

CERTIFICATE OF COMPLIANCE

Certificate Number 20191107-E225236
Report Reference E225236-20020520
Issue Date 2019-NOVEMBER-07

Issued to: BARTEC GmbH
Max-Eyth-Str. 16
97980 Bad Mergentheim GERMANY

**This certificate confirms that
representative samples of**

COMPONENT - SEALING BUSHINGS FOR USE IN
HAZARDOUS LOCATIONS;
COMPONENT - SEALING BUSHINGS FOR USE IN ZONE
CLASSIFIED HAZARDOUS LOCATIONS
See Addendum Page


Have been investigated by UL in accordance with the
component requirements in the Standard(s) indicated on
this Certificate. UL Recognized components are incomplete
in certain constructional features or restricted in
performance capabilities and are intended for installation in
complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: See Addendum Page for Standards
Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

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Certificate Number 20191107-E225236
Report Reference E225236-20020520
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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Component - Line bushings for use in Class I, Groups A, B, C and D; Class II, Groups E, F and G Hazardous Locations..

Line Bushings, Type 07-91 followed by 0, 1, 5, 6, 7 or A; followed by 0, 1, 2, 3 or 9; followed by 0, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S or Z; followed by a two digit number from 00 to 47; followed by 0, 1, 2, 3, 4, 5, 7, 9, C, D, E, F or G ; may be followed by four letters and/or numbers.

Component - Line bushings for use in Hazardous Locations; Class I, Zone 1, AEx db IIC; Ex db IIC.

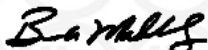
Line Bushings, Type 07-91 followed by 0, 1, 5, 6, 7 or A; followed by 0, 1, 2, 3 or 9; followed by 0, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S or Z; followed by a two digit number from 00 to 47; followed by 0, 1, 2, 3, 4, 5, 7, 9, C, D, E, F or G; may be followed by four letters and/or numbers.

Component - Line bushings for use in Class I, Groups C and D; Class II, Groups E, F and G Hazardous Locations.

Line Bushings, Type 07-91 followed by 0, 1, 5, 6, 7 or A; followed by 0, 1, 2, 3 or 9; followed by 0, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S or Z; followed by a two digit number from 00 to 47; followed by 6 or L; may be followed by four letters and/or numbers.

Standards for Safety:

UL 1203, Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
UL 60079-0 and CAN/CSA C22.2 No. 60079-0:19, Explosive Atmospheres – Part 0: Equipment – General Requirements
UL 60079-1 and CAN/CSA C22.2 No. 60079-1:16, Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
CAN/CSA C22.2 No. 25-17, Enclosures for Use in Class II Groups E, F, and G Hazardous Locations
CAN/CSA C22.2 No. 30-M1986, Explosion-proof enclosures for use in Class I Hazardous Locations



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DESCRIPTION

PRODUCT COVERED:

USR, CSR - Component - Line bushings for use in Class I, Groups A, B, C and D; Class II, Groups E, F and G Hazardous Locations..

Line Bushings, Type 07-91 followed by 0, 1, 5, 6, 7 or A; followed by 0, 1, 2, 3 or 9; followed by 0, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S or Z; followed by a two digit number from 00 to 47; followed by 0, 1, 2, 3, 4, 5, 7, 9, C, D, E, F or G ; may be followed by four letters and/or numbers.

* USR, CSR - Component - Line bushings for use in Hazardous Locations; **Class I, Zone 1, AEx db IIC; Ex db IIC.**

Line Bushings, Type 07-91 followed by 0, 1, 5, 6, 7 or A; followed by 0, 1, 2, 3 or 9; followed by 0, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S or Z; followed by a two digit number from 00 to 47; followed by 0, 1, 2, 3, 4, 5, 7, 9, C, D, E, F or G; may be followed by four letters and/or numbers.

USR, CSR - Component - Line bushings for use in Class I, Groups C and D; Class II, Groups E, F and G Hazardous Locations.

Line Bushings, Type 07-91 followed by 0, 1, 5, 6, 7 or A; followed by 0, 1, 2, 3 or 9; followed by 0, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S or Z; followed by a two digit number from 00 to 47; followed by 6 or L; may be followed by four letters and/or numbers.

GENERAL:

These line bushings are intended to provide the electrical connection between two explosion-proof/flameproof enclosures or two compartments of an explosion-proof/flameproof enclosure or from explosion-proof/flameproof to increased safety enclosures or from explosion-proof/flameproof to intrinsically-safe compartments. They are not intended to be used as conduit sealing fittings.

* USR - Indicates Recognition to the requirements in the following standards: UL 1203, Fifth Edition, UL 60079-0, **7th** Edition and UL 60079-1, **7th** Edition.

* CSR - Indicates Recognition to the requirements in the following standards: CSA C22.2 No. 18-98, CSA C22.2 No. **30-2016**, CSA C22.2 No. **25:2017**, **CSA-60079-0:19** and **CSA-60079-1:16**.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Conditions of Acceptability -

1. These line bushings have only been evaluated for use as a connection between explosion-proof, flameproof and/or increased safety or intrinsically safe compartments and not for use as a conduit seal.
2. Explosion-proof/flameproof joints formed between the line bushing and the end product must be evaluated as part of the evaluation on the end product. **The line bushing has not been subjected to explosion testing and non-transmission testing of an internal ignition.**
3. A minimum of seven full threads must be engaged in the end application as appropriate.
4. The temperature of the conductors should be evaluated in the end application.
5. The epoxy material is suitable for **a service** temperatures from -60°C to $+110^{\circ}\text{C}$.
- * 6. **The epoxy material shall not be subjected to UV light sources.**
7. **The line bushing shall be mechanically protected by an enclosure that is certified per UL 60079-0 and CSA C22.2 No. 60079-0.**

RATINGS:

- * **The maximum voltage of 6000Vac or 6000 Vdc** depending on the voltage rating of the conductors provided.

ENVIRONMENTAL RATINGS:

Ambient Temperature Range	Product Covered
-20°C to $+110^{\circ}\text{C}$	Class I, Division 1 and Zone 1 applications
* -60°C to $+110^{\circ}\text{C}$	Class I, Division 1 and Zone 1 applications.