

§ 129.210

46 CFR Ch. I (10–1–12 Edition)

§ 129.210 Protection from wet and corrosive environments.

(a) Electrical equipment used in the following spaces must be drip-proof:

(1) A machinery space.

(2) A space normally exposed to splashing, water wash-down, or other wet conditions within a galley, a laundry, or a public washroom or toilet room that has a bath or shower.

(3) Every other space with similar wet conditions.

(b) Electrical equipment exposed to the weather must be watertight.

(c) Electrical equipment exposed to corrosive environments must be of suitable construction and must be resistant to corrosion.

§ 129.220 Basic safety.

(a) Electrical equipment and installations must be suitable for the roll, pitch, and vibration of the vessel under way.

(b) All equipment, including switches, fuses, and lampholders, must be suitable for the voltage and current used.

(c) Receptacle outlets of the type providing a grounded pole or a specific direct-current polarity must be of a configuration that does not permit improper connection.

(d) Electrical equipment and circuits must be clearly marked and identified.

(e) Any cabinet, panel, box, or other enclosure containing more than one source of power must be fitted with a sign warning persons of this condition and identifying the circuits to be disconnected.

Subpart C—Power Sources and Distribution Systems

§ 129.310 Power sources.

(a)(1) Each vessel that relies on electricity to power the following loads must be arranged so that the loads can be energized from at least two sources of electricity:

(i) Any system identified as a vital system in §128.130(a) of this subchapter.

(ii) Interior lights.

(iii) Communication systems.

(iv) Navigational equipment and lights.

(v) Fire-protection equipment.

(2) A vessel with batteries of enough capacity for 3 hours of continuous operation to supply the loads specified in paragraph (a)(1) of this section, and with a generator or alternator driven by a propulsion engine, complies with paragraph (a)(1) of this section.

(b) Where a generator driven by a propulsion engine is used as a source of electrical power, no speed change, throttle movement, or change in direction of the propeller shaft of the vessel may interrupt power to any of the loads specified in paragraph (a)(1) of this section.

§ 129.315 Power sources for OSVs of 100 or more gross tons.

(a) The requirements of this section apply instead of those in subpart 111.10 of this chapter.

(b) If a generator provides electrical power for any system identified as a vital system by §128.130(a) of this subchapter, at least two power-generating sets must be provided. At least one set must be independent of the main propulsion plant. A generator not independent of the main propulsion plant must comply with §111.10–4(d) of this chapter. With any one generating set stopped, the remaining set or sets must provide the power necessary for the loads required by this section.

§ 129.320 Generators and motors.

(a) Each generator and motor, except a submersible-pump motor, must be—

(1) In an accessible space, adequately ventilated and as dry as practicable; and

(2) Mounted above the bilges to avoid damage by splash and to avoid contact with low-lying vapors.

(b) Each generator and motor must be designed for an ambient temperature of 50 °C (122 °F), except that—

(1) If the ambient temperature, in the space where a generator or motor is, does not exceed 40 °C (104 °F) under normal operating conditions, the generator or motor may be designed for an ambient temperature of 40 °C (104 °F); and

(2) A generator or motor designed for an ambient temperature of 40 °C (104 °F) may be used in a location where the ambient temperature is 50 °C (122 °F), if