§ 113.10–5 Common return.

A conductor must not be used as a common return from more than one zone.

§ 113.10–7 Connection boxes.

Each connection box must be constructed in accordance with Type 4 or 4X of NEMA 250 or IP 56 of IEC 60529 (both incorporated by reference; see 46 CFR 110.10–1) requirements.


§ 113.10–9 Power supply.

(a) General. There must be at least two sources of power for the electrical equipment of each fire detecting and alarm system. The normal source must be the main power source. The other source must be the emergency power source or an automatically charged battery. If the other source is an automatically charged battery, the charger must be supplied from the final emergency power source. Upon loss of power to the system from the normal source, the system must be automatically supplied from the other source.

(b) Batteries. Each battery used in a fire detecting and alarm system must meet Subpart 111.15 of this chapter.

(c) Capacity of power supply branch circuit. The capacity of each branch circuit providing power to a fire detecting or alarm system must not be less than 125 percent of the maximum load.


Subpart 113.20—Automatic Sprinkler Systems

§ 113.20–1 Sprinkler alarm system.

Each sprinkler alarm system, including annunciator, power supply, alarm switches, and bells, must meet Subpart 76.25 of this chapter.

§ 113.20–3 Connection boxes.

Each connection box and each switch enclosure in an automatic sprinkler system must be constructed in accordance with Type 4 or 4X of NEMA 250 or IP 56 of IEC 60529 (both incorporated by reference; see 46 CFR 110.10–1) requirements.


Subpart 113.25—General Emergency Alarm Systems

EDITORIAL NOTE: Nomenclature changes to subpart 113.25 appear at 61 FR 28288, June 4, 1996.

§ 113.25–1 Applicability.

(a) This subpart, except §§113.25–25 and 113.25–30, applies to each manned vessel of over 100 gross tons, except barges, scows, and similar vessels.

(b) Section 113.25–25 applies to each manned ocean and coastwise barge of over 100 gross tons if the crew is divided into watches for the purpose of steering.

(c) Section 113.25–30 applies to each barge of 300 or more gross tons that has sleeping accommodations for more than six persons.

§ 113.25–3 Requirements.

Each vessel must have a general emergency alarm system that meets the requirements of this subpart.

§ 113.25–5 Location of contact makers.

(a) Passenger vessels and cargo and miscellaneous vessels. Each passenger vessel, cargo vessel, and miscellaneous vessel must have a manually operated contact maker for the general emergency alarm system:

(1) In the navigating bridge; and

(2) At the feeder distribution panel if the general alarm power supply is not in or next to the navigating bridge.

(b) Tank vessels. Each tank vessel must have a manually operated contact maker for the general emergency alarm system:

(1) In the navigating bridge; and

(2) At the deck officers’ quarters farthest from the engineroom;

(3) In the engineroom;

(4) At the location of the emergency means of stopping cargo transfer required under 33 CFR 155.780; and

(5) At the feeder distribution panel if the general alarm power supply is not in or next to the navigating bridge.

(c) Mobile offshore drilling units. Each mobile offshore drilling unit must have
a manually operated contact maker for the general emergency alarm system:
(1) In the main control room;
(2) At the drilling console;
(3) At the feeder distribution panel;
(4) In the navigating bridge, if a navigating bridge is installed; and
(5) In a routinely occupied space that is as far as practicable from all other contact makers.

(d) Additional contact maker. A vessel must not have more than one other contact maker that operates the general emergency alarm system in addition to those required under paragraph (a), (b), or (c) of this section unless the installation of other contact makers has been accepted by the Commandant.

(e) Special system. If a vessel has an emergency squad when operating, has a manual fire alarm system, or is an ocean-going passenger vessel, it must have:
(1) An independent manually operated contact maker in the navigating bridge that is connected to operate only the general emergency alarm signal in crew’s quarters and machinery spaces; or
(2) A separate alarm system that sounds in the crew’s quarters and machinery spaces.

§ 113.25–6 Power supply.

The emergency power source for the general emergency alarm system must meet the requirements of IMO SOLAS 74 (incorporated by reference; see 46 CFR 110.10–1), Regulation II–1/42 or II–1/43, as applicable.


§ 113.25–7 Power supply overcurrent protection.

(a) If the general emergency alarm system is the only load supplied by the general emergency alarm system battery, the battery or batteries must have an enclosed fused switch or circuit breaker that has a means of locking. The fused switched or circuit breaker must be outside of, and next to, the battery room or battery locker, and the capacity of the fuses or circuit breaker must be at least 200 percent of the connected load.

(b) If the general emergency alarm system is supplied from an emergency or interior communication switchboard, or if duplicate general alarm batteries supply other loads as allowed under §113.25–6(e)(2), there must be a fused switch or circuit breaker supplying the general emergency alarm system that has a means of locking.

§ 113.25–8 Distribution of general emergency alarm system feeders and branch circuits.

(a) Each system must have a feeder distribution panel to divide the system into the necessary number of zone feeders, except where, because of the arrangement of the vessel, only one zone feeder is necessary; then a branch circuit distribution panel or feeder distribution panel must be used.

(b) The feeder distribution panel must have overcurrent protection for each zone feeder, but there must be no disconnect switches.

(c) The feeder distribution panel must be in an enclosed space next to the general alarm power supply.

(d) Each system must have at least one feeder for each vertical fire zone that has general emergency alarm signal.

(e) Each system must have one or more branch circuit distribution panels for each zone feeder, with at least one fused branch circuit for each deck level. The distribution panel must be above the uppermost continuous deck, in the zone served, and there must be no disconnect switches for the branch circuits.

(f) A branch circuit must not supply emergency alarm signal on more than one deck level, except for a single branch circuit supplying all levels of a single space containing more than one deck level if all other requirements of this section are met.

(g) On a vessel not divided into fire zones by main vertical fire bulkheads, the general emergency alarm system must be arranged into vertical service zones not more than 40 meters (131 feet) long, and there must be a general alarm feeder for each of these zones that has general emergency alarm signal.

(h) General alarm feeders and branch circuit cables must be in passageways and must not be in staterooms, lockers, galleys, machinery spaces, or other enclosed spaces, unless it is necessary