

EU Type Examination Certificate CML 18ATEX3300X Issue 3

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **iTB and iSTB Control Panels**
- 3 Manufacturer **Index Enclosures Ltd.**
- 4 Address **Unit 5 Wyvern Way,
Ashford,
Kent,
TN24 8DW
United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 equipment 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 If an 'X' suffix appears after the certificate number, it indicates that the equipment 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 IEC 60079-0:2018

EN 60079-1:2014

EN 60079-7:2015


EN 60079-31:2014

- 10 The equipment shall be marked with the following:

 II 2 G

Ex db eb IIC T* Gb

Ta=-*°C to +*°C

 II 2 D

Ex tb IIIC T*°C Db

IP66

Ta=-*°C to +*°C

* Refer to Specific Conditions of Use and Conditions of Manufacture.

11 Description

iTB Range Control Panels

The iTB Range of Control Panels utilise the Index iTB range of enclosures and terminal boxes, which are separately certified under CML 18ATEX3417X and CML 18ATEX3416U 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 IP66 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

Table 1: Maximum dissipated power ratings			
Minimum Enclosure size (mm)			Max. Dissipated power (W)
Height	Width	Depth	
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 CML 18ATEX3417X and CML 18ATEX3416U 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
Explosion-proof load isolation switch module CZ0513	CZ Explosion-Proof electric appliances Co. Ltd	Ex db e IIC Gb	IECEX CQM 10.0006U
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

Item Description	Manufacturer Info	Ex Markings	Ex Certificate(s)
iTB and iSTB range of enclosures	Index Enclosures Ltd.	Ex eb IIC Gb Ex tb IIIC Db IP66	IECEX CML 18.0228U
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

Variation 1

This variation introduces the following modification:

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

Variation 2

This variation introduces the following modifications:

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

Variation 3

This variation introduces the following modifications:

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

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	25/07/2019	R11016A/00	Issue of Prime Certificate
1	04/12/2019	R12891A/00	Introduction of Variation 1
2	01/04/2020	R13068A/00	Introduction of Variation 2
3	09 Jun 2025	R18887A/00	Introduction of Variation 3

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.

- i. When the Control Panels are equipped by the manufacturer with wired terminals, a routine electric strength test shall be conducted in accordance with EN 60079-7, clause 6.1.
- ii. The maximum dissipated power in watts for each Terminal Box shall be calculated in accordance with EN 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 CML 18ATEX3416U; 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 CML 18ATEX3417X.
- 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 of CML 18ATEX3417X, 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.

14 Specific Conditions of Use (Special Conditions)

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 EN 60079-1, Table 3.
- vi. A routine electric strength test shall be conducted in accordance with EN 60079-7, clause 6.1.

Certificate Annex

Certificate Number CML 18ATEX3300X
Equipment iTB Control Panel
iSTB Control Panel
Manufacturer Index Enclosures Ltd.



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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
iEL00032	1 of 1	0	25/07/2019	Quintex/CZ Control Apparatus
iEL00001	1 of 1	6	25/07/2019	iTB Enclosure range composite approval GA
iEL00002	1 of 1	7	25/07/2019	iSTB Enclosure range composite approval GA
iEL00024	1 of 1	0	25/07/2019	iTB Enclosure range quarter turn lock variant
iEL00036	1 of 1	1	25/07/2019	Certification Label iSTB&iTB Control Panel
iEL00010	1 of 1	1	25/07/2019	Max Power Dissipation Table for iSTB&iTB
iEL00033	1 of 1	0	25/07/2019	Typical Control Panel Layouts
iEL001CML	1 of 1	0	25/07/2019	IEL001CML Creepage and Clearance

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
iEL00032	1 of 1	1	27 Nov 2019	Quintex/CZ Control Apparatus

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
iEL00032	1 to 2	2	31 Mar 2020	Approved Control Apparatus

Issue 3

Drawing No	Sheets	Rev	Approved date	Title
iEL00036	1 of 1	2	09 Jun 2025	CERTIFICATION LABEL iSTB & iTB CONTROL PANEL