

IEEE C37.20.1 Par Study Group Meeting Minutes

IEEE Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear

Meeting Date: October 6, 2020

Meeting Time: 1:30 pm - 3:15 pm (CST)

Location: Microsoft Teams On-line Meeting

Attendance

Members: 26

Attendance is recorded at the end of the meeting minutes.

A. Call to Order

The meeting was called to order by PAR Study Group Chair, M. Lafond at 1:30pm (CST) on October 6, 2020.

B. Introductions

Participants introduced as recorded above.

C. Approval of Agenda

Agenda shared and approved by unanimous consent

D. Verbal Call for Essential Patents

None identified

E. Working Group P&P's

Link for Working Group P&P's shared

F. Review Draft PAR Document

Revision 1 of Draft PAR document shared with group on-line. Draft PAR makes no changes to title, scope but does add new language for purpose clause which was reviewed by the group.

Two editorial changes recommended by the group. In the PAR document section 5.5, include the publish date of 2020 for the reference of C37.20.1a. In the PAR document section 5.6, change 1000Vac to 1000 Vac and 3200Vdc to 3200 Vdc.

Motion by P. Barnhart for the PAR Study group to recommend for a full revision PAR for C37.20.1 with the above editorial corrections. 2nd: M. Valdes. Motion approved unanimously by PAR Study Group.

Actions for Chair: Complete editorial corrections in draft PAR document and report recommendation to SA S/C. Record revised PAR language in meeting minutes.

G. Discuss Topics for next Revision

Floor was open to collect subject areas within C37.20.1 that should be considered as a priority for potential WG effort. Topics are listed below for future WG consideration.

- Clause 4 Normal Service Conditions: review/update any changes for new language from C37.20.2 or 20.3
- Clause 6.2.7.2/6.2.7.11.2: review language for accessibility to stored energy springs
- Clause 5: consider new preferred rating of 1,200A to coordinate with C37.13 activity
- New: consider language for door testing/validation to align performance with circuit breaker interruption.
- New: consider informative language for guidance on working distance rules for remote racking
- New: consider language to require closed door racking when maintenance/repair is not required
- Clause 5.5.5: delete clause per SA S/C recommendations and/or review C37.20.2 activity on same subject
- Table 4: Do we update table to reflect higher temperature materials and adjust values
- New: consider language to address breaker door openings when breaker is removed (shutters standard?)
- Clause 6.2.11: review/update any changes for new language from C37.20.2 or 20.3

H. Adjourn

Meeting adjourned at 3:40pm (CST)

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Role	First Name	Last Name	Company
Chair	Michael	Lafond	ABB
Member	Darryl	Moser	ABB
Member	Paul	Barnhart	UL
Member	Dan	Hrncir	Eaton
Member	Lou	Grahor	Eaton
Member	Randy	Creach	AZZ Switchgear
Member	Bryan	Tatum	UL
Member	Owen	Parks	ABB
Member	Federico	Di Michele	CESI Italy
Member	Alex	Lizardo	Cargill
Member	Paul	Barnhart	Underwriters Laboratories
Member	Keith	Flowers	Siemens Industry, Inc.
Member	Paul	Rakus	Eaton
Member	Dave	Gohil	AZZ Switchgear
Member	Paul	Sullivan	DuPont
Member	Jim	Lagree	Eaton
Member	Xin	Zhou	Eaton
Member	Richard	York	Mitsubishi Electric
Member	Will	Zhang	Hitachi
Member	Matt	Westerdale	Bureau of Reclamation
Member	Steven	May	Southern Company
Member	Bill	Bergman	Retired – Bergman & Associates
Member	Marcelo	Valdes	ABB
Member	Jason	Cunningham	Southern Company
Member	Chris	Jarnigan	Southern Company
Member	Doug	Edwards	Siemens Industry

PC37.20.1

Submitter Email:**Type of Project:** Revision to IEEE Standard C37.20.1-2015**Project Request Type:** Initiation / Revision**PAR Request Date:****PAR Approval Date:****PAR Expiration Date:****PAR Status:** Draft**Root Project:** C37.20.1-2015

1.1 Project Number: PC37.20.1**1.2 Type of Document:** Standard**1.3 Life Cycle:** Full Use

2.1 Project Title: Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear**Change To Title:** ~~IEEE~~ Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear

3.1 Working Group: SASC - 37.20.1 - IEEE Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear(PE/SWG/SASC-WG 37.20.1)**3.1.1 Contact Information for Working Group Chair:****Name:** Michael Lafond**Email Address:** mike.lafond@us.abb.com**3.1.2 Contact Information for Working Group Vice Chair:**

None

3.2 Society and Committee: IEEE Power and Energy Society/Switchgear(PE/SWG)**3.2.1 Contact Information for Standards Committee Chair:****Name:** Keith Flowers**Email Address:** keith.flowers@ieee.org**3.2.2 Contact Information for Standards Committee Vice Chair:****Name:** Douglas J Edwards**Email Address:** doug.edwards@ieee.org**3.2.3 Contact Information for Standards Representative:****Name:** Michael Wactor**Email Address:** mwactor@ieee.org

4.1 Type of Ballot: Individual**4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:** Jun 2024**4.3 Projected Completion Date for Submittal to RevCom:** Dec 2024

5.1 Approximate number of people expected to be actively involved in the development of this project: 50**5.2 Scope of proposed standard:** This standard covers metal-enclosed low-voltage power circuit breaker switchgear assemblies containing, but not limited to, such devices as low-voltage power circuit breakers (fused or unfused); other interrupting devices; switches, control, instrumentation, and metering; and protective and regulating equipment. This standard is concerned with enclosed, rather than open, indoor and outdoor switchgear assemblies. It includes types of equipment that are part of secondary unit substations. It does not apply to equipment covered by industrial control standards, communication switchboards, communication switching equipment, switchboards for use on board ships, or dead-front distribution switchboards. In this standard, metal-enclosed low-voltage power circuit breaker switchgear shall be called LV switchgear. For LV ac switchgear, the nominal system voltage shall be 1000 Vac or below; for LV dc switchgear, the rated maximum voltage shall be 3200 Vdc or below.**Change to scope of proposed standard:** This standard covers metal-enclosed low-voltage power circuit breaker switchgear assemblies containing,but not limited to, such devices as low-voltage power circuit breakers (fused or unfused)  other interrupting

devices, switches, control, instrumentation, and metering and protective and regulating equipment. This standard is concerned with enclosed, rather than open, indoor and outdoor switchgear assemblies. It

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switchgear, the rated maximum voltage shall be 3200 Vdc or below.

5.3 Is the completion of this standard contingent upon the completion of another standard? No

5.4 Purpose: This standard:

- a) Establishes minimal functional requirements
- b) Establishes preferred rating structure
- c) Provides preferred ratings
- d) Establishes design and production testing

Change To Purpose: This standard: a) Establishes minimal functional requirements b) Establishes preferred rating structure c) Provides preferred ratings d) Establishes design and production testing

5.5 Need for the Project: This is a general technical revision of the document to incorporate C37.20.1a-2020 and industry accepted changes into the standard.

Change to Need for the Project: This is a general technical revision of the document to incorporate C37.20.1a, ~~C37.20.1b~~ -2020 and industry accepted changes into the standard ~~and to provide increased information as relates to use of LV dc switchgear in traction power applications-~~

5.6 Stakeholders for the Standard: Users, specifiers, manufacturers, owners and operators of metal-enclosed low voltage (1000 Vac and below, 3200 Vdc and below) power circuit breaker switchgear.

Change to Stakeholders for the Standard: Users, specifiers, manufacturers, owners and operators of metal-enclosed low voltage (~~1000Vac~~ 1000 Vac and below, ~~3200Vdc~~ 3200 Vdc and below) power circuit breaker switchgear.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project?

No

6.1.2 Is the Standards Committee aware of possible registration activity related to this project?

No

7.1 Are there other standards or projects with a similar scope? No

7.2 Is it the intent to develop this document jointly with another organization? No

8.1 Additional Explanatory Notes :