



EU Type Examination Certificate CML 17ATEX1131U Issue 0

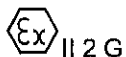
- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Component **EBL3040-1 and EBL4040-2 Ballast Enclosures**
EIL4040-1 and EIF4040-1 Inverter Enclosures
- 3 Manufacturer **Cortem S.p.A.**
- 4 Address **via Aquileia 10**
34070 Villesse
Gorizia
Italy
- 5 The component is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 The 'U' suffix after the certificate number indicates that the component is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012+A11:2013

EN 60079-1:2014

- 10 The component shall be marked with the following:



II 2 G

Ex db IIC Gb

A Snowden



CML 17ATEX1131U
Issue 0

11 Description

The EBL3040-1 & EBL4040-2 Electronic Ballasts Enclosures & EIL4040-1 Inverter Enclosures are Flameproof Ex components for use in increased safety luminaires for LED lighting tubes or strips. The EIF4040-1 Inverter Enclosures are Flameproof Ex components suitable for use in increased safety luminaires for fluorescent lighting tubes.

The Electronic Ballasts and Electronic Inverters consist of an aluminium tube, with aluminium end-caps, that contains an electronic ballast or electronic inverter circuits. One end-cap provides flying leads for the electrical connections.

Ratings:

EBL3040-1	110 to 277 VAC/ VDC, 0/ 50/ 60 Hz, 0.11 to 0,60 A
EBL4040-2	220 to 240 VAC/ VDC, 0/ 50/ 60 Hz, 700 mA
EIF4040-1	110/ 240 VAC/VDC, 50/ 60Hz, 13 ... 58 W
EIL4040-1	110/ 240 VAC, 50/ 60Hz, 110/ 277 VDC, BATT 6 V Max 7A/h

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	15 Jun 2017	R1845A/00	Report for the prime certificate issue.

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- 13.1 Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- 13.2 Each of the Ballast enclosures and Inverter Enclosures shall undergo the following minimum routine overpressure tests in accordance with EN 60079-1, clause 16.1:

Assembly	Required pressure (Bar)
EBL3040-1 ballast enclosures	33.93
EBL4040-2 ballast enclosures	33.93
EIL4040-1 inverter enclosures	28.62
EIF4040-1 inverter enclosures	28.62

The enclosures shall withstand the pressures without suffering permanent deformation of the joints, damage to the enclosure or leakage through the enclosure walls.

- 13.3 The plugs fitted shall be type PLG, manufactured by ELFIT S.p.A., certificate number CESI 02 ATEX 049X. The manufacturer shall only fit the following type:

Material type Aluminium or Stainless Steel, no gasket fitted.



CML 17ATEX1131U
Issue 0

- 13.4 The LED Drivers and Inverters specified by the manufacturer may be replaced with alternate devices, provided that they do not exceed the dimensions specified on the certification drawings.

14 Schedule of Limitations

The following conditions relate to safe installation and/or use of the equipment.

- 14.1 The external case temperature shall not exceed +70°C.
- 14.2 The EBL3040-1 and EBL4040-2 have the following service temperature range: -60°C to +75°C. The limits of this service temperature range shall not be exceeded.
- 14.3 The EIF4040-1 and EIL4040-1 have the following service temperature range: -60°C to +70°C. The limits of this service temperature range shall not be exceeded.
- 14.4 The flameproof joints are not intended to be repaired.
- 14.5 When installed in accordance with the requirements of EN 60079-7, the clearances and creepage distances specified in Clauses 4.3 and 4.4 and Table 2 shall be considered and complied with.
- 14.6 The wire leads are type GS, Single Core Non-Sheathed Internal Cables, 0.75 mm², manufactured by Caviterm.
- 14.7 The non-metallic materials used have not been assessed to the requirements of EN 60079-0, clause 7.3, Resistance to light. It shall be ensured that the non-metallic materials are not exposed to light/UV.
- 14.8 The components have not been assessed to IEC/EN 60079-0, clause 26.4.5, Degree of protection (IP) by enclosures. Consideration shall be given to this if the type of protection applied to the equipment in which the component is to be installed requires a specific IP rating.
- 14.9 An internal earth connection is provided between the case of the Electronic Ballast or Electronic Inverter and the metal enclosure.

Certificate Annex



Certificate Number CML 17ATEX1131U
Component EBL3040-1 and EBL4040-2 Ballast Enclosures
EIL4040-1 and EIF4040-1 Inverter Enclosures
Manufacturer Cortem S.p.A.

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
A3-6648	1 of 3	0	15 Jun 2017	Electronic Ballast EBL-3040-1 Ex db Assembly and External Dimensions
A3-6648	2 of 3	0	15 Jun 2017	Electronic Ballast EBL-4040-2 Ex db Assembly and External Dimensions
A3-6648	3 of 3	0	15 Jun 2017	Electronic Inverter EIL-4040-1 and EIF-4040-1 Ex db Assembly and External Dimensions
A4-6647	1 to 3	0	15 Jun 2017	Technical Note