Every two months, CompEx Certification's Technical Director Paul Hague will offer his perspective on the latest developments in the world of standards.

A fter a little over 10 years, IEC 60079-17 Electrical installations inspection and maintenance' was published on 1 December 2023. But what of its "partner standard" IEC 60079-14? Well, we had to wait just a little bit longer!

The news that the 6th Edition of the IEC standard 60079-14 'Electrical installation design, selection and installation of equipment, including initial inspection' went to the BPUB stage (IEC stage code BPUB: "Being published") on 19 July was welcomed by many and was, for some, considered long overdue. Whilst I was pondering what to consider as a theme for my first article, the standard was finally published on 30 August and from looking at various social media posts since this was received with a certain degree of fanfare.

The purpose of this article is to highlight some of the changes to IEC 60079-14 and draw your attention to the additional guidance provided by the standard.

The first change is actually in the title and is straightforward; the word 'erection' has gone, replaced with the more recognisable and common term 'installation'. The other change to the title is including the term 'initial inspection', to ensure that all the key areas addressed in the standard are highlighted.

I suspect the most fundamental change in terms of navigating your way through the standard, and one which will take the most getting used to, is a change to the format.

## Changes in standard

There are now specific sections covering design, selection, installation and initial inspection. Whilst this appears sensible, there is inevitably some overlap, so caution is recommended here.

For example, Designers may need to refer (subject to the design scope) to the installation section (Section 8) for guidance on certain aspects that may affect the decisions they make. This will also apply to aspects of the installation that may require an understanding of the equipment design. This philosophy outlined in the 5th and 6th Edition under Annex A, 'Knowledge, skills and competencies' remains, but nonetheless serves as a useful reminder.

Like the previous Edition, this new 6th Edition assists the reader by extending the Foreword to include a table of significant changes which are categorised in three ways; 'Minor and editorial changes', 'Extension' and 'Major technical changes'. In addition to the identification on the relevant clause, further context has also been provided with information regarding the reason for the change.

In addition to this, and included in the Foreword, Table 2 provides guidance on the clauses for special types of equipment as they relate to the requirements under design, selection and installation. Alongside this, Table 3 provides guidance on the clauses for additional requirements against the type of protection under design, selection and installation.

In addition to the title and format changes described above, other changes include:

- Introduction of a new flowchart covering flameproof cable entry devices. This considers equipment groups, cable lengths and enclosures with volumes ≤ 2,000 cm³. The flowchart also refers to a new 'improved' normative Annex C, replacing the previous informative Annex E, and covers pressure testing of cables into flameproof enclosures.
- Change to the application of adaptors and reducers to align with the product standard requirements.

- Re-introduction of a separate clause covering cable jointing.
- The previous normative Annex C, tables for initial inspection, are now included in a new informative Annex O. Mirroring the requirements of IEC 60079-17, this allows for customised checklists for specific installations.
- A new initial inspection table covering the type of protection Ex "o" liquid immersion has also been introduced.
- For Designers, clarification on the application of the "1% rule" as it applies to the design of intrinsically safe circuits as well as the alignment of simple apparatus with IEC 60079-11.

So, what is CompEx doing in response to the release of the new standard?

As part of a wider qualifications review and given the changes, not least to the format of the new standard, we had already started with our subject matter experts to review the potential impact of the latest edition to IEC 60079-14.

Our detailed assessment has resulted in 'The CompEx Standard Guide - Electrical installations design, selection and installation of equipment, including initial inspection (IEC 60079-14)' which provides a useful cross-reference between the new 6th Edition and the familiar 5th Edition, and highlights the significance of any changes to specific clauses.

The release of this free resource will coincide with the publication of this edition of HazardEx, so please watch out for details on our website, https://compexcertification.com/ and our social media channels. ■

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