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02 November 2006

William R Goldbach
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Re: PC62.39 - Test Methods for Self-Restoring Current Limiter Components used in
Telecommunication Surge Protectors

Dear William:

I am pleased to inform you that on 02 November 2006 the IEEE-SA Standards Board approved the above referenced project until 31 December 2010. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/C62-39.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"

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 s.hampton@ieee.org no later than 31 January 2007.

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 +1 732 562 6003 or by email at s.hampton@ieee.org.

Sincerely,

Sherry Hampton
Administrator, Governance
Standards Activities
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CC: d.dorr@ieee.org, stds-pes-scc@ieee.org, m.j.maytum@ieee.org

PAR Request Date: 28 September 2006

PAR Approval Date: 02 November 2006

PAR Signature Page on File: Yes

Type of PAR: New IEEE Standard

Status: PAR for a New IEEE Standard

Root Project:

1.1 Project No.: **PC62.39**

1.2 Type of Document: Standard

1.3 Life Cycle: Full-Use

1.4 Is this document in ballot now? No

2.1 Title

Test Methods for Self-Restoring Current Limiter Components used in Telecommunication Surge Protectors

2.1 Amendment/Corrigenda Title

3.1 Working Group Name [Low Voltage Solid State Surge Protection Devices WG](#)

Working Group Chair

[Maytum, Michael J](#)

Phone: +44 7879 697652

Email: m.j.maytum@ieee.org

Working Group Vice Chair

3.2 Sponsor

[IEEE Power Engineering Society Surge Protective Devices/Low Voltage \(PE/SPDLV\)](#)

Sponsor Chair

[Dorr, Douglas S](#)

Phone: 407-968-3010

Email: d.dorr@ieee.org

Name of Standards Liaison Representative (if applicable)

[Goldbach, William R](#)

Phone: 804-318-1739

Email: wgoldbach@ieee.org

3.3 Joint Sponsor

4.1 Type of Ballot: Individual

4.2 Expected Date of Submission for Initial Sponsor Ballot: November 2007

4.3 Projected Completion Date for Submittal to RevCom: July 2008

5.1 Approximate number of people expected to work on this project: 10

5.2 Scope: This standard sets terms, test methods and measurement procedures for series connected, self-restoring current limiter components used in low-voltage telecommunication circuit surge protectors. It is only applicable for components in telecommunications circuits with voltages equal to or less than 1000 V rms or 1200 V dc. The self-restoring current limiters covered by this standard have the following properties: · Excessive current causes a transition from a low-resistance state to a high-resistance state · Reverts to a low-resistance state when the excessive current ends · Directly operated by the current flow through the component · Solid-state (no moving parts) · Withstands specified levels of impulse · Withstands specified AC voltage levels when in the high-resistance state Examples of this type of current limiter technology are positive temperature coefficient step-function thermistors of ceramic or polymeric material and silicon semiconductor based electronic circuits. This standard does not cover self-restoring current limiter components used in other applications, such as heaters, inrush-current limiters or sensing devices. Current interrupting type components, which reduce the current to zero by a mechanical circuit break, are not covered by this standard. In this standard, a telecommunications circuit is a circuit that uses metallic conductors to handle the remote transmission of information, such as data, communications and signalling.

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

5.4 Purpose: The test criteria and terms of this standard provide a means of component comparison and a common engineering language for users and manufacturers of self-restoring current limiter components intended for use in low-voltage telecommunication circuit surge protectors. The test and measurement of low-voltage telecommunication (data, communications, and signalling) surge protectors is given in IEEE Standard C62.36. This standard provides the corresponding component tests for the surge protector non-surge and active tests.

5.5 Need for the Project: None of the existing standards adequately cover the testing of self-restoring current limiters for use in Telecommunication Surge Protectors. Such standards are: UL 1434 (APRIL 3, 1998), Thermistor-type devices A general PTC and NTC thermistor safety document. Testing does not cover many of the parameters needed for surge protector use e.g. Impulse withstand. ITU-T Recommendation K.30 (03/93), Positive temperature coefficient (PTC) thermistors Tests are for equipment applications and not surge protector usage (where the current limiter is usually connected after the voltage limiter). Critical tests, like component inherent resistance recovery, are not covered. IEC 60738-1 (1998), Thermistors – Directly heated positive step-function temperature coefficient – Part 1: Generic specification Only covers thermistors made with ceramic material. Testing does not cover many of the parameters needed for surge protector use e.g. Impulse withstand.

5.6 Stakeholders for the Standard: The stakeholders are telecom designers, standards makers, specifiers and test houses concerned with these components.

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:** 2006-05-01

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:

1) This is a component for a surge protector, but technically not a surge protective component, as it doesn't limit voltage. Thus the standard number isn't automatically an SPDC C62.xx, but for protective function linking a C62.xx number would be helpful. 2) A companion PAR, IEEE PC62.69 Standard Specifications for Self-Restoring Current Limiter Components used in Telecommunication Surge Protectors has been submitted. 3) In the 2005 - 2008 Study Period of the ITU-T Study Group 5: Protection against electromagnetic environment effects there is Question 13/5 (Protective components and assemblies) containing project Kocp. Kocp is for OverCurrent Protectors, a revision of Recommendation K.30. The scope of Kocp has not been formulated yet, but it is possible some material from this PAR project could be used in Kocp. 4) The project applicability to SPDC was discussed on the IEEE SPD Forum at <https://www.ieeecommunities.org/spd?go=1285614> The closing message reads Sent: Wednesday, October 06, 2004 6:47 AM Subject: Re: SPD components and SPDs Mich: Considering your clarification I see no problem with the PAR being sponsored by SPDC. In my opinion it is within the scope of the SPDC activity as per you description. Joe Koepfinger 5) The formulation of the PAR entries was done on the IEEE SPD Forum at <https://www.ieeecommunities.org/spd?go=1285634>

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: