Meeting Report ISO TC 188 WG 10 Berlin, Germany June 19-20, 2017

Technical Committee 188 – Working Group 10, Electrical Equipment

## Combined ISO 13297 and ISO 10133, Combined AC and DC Electrical systems

Technical experts from England, Canada, Sweden, Germany, United States, France, Australia, CEN and ICOMIA were in attendance.

The WG addressed all comments received in the WD review from various international boating industry organizations, CEN and IEC.

- 1. Numerous editorial corrections were made.
- 2. 12.10. Accepted the US "seven inch" rule for ac source connectors to be 175mm (rounded from 178mm).
- 3. 14.2. Added sources of ac power.
- Comments against the systems drawing were tabled until the next meeting pending revisions by BSI and DIN.
- 5. Redefined isolation transformer, neutral point, panel board/switchboard, ground plate, anti-islanding protection, polarized system, and battery switch ratings.
- 6. 11.1 a. & b. Verify temperatures with component manufacturers. (Matches US requirements). (Action)
- 7. 18.3. Allowed uninsulated strip or braid in the bonding system.
- 8. 20.9. Allowed wire clamping devices that do not damage the conductor strands.
- 9. Modified the scope to more closely follow the wording of the RCD.
- 10. Used the battery ventilation requirements from IEC 60092-507. Action: Check the area required for battery ventilation (BSI).
- 11. The standard's scope was modified to allow an exception for conductors supplied by outboard OEMs, both internal and external to the cowling.
- 12. Bilge pumps were determined to be essential safety equipment with a maximum 3% voltage drop.
- 13. Added additional warnings and instructions to the Warning Label Annex.

## Action items:

Action recommendation from CEN: Check IEC 60092-507 against the combined ISO AC & DC standard and ABYC E-11. For the ISO portion: to be assigned.

Action: Look at standard's organization layout using IEC 60092-507 and ABYC E-11 as models. To be assigned.

Action: Develop proposals for the requirements of electric cooking, electric heating, wind and photo-voltaic generation. BSI – Russ Wombwell, ABYC - Dave Broadbent.

Action: IEC 60092-507 test list will be sent to WG members for review.

Disposition of the document: Correct minor numbering and formatting, and then distribute the WD document to committee members for a 30 day review.

## ISO 8849, Electronically operated DC bilge pumps

Technical experts from Sweden, Germany, United States, France, and CEN were in attendance.

The WG addressed all comments received in the WD review from various international boating industry organizations and CEN.

- 1. Bilge pumps shall run continuously for 24 hours at 87.5% of nominal voltage.
- 2. Electrical connections shall be watertight to IP 67.
- 3. Added that AC bilge pumps shall be fitted with an ELCI.
- 4. Expanded the scope of the standard to include AC bilge pumps and changed the title. This standard now addresses both AC and DC bilge pumps.
- 5. Added marking the pump "ISO 8846 MARINE" (ignition protection, if applicable).
- 6. Removed the 24m craft length limit from the scope of the standard.

Disposition of the document: Send incomplete comments back to originators, clarify additional requirements with convener and submit the document to the WG for a 30 day review.

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