



Operation and instruction manual
Ex e Junction boxes type INDEX.E.E.xx

Polycarbonate



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Purpose of these instructions

Working in hazardous areas, the safety of personnel and plant depends on complying with all relevant safety regulations. Assembly and maintenance staff working on installations therefore have a particular responsibility. They require precise knowledge of the applicable standards and regulations. These instructions give a brief summary of the most important safety measures. It supplements the corresponding regulations which the staff must study.



SAFETY INSTRUCTIONS

Use the explosion-proof box only for its intended purpose. Explosion-proof boxes are not suitable for Zone 0 hazardous areas! Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision. No changes to the device impairing its explosion protection are permitted. Use the explosion-proof box only if it is clean and undamaged. Any damage can invalidate the Ex-protection.

Observe the following during installation and operation:

- National safety regulations
- National accident prevention regulations;
- National installation regulations(e.g. IEC 60079-14);
- Generally recognized technical regulations;
- Safety guidelines in these operating instructions;
- Characteristic values given on explosion-proof switch module.

Applicable scope

Transport and storage in original packaging only. National safety and installations regulations and the generally accepted rules of engineering practice must be observed when mounting and operating this equipment.

Technical data

Ex mark: Ex II 2G Ex e.....[ia....] II Gb
 Ex II 2D Ex tb IIIC Db

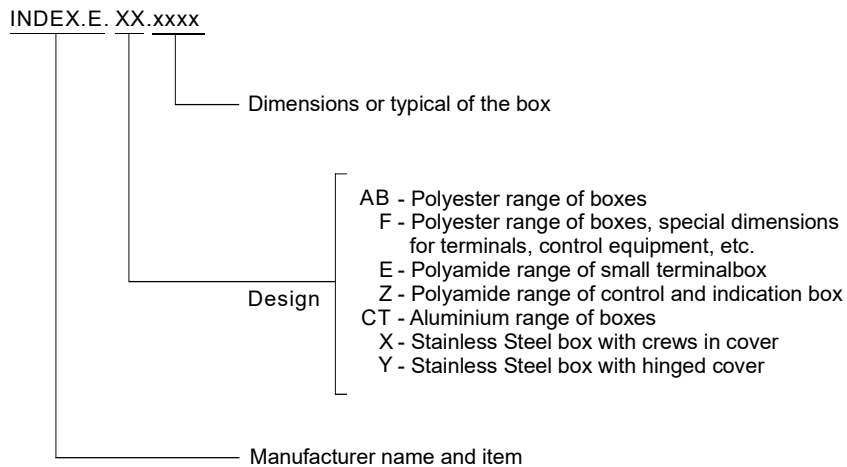
possible explosion-proof protection - d, e, m, ia / ib / etc.
 possible temperature class - T4, T5, T6 - 85°C, 100°C, 135°C

Can be used in zone 1,2, 21 en 22
 Ambient temperature: $-20^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$
 Optional temperature: $-40^{\circ}\text{C} \leq T_a \leq 80^{\circ}\text{C}$
 Degree of protection: IP65 / IP66
 Certificate CML 18ATEX 3276X
 IECEx CML 18.0132X

Conformity to standards

The explosion-proof box is designed and manufactured according to standard of ISO 9001. The explosion-proof box is in conformity with ATEX directive and the standards IEC60079, EN60079 and IEC61241, EN61241

Model and implication of INDEX.E





INDEX.E.E - Junctionboxes

Technical data:

Ex mark: II 2G Ex e.....ia.... II Gb
 II 2D Ex tb IIIC Db

possible explosion-proof protection - d, e, m, n, ia / ib / etc.
 possible temperature class - T4, T5, T6 - 85°C, 100°C, 135°C

Can be used in zone 1,2, 21 en 22
 Ambient temperature: -20°C ≤ Ta ≤ +40°C
 Degree of protection: IP65 / IP66

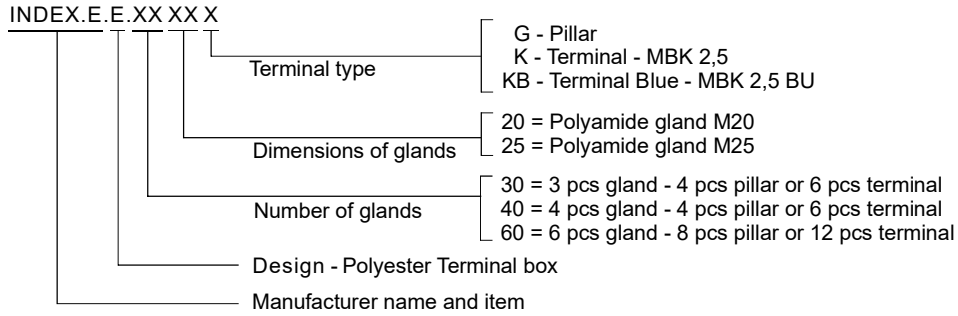
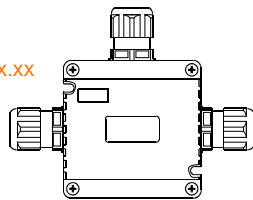
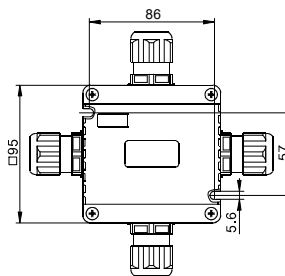


Illustration	Enclosure type	Glands	Terminals	Torque cover
<p>Type INDEX.E.E - 120 x 120 x 65 mm</p>	INDEX.E.E.3020.G	3 x M20	4 x Pillar	0.5 Nm
	INDEX.E.E.3025.G	3 x M25	4 x Pillar	0.5 Nm
	INDEX.E.E.4020.G	4 x M20	4 x Pillar	0.5 Nm
	INDEX.E.E.4025.G	4 x M25	4 x Pillar	0.5 Nm
	INDEX.E.E.3020.K	3 x M20	6 x MBK2,5	0.5 Nm
	INDEX.E.E.3025.K	3 x M25	6 x MBK2,5	0.5 Nm
	INDEX.E.E.4020.K	4 x M20	6 x MBK2,5	0.5 Nm
	INDEX.E.E.4025.K	4 x M25	6 x MBK2,5	0.5 Nm
	INDEX.E.E.3020.KB	3 x M20 BU	6 x MBK2,5 BU	0.5 Nm
	INDEX.E.E.3025.KB	3 x M25 BU	6 x MBK2,5 BU	0.5 Nm
	INDEX.E.E.4020.KB	4 x M20 BU	6 x MBK2,5 BU	0.5 Nm
	INDEX.E.E.4025.KB	4 x M25 BU	6 x MBK2,5 BU	0.5 Nm
<p>Type INDEX.E.E - 160 x 160 x 65 mm</p>	INDEX.E.E.6020.G	6 x M20	8 x Pillar	0.5 Nm
	INDEX.E.E.6025.G	6 x M25	8 x Pillar	0.5 Nm
	INDEX.E.E.6020.K	6 x M20	12 x MBK2,5	0.5 Nm
	INDEX.E.E.6025.K	6 x M25	12 x MBK2,5	0.5 Nm
	INDEX.E.E.6020.KB	6 x M20 BU	12 x MBK2,5 BU	0.5 Nm
	INDEX.E.E.6025.KB	6 x M25 BU	12 x MBK2,5 BU	0.5 Nm

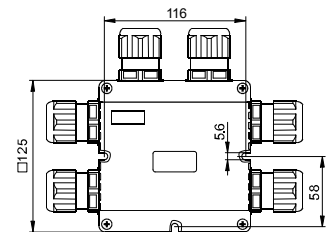
Type INDEX.E.E. 302x.xx



Dimensions



Type INDEX.E.E.402x.xx



Type INDEX.E.E.602x.xx



Safety and Maintenance Instruction

This Safety Instruction is meant for skilled electricians and instructed personnel in accordance with national legislation, including the relevant standards and, where applicable, in accordance with IECEx 60079 and EN60079 on electrical apparatus for explosive atmosphere. Read carefully this instruction before installation or maintenance.

After each opening (at least once a year for inspection) the following points must be checked/performed:

- Compliance with permitted ambient temperatures;
- Damages on the box
- Damages on the gaskets
- Clean upper dust and avoid dust accumulating.

1. Enclosures must be installed and maintained in accordance with all standards regarding electrical installations in hazardous areas classified for explosive gas and/or dust atmospheres.
2. Avoid any dust accumulation.
3. The boxes must not be operated in zone 0 hazardous areas.
4. Ambient temperature, maximum voltage and maximum current must not exceed mentioned values on the tagplate.
5. Changes of the design and modifications to the equipment are not permitted.
6. The boxes shall be operated as intended and only in undamaged and perfect condition.
7. If box or part of box is damaged, the power has to be disconnected immediately.
Contact Index Elektro BV for further instructions. It is not allowed to repair the box without the written permission of Index Elektro BV.
8. Repairs may only be carried out by qualified electrician from INDEX ELEKTRO BV.
9. All operations of installation, replacement or inspection must **not** be performed when electrical circuit is alive.
10. All technical data indicated on the tag plate of the box have to be observed.
Also all other information on tag plate or extra text plate has to be respected.
11. Accessories used for cable entries must meet IECEx 60079 and EN 60079 standards.
Their minimum protection must be IP54. When gaskets are used to maintain raintightness, be sure the gaskets are mounted in their adequate locations.
12. All unused holes for cable entries etc., have to be closed with appropriate plugs, which are ATEX / IECEx certified.
13. Handle carefully all joint parts so to avoid damaging coupling surface.
14. If cover of Ex box is fitted with bolts, all bolts must be present and completely screwed.
(For tightening moment of bolts of Ex box see the sheets before, if one of these conditions is not regarded, the enclosure has to be disconnected from power supply immediately, because the enclosure is not explosion-proof.
In case of lost bolts we recommend to replace them with new screws. Use screws with same diameter, pitch and length of thread.
15. Disconnect power immediately if a coloured lens of a signalling light is damaged or broken, until a new lens has been fitted.
16. All Ex enclosures with external earth bolt must be connected to earth with an external earth conductor with adequate cross section (at least 4 mm²).
17. All metal parts in and outside the box must be connected to earth (such as cable glands etc.).
18. When a metal cable gland used in polyester or polyamide boxes an external earth bolt is required.
19. The respective valid national regulations shall be observed

Label 3 - Junction boxes INDEX.E.E

	Explosion-proof terminal box
www.indexelektro.nl	Type INDEX.E.E.
	T.amb. -40°C to +40°C
Ex II2G Ex eb ia IIC T6 Gb Ref.	
Ex II2D Ex tb IIIIC T80°C	60V/1A - IP66
IECEX CML18.0132X	Year 2019
CML 18ATEX3276X	CE 2503