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

**Title: ExTAG/671/CD** – **Draft ExTAG Decision Sheet –** **Protecting electrical ignition sources that are part of electromechanical equipment**

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

**INTRODUCTION**

This document, *ExTAG/671/CD, Draft ExTAG Decision Sheet – Protecting electrical ignition sources that are part of electromechanical equipment* has been prepared by UL LLC and is issued for consideration by ExTAG.

In accordance with OD 035 this document is issued for a six week comment period.

Please submit comments on this new Draft DS using the comments table, a separate document, by –

**2022 04 01**

to

**Christine Kane**

**ExTAG Secretariat**

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**COLLECTION OF IECEx / ExTAG DECISIONS**

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| Standard: ISO 80079-36:2016 | **Clauses:** 6.5 | **Draft Decision Sheet:**ExTAG/671/CD |
| **Subject:** Protecting electrical ignition sources that are part of electromechanical equipment **Status of document:** Draft | **Key words:** * Electrical ignition sources
* Electromechanical equipment
* Type of Protection “h”
 | Date: February 2022 **Originator of proposal:** UL LLC**TC/SC involved:** IEC/SC 31M WG 1 |

**QUESTION:**

Can Type of Protection “h” from ISO 80079-36 be used to protect electrical ignition sources that are part of electromechanical equipment (for example, the application of Type of Protection “b” to the rotor of an electric machine)?

**ANSWER:**

No – While Type of Protection “h” can be used to protect non-electrical ignition sources that are part of electromechanical equipment (for example, mechanically generated sparks from a rotor of an electric machine), it cannot be used to protect electrical ignition sources (for example, the induced voltage and resulting current on a rotor of an electric machine).

This position is based on 6.5 of ISO 80079-36:2016 on “Electrical ignition sources except stray current” which reads, “Where electrical equipment is used in conjunction with mechanical equipment, the electrical equipment shall comply with the relevant parts from the IEC 60079 series.”