### § 111.20-15

# § 111.20-15 Protection of transformers against overcurrent.

Each transformer must have protection against overcurrent that meets Article 450 of NFPA NEC 2002 or IEC 60092-303 (both incorporated by reference; see 46 CFR 110.10-1).

[USCG-2003-16630, 73 FR 65196, Oct. 31, 2008, as amended by USCG-2013-0671, 78 FR 60153, Sept. 30, 2013]

## Subpart 111.25—Motors

#### §111.25-1 General requirements.

The requirements for generators contained in §111.12–5 apply to motors.

[CGD 74-125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94-108, 62 FR 23908, May 1, 1997]

#### §111.25-5 Marking.

- (a) Each motor must have a marking or nameplate that meets either Section 430.7 of NFPA NEC 2002 or clause 16 of IEC 60092–301 (both incorporated by reference; see 46 CFR 110.10–1).
- (b) The marking or nameplate for each motor that is in a corrosive location must be corrosion-resistant.

[CGD 74-125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94-108, 61 FR 28278, June 4, 1996; USCG-2003-16630, 73 FR 65196, Oct. 31, 2008; USCG-2013-0671, 78 FR 60153, Sept. 30, 20131

### § 111.25-15 Duty cycle.

Each motor must be rated for continuous duty, except a motor for an application listed in Table 111.25–15 or a similar duty must meet the minimum short-time rating stated in the table.

TABLE 111.25-15

Application of motor	Minimum short-time rating of motor, in hours
Deck winch and direct acting capstan.	Half.
Deck winch with hydraulic transmission.	Continuous at no load followed by ½ hr. at full load.
Direct acting windlass	One fourth.
Windlass with hydraulic transmission.	Half hour idle pump oper- ation, followed by ½ hr. full load operation.
Steering gear, direct acting	One.
Steering gear, indirect drive	Continuous operation at 15 pct. load followed by 1 hr. at full load.
Watertight door operators	1/12.
Boat winches	1/12.

## Subpart 111.30—Switchboards

### §111.30-1 Location and installation.

Each switchboard must meet the location and installation requirements in section 8.2 of IEEE 45-2002 or IEC 60092-302 (both incorporated by reference; see 46 CFR 110.10-1), as applicable.

[USCG-2003-16630, 73 FR 65196, Oct. 31, 2008]

# § 111.30-3 Accessibility of switchboard components and connections.

Each component and bus bar connection on a switchboard that is not accessible from the rear, except a bus bar connection for a draw-out type circuit breaker, must be within 0.5 m (20 in.) of the front of the switchboard.

## § 111.30-4 Circuit breakers removable from the front.

Circuit breakers, when installed on generator or distribution switchboards, must be mounted or arranged in such a manner that the circuit breaker may be removed from the front without unbolting bus or cable connections or denergizing the supply, unless the switchboard is divided into sections, such that each section is capable of providing power to maintain the vessel in a navigable condition, and meets §111.30–24 (a) and (b).

[CGD 94-108, 61 FR 28278, June 4, 1996]

## §111.30-5 Construction.

- (a) All low voltage and medium voltage switchboards (as low and medium are determined within the standard used) must meet—
- (1) For low voltages, either section 8.3 of IEEE 45-2002 or IEC 60092-302 (both incorporated by reference; see 46 CFR 110.10-1), as appropriate.
- (2) For medium voltages, either section 8.4 of IEEE 45–2002 or IEC 60092–503 (incorporated by reference; see 46 CFR 110.10–1), as appropriate.
- (b) Each switchboard must be fitted with a dripshield unless the switchboard is a deck-to-overhead mounted type which cannot be subjected to leaks or falling objects.

[CGD 94–108, 61 FR 28278, June 4, 1996, as amended at 62 FR 23908, May 1, 1997; USCG–2003–16630, 73 FR 65196, Oct. 31, 2008; USCG–2013–0671, 78 FR 60153, Sept. 30, 2013]