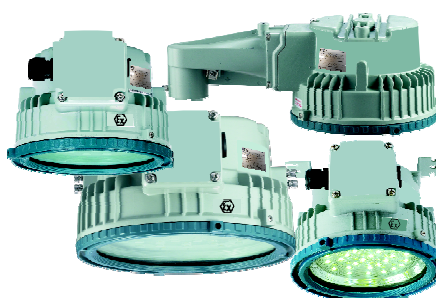




Product manual Z0873 and Z0874 LED light fittings



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Z087x-08-12-17



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 electric apparatus modules only for its intended purpose. Explosion-proof electric apparatus modules 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 electric apparatus only if they are 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 the explosion-proof apparatus modules.

Conformity to standards

Explosion-proof electric apparatus module is designed, manufactured and tested according to standard of ISO 9001. The explosion-proof apparatus module conforms to the directive 94/9/EC, ATEX and the following standards:

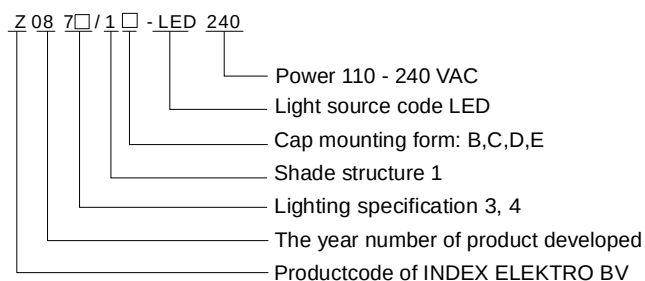
IEC60079-0 : 2011	EN60079-0 : 2012
IEC60079-1 : 2007	EN60079-1 : 2007
IEC60079-7 : 2006	EN60079-7 : 2007
IEC60079-31: 2008	EN60079-31 : 2009

Applicable scope

This series products is suitable for the explosive hazardous area zone 1, zone 2 and dust hazardous zone 21 and zone 22, work as illumination; The product may be used indoors and outdoors.



Model and implication

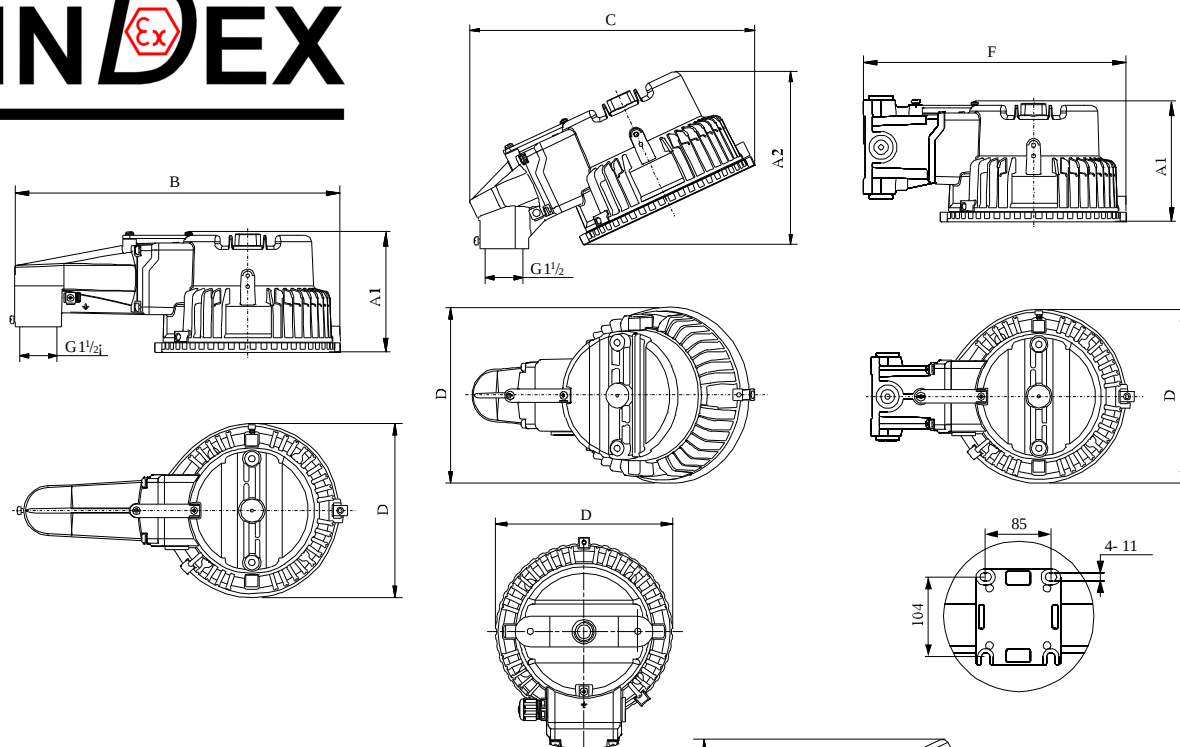


Technical Data

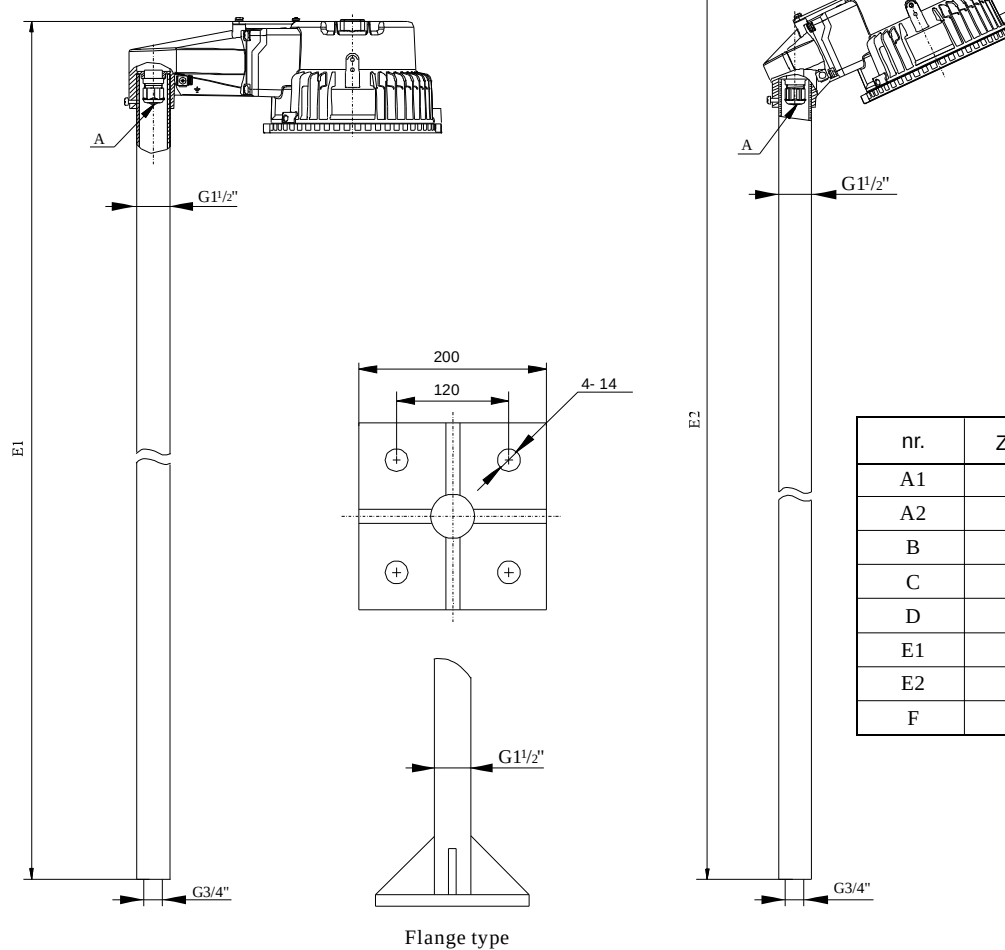
Ex mark II 2 G Ex de IIC T6 Gb,
II 2 D Ex tb IIIC T85°C Db

- Degree of protection: Ip66
- Ambient temperature: $-40^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}/55^{\circ}\text{C}$ or $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}/55^{\circ}\text{C}$ as per table 2
- Cable entry Certified cable glands, M25
- Terminals: L and N – 2x1,5 qmm. Ground internal 1 x 6 qmm / Ground external 1 x 6 qmm.
- Suggested moment of screw down:
 - * M25 cable glad / stopping plug - 2.5 Nm
 - * M5 grounding screw - 3.0 Nm
 - * M6 terminal schrew - 3.5 Nm

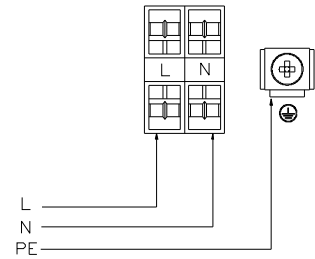
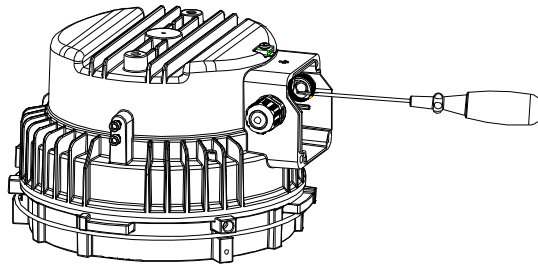
No .	Model specification	Lumen	Power	Rated voltage	Current	Ambient temperature/ Temperature group	
						$\leq T_a 40^{\circ}\text{C}$	$\leq T_a 55^{\circ}\text{C}$
27	Z0873/1 ☐ - LED 30W	2550	30W	110~240 VAC - 50/60 Hz	0.16A	T6	T6
41	Z0874/1 ☐ - LED 45W	3843	45W	100~240 VAC - 50/60 Hz	0.25A	T6	T6
42	Z0874/1 ☐ - LED 60W	5258	60W	100~240 VAC - 50/60 Hz	0.31A	T6	T6



A represents a built-in polyamide M25 cable gland



nr.	Z0873	Z0874
A1	156	160
A2	225	253
B	435	485
C	370	415
D	230	280
E1	2470	2470
E2	2590	2620
F	272	377



Installation/operation

○ Transport and storage in original packaging only national safety and installations regulations and the generally accepted rules of engineering practice must be observed when erecting and operating this equipment.
In order to guarantee that the explosion-proof light fittings normal work and the security, the user must observe following stipulated:

- The explosion-proof light fittings is applicable for using in indoors and outdoors zone 1, zone 2, zone 21 and zone 22.
- The ambient temperature is not lower than $-40^{\circ}\text{C}/-20^{\circ}\text{C}$ and not higher than $+40^{\circ}\text{C}/+55^{\circ}\text{C}$.
- The explosion-proof light fittings should be used under the following atmospheric condition :
The pressure is $80\text{kPa} \sim 10\text{kPa}$ ($0.8 \text{ bar} \sim 1.1 \text{ bar}$) The volume ratio of standard oxygen content is 21% air.
- The explosion-proof light fittings mounting direction: Vertical hoisting and vertical bank $\pm 45^{\circ}$ hoisting.



Do not open while energized !

Must cool down for 15 minues before open the light fittings !

- When mount or open the coverglass suite, the flameproof thread and the coverglass are not damaged;
- When open the light fittings, that the flameproof thread is clean mustbe guaranteed in order to avoid affecting the explosion-proof performance and installation of the light fitting;
- Choose the introduction of cable high temperature resistant performance is not less than 95°C
- Wire connecting.
 1. Size appropriate “-“ screwdriver inserts the terminal like the position of chart 1, causes the post to the clamp line mouth to open;
 2. Appropriate wire inserts the clamp line mouth, draws out the screwdriver, the wire reliably is then locked.
 The terminal is Explosion-proof terminal, each terminal's in-out port has two terminals positions, each positions only can insert one lead.
- The cable must not be damaged; Cautious disposal of cable connection, for instance:
 - The cable must be inserted in the terminal reliably;
- - The cable does not allow to have the phenomenon of empty meets;
 - The cable must not be damaged;
 - The both internal and external earthing shall be connected reliably. Ground wire cross-sectional area of not less than the phase conductor cross-sectional area level.



Being operational

- Before being operational, should carry on the test according to the stated method in the related rule.
- Before being operational, you should examine the lighting fittings correct function and mounting according to this instruction and other feasible regulation
- There will be a temperature rise on the surface of light fitting when it is used and it is normal phenomena. Don't touch the transparent parts due to its temperature is high
- If the metal halide lamp, high pressure sodium vapor lamp and high pressure mercury vapor lamp are extinguished suddenly during working started once again, they cannot be immediately shined. This is a normal phenomenon.
After cooling for a 10 to 15 minutes, they can be normally shined when restarted once again. The hot start should be avoided as far as possible so as not to make the bulbs damage.
- The same models bulbs should be chosen as far as possible when replacing the bulbs, changing the power and type of bulbs freely prohibited

Cable gland, stopping plug

- Generally, only certified cable glands and stopping plugs are permitted for use. However, the explosion-proof performance after the coordinate use should not be lower than the overall product. The explosion-proof performance of cable glands and stopping plugs should not be lower than: Ex e II - IP66
- The degree of protection of whole product will be reduced when the cable gland or stopping plug which the degree of protection is lower than IP66 are used
- Its installing and operation instructions should be observed if other cable glands are used;
- Care should be taken to the cable glands which should be matched with the used cable outside diameter properly; The outer diameter of being used cable see mark of cable glands.
- Unused cable glands shall be closed with certified blanking plug and the diameter of blanking plug shall be properly adapted to the cable diameter.
- In order to ensure the required minimum degree of protection, the bolts of cable glands, blanking plug and relevant sealing bolts are to be tightened down.



Over tightening of cable glands, blanking plug and relevant sealing bolts might impair the performance of protection.

Accessories / spare parts

Only original spare parts as well as original accessories made by INDEX ELEKTRO BV can be used.

Maintenance

- Observes strictly your country control overhaul and standard. The spare parts which have the important effect to explosion-proof performance must inspect carefully and specially. When you take down or replace the components, the equipment must be power off. Before turn off the switch and open the light fitting must be refrigerated for 15 minutes! All the maintenance and repair must use the original component made by INDEX ELEKTRO BV. Replacing and repairing should only take by professional electrician.
- The following points must be checked during maintenance :
 - o Compliance with permitted temperatures;
 - o Check if the built-in component is fixed reliably;
 - o Check if the earthing is well connected;
 - o Check if the glass cover and light fitting have flaw or damage;
 - o Check if all the seals are in the hermetic working state;
 - o Check if the flameproof threat is not damaged.
- Notice: You should often carry through the maintenance to make the light fitting all right, checking at least one time each year.
- Repair and overhaul shall comply with IEC60079-19 and EN60079-19

Disposal / recycling

The respective valid national regulations for disposal of waste shall be observed strictly when disposing of apparatus! We are pleased to answer any special questions you may have. Please contact INDEX ELEKTRO bv.