

## Residual Current Devices



### Annual Report 2014

#### Scope

The RCD TF was established by ETCI in September 1996 to provide a specialist focus for the formulation of standards for residual current devices. The Task Force is responsible for monitoring the work of CLC TC23E and IEC SC23E in so far as it relates to RCDs and for providing appropriate advice to ETCI Council.

The Task Force is also responsible for ETCI [Publication ET 214](#) (Guide to the Selection and Use of Residual Current Devices), which is available as a free download from the ETCI web site.

The work of ETCI RCDTF leads to the publication of European Standards, which in turn are transposed into Irish Standards.

A full catalogue of Irish Standards is available at [www.standards.ie](http://www.standards.ie)

#### International TCs Shadowed by this TC

[IEC SC23E](#): Circuit breakers and similar equipment for household use

[CLC TC23E](#): Circuit breakers and similar devices for household and similar applications

#### Irish Industry/Sector Served by this TC

Manufacturers and users of residual current devices. The standards developed by IEC SC23E/CLC TC 23E are also referenced by other ETCI TC's such as TC2 in the Wiring Rules, ET101.

## Residual Current Devices

### 1. Review of the Year 2014

ETCI RCDTF met on two occasions in 2014:

DATE	VENUE
13 May 2014	ETCI Head Office
25 November 2014	ETCI Head Office

## IEC

### IEC/SC23E/WG2

WG2 is responsible for product standards in relation to shock and fire protection for products for household and similar use. This covers MCBs, RCDs and arc fault detectors (AFDs).

The main areas covered during 2014 were as follows:

**Revision of IEC 61008 & IEC 61009.** This work involves converting these standards into a "Blocks & Modules" format to facilitate the easier development of new RCD standards by taking appropriate Blocks or Modules from existing standards and dropping them into the new standards. This should save time and effort in the drafting of the new standards.

**Revision and updating of IEC 62640 (SRCD's).** This standard continues to undergo revision because of its increasing use worldwide and the highlighting of problems or anomalies with the existing publication. Ireland and the UK have been in the forefront of proposed changes to the standard.

**Draft document IEC TS 62710 deals with RCDs with Additional Functions.** This document sets out specific requirements not covered by the relevant RCD product standards. This work progressed during the year and is likely to be completed in 2015.

**IEC 62606 covers Arc Fault Detection Devices (AFD).** This standard was published in 2013, and sets out the requirements for arc fault protecting devices. Consideration is now being given to extending this standard to cover multiphase products.

### Classifications

It is proposed to replace the existing four classifications for RCDs in IEC 61008 and IEC 61009 with six classifications to cover the different characteristics of RCDs available on the market. This work started in 1991 and has been stalled on numerous occasions due to commercial interests overriding technical requirements. The work was expected to have made considerable progress during 2014, but no progress was made during the year and the work appears to be stalled once again.

**WG7 is responsible for drawing up requirements for RCD protection in Mode 2 Electric Vehicle Charging.**

Shock protection for Mode 2 charging is provided by an RCD fitted within the plug or the cable supplying power to the electric vehicle (EV). WG7 met earlier this year to continue the development of an IEC standard for these devices. This work will carry over into 2015.

**WG8 is responsible for drawing up requirements for RCD protection in Mode 3 Electric Vehicle Charging.**

Shock protection for Mode 3 charging is provided by an RCD fitted within the EV charging station. WG8 met twice during the year to continue the development of an IEC standard for these devices. This work will carry over into 2015.

## **CENELEC**

CENELEC TC23E largely mirrors the work done in IEC. CENELEC TC23E met in Paris on 27 June 2014.

Ireland was unable to attend this meeting, but changes proposed jointly by IE and the UK, with regard to SRCDs, were approved at this meeting. Following changes approved in IEC, HD 62640 (SRCDs) will be amended by CLC TC23E.

## **2. Membership 2014**

<b>NAME</b>	<b>ORGANIZATION</b>
Mr. J. O'Dwyer	UCD, CHAIRMAN
Mr. P. Ward	Western Automation
Mr. B. Abbott	NSAI, SECRETARY

## **2. International Meetings 2014**

Mr Ward is an active member of the following international bodies:

IEC/SC23E/WG2    - RCDs for household and similar use  
IEC/SC23E/WG7    - RCDs for electric vehicles – Mode 2  
IEC/SC23E/WG8    - RCDs for electric vehicles – Mode 3

CLC/TC23E        - RCDs for household and similar use in a European context

Mr. Ward attended the following IEC meetings in 2014:

<b>DATE</b>	<b>COMMITTEE</b>	<b>LOCATION</b>
15-16 April 2014	IEC/SC23E/WG8	Frankfurt
5-7 May 2014	IEC/SC23E/WG7	Frankfurt
3-4 July 2014	IEC/SC23E/WG8	Paris
2-4 December 2014	IEC/SC23E/WG2	Bordeaux

## **4. ETCI Publications Developed by TC During 2014**

No new ETCI publications in 2014.

## **5. Programme for Coming Year**

The RCD TF will maintain a high level of contact with IEC SC23E and CENELEC TC23 through active participation in the work and activities of these bodies. The RCD TF will continue to operate in an efficient and effective manner, particularly through the use of electronic communications.