equipment; or
§ 111.60–4 Minimum cable conductor size.

Each cable conductor must be #18 AWG (0.82 mm²) or larger except—

(a) Each power and lighting cable conductor must be #14 AWG (2.10 mm²) or larger; and

(b) Each thermocouple, pyrometer, or instrumentation cable conductor must be #22 AWG (0.33 mm²) or larger.