Fiditas
explosion safety solutions

17065 · HAA
3635

[1] # EU – TYPE EXAMINATION CERTIFICATE

[2] Component Intended for use on/in an Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU.

[3] EU-Type Examination Certificate Number: **FIDI 26 ATEX 0002U** Issue: **0**

[4] Product: **EJBL Ex d Enclosures**

Type: **EJBL...**

[5] Manufacturer: **Pepperl+Fuchs SE**

[6] Address: **Lilienthalstrasse 200, 68307 Mannheim, Germany**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

[8] FIDITAS Ltd., Notified Body number 2829 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential Report No: **FIDI 26 CR 005**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-1:2014** **EN 60079-31:2014**

except in respect of those requirements listed at item 18 of the Schedule.

[10] The sign 'U' is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EU-Type Examination Certificate relates only to the design, examination and test of the specified product in accordance with Annex III. Further requirements of the Directive apply to the manufacturing process and supply of this products. These are not covered by this certificate.

[12] The marking of the product shall include the following:

Ex

II 2G Ex db IIB+H2 Gb

II 2D Ex tb IIIC Db

Fiditas d.o.o. ZAGREB

FIDITAS Ltd.
Certification department
Approved:

Marino Kelava, M.E.Eng.

Our ref.: 24.CRT.057

Date: 13.03.2026

Fiditas Ltd. Slavka Tomerlina 44, 10361 Zagreb-Sesvete, Croatia
Phone: +385 1 5578565; info@fiditas.com ; www.fiditas.com

[13] **SCHEDULE**

[14] **EU - TYPE EXAMINATION CERTIFICATE No.:** **FIDI 26 ATEX 0002U**

[15] **Description of product**

The EJBL Ex d enclosures are flameproof type enclosures with a flanged joint and are available in a range of ten sizes suitable for final applications such as command, control, signalling and/or visualization unit.
The enclosures can have threaded entries for the fitment of separately approved cable entry devices in the case of the body, and separately approved operators in the case of the lid, according to the limitations given in the schedule drawing set.
The enclosures are made of aluminium alloy.

Rated ambient temperature range: -60°C up to +60°C (depend on enclosure type)

Types EJBL2A to EJBL10B are intended for ambient temperature range: -60°C up to +60°C
Types EJB11B to EJBL17A are intended for ambient temperature range: -50°C up to +60°C
Types EJBL18B to EJBL20 are intended for ambient temperature range: -60°C up to +60°C

Ingress protection: IP66

Type identification:

Type	External height [mm]	External width [mm]	External depth [mm]	Internal height [mm]	Internal width [mm]	Internal depth [mm]
EJBL2A	221	221	156	163	163	137
EJBL4A	259	221	167	201	163	147
EJBL6A	308	208	171	250	150	153
EJBL8B	358	258	223	300	200	204
EJBL10B	428	318	252	370	260	232
EJBL11B	470	390	255	400	320	230
EJBL15A	570	420	257	500	350	232
EJBL17A	638	466	383	570	370	357
EJBL18B	725	512	392	640	427	364
EJBL20	888	638	334	803	553	305

Enclosures may be produced in intermediate sizes where required subject to the following rules:

- All intermediately sized enclosures are based on a reference enclosure, which is the next larger enclosure from the standard EJBL range. Every dimension (HxWxD) of the intermediately sized enclosure must be the same or smaller than the reference enclosure, so the volume is always smaller than the reference enclosure. Larger sizes than size of EJBL20 enclosure are not allowed.
- All safety relevant parameters for the intermediately sized enclosure (wall thicknesses, flamepath length and gap etc.) shall be the same as for the reference enclosure.
- The number of and type and screws for the intermediately sized enclosure shall be the same as for the reference enclosure.

Fiditas Ltd. Slavka Tomerlina 44, 10361 Zagreb-Sesvete, Croatia
Phone: +385 1 5578565; info@fiditas.com ; www.fiditas.com

- The intermediately sized enclosure shall be subjected to the same overpressure test as is applicable for the reference enclosure.
- The R_{thair} and R_{the} values for an intermediately sized enclosure are based on a referenced enclosure, which is the next smallest.
- The maximum power dissipation (MDP) value for an intermediately sized enclosure shall be determined from the difference between the required ambient temperature Ta, the limiting temperature of the T class and the thermal coefficient R_{the}.

Final calculated temperature coefficient R_{th}

Type	A [mm]	B [mm]	C [mm]	Enclosure exposed surface [mm²]	R_{thair} (K/W)	R_{the} (K/W)
EJBL2A	221	221	156	186745	0.7884	0.3947
EJBL4A	259	221	167	217559	0.6792	0.3539
EJBL6A	308	208	171	240536	0.6865	0.3405
EJBL8B	358	258	223	367100	0.4074	0.2435
EJBL10B	428	318	252	512088	0.2423	0.1824
EJBL11B	470	390	255	621900	0.2434	0.1670
EJBL15A	570	420	257	748260	0.2032	0.1463
EJBL17A	638	466	383	1142972	0.1166	0.0917
EJBL18B	725	512	392	1341008	0.1149	0.0964
EJBL20	888	638	334	1585912	0.0773	0.0723

Determination of maximum surface temperature can be performed by using coefficient R_{the} for calculation.

$$T_{surfacemax} = T_{amax} + R_{the} \times Pn$$

Determination of service temperature inside of enclosure, temperature of branching point and cable entry temperature can be performed by using temperature of air inside of enclosure. Coefficient R_{thair} can be used for calculation.

$$T_{service} = T_{amax} + R_{thair} \times Pn$$

The cable temperature resistance to be marked on the marking plate can be calculated according to formula:

$$T_{cable} = T_{amax} + R_{thair} \times Pn$$

Where:

- T_{amax} is maximum ambient temperature for which the equipment is marked
- Pn – maximum dissipation inside the enclosure
- R_{thair} – coefficient which define overtemperature of internal air in relation of internal power dissipation
- R_{the} – coefficient which define overtemperature on external surface of enclosure in relation of internal power dissipation

Fiditas Ltd. Slavka Tomerlina 44, 10361 Zagreb-Sesvete, Croatia
Phone: +385 1 5578565; info@fiditas.com ; www.fiditas.com

Maximum Dissipated Power (MDP)

Type	Maximum Dissipated Power [W]							
	T6/85˚C				T5/100˚C			
	+40˚C	+50˚C	+55˚C	+60˚C	+40˚C	+50˚C	+55˚C	+60˚C
EJBL2A	101	76	63	51	139	114	101	89
EJBL4A	113	85	71	57	155	127	113	99
EJBL6A	117	88	73	59	162	132	117	103
EJBL8B	164	123	103	82	226	185	164	144
EJBL 10B	219	164	137	110	302	247	219	192
EJBL 11B	240	180	150	120	329	269	240	210
EJBL15A	273	205	171	137	376	308	273	239
EJBL17A	436	327	273	218	600	491	436	382
EJBL18B	415	311	259	207	570	467	415	363
EJBL20	553	415	346	277	761	623	553	484

Type	Maximum Dissipated Power [W]							
	T4/135˚C				T3/200˚C			
	+40˚C	+50˚C	+55˚C	+60˚C	+40˚C	+50˚C	+55˚C	+60˚C
EJBL2A	228	203	190	177	393	367	355	342
EJBL4A	254	226	212	198	438	410	396	381
EJBL6A	264	235	220	206	455	426	411	397
EJBL8B	370	329	308	288	637	596	575	555
EJBL 10B	493	439	411	384	850	795	768	740
EJBL 11B	539	479	449	419	928	868	838	808
EJBL15A	615	547	513	478	1059	991	957	923
EJBL17A	981	872	818	763	1690	1581	1526	1472
EJBL18B	933	830	778	726	1608	1504	1452	1400
EJBL20	1245	1107	1038	969	2145	2006	1937	1868

Caution and Warning label:

"Use lid screws of quality A4-80 with minimum yield strength of at least 600 N/mm^2."

For products complete with external coating in non-metallic material with a thickness:

- > 0.2 mm for IIB+H2 execution or
- > 2 mm for IIB execution or

"Warning – Potential electrostatic charging hazard – for cleaning use only a damp cloth"

[16] Confidential Report No. FIDI 26 CR 005

Fiditas Ltd. Slavka Tomerlina 44, 10361 Zagreb-Sesvete, Croatia
Phone: +385 1 5578565; info@fiditas.com ; www.fiditas.com

[16.1] Routine testing

Routine overpressure test of empty enclosure types EJBL2A up to and included EJBL6A according to clause 16.2 of standard EN 60079-1 is not required since type testing was performed with static pressure 4×pref.

The routine overpressure test shall be carried out on enclosure with the static method (paragraph 15.2.3.2 of EN 60079-1 standard), at:

- 11.9 bar on enclosures sizes from EJBL8B and EJBL10B intended for minimum ambient temperature -20°C. Routine overpressure test of these enclosures can be performed as batch testing according to clause 16.6 of standard EN 60079-1 since type testing was performed with static pressure 3×Pref.
- 16.3 bar on enclosures sizes from EJBL8B and EJBL10B intended for minimum ambient temperature -60°C.
- 12.6 bar on enclosures sizes from EJBL11B and EJBL17A intended for minimum ambient temperature -20°C.
- 15 bar on enclosures sizes from EJBL11B and EJBL17A intended for minimum ambient temperature -50°C.
- 13.5 bar on enclosures sizes from EJBL18B and EJBL20 intended for minimum ambient temperature -20°C.
- 17 bar on enclosures sizes from EJBL18B and EJBL20 intended for minimum ambient temperature -60°C.

[17] Schedule of Limitations

- Contact the original manufacturer for information on the flameproof joint dimensions, if required during installation, maintenance or repair.
- Ambient temperature range:
  - -60 °C up to +60 °C for EJBL2A to EJBL10B and EJBL18B to EJBL20
  - -50 °C up to +60 °C for EJB11B to EJBL17A
- The empty enclosure types EJBL2A to EJBL10B can be used in the ambient temperature range from -60 °C up to +60 °C.
- The empty enclosure types EJB11B to EJBL17A can be used in the ambient temperature range from -50 °C up to +60 °C.
- The empty enclosure types EJBL18B to EJBL20 can be used in the ambient temperature range from -60 °C up to +60 °C.
- Maximum service temperature of the empty enclosures is up to +200 °C.
- The minimum required distance between flameproof flanged joint of the enclosure and external obstacle is 40 mm.
- According to EN 60079-1 annex D, the content of the Ex component enclosure equipment may be placed in any arrangement, provided that for Group IIB+H2 an area of at least 40% of each cross-sectional area remains free.
- The maximum number of apertures, their maximum sizes and their positions are given in drawing 16-1691FI-04 sheets 4&5 for body and lid respectively.
- For enclosures Group III with painted enclosure, to reduce the risk of ignition due to static discharge the equipment may only be used in area where charging mechanisms such as fast-moving particles along a surface are not present (as example: pneumatic transfer of powders).

Fiditas Ltd. Slavka Tomerlina 44, 10361 Zagreb-Sesvete, Croatia
Phone: +385 1 5578565; info@fiditas.com ; www.fiditas.com

[18] Essential Health and Safety Requirements

Covered by the conformity with harmonized standards listed under item 9.

[19] Drawings and Documents

Title:	Drawing No.:	Rev. level:	Date:
EJBL Ex d enclosures description	16-1691FI-00	/	01.09.2025.
EJBL enclosure general assembly & dimensions	16-1691FI-04	/	01.09.2025.
EJBL Ex d Enclosures IOM	16-1691FI-09	/	01.09.2025.
EJBL enclosure certification label	16-1691FI-10	/	01.09.2025.

Fiditas Ltd. Slavka Tomerlina 44, 10361 Zagreb-Sesvete, Croatia
Phone: +385 1 5578565; info@fiditas.com ; www.fiditas.com