IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx CML 19.0068X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 3	Issue 2 (2020-04-06) Issue 1 (2020-03-05) Issue 0 (2019-07-25)
Date of Issue:	2025-06-09		

Applicant: **Index Enclosures Ltd.**
Unit 5 Wyvern Way
Ashford
Kent
TN24 8DW
United Kingdom

Equipment: **iTB & iSTB Control Panels**

Optional accessory:

Type of Protection: **Flameproof Ex "db", Increased Safety "eb", Dust Ignition Protection "tb"**

Marking: Ex db eb IIC T* Gb

Ex tb IIIC T* Db IP66

Tamb = -*°C to +*C

* see Certificate Annex

Approved for issue on behalf of the IECEx Certification Body: **Stelios Roumbedakis**

Position: **Certification Manager**

Signature: (for printed version) S.Roumbedakis

Date: (for printed version) 2025-06-09

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2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

IECEx Certificate of Conformity

Manufacturer: **Index Enclosures Ltd.**
Unit 5 Wyvern Way
Ashford
Kent
TN24 8DW
United Kingdom

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/CML/ExTR19.0098/00 GB/CML/ExTR19.0229/00 GB/CML/ExTR20.0071/00
GB/CML/ExTR25.0136/00

Quality Assessment Report:

GB/CML/QAR20.0009/05

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The iTB and iSTB control panels are fabricated from mild steel or stainless steel. The enclosures consist of a body and hinged lid complete with silicone gaskets. On the door of the enclosure a combination of separately certified panel mounted control apparatus can be fitted; inside the enclosure a combination of terminals and/or rail mounted control apparatus may be installed.

Refer to Certificate Annex for full Product Description.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Refer to Certificate Annex.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1

This issue introduced the following change:

1. To assess and permit the addition of an alternative isolation switch module.

Issue 2

This issue introduced the following changes:

1. To assess and permit the addition of a range of switch handles for use with the previously approved CZ0513 isolation switch module series.
2. To assess and permit the addition of a series of alternative panel mounted control apparatus manufactured by of BARTEC GmbH.

Issue 3

This issue introduced the following change:

1. Update to the nameplate (add certification Mark of another certification scheme).

Annex:

Certificate Annex IECEx CML 19.0068X Issue 3.pdf

Annexe to:	**IECEx CML 19.0068X Issue 3**
Apparatus:	**iTB and iSTB Control Panels**
Applicant:	**Index Enclosures Ltd.**

Description

iTB Range Control Panels

The iTB Range of Control Panels utilises the Index iTB range of enclosures and terminal boxes, which are separately certified under IECEx CML 18.0229X and IECEx CML 18.0228U respectively.

The enclosures in the iTB range are fabricated from painted mild steel or stainless steel and consist of a body and hinged door up to 1000 mm wide, or doors up to 1000 mm wide closing to a centre bar, to the front of the enclosure, complete with silicone gaskets. Additionally, a hinged door up to 1000 mm wide, or doors up to 1000 mm wide closing to a centre bar, to the rear of the enclosure is permitted. The enclosure meets a degree of protection of lP66 and is available in sizes ranging from 230 x 150 x 130 mm to 2000 x 1000 x 800mm. Enclosures may be manufactured within this range of sizes as long as the maximum height, width or depth do not exceed the maximum specified. The body may be supplied with gland plates on up to four side faces and the lid is secured to the body by two, three or four hinges and from two to five M6 screws or quarter-turn locks, depending on the size of enclosure. There are studs inside the enclosures for the subsequent mounting of components. Internal M6 earth studs are provided on the lid and gland plates. An internal/external M6 or M10 earth stud is provided in the main enclosure body.

On the door of the enclosure a combination of separately certified panel mounted control apparatus can be fitted; in particular, the door of the enclosure can be fitted with the Quintex GmbH switch module type QX0201, signal lamp with button module type QX0212, ammeter or voltmeter type QX0205, potentiometer module type QX0203, signal lamp module type QX0202, and the CZ Explosion-Proof electric appliances Co. Ltd, type CZ0513 series isolation switch module along with the CZ8000-8003 series of switch handles. The equipment may also be fitted with an alternative range of separately certified panel mounted control apparatus manufactured by BARTEC GmbH; in particular, the door of the enclosure can be fitted with BARTEC GmbH illuminated Indicator Module Type 07-335*-****/**** & illuminated Push button Type 07-336*-****/****, switch Module Type 07-332*-****/****, Control Switch Type 07-333*-****/****, and Switch Module, 4-Pole, Type 07-3381-****/****, control and Switching Unit, Type 07-337*-****/****, and control & signalling device adaptors type 05-0003-00**/****.

Inside the enclosure, and as listed in CML 18ATEX3417X and IECEx CML 18.0229X, a combination of terminals and/or rail mounted control apparatus may be installed.

The combination of terminals and apparatus is subject to a maximum dissipated power as listed in Table 1, and the maximum dissipated power is calculated using the method described in EN/IEC 60079-7, Annex E.2:

Table 1: Maximum dissipated power ratings			
Minimum Enclosure size (mm)			Max. Dissipated power (W)
Height	Width	Depth	
230	150	130	11.34
300	200	150	15.96
300	300	150	19.14
500	400	150	30.21
600	400	200	35.05
750	500	200	44.38
900	600	200	53.81
1000	800	200	64.27
1200	800	300	73.71
1200	1000	300	79.98

iSTB Range Control Panels

The iSTB Range of Control Panels utilises the Index iSTB range of enclosures and terminal boxes, which are separately certified under IECEx CML 18.0229X and IECEx CML 18.0228U respectively.

The enclosures in the iSTB range are fabricated from painted mild steel or stainless steel and consist of a body and bolted cover complete with silicone gaskets. The enclosure meets a degree of protection of IP66 and is available in sizes ranging from 100 x 100 x 80 mm to 2000 x 1200 x 800 mm. The body may be supplied with gland plates on up to four side faces and the cover is secured to the body by four M6 screws. There are studs inside the enclosure for the subsequent mounting of components. Internal M6 earth studs are provided on the lid and gland plates. An internal/external M6 or M10 earth stud is provided in the main enclosure body. Enclosures may be manufactured within this range of sizes as long as the maximum height, width or depth do not exceed the maximum specified.

On the door of the enclosure a combination of separately certified panel mounted control apparatus can be fitted; in particular, the door of the enclosure can be fitted with the Quintex GmbH switch module type QX0201, signal lamp with button module type QX0212, ammeter or voltmeter type QX0205, potentiometer module type QX0203, signal lamp module type QX0202, and the CZ Explosion-Proof electric appliances Co. Ltd, type CZ0513 series isolation switch module along with the CZ8000-8003 series of switch handles. The equipment may also be fitted with an alternative range of separately certified panel mounted control apparatus manufactured by BARTEC GmbH; in particular, the door of the enclosure can be fitted with BARTEC GmbH illuminated Indicator Module Type 07-335*-****/**** & illuminated Push button Type 07-336*-****/****, switch Module Type 07-332*-****/****, Control Switch Type 07-333*-****/****, and Switch Module, 4-Pole, Type 07-3381-****/****, control and Switching Unit, Type 07-337*-****/****, and control & signalling device adaptors type 05-0003-00**/****.

Inside the enclosure, and as listed in CML 18ATEX3417X and IECEx CML 18.0229X, a combination of terminals and/or rail mounted control apparatus may be installed.

The combination of terminals and apparatus is subject to a maximum dissipated power as listed in Table 2, and the maximum dissipated power is calculated using the method described in EN/IEC 60079-7, Annex E.2.:

Table 2: Maximum dissipated power ratings			
Minimum Enclosure size (mm)			**Max. Dissipated power (W)**
Height	**Width**	**Depth**	
100	100	80	3.80
120	120	80	5.14
150	150	90	7.42
190	190	100	10.43
160	380	120	18.04
250	250	120	15.05
250	400	150	21.54
380	380	220	26.11
600	400	220	35.35
600	600	300	43.14

The iTB and iSTB Range of Control Panels may consist of the following Ex components:-

Item Description	**Manufacturer Info**	**Ex Markings**	**Ex Certificate(s)**
Push Button QX0201	Quintex GmbH	Ex de IIC Gb Ex tD A21 IP66	IECEx EPS 11.0011U
Signal Lamp QX0202	Quintex GmbH	Ex de IIC Gb Ex tD A21 IP66	IECEx EPS 11.0012U
Potentiometer QX0203	Quintex GmbH	Ex de IIC Gb Ex tD A21 IP66	IECEx EPS 11.0013U
Ammeter QX0205	Quintex GmbH	Ex e IIC Gb Ex tD A21 IP66	IECEx EPS 11.0014U
Illuminated Push Button QX02012	Quintex GmbH	Ex de IIC Gb Ex tD A21 IP66	IECEx KEM 06.0015U

Item Description	Manufacturer Info	Ex Markings	Ex Certificate(s)
Explosion-proof load isolation switch module CZ0513	CZ Explosion-Proof electric appliances Co. Ltd	Ex db e IIC Gb	IECEx CQM 10.0006U
iTB and iSTB range of enclosures	Index Enclosures Ltd.	Ex eb IIC Gb Ex tb IIIC Db IP66 Ts: -50°C to +135°C	IECEx CML 18.0228U
Explosion-proof switch handles CZ8000-8003/**	CZ Explosion-Proof electric appliances Co. Ltd	Ex eb IIC Gb Ex tb IIIC Db IP66	IECEx CML 17.0042U
illuminated Indicator Module Type 07-335*-****/**** & illuminated Push button Type 07-336*-****/****	BARTEC GmbH	Ex db eb IIC Gb Ex db eb ia IIC Gb	IECEx CML 17.0046U
Switch Module Type 07-332*-****/****, Control Switch Type 07-333*-****/****, and Switch Module, 4-Pole, Type 07-3381-****/****	BARTEC GmbH	Ex db eb IIC Gb	IECEx CML 17.0045U
control and Switching Unit, Type 07-337*-****/****	BARTEC GmbH	Ex db eb IIC Gb	IECEx CML 17.0057U
control & signalling device adaptors type 05-0003-00**/****	BARTEC GmbH	Ex eb IIC Gb Ex tb IIIC Db	IECEx CML 14.0005U

The iTB and iSTB Range of Control Panels comprise the following Ex Equipment:-

Item Description	Manufacturer Info	Ex Markings	Ex Certificate(s)
iTB and iSTB range of terminal boxes	Index Enclosures Ltd.	Ex eb IIC T* Gb Ex tb IIIC T*°C Db IP66	IECEx CML18.0229X

Conditions of Manufacture

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

i. When the Control Panels are equipped by the manufacturer with wired terminals, a routine electric strength test shall be conducted in accordance with IEC 60079-7, clause 6.1.

ii. The maximum dissipated power in watts for each Terminal Box shall be calculated in accordance with IEC 60079-7, Annex E, E.2 and shall not exceed the value given in Tables 1 and 2 detailed in the Product Description.

iii. The Control Panels may also be manufactured to sizes not specified in the documentation provided that any given dimension is not larger than the respective dimension of the largest enclosure or smaller than the respective dimension of the smallest enclosure. The marked power rating shall be the power rating of the next smallest size of enclosure.

iv. The manufacturer shall take all reasonable steps to ensure that the user/installer complies with the special conditions for certification associated with the control panels and the equipment fitted to them; in addition, the manufacturer shall provide the user/installer with an appropriate copy of the certificate and instructions for each certified device/part that is fitted to the equipment that is subject of this certificate.

v. The enclosure types and manufacture used in the construction of these control panels is limited to the type and manufacture covered by IECEx CML 18.0228U; in addition, the combination and type of terminals that can be used with the control panels is limited to the combinations and type of terminals covered by IECEx CML 18.0229X.

vi. The equipment incorporates separately certified devices/parts; the manufacturer shall ensure that any changes to those parts do not affect the compliance of the certified products that are subject of this certificate.

vii. Depending on the type and number of terminals used, and the apparatus inside the enclosure of the iTB and iSTB panels, a range of Ambient Temperatures are suitable for the equipment; the Ambient Temperature Range, temperature class and assigned maximum surface temperature (for dust atmospheres) of the equipment shall be determined in accordance with the conditions/limitations listed in IECEx CML 18.0229X, and its maximum and minimum limits shall be within -50°C to +60°C. The marked ambient temperature range is limited to -40°C to +55°C for the iTB and iSTB Range of Control Panels that use the type CZ0513 series isolation switch module.

viii. When the BARTEC GmbH type 05-0003-00 control & signalling device adaptors are used with the equipment, the marked maximum ambient temperature of the equipment shall not exceed +55°C.

Specific Conditions of Use

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

i. The Control Panels comprise previously certified parts; the user and/or installer shall install and commission the equipment taking into account any restrictions or specific conditions of use that are applicable to the previously certified devices/parts that are fitted to the equipment.

ii. To maintain the ingress protection of IP66 any cable entry device shall be certified Ex e and shall be suitably rated IP66 and suitable for the environment it is to be used in.

iii. When the Terminal Boxes are installed in a dust explosive environment the user shall ensure that an accumulation of excessive dust layers on the enclosure is prevented.

iv. It is the user's responsibility to ensure that the equipment is connected to earth appropriately; refer to the User Manual of the equipment.

v. The equipment utilises previously certified devices/parts with type of protection "d", "e"; repair of the flameproof joints shall be made in compliance with the structural specifications provided by the original equipment manufacturer (OEM). Repairs shall not be made on the basis of the values specified in IEC 60079-1, Table 3.

vi. A routine electric strength test shall be conducted in accordance with IEC 60079-7, clause 6.1.

Components used which are covered by Ex Certificates issued to older editions of Standards

Certificate number	Standards (incl Ed)	Assessment result
IECEx EPS 11.0011U	IEC 60079-0:2007-10	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2007-04	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-7:2006-07	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-0:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-1:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
IECEx EPS 11.0012U	IEC 60079-0:2007-10	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2007-04	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-7:2006-07	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-0:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-1:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
IECEx EPS 11.0013U	IEC 60079-0:2007-10	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2007-04	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-7:2006-07	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-0:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-1:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
IECEx EPS 11.0014U	IEC 60079-0:2007-10	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-7:2006-07	Technical differences evaluated and found satisfactory. For detail see ExTR

Certificate number	Standards (incl Ed)	Assessment result
	IEC 61241-0:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-1:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
IECEx EPS 11.0015U	IEC 60079-0:2007-10	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2007-04	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-7:2006-07	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-0:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 61241-1:2004	Technical differences evaluated and found satisfactory. For detail see ExTR
IECEx CML 18.0228U	IEC 60079-0:2017	Current edition
	IEC 60079-7:2015	Current edition
	IEC 60079-31:2013	Current edition
IECEx CQM 10.0006U	IEC 60079-0:2011	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2014	Current edition
	IEC 60079-7:2006-07	Technical differences evaluated and found satisfactory. For detail see ExTR
IECEx CML 17.0046U	IEC 60079-0:2011, Ed. 6.0	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2014-06 E.7.0	Current edition
	IEC 60079-7:2015	Current edition
	IEC 60079-11:2011	I.S. excluded from this equipment
IECEx CML 17.0045U	IEC 60079-0:2011, Ed. 6.0	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2014-06 E.7.0	Current edition
	IEC 60079-7:2015	Current edition
IECEx CML 17.0057U	IEC 60079-0:2011, Ed. 6.0	Technical differences evaluated and found satisfactory. For detail see ExTR

Certificate number	Standards (incl Ed)	Assessment result
	IEC 60079-1:2014-06 E.7.0	Current edition
	IEC 60079-7:2015	Current edition
IECEx CML 14.0005U	IEC 60079-0:2011, Ed. 6.0	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-7:2015	Current edition
	IEC 60079-31:2013	Current edition

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