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

**Title: ExTAG/538A/CD Revised Draft ExTAG Decision Sheet - Construction requirements for flameproof enclosures with an internal source of release (containment system)**

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

**INTRODUCTION**

This document, *ExTAG/538A/CD* *Draft ExTAG Decision Sheet - Construction requirements for flameproof enclosures with an internal source of release (containment system),* has been prepared by FM Approvals LLC, US, taking into account comment received on ExTAG/538/CD *Draft ExTAG Decision Sheet - Construction requirements for flameproof enclosures with an internal source of release (containment system)* which it now replaces .

ExTAG/538A/CD has been prepared for a 6 weeks circulation comment period,

Please submit comments using the comments table, a separate document by –

**04 April 2019**

**to**

**Christine Kane**

***Julien Gauthier***

**Julien Gauthier**

**ExTAG Secretary**

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**COLLECTION OF IECEx / ExTAG DECISIONS**

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| **Standard:** IEC 60079-1:2014 (Ed 7) | **Clauses:** Annex G | Draft Decision Sheet:  |
| **Subject:**Construction requirements for flameproof enclosures with an internal source of release (containment system)**Status of document:** **Draft** | **Key words:*** Containment system
 | **Date: 2019 02****Originator of proposal:** FM Approvals LLC (FMG)**TC/SC involved:** IEC/TC 31/MT60079-1 |
| **Question**: Can the tests given in G.4 of IEC 60079-1, Ed 7, be omitted if the containment system inside flameproof enclosure complies with the burst pressure test in 5.2.5 of IEC TS 60079-40 followed by the Helium leak tests in 4.1.3.2 of IEC 60079-26?**Answer**: Yes. A containment system that meets the design requirements of G.3 of 60079-1 along with the pressure test in 5.2.5 of IEC TS 60079-40, using a test time of at least 2 minutes, followed by the Helium leak tests in 4.1.3.2 of IEC 60079-26 would provide appropriate justification for the tests of G.4 to be omitted. If non-metallic materials other than glass or ceramic are used to effect the sealing of the containment system, it is noted that thermal endurance preconditioning is also required prior to the burst pressure and Helium leak tests. |