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

**TITLE: Compilation of comments and Observations on -** **ExTAG/700/CD Draft ExTAG Decision Sheet – Marking of Ex Components when intended for use only by their manufacturer**

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

**INTRODUCTION**

This document contains the compilation of comments, as well as observations, from the originator, FM Approvals LLC (FMG) on ExTAG/700/CD Draft ExTAG Decision Sheet – Marking of Ex Components when intended for use only by their manufacturer.

As a result of comments received, and considered, the originator prepared a further revised Draft Decision Sheet ExTAG/700A/CD Draft ExTAG Decision Sheet – Marking of Ex Components when intended for use only by their manufacturer

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

***Christine***

**ExTAG Secretariat**

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| --- |
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| **ExCB/****ExTL** | **Clause/ Sub-clause** | **Paragraph Figure/****Table** | **Type of****comment****General/****technical/****editorial** | **COMMENTS** | **Proposed change** | **Observation****(to be completed by the originator)** |
| --- | --- | --- | --- | --- | --- | --- |
| **CCTEG SHCCN**  |  |  |  | We agree with the resolutions of ExTAG-700-CD |  | Noted |
| **CMD****IN****In consultation with****Intertek India Private Limited, Karandikar Laboratories Pvt. Ltd., and KL Certification Services** |  |  |  | It is hereby stated that we have 'no comments on draft decision sheet' ExTAG/700/CD. |  | Noted |
| **CNEX-Global B.V.****NL** | **-** | **-** | **G** | **We do not agree with this draft DS, because it creates confusion**.Principal Reason: Any component that does not bear the marking required for certified Ex components, is to be considered as not being an Ex Component.Any component made by manufacturer X, that is solely intended to be installed in Ex Equipment made by manufacturer X, can surely be certified as being part of the Ex Equipment.Doing so would not make that component an Ex Component.To be clear:An Ex Component is an component that complies with the Ex requirements for Ex Components.If this draft DS is allowed, then by the same reasoning this rule could be applied to an Assembly of Ex Equipment, made of Ex Equipment products from the same manufacturer. Also then, there would only need to be 1 marking plate for the whole assembly, without requiring Ex markings for all individual Ex Equipment.That is an unwanted situation. | Withdraw this DS | Not accepted.In many cases, manufacturers have certified some parts as Ex Components in order to easily apply them in multiple products without the need to continually repeat tests. The current text of 29.10 does not require marking in this specific case, but some uniformity in the description on the Certificate is desirable. IEC 60079-46 has specific requirements for the marking of assemblies |
| **CQM****CN** |  |  |  | It is no clear whether the **marking** in the answer refers to all information given in clause 29.10. In case all information is not marked, it will be difficult to verify the consistence of product and traceability during factory audit or market supervision. It is also necessary to identify the Ex component with U certificate or Ex component tested together with the complete equipment. | So we would propose to specify the minimum required mark: S/N and Certificate No., instead of “no marking”.  | Not accepted. The manufacturer of the Ex Component and any intended Ex Component or Ex Equipment would need to have suitable traceability of parts for their own manufacturing, but a serial number or certificate number marking is not the only way of achieving traceability within the manufacturer’s quality system. The Certificate number and serial number are appropriate when the part is placed on the market. |
| **CSA** **and****CSAE****CA** | **-** | **-** | **General** | CSA and CSAE ExTL’s and ExCB’s support this draft decision sheet | **-** | Noted. |
| **DEK****NL** |  |  |  | This sheet intends to be an extension to the standard. This is not allowed per OD 035.In addition: clauses C.3.1.3 and C.3.1.4 do not allow the alternative route. We think this is intentionally since quality control on applying the sealing material and routine testing requirements differ significantly for bushings made by manufacturers and glands and conduit sealing devices installed by the end users. | Withdraw this sheet. | Not accepted.The existing standard does not require external or internal marking in the situation described. The main intent of this DS is to harmonize the way the information is presented on the certificate.As there is no sub-clause C.3.1.3 or C.3.1.4 in IEC 60079-0, it is not clear what alternative route they would not permit. |
| **DEKRA / BVS****DE** |  |  | **General** | **We are in favour with the DS.** |  | Noted. |
| **DNV****NO** | **IEC 60079-0: 2017, clause 29.10** |  |  | **Disagree. This TAG modifies the technical content of IEC 60079-0: 2017 (ed 7), as current clause 29.10 specifically mention “Ex component enclosures”. Meaning relaxation in marking requirements only apply to enclosures where manufacturer also hold the Ex equipment certificate for same enclosure. Technical changes to clause 29.10 can not be made by a TAG decision.**  |  | Noted. No proposal made.The existing standard does not require external or internal marking in the situation described. The main intent of this DS is to harmonize the way the information is presented on the certificate. |
| **Fiditas****HR** | **-** | **-** | **G** | **We agree with proposed answer**  | **-** | Noted. |
| **FTZU****CZ** |  |  | **G** | **We agree with this draft ExTAG Decision Sheet.** |  | Noted. |
| **ITL****IL** | **29.10** |  |  | **No Comment**  | **N/A** | Noted |
| **KOSHA****KR** | **IEC 60079-0:2017****(Edition 7.0) 29.10** | **-** | **General** | **We agree with this draft without any comments.** |  | Noted |
| **KRH****GR** | **29.10** |  | **-** | No | **No** | Noted. No proposed change or justification provided. |
| **MASC****ZA** | **29.10** |  | **Technical** | **Some components are frequently replaced, e.g. for gas sensing equipment, component certified pellistor sensors with encapsulation and a sinter disc may be replaced multiple times in the life cycle of the equipment. In addition, some components, like the pellistor sensor, run on separate production lines / requirements.****Therefore, a component without at least a serial number / batch number may cause traceability issues for re-calls or should investigations be required.** | **It should be a requirement that at least a batch number / serial number be applied for traceability to the quality system of the OEM.** | Noted. Such a requirement exists in ISO/IEC 80079-34. |
| **NANIO CCVE (RU)****ExCB/****ExTL** |  |  | **General** | Clause 8.1.3 of IECEx Rules 02 states that the IECEx CoC shall contain at least the Ex marking requirements.Clause 1.2.10 Marking of OD 011-2 states the following:«This should show what would be seen on the marking plate concerning the Ex aspect of theproduct, including the way the Certificate Number should appear.This should show the Ex marking string as detailed in IEC 60079-0, including the symbol Ex,the symbol for each type of protection used, the symbol of the group, the maximum surfacetemperature, the equipment protection level and the range of ambient temperature or thesymbol “X”, where appropriate.As an example, a product to be marked with “Ex d IIC T4 IP65” must have this ‘marking string’defined in the Marking field of the Certificate. | **It is proposed to reword the answer or to withdraw this draft of DS** | Not accepted to withdraw.Accepted to reword the answerThe existing standard does not require external or internal marking in the situation described. The main intent of this DS is to harmonize the way the information is presented on the certificate. Text is proposed to clarify the “ratings” of the product if an Ex marking string is not marked on the Ex Component. |
| **NANIO**  |  |  |  | Further guidance on marking requirements and examples of acceptable formats can be foundin IEC 60079-0, Clause 29.»Clause 29.10 of IEC 60079-0 states «The internal markings may be omitted if the enclosure (as Ex Component) manufacturer is also the holder of the equipment certificate, and indicated as such in the Schedule of Limitations of the Ex Component certificate», but the marking section of the Certificate of Conformity shall include Ex marking for Ex component.The possibility of the Ex marking omittance for Ex components, if the manufacturer of the Ex component is also the holder of the equipment certificate, should not be interpreted as an opportunity to exclude Ex marking information in the marking section of the certificate for Ex component.In any case, the marking section of the certificate must include the following information to identify the Ex component and confirm compliance with the requirements to the particular types of protection:«This should show the Ex marking string as detailed in IEC 60079-0, including the symbol Ex,the symbol for each type of protection used, the symbol of the group, the maximum surfacetemperature, the equipment protection level».But in this rare case it is permitted to omit the internal marking. |  | Noted. No proposal made. |
| **NCC****BR** | **29.10** | **-** | **-** | We agreeIn this case, we could include, in addition to the mentioned text, a specific condition of use with the text, for example: “In the case of a possible replacement of this Ex Component, it must be changed to a certified Ex Component that guarantees the type and degree of protection of the equipment.” | **-** | Noted. In the case of repair, the requirements of IEC 60079-19 would apply.It is also noted that Ex Components do not have Specific Conditions of Use. |
| **NEPSI****CN** |  |  | **G** | In general, we support the draft Decision Sheet, but slight modification to the Answer is suggested as given in the right column.From the user’s perspective, marking on certified Ex Component facilitates the lifecycle maintenance and management of the in-service Equipment. | **Suggest to change the statement in the answer as follows:****In this case, the marking section of the Certificate of Conformity should additionally state:****“This Ex Component may have no marking once it is not intended to be placed on the market, but is solely for integration by the Ex Component manufacturer into their own Ex Equipment.”** | Accepted in principle. See revised text. |
| **SGS Baseefa****GB** |  |  | **Ge** | SGS Baseefa fully supports this DS and is happy with the words chosen for use in such a Component CertificateIt is a normal practice for Component Certificates to be issued for an Ex eb motor mechanical construction, so that individual equipment certificates can more economically be issued for each electrical design built in that frame. (We have been doing it for at least 45 years.)In such circumstances, the “component” never physically exists as an entity, but is a very useful aid to facilitate certification. (And there would be nowhere to actually fix a marking plate!) |  | Noted. |
| **Simtars****AU** |  |  |  | Simtars has no comments. |  | Noted |
| **TC 31** **WG22** | **29.10** | **-** | **General** | There are concerns with the proposed answer if the Manufacturing location of the Ex Component is not the same as the manufacturing location of the Ex Equipment.The proposed change takes into account the definitions of Manufacturer (3.17) and Manufacturing location (3.18) from IECEx 02.Such an Ex Component is a “significant part” as defined in 8.5.2 b) of ISO/IEC 80079-34 and, therefore, traceability is required. | Ex Component marking in accordance with 29.10 of IEC 60079-0 is not required under the following conditions1. the Ex Component is not intended to be placed on the market and is solely for integration by the Ex Component manufacturer into their own Ex Equipment, and
2. the manufacturing location for the Ex Component and Ex Equipment is under the control of Ex Equipment manufacturer.

In this case, the marking section of the Certificate of Conformity should state:“This Ex Component has no marking as it is not to be placed on the market but is solely for integration by the Ex Component manufacturer into their own Ex Equipment.”As the “Marking” section would not include the “Ex” rating of the Ex Component, that rating information should be included in the “Equipment” section. | Accepted in principle. Reworded for clarity |
| **TIIS****JP** | **-** | **-** | **ge** | We basically agree with the content of the draft DS. However, since the marking requirement as Ex component is present in the current standard (ed.7.0), we are afraid of the change of the requirements. | **-** | Noted.The existing standard does not require external or internal marking in the situation described. The main intent of this DS is to harmonize the way the information is presented on the certificate. Text is proposed to clarify the “ratings” of the product if an Ex marking string is not marked on the Ex Component. |
| **TUN****DE** | **All** | **All** | **Ge** | **We reject the ExTAG Draft. The intention of the ExTAG Draft is dangerous and the described method can be covered by an ExTR for example.** | **Reject the ExTAG** | Not accepted.Only ExMC could reject ExTAG. |
| **UL LLC****US****ULBR****UL Demko** | **29.10** | **-** | **General** | **There are concerns with the answer if the Manufacturing location of the Ex component is not the same as the Manufacturing location of the Ex equipment.****The proposed change takes into account the definitions of Manufacturer (3.17) and Manufacturing location (3.18) from IECEx 02.** | **Propose to add the clarifying text in bold to the answer:****Where an Ex Component manufacturer is intended to be the holder of an Ex Equipment certificate employing the Ex Component, marking is not required as the Ex Component is not intended to be placed on the market, but is solely for integration by the Ex Component manufacturer into their own Ex Equipment under the condition that the manufacturing locations for the Ex Component and Ex Equipment are under the control of the original equipment manufacturer. Such a component is considered to be a significant part as defined in Clause 8.5.2 b) of ISO/IEC 80079-34 and, therefore, traceability is required.****In this case, the marking section of the Certificate of Conformity should state:****“This Ex Component has no marking as it is not intended to be placed on the market, but is solely for integration by the Ex Component manufacturer into their own Ex Equipment.”** | Accepted. In principle. See revised text. |
| **PTB****DE** |  |  |  | **PTB agrees the document**  |  | Noted |
| **PTB****DE**  | **Answer** |  | **Ed** | **Give an additional hint, that any marking according to the internal QM Processes must guarantee the link between the Ex-component certificate and the Ex-component.** **This is necessary to identify the parts as (separate certified) components when the Ex-equipment is tested at any Ex-TL lab.** | **Add the following addition information after the first paragraph.** **The manufacturer needs to mark the components with any marking concerning their QM system to guarantee the link between the Ex-component and the component certificate.**  | Accepted. In principle. See revised text. |