IEEE C37.13, Low-Voltage AC Power Circuit Breakers Used in Enclosures

Minutes

| Meeting Date: | 26 July 2021 |
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| Meeting Time: | 8 AM – 9:30 AM CDT |
| Location: | Online Meeting |

A. Call to order

The meeting of the thermal testing ad hoc (under the oversight of the IEEE C37.13 Working Group) was called to order at 8:05 am CDT.

B. Approval of agenda

Version 1.0 of the proposed meeting agenda was approved by unanimous consent.

C. Attendance

Introductions were made of all attendees. Attendees are listed below.

Eleven ad hoc members were in attendance.

| Name | Company | Member/Guest |
|-----------------|-------------------------|--------------|
| Keith Flowers | Siemens Industry, Inc. | Chair |
| Ted Burse | Powell Industries, Inc. | Member |
| Clint Carne | Schneider Electric | Member |
| Dan Delfino | ABB | Member |
| Lou Grahor | Eaton Corporation | Member |
| Tom Hawkins | Siemens Industry, Inc. | Member |
| Michael Lafond | ABB | Member |
| Albert Livshitz | CE Power | Member |
| Richard Rohr | Powell Industries, Inc. | Member |
| Eddie Wilkie | Eaton Corporation | Member |
| Danish Zia | UL LLC | Member |

Attendees:

D. Rules and guidelines for conducting working group meetings

The IEEE Patent Policy and Business Conduct slides were reviewed. For reference, they may be may be found at the following website:

https://mentor.ieee.org/myproject/Public/mytools/mob/slideset.pdf

A call for essential patents was made, however none were brought to the attention of the ad hoc.

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E. New business

Thermal testing of low-voltage power circuit breakers and low-voltage switchgear was discussed. Some areas of investigation were identified by the team:

- Maximum ventilation limits for circuit breaker test enclosure faces?
- Circuit breaker test conductors:
 - Standard lists the minimum length of the test conductors. Should there be limitation to length of test conductors? Should there be a temperature delta limitation for the test conductors?
 - Standard is silent on phase-spacings of test conductors. Should there be limits to phase spacings of test conductors?
 - Standard is silent on coatings of test conductors. Should there be limitation or restrictions against coatings of test conductors?
 - The test conductors and circuit breaker terminals are tested in free air. Should the test conductors and/or terminals be enclosed?
- Requirements of the test enclosure (mock compartment) will be reviewed and compared between IEEE Std PC37.13 and IEEE Std C37.20.1.
- Method for determining temperature stabilization should be reviewed between IEEE Std PC37.13 and IEEE Std C37.20.1 for potential harmonization (if there are differences noted.

The team will also review other industry standards for power switching devices for potential best-practices.

F. Next steps discussion

The team will further explore the topics listed in New Business in a follow-up discussion targeted for late August 2021 (specific date and time to-be-determined by poll).

G. Adjourn

The ad hoc completed the agenda and adjourned the meeting at 9:15 am CDT.

Minutes submitted by: Keith Flowers Ad Hoc Chair July 26, 2021