Coast Guard, DHS § 129.330

(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 the generator or motor is derated to 80 percent of the full-load rating and if the rating or setting of the overcurrent devices of the generator or motor is reduced accordingly.

(c) For each generator rated at 50 volts or more, a voltmeter and an ammeter used for measuring voltage and current while the generator is in operation must be provided. For each alternating-current generator, a means for measuring frequency must also be provided. To ensure satisfactory operation of each generator, additional control equipment and measuring instruments, if needed, must also be provided.

(d) Each generator must have a nameplate attached to it indicating—

(1) Name of manufacturer, type of generator, and designation of frame;
(2) Output in kilowatts, or horsepower rating;
(3) Kind of rating (continuous, overload, or other);
(4) Amperes at rated load, voltage, and frequency;
(5) Number of phases, if applicable;
(6) Type of windings, if DC;
(7) When intended for connection in a normally grounded configuration, the grounding polarity; and
(8) For a generator derated to comply with paragraph (b)(2) of this section, the derated capacity.

(e) Each motor must have attached to it a nameplate containing the information required by Article 430 of NFPA 70.

§ 129.326 Dual-voltage generators.

If a dual-voltage generator is installed on an OSV—

(a) The neutral of the dual-voltage system must be solidly grounded at the switchboard’s neutral bus and be accessible for checking the insulation resistance of the generator; and

(b) Ground detection must be provided that—

(1) For an alternating-current system, complies with §111.05–27 of this chapter; and

(2) For a direct-current system, complies with §111.05–29 of this chapter.

§ 129.330 Distribution panels and switchboards.

(a) Each distribution panel or switchboard must be in a location as dry as practicable, accessible, adequately ventilated, and protected from falling debris and dripping or splashing water.

(b) Each distribution panel or switchboard must be totally enclosed and of the dead-front type.

(c) Each switchboard must have non-conductive handrails.

(d) Each switchboard or main distribution panel must be fitted with a dripshield, unless the switchboard or distribution panel is of a type mounted deck-to-overhead and is not subject to falling objects or liquids from above.

(e) Each distribution panel and switchboard accessible from the rear must be constructed to prevent a person’s accidental contact with energized parts.

(f) Working space must be provided around each main distribution panel...
§ 129.340 Cable and wiring.

(a) If individual wires, rather than cables, are used in systems operating at a potential of greater than 50 volts, the wire and associated conduit must be run in a protected enclosure. The protected enclosure must have drain holes to prevent the buildup of condensation.

(b) Each cable and wire must—

(1) Have stranded copper conductors with sufficient current-carrying capacity for the circuit in which it is used;
(2) Be installed so as to avoid or reduce interference with radio reception and compass indication;
(3) Be protected from the weather;
(4) Be supported so as to avoid chafing or other damage;
(5) Be installed without sharp bends;
(6) Be protected by metal coverings or other suitable means, if in areas subject to mechanical abuse;
(7) Be suitable for low temperature and high humidity, if installed in refrigerated compartments;

(8) Be located outside a tank, unless it supplies power to equipment in the tank; and

(9) Have sheathing or wire insulation compatible with the fluid in a tank, when installed to comply with paragraph (b)(8) of this section.

(c) Cable and wire in power and lighting circuits must be #14 AWG or larger. Cable and wire in control and indicator circuits must be #22 AWG or larger, or be ribbon cable or similar, smaller, conductor-size cable recommended by the equipment manufacturer for use in circuits for low-power instrumentation, monitoring, or control.

(d) Each uninsulated current-carrying part must be mounted on noncombustible, nonabsorbent, high-dielectric insulating material.

(e) Equipment mounted on a hinged door of an enclosure must be constructed or shielded so that no person will come into accidental contact with energized parts of the door-mounted equipment when the door is open and the circuit energized.

(f) Bus capacity of switchboards and main distribution panels must be sized in accordance with §111.30–19(a) of this chapter. Panelboards must have current rating of not less than the feeder-circuit capacity.

(8) Be located outside a tank, unless it supplies power to equipment in the tank; and

(9) Have sheathing or wire insulation compatible with the fluid in a tank, when installed to comply with paragraph (b)(8) of this section.

(g) Nonconductive mats or grating must be provided on the deck in front of each switchboard and, if the switchboard is accessible from the rear, on the deck behind the switchboard.

(h) Equipment mounted on a hinged door of an enclosure must be constructed or shielded so that no person will come into accidental contact with energized parts of the door-mounted equipment when the door is open and the circuit energized.

(i) Bus capacity of switchboards and main distribution panels must be sized in accordance with §111.30–19(a) of this chapter. Panelboards must have current rating of not less than the feeder-circuit capacity.

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(f) Bus capacity of switchboards and main distribution panels must be sized in accordance with §111.30–19(a) of this chapter. Panelboards must have current rating of not less than the feeder-circuit capacity.