High Voltage Electrical Installations

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part H Guidance for the Survey and Construction of Steel Ships Part H

Reason for Amendment

IACS UR E11(Rev.2) specifies design and test requirements for high voltage electrical installations whose system voltages exceed 1,000 V, but are 15,000 V or less.

IACS conducted a review of UR E11(Rev.2) to bring it in line with relevant IEC standards. As a result, IACS decided to add internal arc classification requirements, etc. for high voltage electrical installations. These revisions were adopted as UR E11(Rev.3) in February 2015.

Accordingly, relevant rules were amended in accordance with IACS UR E11(Rev.3).

Outline of Amendment

- (1) Specifies that shutters used for withdrawable circuit breakers and switches are to be clearly marked using colours or labels to indicate whether they are for incoming and outgoing circuits.
- (2) Specifies internal arc classification requirements for high voltage switchboards and control boards.
- (3) Adds high voltage control boards to the items subject to internal arc fault tests.
- (4) With respect to high voltage tests of high voltage cables after installation on board, the test voltage for direct current is amended to 4.2 times from 4 times the rated voltage U_0 .
- (5) With respect to high voltage tests of high voltage cables after installation on board, the range of cables which may be tested using alternating current is amended.
- (6) IEC62271-201 is added as a reference standard for high voltage switchboards and control boards, and reference standards are amended to reflect their respective latest versions.