**INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

**Title: Reconfirmation of Decisions Sheets falling under the 5 year review (2015)**

**Circulated to: ExTAG – IECEx Testing and Assessment Group**

**INTRODUCTION**

During the ExTAG 2020 Remote Meeting it was agreed that the ExTAG Chair and Deputy Chair review the Decision Sheets listed in ExTAG/626A/Inf Decisions Sheets falling under the 5 year review of their validity in accordance with IECEx OD 035 and make recommendations to the ExTAG.

This document is the result of the review and is submitted for consideration by the ExTAG during the ExTAG 2021 Remote Meeting.

This updated version ExTAG/649A/R now includes recommended actions on 2015/012 DS 2015/013 and DS 2015/0-14 with an Annex A being proposed revision of 2015/014.

***Please inform the Secretariat immediately of any omissions or errors at***

***Christine Kane***

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**To re-confirm the following Decision Sheets, now falling under the 5 year review**

| **Document Number** | **Standard No.** | **Clause/Subject** | **Comments of TC 31**  **(added January 2021)** | **Comments of originator(s)** |
| --- | --- | --- | --- | --- |
| **DS 2015/019** | IEC TS 60079-40 | Reference to: IEC TS 60079-40 Explosive atmospheres - Part 40: Requirements for process sealing between flammable process fluids and electrical systems: 2015 (First Edition). | This is still needed for the foreseeable future until there is new activity on IEC TS 60079-40. | Recommend that this DS is re-confirmed.  Chris Agius (2021-02-10) |
| **DS 2015/018** | IEC 60079-1:2014  (Edition 7.0)  IEC 60079-1:2007  (Edition 6.0)  ISO/IEC 80079-34 :2011 | Spigot joints/Conical joint. | This is still needed for the foreseeable future (at least 2 more editions of IEC 60079-1) and will be referred to MT 60079-1 for consideration when work on the next edition starts. | As recommended by MT 60079-1, we would like to maintain this Decision Sheet while the IEC 60079-1 Ed.6 and Ed.7 can be used. We have noted that the 60079-1 Ed. 8 will consider this decision.  -Thierry Houeix (2021-06-29) |
| **2015/017** | **Withdrawn Dubai Meeting** | | | |
| **DS** [**2015/016A**](https://www.iecex.com/dmsdocument/50) | IEC 60079-11:2011 Ed.6.0  IEC 60079-1:2014 Ed. 7.0 | Testing of thermocatalytic sensors with Ex ia IIC marking. | This is still needed until current and prior editions of these standards do not allow “i” on thermocatalytic sensors and IEC 60079-1:2014 is the prior edition. | 2015/016A – still needed  -Mike Slowinske (2020-09-30) |
| **DS 2015/015** | IEC 60079-1 Ed. 7 (2014)  IEC 60079-1 Ed. 6 (2007) | Enclosures welded or brazed together. | This is still needed and will be referred to MT 60079-1 for consideration when work on the next edition starts. | TC 31 has stated that the DS is still needed. Based on that comment, it seems clear that it should be re-confirmed.  -Bill Fiske (2021-06-24) |
| **DS 2015/014** | IEC 60079-15:2010  IEC 60079-7:2015 | Terminal Boxes open to the interior of the motor. | IEC 60079-15 ed. 5 no longer has this text, but the DS must remain for the prior edition.  IEC 60079-7:2015 ISH1 addressed this. The DS should be revised to be consistent with ISH1 and the CD of IEC 60079-7 ED6. Please advise if you would like TC 31 to initiate the revision proposal. | Edited draft revision ExTAG/660/CD provided as Annex A in this document.  -Ron Sinclair (2021-07-26) |
| **DS 2015/013** | IEC 60079-26:2014 | Vibration test on partition walls. | IEC 60079-26:2020 still has this same wording. I emailed the convenor of the MT (Gerold) to confirm it has not been addressed. This is still needed due to the previous edition anyway. | Retain for the previous edition.  However, the current edition does refer to IEC TS 60079-40 for the vibration test. The reference, although not specific, would seem to be to 5.2.3. This relates only to pressure cycling and not to other forms of vibration, e.g. mechanical flexing. The reference clause would not, therefore seem to cover all situations.  TC31 are asked to provide further comment.  -Ron Sinclair (2021-07-26) |
| **DS 2015/012** | IEC 60079-7:2006  IEC 60079-15:2010  IEC 60079-7:2015 | Card Edge Connectors. | IEC 60079-15:2017 no longer discusses ‘card edge connectors’, but edition 4 remains the one prior edition.  31/1519/CD addresses this, but the DS will have to remain in place until this and a subsequent edition are both issued. | Retain without amendment.  -Ron Sinclair (2021-07-26) |
| **DS 2015/011A** | IEC 60079-0 | IEC 60079-0 and subordinate standards IECEE OD-5012 Edition 1. | Although IEC 60079-0 ed. 7 clause 26.5.1.1 parag 3 provides some guidance, this DS is much more informative and should be kept. | I agree with the TC31 comments and recommend keeping the DS  -Ron Webb (2021-02-04) |
| **DS 2015/010** | **IEC 60079-31:2008 (Ed. 1.0)**  **IEC 60079-0:2007 (Ed. 5.0)**  **IEC 60079-0:2011 (Ed. 6.0)** | **Marking of Ex t equipment intended for installation partly in Zone 20 and partly in Zone 21.** | This is addressed in the current editions, but is still needed for prior editions. | **Still needed**  The comment of TC 31 is acceptable for me.  Xu Jianping  (2021-02-13) |
| **2015/009** |  |  |  | 2015/009 – still needed  -Mike Slowinske (2020-09-30) |
| **2015/008** |  |  |  | 2015/008 – still needed (2014 is still the latest 79-1 version, and the latest 79-15 version (2017) no longer has enclosed break, so that version need not be added)  -Mike Slowinske (2020-09-30) |
| **2015/007** |  |  |  | 2015/007 – still needed  -Mike Slowinske (2020-09-30) |
| **DS 2015/006** | IEC 60079-0:2011  (Edition 6.0)  IEC 60079-1:2014  (Edition 7.0) | Use of thread inserts in aluminium flameproof enclosures.  Translated Version: (Portugese Version PT) | We do not know the involvement of TC 31 in this DS.  TC 31 will send this to the MTs for consideration of possible update related to the current and previous editions | No response from originator Paul van Nijen (kiwa, Netherlands) |
| **DS 2015/005** | IEC 60079-0:2011 (Ed. 6.0) | Applicability of Non-Electrical Equipment Standards to Ex Rotating Electrical Machines. | This still needed for the prior edition. needs to be checked by WG22 and WG27 if it is needed for the current edition and for any proposed update of the ds. | 2015/005 – needs to be revised as it references draft non-electrical standards, which are now published  -Mike Slowinske (2020-09-30) |
| **DS** [**2015/004**](https://www.iecex.com/dmsdocument/62) | IEC 60079-31:2008 (Ed. 1.0)  IEC 60079-31:2013 (Ed. 2.0)  IEC 60079-0:2007 (Ed. 5.0)  IEC 60079-0:2011 (Ed. 6.0) | marking of ex t equipment with and without layers of dust. | this ds is in conflict with the current edition of 79-0. it needs to be sent to WG22 for review and update to reflect the current publications and one prior editions | I am of the belief that this DS should remain as the standards listed are still applicable under the current plus one rule permitted by IECEx. I did discuss this with the WG22 convenor and Bill agreed with the retaining the DS.  As the DS was reviewed by TC31 WG22, and changes were made for IEC 60079-0 Ed 7, there is the possibility it could be revised so that the answer, instead of the proposal to make a request to WG22, could be to replace the text of the last three bullet points with the applicable text of the marking section is instead, they are technically equivalent, but this seems ‘make work’ when the existing DS is sufficient.  I hope this helps.  Best regards  Nicholas Ludlam  (2021-02-03) |
| **DS** [**2015/003**](https://www.iecex.com/dmsdocument/63) |  |  |  | 2015/003 – still needed. The new decision sheet from LCIE (ExTAG agenda item 9.4) was on a similar topic, so maybe some small changes are needed to refer to that DS, when it is published.  -Mike Slowinske (2020-09-30) |
| **DS 2015/002** | IEC 60079-18:2009  (Ed. 3.0)  IEC 60079-18:2004  (Ed. 2.0) | Determination of faults This document slightly modifies ExTAG DS 2014/003 to address changes introduced during the revision and publication of IEC 60079-11 Ed 6.0. .ExTAG DS 2014/003 has been withdrawn. | We do not know the involvement of TC 31 in this DS.  TC 31 WILL SEND THIS TO MT60079-18 FOR CONSIDERATION OF POSSIBLE UPDATE RELATED TO THE CURRENT AND PREVIOUS EDITIONS | What I can tell you is that DS2015/002 was developed by Nick Ludlam (FME) and Ron Sinclair (BAS) to consistently address “faults” in IEC 60079-18, Ed 2 and 3. The DS remains valid for those editions, and I can confirm it has nothing to do with IEC TS60079-40.  Please let me know if that answers the question I couldn’t figure out.  Bill William G Lawrence, P.E (2021-02-3) |
| **2015/001A** | **withdrawn 2020-01-01 Decision 2018/19 (ExMC/1436/DL)** | | | |
| **2015/001** | **replaced by 2015/001A** | | | |

**ExTAG/660/CD**

**August 2021**

**ANNEX A to ExTAG/649A/CD**

**A revision of ExTAG DS 2015/014**

**COLLECTION OF IECEx / ExTAG DECISIONS**

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| **Standard:** IEC 60079-15:2010  IEC 60079-7:2015 | **Clause:**  8.3  5.2.3 | **Date: 2015 09 15**  **Revised July 2021**  **Originator of proposal:** SGS Baseefa on behalf of IEC TC31 WG 27 |
| **Subject:**  Terminal Boxes open to the interior of the motor  **Status: Draft** | **Key words:**   * Terminal Box * Motor | **TC/SC involved:**  TC31 WG27  **Draft Decision Sheet:**  ExTAG/660/CD |
| **Question**:  Do the requirements given in 8.3 of IEC 60079-15:2010 or 5.2.3 of IEC 60079-7:2015 prohibit the use of a terminal box open to the interior of a motor rated 1 kV or greater, provided the interior of the machine has an ingress protection of IP54 or greater?  *IEC 60079-15, Ed 4:*  *8.3 Terminal boxes*  *Terminal boxes attached to machines operating at voltages up to 1 kV, may be opened to the interior of the machine, only when the IP rating of the machine is IP44 or higher. The external IP protection of the box shall be not less than IP54, as determined in accordance with IEC 60079-0.*  *IEC 60079-7 Ed 5:*  *5.2.3 Degrees of protection provided by electrical machines, Level of Protection “ec”*  *The requirements of 4.10 apply, except that terminal boxes attached to electrical machines operating at voltages up to 1 kV, may be opened to the interior of the machine, only when the degree of protection of the electrical machine is at least IP44. Covers and entries of the terminal box shall provide at least degree of protection IP54.*  **Answer:**  No. As long as the interior of the machine has an ingress protection of IP54 or greater, determined in accordance with IEC 60079-0, there is no limitation to less than 1 kV. If the interior of the machine has an ingress rating of IP44 or lower, the use of a terminal box open to the interior of a motor rated 1 kV or greater is not permitted.  NOTE 1: Many manufacturers opt to declare IP44 for the machine for certification purposes, whilst claiming a rating of IP54 or higher, by assessment, for contractual purposes in order to avoid the difficult testing required for certification of the IP of larger machines. As such, this additional IP rating need only comply with IEC 60529 or IEC 60034-5 as applicable, and not with any of the testing detailed in IEC 60079-0.  NOTE 2: The initial version of this DS was prepared by TC 31 WG27 at its meeting in Mississauga, following a request for clarification by one of the members of WG27. WG27 subsequently prepared the relevant I-SH and the published I-SH text has been reproduced in this revised ExTAG Decision Sheet. It is compatible with the text currently proposed for Edition Six of IEC 60079-7. | | |