



Every two months, SGS Baseefa Technical Manager Ron Sinclair MBE gives his perspective on the latest developments in the world of standards.

Its standards time again

considered. Much clearer than the previous term “non-divergent”.

The requirements for wiring between enclosures, that is carried out as part of manufacture in the factory, is now clarified as requiring to meet the relevant requirements of IEC 60079-14. This was already in IEC 60079-46 for assemblies, but it is recognised that there are many instances where the same requirements should apply but are not subject to the assembly standard.

There was considerable discussion about the current market for replacement lamps that were not considered as part of the original luminaire. This mainly concerns substitution by a more environmentally friendly lamp (LED or CFL) but there can be many unexpected consequences for the explosion protection. It is difficult to get the message “Don’t do it” into a construction standard, but there is now a direct reference to IEC 60079-17 (Inspection and Maintenance) and IEC 60079-19 (Repair and Modification). Maintenance on a luminaire includes replacing a failed lamp with one listed in the manufacturer’s instructions. Fitting a lamp that is not listed is considered a modification, with all that is implied by IEC 60079-19, including marking with the repair triangle and the name and address of the modifier.

In order to align with ISO/IEC 80079-34 (QA systems for Ex Equipment) and IECEx Operational Document OD 017, the standard will now highlight the difference between “Schedule Drawings” and “Related Drawings” in the section on documentation. Putting all manufacturing drawings into the certificate schedule can cause real headaches for the manufacturer and certifier alike. If you are not sure why, I suggest you download OD 017 from www.iecex.com.

When it comes to testing, the table of impact values has been titivated and should be clearer (with no intentional change for existing equipment) and there is now greater clarity on the circumstances where such

a test may be waived due to the intended location after installation.

Marking of Ex-Components has been clarified, to confirm that they are never marked with a temperature class or an ambient temperature range, as that can only be decided once the component is installed in an equipment. For the Ex-Component, the critical data is the Service Temperature, i.e. the maximum temperature permitted for the materials of construction once mounted in the equipment.

We introduced the possibility of digital marking, to supplement the text marking. This can be by a QR Code, or an electronic identification tag.

There was considerable discussion on the use of “X” marking to indicate Specific Conditions of Use. A concern has been expressed from more than one group of people, but predominantly the users of equipment, that they are not always able to fulfil the requirements. And sometimes they do not even understand them. A horizontal working group, across all standards, has been set up to look at this, but the intent is to reduce the numbers of such conditions, applied by certification bodies, that are not using text explicitly provided in the standards.

As the series of meetings has not finished when I am writing this, I will bring more information in my next article. ■

During the last week in September and the first week in October, we were scheduled to have a series of international meetings in Dubai. As the repercussions of the pandemic continued, we switched to virtual meetings.

We continued work (started in 2019) to prepare the first formal draft for the next edition of IEC 60079-0. There is nothing startling in the pipeline, so most equipment already certified to the current edition will still comply, but the opportunity has been taken to remove some ambiguities and provide clarification where necessary.

We clarified the difference between personal and portable equipment, and this distinction is used later in the standard. “Personal” only includes things normally in contact with the skin. Everything else is “portable” as, although it is often used when carried, it can be laid down whilst operating. “Hand held”, is no longer used as a description.

A whole raft of new definitions has been introduced related to Insulation Coordination, including clarity in distinguishing between macro- and micro-environments. These support more than one standard, where different electrical segregations are required according to the local environment.

There is now clarity that for light sources as a potential ignition risk, only those with a focal point in the hazardous area need to be

About the author

SGS Baseefa’s Technical Manager Ron Sinclair MBE will continue to attend the European Notified Bodies Group for ATEX (ExNGB), although representing SGS Fimko, their partner EU Notified Body, now that the UK bodies are excluded. He is Chair of the IECEx Service Facility Certification Committee and a member of the IECEx Executive. He is chair of the UK Standards Committee operating in this area for electrical equipment, and recently retired as chair of the European committee.