§ 111.30–27

Direct current ship’s service switchboards.

(a) Each direct current ship’s service switchboard must have the equipment required by paragraphs (b) through (f) of this section.

(b) For each connected generator, each switchboard must have the following:

(1) A circuit breaker that meets §111.12–11 and §111.50–5.

(2) A disconnect switch or link for each generator conductor, except a switchboard having a draw-out or plug-in type generator circuit breaker that disconnects—

(i) Each conductor; or

(ii) If there is a switch in the generator neutral, each ungrounded conductor.

(3) A field rheostat.

(4) A pilot lamp connected between the generator and circuit breaker.

(c) For each two-wire generator, each switchboard must have:

(1) An ammeter; and

(2) A voltmeter with a selector switch that connects the voltmeter to show:

(i) Generator voltage; and

(ii) Bus voltage.

(3) A pilot light connected to the shore side of the circuit breaker or fused switch; and

(4) For each shore power connection each switchboard must have:

(i) A circuit breaker or fused switch; and

(ii) A voltmeter under paragraph (b)(5) of this section connected to show the voltage of each phase of the shore power connection.

(g) The equipment under paragraphs (b), (d), (e), and (f) of this section, except the equipment under paragraphs (b)(1), (b)(2), and (f)(1), must be on the ship’s service switchboard or on a central control console that:

(1) Is in the same control area as the main ship’s service switchboard or can remotely control the ship’s service generator circuit breaker;

(2) Has a generator section that has only generator functions;

(3) Has the generator section segregated from each other console section by a fire-resistant barrier; and

(4) Has cabling from the main switchboard to the generator section of the console that:

(i) Has only generator control and generator instrumentation circuits; and

(ii) Is protected from mechanical damage.
§ 111.33-1 General.

This subpart is applicable to all power semiconductor rectifier systems.