C37.74 Working Group Meeting Minutes

May 29th 2024, 10:00 M – 11:30 AM VIRTUAL

Chair: Kennedy Darko

Secretary: Frank DeCesaro (filling in)

Meeting Agenda

1. Call to Order
2. Call for Patents and Copyrights.
    i. Patent Slides

    No issues presented by members.

    ii. Copyright Slides

    No issues presented by members.
3. Introduction of Members and Guests

    Through chat feature in MS Teams
4. Attendance and quorum check

    Quorum achieved (18 of 20 members present)
5. Approval of agenda

    Agenda was presented. There were no additions or changes suggested. Joseph moved to accept the agenda, and Karla's seconded.
6. Action Items
    - Continuation of Ballot comment resolution (attached spreadsheet)
7. Any other business
8. Next in person meeting
    - Virtual
9. Adjournment

- *Many comments (I-500, I-501, I502 etc.) related to sections 7.8.4 and 7.8.3.*
  - *The previous decision was to move 7.8.4 to the annex from the last meeting.*
  - *The chair recommends removing 7.8.4 from annex and putting in the main body. Use language similar to 9.2 that this test is not required and can be performed per agreement between user and manufacturer using IEEE 592 as a guide.*
  - *We will need to add IEE 592 to the bibliography.*
  - *No objection from WG.*

- *I- 536, Line 1, what is the difference between Ground switch and grounding switch, I personally think it's the same, take one or the other but don't use the same name during the whole document.*

  change ground switch to grounding switch.

  - *The ground switch is used in 3 places, and the grounding switch is used in 12 places.*
  - *Accepted. Will change all instances of ground switches to grounding switch.*

- *I-614, Line 1010, There is a grammatical problem with this sentence and it's not clear what it is trying to say. Is it saying that if you reach the limit and haven't stabilized, you need to keep testing? What is the purpose of this?*

  Clarify this sentence. Also, correct the grammar: Should it say "If the temperature rise . . . Is equal" or "If the temperature rises . . . are equal"?

Discussion

- *This has two parts to it and regards the temperature rise test.*
- *C62271-1 says if you stabilize the temperature below the limit, you pass the test.*
- *Chair proposes that we remove the language and add some language about pass/fail criteria.*
- *It was commented that the language in lines 1010 and 1011 say after the second interval, to force one more reading.*

  Add the following to the end of Line 1011: ". . . the tests shall be continued to confirm the rises do not exceed 5.10.2."

  Another proposal: If any temperature reading is equal to the limit of observable temperature rise in X, the tests shall be continued to confirm the rise does not exceed the observable temperature limit. This may need to be written a bit more for the document, but this is the gist.

  It was suggested to say something like the test shall be continued for an additional 30-minute interval to confirm the rise does not exceed the observable temperature limit.

The test object has passed the test if any temperature readings do not exceed the values given in 5.4.2.
OR:
The test object has passed the test if the temperature rise of the monitored points does not exceed the limit of observable temperature rise in 5.4.2.

Final agreement was on:
Place after line 1009
If any temperature reading is equal to the limit of observable temperature rise in X, the tests shall be continued for additional 30-minute interval to confirm the rise does not exceed the observable temperature limit.

The test object has passed the test if the temperature rise of the monitored points do not exceed the limit of observable temperature rise in 5.4.2.

Screen shot of what it will look like:

- *WG generally agreed.*

7.7.3.3 Test procedure

The dc resistance of the current-carrying path to be tested shall be measured and recorded before and after the continuous current test using the method in 8.18.1.

The continuous current test shall be made for a length of time that assures that the temperature rise of any monitored point in the assembly has not changed by more than 1 °C over a 1 hour period, with readings being taken at not greater than 30 minute intervals. The frequency of the test current shall not be less than the rated power-frequency of the assembly tested.

If ~~the~~ any temperature reading ~~rises after the second interval~~ is equal to the limit of observable temperature rise in ~~(5.4.25.10.2) and if the temperature rise has increased since the last reading~~, the tests shall be continued for an additional 30 minute interval to confirm the rise does not exceed the observable temperature limit.

The test object has passed the test if the temperature rise of the monitored points do not exceed the limit of observable temperature rise in 5.4.2.

- *I-619, Line 1024, Reword this paragraph to align with comment on line 1023*

  "The purpose of these tests is to verify that the DSG or a DSG module is capable of carrying its rated peak withstand current, its rated short-time withstand current for the required duration, and rated fault-making current if applicable."

  - *Accepted*

- *I-628, Line 1395, Hanging paragraph. Also I do not see the value in referencing Figure 3.*

  Move this paragraph under heading "7.7.8.1 General". Also remove ref to Figure 3.

  - *Revised.*
  - *(See Figure 3) will be changed to (See Table 8)*

- *I-651, Line 1617, Not all units have fuses.*

  Rewrite points b) and c):

- *b) The circuit configuration is shown correctly.*
- *C) For fused units, the fuses are connected properly and the fuses fit in the holders or mountings.*
    - *Accepted.*

- I-544, Line , The short time withstand current test is missing in Table 7 and should be listed after the peak withstand test.

  The short time withstand current test is missing and should be listed after the peak withstand test.

    - *Reject: Table 7 lays out the test sequence to be completed on individual way. Short time test is not part of the sequence and can be completed on a separate switch.*

- *I-697, Line 1576, The text used for this test was from the Fault interrupter standard (C37.62). Incorporating a 2000 cycle requirement for Load-Break Switching is excessive since Load-Break switches typically operate far less than their Fault Interrupter counterparts.*

  Remove section 7.10 Mechanical Duty Test since mechanical operations are already a part of the design testing sequence. Or, list as an optional test with a cycle requirement determined between the user and manufacturer.

    - *The WG previously agreed that the 50 mechanical operations in the table 7 and table 6 are not enough. However it is also realistic to not expect a loadbreak device to be subjected to 2000 operations. An ad hoc need to review and make recommendations.*

- *Request for next week, everyone was sent the Editorial comment resolution suggestions. WG asked to review and send comments to be discussed or vote on accepting these?*

End of session

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