



Sherry
Hampton/STDS/STAFF/
US/IEEE

10/02/2007 11:29 PM

To mwactor@powl.com

cc tburse@powl.com, stds-pes-scc@ieee.org,
doug.edwards@ieee.org, Matthew
Ceglia/STDS/STAFF/US/IEEE@IEEE

bcc

Subject Approval of Project - PC37.27

02 October 2007

Michael Wactor
Powell Electrical Systems, Inc.
8550 Mosley Drive
Houston, TX 77075
mwactor@powl.com

Re: PC37.27 - Application Guide for Low-Voltage AC Power Circuit Breakers Applied With Separately Mounted Current-Limiting Fuses

Dear Michael:

I am pleased to inform you that on 27 September 2007 the IEEE-SA Standards Board approved the above referenced project until 31 December 2008 with the editorial changes to Items 5.2 and 5.4. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/C37-27.pdf>.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

Rosters can be submitted in any format to the NesCom Administrator (nescom-admin@ieee.org). Please forward this list to the NesCom Administrator via e-mail at nescom-admin@ieee.org no later than 26 December 2007.

Or, for your convenience, you can manage your standards development roster in myProject. Instructions are as follows:

- Go to myProject - <https://development.standards.ieee.org/my-site>
- Login using your IEEE Web Account username and password.
- Once logged into myProject, go to "Manage Committees"
- Drill down to the project by clicking the (+) on the left to expand each level. The actual project will be highlighted in yellow

●Click "Manage Committees" for that project. A list of individuals enrolled in the Committee/Project will appear. On this screen you can assign whether a person is a Participant, a Non-Voting Member or a Voting Member of the project group. You may also view contact information for that individual.

Please visit our website, IEEE Standards Development Online (<http://standards.ieee.org/resources/development/index.html>), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any questions, please contact the NesCom Administrator via e-mail at nescom-admin@ieee.org or via telephone at +1 732 562 3806.

Sincerely,

NesCom Admin
Standards Activities
Email: nescom-admin@ieee.org

PAR Request Date: 11 July 2007**PAR Approval Date:** 27 September 2007**PAR Signature Page on File:** Yes**Type of PAR:** Modification to Approved PAR**Status:** Modification to a Previously Approved PAR for the Revision of a Standard - PC37.27, 23 September 2004**Root Project:** IEEE Std C37.27-1987**1.1 Project No.:** **C37.27****1.2 Type of Document:** Guide**1.3 Life Cycle:** Full-Use**1.4 Is this document in ballot now?** No**2.1 Title**

Application Guide for Low-Voltage AC Power Circuit Breakers Applied With Separately Mounted Current-Limiting Fuses

3.1 Working Group Name[Low Voltage Switchgear Devices Subcommittee](#)**Working Group Chair**[Edwards, Douglas J](#)

Phone: 919-365-2337

Email: doug.edwards@ieee.org

Working Group Vice Chair**3.2 Sponsor**[IEEE Power Engineering Society Switchgear \(PE/SWG\)](#)**Sponsor Chair**[Burse, Ted](#)

Phone: 713-948-4599

Email: tburse@powl.com

Name of Standards Liaison Representative (if applicable)[Wactor, Michael](#)

Phone: 713-948-4918

Email: mwactor@powl.com

3.3 Joint Sponsor**4.1 Type of Ballot:** Individual**4.2 Expected Date of Submission for Initial Sponsor Ballot:** September 2008**4.3 Projected Completion Date for Submittal to RevCom:** September 2009**5.1 Approximate number of people expected to work on this project:** 9

5.2 Scope: This guide applies to low-voltage power circuit breakers of the 635 V maximum voltage class with separately mounted current-limiting fuses for use on ac circuits with available short-circuit currents of 200 000 A (rms symmetrical) or less. Low-voltage ac fused power circuit breakers and combinations of fuses and molded-case circuit breakers are not covered by this guide. This guide sets forth recommendations believed essential for the selection of current-limiting fuses (see NEMA FU-1 and UL248-1) for use in combination with low-voltage ac power circuit breakers, rated in accordance with ANSI/IEEE C37.13 and applied in Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear in accordance with ANSI/IEEE C37.20.1. NOTE - The combination of a circuit breaker and separately mounted fuses is limited to 600 V based on fuse maximum voltage ratings.

Old Scope: The scope changed from the original PAR. Original PAR Scope was: This guide applies to low-voltage power circuit breakers of the 600 V insulation class with separately mounted current-limiting fuses for use on ac circuits with available short-circuit currents of 200 000 A (rms symmetrical) or less. Low-voltage integrally fused power circuit breakers and combinations of fuses and molded-case circuit breakers are not covered by this guide. This guide sets forth recommendations believed essential for the selection of current-limiting fuses (see ANSI C97.1-1972 (R 1978) [3]) for use in combination with low-voltage power circuit breakers, rated in accordance with ANSI/IEEE C37.13-20XX and applied in Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear in accordance with ANSI/IEEE C37.13-1981 [4]. Revised Scope is: This guide applies to low-voltage power circuit breakers of the 600 V maximum voltage class with separately mounted current-limiting fuses for use on ac circuits with available short-circuit currents of 200 000 A (rms symmetrical) or less. Low-voltage integrally fused power circuit breakers and combinations of fuses and molded-case circuit breakers are not covered by this guide. This guide sets forth recommendations believed essential for the selection of current-limiting fuses (see NEMA FU-1 and UL248-1) for use in combination with low-voltage power circuit breakers, rated in accordance with ANSI/IEEE C37.13-20XX and applied in Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear in accordance with ANSI/IEEE C37.20.1-2002.

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

5.4 Purpose: This project is to address the following issues: 1) short-circuit protection of unprotected wiring on circuit breakers, 2) modification of all dimensional information to provide metric dimensions, 3) general revision for harmonization related standards 4) general revision for current products and applications.

Old Purpose: This PAR is being revised to reflect a revision to this Scope. [Revised 2004-08-16 Scope]. The scope change includes revisions to the referenced standards C97.1 which was withdrawn and not superceded. Referenced NEMA and UL standards provide the required references associated with current-limiting fuses. The purpose of the original project remains unchanged and is as follows: The structure of the standard is not changed from the original C37.27-1987 standard and thus does not include a purpose of document statement. Purpose of this project: This project is to address the following issues: 1) short-circuit protection of unprotected wiring on circuit breakers, 2) modification of all dimensional information to provide metric dimensions, 3) general revision for harmonization related standards 4) general revision for current products and applications.

5.5 Need for the Project: No revision is made from the statement concerning the specific reasons for this project from the previously approved PAR.

5.6 Stakeholders for the Standard: The end users of the application guide will be the manufacturers and end users of nonintegrally fused power circuit breakers.

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes **Presented Date:** 2007-05-09

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

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

If yes, please explain:

Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? ? Do not know at this time

Technical Committee Name and Number:

Contact person:

Contact person Phone Number:

Contact person Email Address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

7.4 Additional Explanatory Notes:

The Title and the Scope are being modified. Title: The title is changed from "Low-Voltage AC Nonintegrally Fused Power Circuit Breakers (Using Separately Mounted Current-Limiting Fuses)" to "Low-Voltage AC Power Circuit Breakers Applied with Separately Mounted Current-Limiting Fuses." This change removes the qualifier of "Nonintegrally Fused". The revision of the title details that this is an application guide for all low-voltage AC power circuit breakers. The qualifier of "Guide for AC Nonintegrally Fused" was considered confusing. Scope: The scope was revised (2nd sentence) to also remove this adjective "integrally". In the sentence it details what is not covered by the guide - all low-voltage ac fused are not covered by this guide instead of just (per the previous scope) low-voltage ac integrally fused power circuit breakers.

8.1 Sponsor Information:

Is the Scope of this project within the approved scope/definition of the Sponsor's Charter? Yes

If no, please explain:

[Email This Letter](#)

06 December 2006

Michael Wactor
Powell Electrical Systems, Inc.
8550 Mosley Drive
Houston, TX 77075
mwactor@powl.com

Re: PC37.27 - Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuit Breakers
(Using Separately Mounted Current-Limiting Fuses)

Dear Michael:

I am pleased to report that on 06 December 2006 the IEEE-SA Standards Board approved the extension request of the above-referenced project until 31 December 2008.

If you should have any further questions, please contact me at +1 732 562 6003 or by email at s.hampton@ieee.org.

Sincerely,

Sherry Hampton
Administrator, Governance
Standards Activities
Phone +1 732 562 6003
FAX +1 732 875 0695
Email: s.hampton@ieee.org

CC: tburse@powl.com, stds-pes-scc@ieee.org, doug.edwards@siemens.com

IEEE-SA Standards Board Extension Request

Revised 23 June 2004

1. Date of Request: 5-Oct-06
2. Assigned Project Number: PC37.27
3. Project Title: Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuit Breakers (Using Separately Mounted Current-Limiting Fuses)
 - a. Name of Working Group (WG): C37.27
 - b. Name of Working Group Chair: Douglas J. Edwards
 - c. Name of Sponsoring Society and Committee: Power Engineering Society Switchgear
 - d. Name of Sponsoring Committee Chair: Jeff Nelson
4. Contact Information (Contact should be the person who will answer any questions concerning this extension request):
 - a. Name: Douglas J. Edwards
 - b. Telephone: 919-365-2337
 - c. FAX: 919-365-1337
 - d. EMAIL: doug.edwards@siemens.com
5. Statement of why an extension is required. This should include a description of what the working group has accomplished and what remains to be accomplished, along with the reasons why the work was unable to be completed in the allotted timeframe The document has been balloted and is in the process of resolving ballot comments. The delays were primary due to hot discussions but resolutions of these issues are being resolved. Recirculation ballot should be initiated in November 2006 and the contriversal issues are being resolved.
6. History
 - a. What date was the PAR first approved? 11-Dec-02
 - b. What date did you begin writing the first draft? 1-Jan-00
 - c. How many people are actively working on the project? 8
 - d. How many times a year does the working group meet:
 1. In person? 2
 2. Via teleconference? 2
 - e. How many times a year is a draft circulated to the working group via electronic means? 3
7. Document Progress
 - a. What percentage of the Draft is stable? 95%
 - b. How many significant work revisions has the Draft been through? 11
8. Project Plan

(Item #8a is only for projects that have been balloted. If your draft has not yet gone to ballot, please go to Item #8b)

a. Balloting History - Provide history of all IEEE Sponsor ballots under this project::

1st Ballot Close date (or scheduled close): 2005-10-26

1st Ballot Draft Number: 9

1st Ballot results (% affirmative, %negative, %abstain): 92% Affirmative, 8% Negative, 2% Abstain

2nd Ballot Close date (or scheduled close):

2nd Ballot Draft Number:

2nd Ballot results (% affirmative, %negative, %abstain):

(Add additional entries for ballots as needed):

When do you estimate that the final IEEE Sponsor ballot will be completed? 1-Jun-07

When do you expect to submit the proposed standard to RevCom? 1-Jun-07

b. For projects that have not yet begun Sponsor ballot, please answer the following:

When will IEEE sponsor balloting begin?

When do you estimate that the final IEEE Sponsor ballot will be completed?

When do you expect to submit the proposed standard to RevCom?

9. Future Adoptions

- If this is a new document, will it be adopted (in part or in whole) by another national, regional or international organization? No If yes, which organization?
- If this is a revision of an existing document, has this document been adopted by the IEC, ISO, ETSI, SCC, etc? No If yes, which organization?

10. Additional Extensions

a. Is this the first request for an extension? Yes (If yes, please do not go any further. You have completed the form.)

b. If not, when was the previous extension approved?

After completion of this form, please e-mail this to the NesCom Administrator at nescom-admin@ieee.org. Confirmation of submittal will be sent on receipt of this request.

Jodi Haasz

09/23/2004 03:32 PM

To: michael.d.sigmon@us.abb.com
cc: doug.edwards@siemens.com, amonroe@uscopower.com,
stds-pes-scc@ieee.org
Subject: PC37.27

23 September 2004

M. Dean Sigmon
ABB Inc.
2300 Mechanicsville Road
Florence, SC 29501-0524
michael.d.sigmon@us.abb.com

Re: PC37.27 - Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuit Breakers (Using Separately Mounted Current-Limiting Fuses)

Dear M. Dean:

I am pleased to inform you that on 23 September 2004 the IEEE-SA Standards Board approved the above referenced project until 31 December 2006. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/C37-27.pdf>. The New Standards Committee would ask that you consider adding the voltage range to the title when the Guide is being revised.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at <http://standards.ieee.org/guides/par/roster.xls>. Please forward this list to me via e-mail at j.haasz@ieee.org no later than 21 December 2004.

Please visit our website, IEEE Standards Development Online (<http://standards.ieee.org/resources/development/index.html>), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at 732-562-6367 or by email at j.haasz@ieee.org.

Sincerely,

Jodi Haasz
Program Manager
International Stds Programs and Governance
Standards Activities
Phone +1 732 562 6367
FAX +1 732 875 0695
Email: j.haasz@ieee.org

PAR FORM

PAR Status: Revision of Revision PAR

PAR Approval Date: 2004-09-23

PAR Signature Page on File: Yes

1. Assigned Project Number: C37.27

2. Sponsor Date of Request: 2004-08-16

3. Type of Document: Guide for

4. Title of Document:

Draft: Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuit Breakers (Using Separately Mounted Current-Limiting Fuses)

5. Life Cycle: Full-Use

6. Type of Project:

6a. Is this an update to an existing PAR? Yes

If Yes: Indicated PAR number/approval date: C37.27 - 2002-12-11

If Yes: Is this Project in Ballot now? No

6b. The Project is a: Revision of Std C37.27-1987

7. Working Group Information:

Name of Working Group: C37.27

Approximate Number of Expected Working Group Members:8

8. Contact information for Working Group Chair:

Name of Working Group Chair: Douglas J Edwards

Telephone: 919-365-2337 **FAX:** 919-365-1337

Email: doug.edwards@siemens.com

9. Contact information for Co-Chair/Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair:

Name of Co-Chair/Official Reporter, Project Editor or Document Custodian:

Telephone: FAX:

Email:

10. Contact information for Sponsoring Society or Standards Coordinating Committee:

Name of Sponsoring Society and Committee: Power Engineering Society Switchgear

Name of Sponsoring Committee Chair: Alec C Monroe

Telephone: 205-592-7241 **FAX:** 205-592-9485

Email: amonroe@uscopower.com

Name of Liaison Rep. (if different from the Sponsor Chair): M. Dean Sigmon

Telephone: 843-413-4707 **FAX:** 843-413-4850

Email: michael.d.sigmon@us.abb.com

Name of Co-Sponsoring Society and Committee:

Name of Co-Sponsoring Committee Chair:

Telephone: FAX:

Email:

Name of Liaison Rep. (if different from the Sponsor Chair):

Telephone: FAX:

Email:

11. The Type of ballot is: Individual Sponsor Ballot

Expected Date of Submission for Initial Sponsor Ballot: 2004-03-01

12. Fill in Projected Completion Date for Submittal to RevCom: 2005-10-01

Explanation for Modified PAR that completion date is being extended past the original four-year life of the PAR:

13. Scope of Proposed Project:

The scope changed from the original PAR. Original PAR Scope was: This guide applies to low-voltage power circuit breakers of the 600 V insulation class with separately mounted current-limiting fuses for use on ac circuits with available short-circuit currents of 200 000 A (rms symmetrical) or less. Low-voltage integrally fused power circuit breakers and combinations of fuses and molded-case circuit breakers are not covered by this guide. This guide sets forth recommendations believed essential for the selection of current-limiting fuses (see ANSI C97.1-1972 (R 1978) [3]) for use in combination with low-voltage power circuit breakers, rated in accordance with ANSI/IEEE C37.13-20XX and applied in Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear in accordance with ANSI/IEEE C37.13-1981 [4].

Revised Scope is:

This guide applies to low-voltage power circuit breakers of the 600 V maximum voltage class with separately mounted current-limiting fuses for use on ac circuits with available short-circuit currents of 200 000 A (rms symmetrical) or less. Low-voltage integrally fused power circuit breakers and combinations of fuses and molded-case circuit breakers are not covered by this guide. This guide sets forth recommendations believed essential for the selection of current-limiting fuses (see NEMA FU-1 and UL248-1) for use in combination with low-voltage power circuit breakers, rated in accordance with ANSI/IEEE C37.13-20XX and applied in Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear in accordance with ANSI/IEEE C37.20.1-2002.

Is the completion of this document contingent upon the completion of another document? No

14. Purpose of Proposed Project:

This PAR is being revised to reflect a revision to this Scope.

[Revised 2004-08-16 Scope]. The scope change includes revisions to the referenced standards C97.1 which was withdrawn and not superceded. Referenced NEMA and UL standards provide the required references associated with current-limiting fuses.

The purpose of the original project remains unchanged and is as follows:

The structure of the standard is not changed from the original C37.27-1987 standard and thus does not include a purpose of document statement. Purpose of this project: This project is to address the following issues: 1) short-circuit protection of unprotected wiring on circuit breakers, 2) modification of all dimensional information to provide metric dimensions, 3) general revision for harmonization related standards 4) general revision for current products and applications.

14a. Reason for the standardization project:

No revision is made from the statement concerning the specific reasons for this project from the previously approved PAR. The end users of the application guide will be the manufacturers and end users of nonintegrally fused power circuit breakers.

15. Intellectual Property:

Has the sponsor reviewed the IEEE patent policy with the working group? Yes

Is the sponsor aware of copyrights relevant to this project? No

Is the sponsor aware of trademarks relevant to this project? No

Is the sponsor aware of possible registration of objects or numbers due to this project? No

16. Are there other documents or projects with a similar scope? No

Similar Scope Project Information:

17. Is there potential for this document (in part or in whole) to be adopted by another national , regional or international organization? Do not know at this time

If yes, please answer the following questions:

Which International Organization/Committee?

**International Contact
Information?**

18. If the project will result in any health, safety, or environmental guidance that affects or applies to human health or safety, please explain in five sentences or less.

19. Additional Explanatory Notes: (Item Number and Explanation)

Line 6 - The scope of the PAR has been revised.

The titles of the references are as follows:

ANSI C97.1-1972 (R 1978) - Low Voltage Cartridge Fuses, 600 volts or less

IEEE PC37.13 - Standard for Low-Voltage AC Power Circuit Breakers Used in Enclosures

ANSI/IEEE C37.20.1-2002 - IEEE Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear