

**IEEE Power Engineering Society  
Switchgear Committee  
Low Voltage Switchgear Devices Subcommittee**

**C37.13 and C37.27 Working Group Report  
October 3, 2006 – Milwaukee, Wisconsin**

PC37.13 and PC37.27 working groups (combined) met for Wednesday morning session (8 – 11 AM) with seven (7) members, 12 guests present and one excused member.

The IEEE Patent Slides were shown and reviewed.

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

**Distributed documents included:**

C37.13/D17

Comments – C37.13/D15a & D16 creating D17.

Excerpt from UL248-1 (Aug. 1, 2000) and excerpt from UL248-10 (Aug. 1, 2000)

**Discussion Items**

PC37.13/D15a ballot comments were discussed along with revisions made creating a draft D17. Target issues were identified by chair, highlighted in the Comments Form, and only the key issues targeted for discussion.

1. References to other standards will be not carry dates or clause/table references. Clauses and table references, although desirable, are not considered essential so they will be deleted.
2. Temperature testing of fuses on circuit breakers will not be included. The need for additional tests versus the coverage of these temperature rise details by the current test protocol led to conclusion that no additional test were justified or needed.
3. 13x versus 12x instantaneous settings was discussed. The 13x maximum setting was approved based on coordination with NEC.
4. References to NEC instead of using the previous text which referenced C37.16 and specific tables was discussed. C37.16 tables associated with HP and FLA are being removed from C37.16 and replaced with references to NEC. Thus the proposed references to NEC will be kept as shown in C37.13/D17 draft in coordination with C37.16.
5. A "Grandfather" clause is added to clarify retesting requirements. The legal pros and cons were discussed considering anti-trust and product liability issues. The proposed Grandfather clause provides clarification with the existing retesting protocol.

Jean-Claude Maurice (Co-Chair of C37.16 WG) brought two issues to C37.13 WG for discussion.

6. Clarification of the definitions of Fused CB's versus integrally fused and nonintegrally fused circuit breakers. The terms used in C37.100 for Low-voltage power circuit breakers and in C37.13 and C37.27 current drafts were reviewed and no additional changes of the definitions deemed necessary. See below under C37.27 discussion items concerning the Title and Scope for C37.27.
7. Should high endurance circuit breakers be established? Although manufacturers may offer high-endurance circuit breakers, there were no application requirements identified justifying preferred ratings being established.

**Schedule**

C37.13/D18 will be distributed to WG members and guest at the Milwaukee, WI meeting for review. Target is to distribute this in October 2006 with requested responses by mid-November.

PAR extension will be initiated. The PAR is valid this December 2006.

New draft should be out for recirculation in November 2006. This recirculation will be run concurrently for C37.13 and C37.27.

**C37.27 Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuit Breakers  
(Using Separately Mounted Current-Limiting Fuses)**

**Documents distributed**

C37.27/D11

Comments – C37.13/D9 and D10 creating D11.

**Discussion Items**

PC37.27/D9 ballot comments were discussed along with revisions made creating a draft D11. Target issues were identified by chair, highlighted in the Comments Form, and only the key issues targeted for discussion.

1. Title and text were updated associated with the Clause 5.2.4 associated with the minimum fuse ratings and coordination with the Trip Device.
2. Reviewed the applicability of C37.27 to integrally fused circuit breakers. The conclusion was that the current text in C37.13 and C37.27 will be maintained for now and there will request fro coordination with C37.50. Consideration for revising the title and scope will be made in the future.

**Schedule**

C37.27/D12 will be distributed to WG members and guest at the Milwaukee, WI meeting for review. Target is to distribute this in October 2006 with requested responses by mid-November.

PAR extension will be initiated. The PAR is valid this December 2006.

New draft should be out for recirculation in November 2006. This recirculation will be run concurrently for C37.13 and C37.27.

Report submitted by: D. Edwards, PE  
PC37.13 and PC37.27 WG Chair