



## IPIEx Certificate of Conformity

Iranian Petroleum Institute confirms that the activities of

Golnoor

Address: No. 9, Golnoor Co., Golnoor Bldg., Corner of Elahiye  
Dd.-End, North Sheikh Ave., Isfahan, Iran

This Certificate Complies With:

Equipment: Explosion-Proof light fitting (ASTERIA series)  
Type of protection: db , op is , tb  
Ex db op is IIC T6 Gb, Ex op is tb IIIC T85°C Db  
(LED Type)  
Marking: Ex db IIC T6 Gb, Ex tb IIIC T85°C Db  
(Fluorescent Type)

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 within the scope of the certificate and that the manufacturer's quality system, relating to the Ex-products covered by this certificate, was assessed and found to comply with the IPIEx Quality system requirements. This certificate is granted subject to the conditions as set out in the IPIEx Scheme.

(For details see scope of certificate)

Certificate No: IREX 25 EPIL 022

Certificate Dates and History

Certificate Issue Date: 2025.09.06 Issue No: 00

Certificate History: --- Certificate Expiry Date: 2028.09.05

Approved for issue on behalf of the IPIEx Certification Body

Seyed Mohsen Mirsadri

Certification Body Manager

Certificate issued by:

Name: EPIL  
Address: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St.,  
Bozorgmehr St., Vali-Asr Ave., Tehran-Iran  
Tel: (+9821) 61971



1. This certificate and schedule may only be reproduced in full.
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.ipiex.ir](http://www.ipiex.ir) or use of this QR Code.

# Golnoor

Light up Your Life

## ASTERIA

Installation and utilization instruction for  
Explosion protected LED Lighting



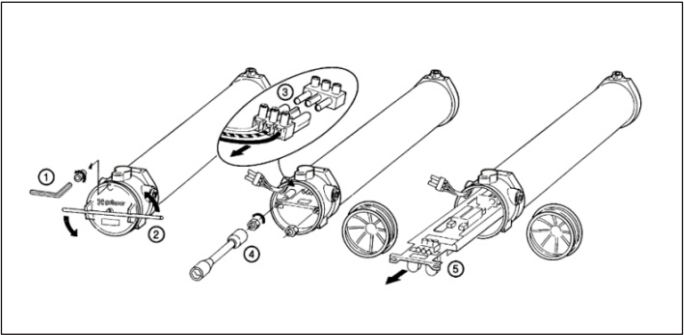
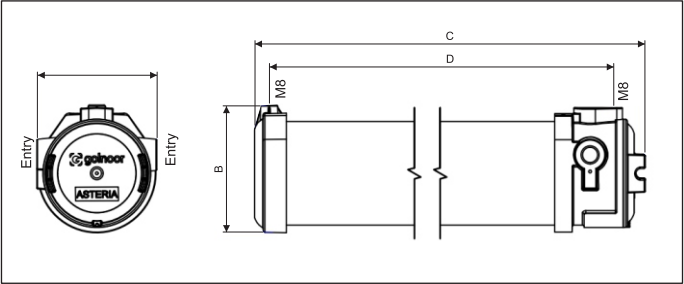
To observe the terms and conditions of the  
product guarantee, please refer to [Golnoor's website](http://Golnoor's website)

[www.golnoor.com](http://www.golnoor.com)  
[info@golnoor.com](mailto:info@golnoor.com)

Mail-box 1586685717  
Customer service : +98 021-88672727

**Dimensions (mm)**

	A	B	C	D
Large	140	148	1325	1265
Medium	140	148	715	655
Small	140	148	465	405



**8. Repair / Overhaul / Modifications**

Repairs and overhauls may only be carried out with genuine Golnoor spare parts. Switch off the equipment before opening or isolate it before the dismantling of individual parts. Only use original spare parts. Repairs that affect the explosion protection may only be carried out by Golnoor or a qualified electrician in compliance with the applicable national rules. For repair of electrical equipment in protection mode is suggested to follow the instructions indicated in IEC/EN 60079-19. Modifications to the equipment or changes to its design are not permitted.

All reparations have to be done without voltage! In the event of damage to the flameproof enclosures or other part of equipment that could affect the mode of protection, replacement of these components is mandatory. In case of doubt, the respective equipment shall be sent to Golnoor for repair. Reconstruction or modifications to equipment are only possible within the scope of the approvals and shall be certified afterward

**9. Disposal / Recycling**

When the equipment or its parts are disposed of, the respective valid national regulations on waste disposal shall be observed. Subject to alteration or supplement of this product without any advertisement before. Save these instructions for future reference. All statements, technical information, and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof is not guaranteed. Since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assume all risk and liability whatsoever in connection therewith.

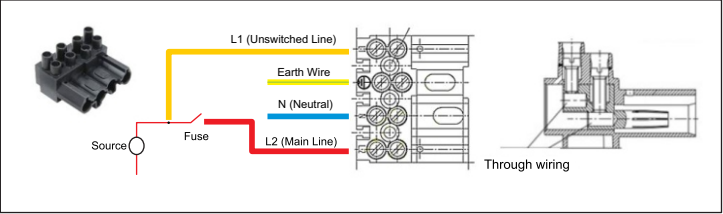
6.5 Putting into operation the emergency system

Before putting the light fitting into operation, the tests specified in the individual national regulations shall be performed. In addition to this, the correct functioning of the light fitting shall be checked in accordance with these operating instructions and other applicable regulations.

Only carry out insulation measurement between PE and external conductor L1 (L2, L3) as well as between PE and N.  
-Measurement voltage: Max.: 1KV AC/DC-  
-Min insulation: 2M Ω.

The light fitting may only be operated when closed.

**Warning:** If the power supply and emergency system are energized from the same phase (L2), after the power goes out (de-energization of L2), the battery will energize the circuit. After a while, the battery will be discharged. Therefore, to prevent this phenomenon, the power supply and emergency system are supplied from two separate phases (Unswitched Line and L2).



**Warning:** Only certified equipment may be put into operation. Improper installation and operation of the lamp leads to loss of the guarantee.

**Warning:** To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.

7. Maintenance / Servicing

The valid national regulations for the maintenance/servicing of electrical equipment for use in potentially explosive atmospheres shall be observed (i.e. IEC/EN 60079-17). Before opening the enclosure, it is necessary to ensure that the voltage supply has been isolated and should be allowed to cool down for 10 minutes after switching off. The necessary intervals between servicing depend upon the specific application and shall be stipulated by the operator according to the respective operating conditions. We recommend regular maintenance according to an approved preventive maintenance program. During servicing, above all, parts on which the explosion protection depends shall be tested or visually inspected to ensure their correct state, i.e.:

- Enclosure threaded parts like cover and cable entries, shall be properly greased, in good condition, clean, and without any corrosion or damage.
- The thread shall not be treated, painted nor varnished! preferably with grease thermally and chemically stable i.e.: Molikote® Br2 plus.
- Check all seals for efficiency and intactness. Replace older or damaged seals with new seals.
- Be aware of the lamp tube change intervals specified by the manufacturer of it. Lamp tube types must be as specified.

Any damaged parts shall be replaced immediately using original parts or damaged parts shall be repaired by the manufacturer. Check that connection terminals, cable entries, and blind plugs fit securely. All electrical and electronic material inside of the enclosure shall be maintained as per their own instructions. If, in the course of servicing, it is ascertained, that repairs are necessary, section 8 of these operating instructions shall be observed.

Table 1. Types configuration

Item	Type	Lamp Tube	Lamp Holder	Power	Size	Temperature Class -30<Ta<55°C	Surface temperature -30<Ta<55°C	Weight (Kg)
1	X10 NF 72-L	2x36	G13	72	L	T6	85°C	9.7
2	X10 NF 36-M	2x18	G13	36	M	T6	85°C	5.8
3	X10 NLT 36-L	2x18 LED	G13	36	L	T6	85°C	9.4
4	X10 NLT 18-M	2x9 LED	G13	18	M	T6	85°C	5.6
5	X10 EF 72-L	2x36	G13	72	L	T6	85°C	10.6
6	X10 EF 36-M	2x18	G13	36	M	T6	85°C	6.6
7	X10 NL 60 -L	-	-	60	L	T6	85°C	9.4
8	X10 EL 60 -L	-	-	60	L	T6	85°C	10.3
9	X10 NL 40 -L	-	-	40	L	T6	85°C	9.3
10	X10 EL 40 -L	-	-	40	L	T6	85°C	10.2
11	X10 EL 30 -M	-	-	30	M	T6	85°C	5.8
12	X10 EL 30 -M	-	-	30	M	T6	85°C	6.5
13	X10 NL 20 -M	-	-	20	M	T6	85°C	5.8
14	X10 EL 20 -M	-	-	20	M	T6	85°C	6.5
15	X10 NL 15 -S	-	-	15	S	T6	85°C	4.3
16	X10 EL 15 -S	-	-	15	S	T6	85°C	5.1
17	X10 NL LIOL -S	-	-	15	S	T6	85°C	4.8
18	X10 NL MIOL -S	-	-	15	S	T6	85°C	5

1. Safety Instructions

This product shall be installed and connected by skilled electricians and instructed personnel in accordance with IEC/EN 60079-14 and the respective national legislation on electrical equipment for explosive atmospheres. The national safety rules and regulations for the prevention of accidents, as well as the safety instructions, like this text in these operating instructions manual, shall be observed. The luminaries must not be operated in Zone 0 or 20 hazardous areas. The requirements of IEC/EN 60079-31 regarding excessive dust deposits and temperature must be considered by the user. The indicated surface temperatures are not related to a layer above 5mm thickness. Before opening, electrical power to the luminaire must be turned off for at least 10 minutes. The temperature class and explosion group stated on the luminaire shall be observed. To ensure adherence to the temperature class or surface temperature stated on the type label of the luminaire, the permissible ambient temperature shall be observed. Light fittings shall be used for their intended purpose, shall be undamaged, and shall be in perfect and clean condition. Keep tightly closed when in operation. The technical data indicated in point 3 as well as those indicated in light fitting, must be observed. Modifications or design changes to this luminaire that can affect the explosion protection are not permitted. Avoid multiple, short-time switching operations. Only original Golnoor spare parts may be used as replacements and for repairs. Repairs that affect the explosion protection may only be carried out by Golnoor or by a qualified electrician in compliance with the respective national regulations. Prior to being put into operation, the luminaries shall be checked in accordance with the instructions as per section 6. Before initial operation, any foreign matter shall be removed from the light fitting. Do not keep this operating instruction manual inside of the luminaire during its operation.

2. Conformity with Standard

This equipment conforms to the following standards:

- EN 60 079-0: 2017
- EN 60 079-1: 2014
- EN 60 079-31: 2022
- EN 60 079-28: 2015

It has been designed, manufactured, and tested according to the state of the art and according to EN ISO 9001.

### 3. Technical Data

- Marking: Ex db IIC T6 Gb
- Ex tb IIIC T 85°C Db
- EU-type examination certificate: IR EX 25 EPIL 022
- Marking: Ex db op is IIC T6 Gb (LED type)
- Ex op is tb IIIC T 85°C Db (LED type)
- Ex db IIC T6 Gb (Fluorescent type)
- Ex tb IIC T 85°C Db (Fluorescent type)
- Rated voltage: 220-230 V, 50/60 Hz
- LED (direct w/o driver): T8 for NLT type  
(When LED tubes are used, the manufacturers shall be consulted for their maximum operating temperature.)
- Terminals: 6x 2.5 mm2 L E N, 8x 2.5 mm2 L L1 E N for emergency type. (Through wiring ability)
- Degree of protection IEC/EN 60529: IP66 Perm. ambient temperature: See Table 1
- Enclosure material: Copper-free aluminum
- Glass material: Borosilicate
- Color of enclosure (standard version): RAL 7072 FBE
- Cable gland entries: 2xM25/M20

### 4. Field of application

These accessories are intended for use in potentially explosive atmospheres in Zones 1, and 2 in accordance with IEC/EN 60079-10-1 and in Zones 21,22 in accordance with IEC/EN 60079-10-2. The enclosure materials used, including any external metal parts, are high-quality materials that ensure corrosion resistance and resistance to chemical substances according to the requirements for use in a "normal industrial atmosphere" An example, among others, is the following:

- Copper-free aluminum alloy casting
- Stainless steel
- Borosilicate glass

In case of use in an extremely aggressive atmosphere, please consult the manufacturer.

### 5. Use/Properties

This light fitting can be used inside or outside to illuminate areas with potentially explosive atmospheres and may be used only in places with low mechanical impact risk, due to the normal operation in the industrial process. The temperature class, explosion group, and permissible ambient temperature can be found in the tables and technical data. The data according to sections 2 and 4 shall be considered during use. Applications other than those described are not permissible without a written declaration of consent from Golnoor. During operation, the instructions stated in section 7 of the operating instructions shall be observed. The sole responsibility concerning the suitability and proper use of these luminaries lies with the operator.

### 6. Installation

The IEC/EN 60079-14, relevant national regulations, and the generally recognized rules of engineering shall be applied for the installation and operation. Transport and storage of the luminaries are permitted in the original packaging and specified positions only. Pay attention when installing, maintaining, or repairing the light fittings, do not damage the fire-finish of the glass surface by abrasions, sanding, small strokes, etc. that can weaken their mechanical functions. Intensive sun radiation in areas of high ambient temperatures may cause inadmissible temperature rise inside the luminaries. This may result in a decrease in the lifetime of the electronic ballast (EVG) or electronic components inside of the luminaries. Therefore, those luminaries should be switched off during the daytime by a photocell control. The improper installation and operation of light fittings can result in the invalidation of the guarantee.

### 6.1 Mounting

Fixing dimensions are shown in Figure Luminaries are suitable for ceiling, wall, or pole mounting. The accessories are not included. See the Golnoor catalog for the correct selection of mounting accessories. The light fitting may only lie flat on and be fixed torsion-free to the fastening points provided for direct assembly. The screws chosen shall fit the fixing hole and shall not damage the hole (e.g. use of a washer, select the correct length, etc.). The number of screws used for fixing the equipment shall correspond to the number of fixing holes in the light fitting. Special attention shall be paid to the PE connections. Warning: Overtightening might damage the light fitting.

### 6.2 Opening the device / Electrical connection

Before opening the light fitting, it is necessary to ensure that there is no voltage and it must be allowed to cool down for 10 minutes after switching off, as a safety measure. The connection of explosion-protected light fittings may only be carried out by specialists. These luminaries shall be connected directly in the flameproof enclosure using certified flameproof cable entries, whereby the mounting instructions for the cable entry shall be considered (see Section 6.3 Cable Entries).

**Warning:** To establish the type of protection "Ex-d flameproof", it is essential to pay attention to the correct mounting of the cable and cable entry. To open a flameproof enclosure, the interlocking screw, item 1, in the cover has to be unscrewed. The cover, item 2, can then be removed from the luminary by turning it anticlockwise. Warning: The cover shall be safeguarded against falling off. To maintain explosion protection, conductors shall be connected with special care. The insulation shall reach up to the terminal. The conductor itself shall not be damaged. The minimum and maximum conductor cross sections that can be connected shall be observed, see point 3 technical data. All screws and/or nuts of connection terminals, including those not in use, shall be tightened down securely. Excessive tightening can affect the connection.

### 6.2.1 Lamp

The lamp tube type approved for each light fitting is specified in Table 1. For installation of lamp tubes, once the steps mentioned in point 6.2, remove the 2 nuts item 4, and extract the tray, item 5. Take special care to remove correctly the cable for the internal PE connection between the tray and body of the light fitting. Install or replace the suitable lamps into the corresponding lamp holders, test for a secure installation, insert the tray again, connect the cable for internal PE connection between the tray and body of the light fitting, screw the 2 nuts, item 4, and then close the light fitting as indicated in point 6.4.

Only lamp tubes that are approved for each type of light fitting may be used. If you have any doubts, please consult with Golnoor. You can use LED tubes from many manufacturers, observe the correct selection of LED tubes according to the light fittings LED type, these must be suitable for direct mains connection without any driver, ballast, or control gear, T8 for G13 lamp socket and with appropriate length. Special care to control the correct LED tube selection according to the luminaire wiring type shall be taken.

**Warning:** Do not install any type of fluorescent lamps in any LED-type light fittings.

Due to these LED types of light fittings having direct mains connection and having no control gear inside, the use of fluorescent tubes in these LED types of light fittings can cause an internal short circuit or an explosion that can destroy the light fitting. The improper use of LED-type luminaires and the use of LED tubes not suitable for the provided wiring may result in an invalidation of the guarantee.

### 6.3 Ex-d cable entries / Ex-d blanking plugs

Only suitable certified flameproof cable entries and certified flameproof blanking plugs may be used. These should be for the same groups of the explosion of the light fittings, in this case, IIC for gas and IIIC for dust. The relevant mounting and installing manufacturer directives for certified cable entries and blanking plugs shall be observed. When using cable entries with a degree of protection that is lower than the IP protection of the light fitting (see Technical Data), the degree of protection IP for the complete unit is reduced. To ensure the required minimum degree of protection, the cable entries shall be tightened down securely. Over-tightening can impair the degree of protection. In order to guarantee and/or establish the explosion protection and degree of protection, unused entry holes shall be sealed with a certified flameproof blanking plug.

### 6.4 Closing equipment / Cover lock

Any foreign matter shall be removed from the equipment. Grease the cover thread before screwing the cover, preferably with grease thermally and chemically stable i.e.: Molikote® BR2 plus. Pay attention to the correct fit of the seal into the cover. All seals must be clean and undamaged. To close the light fitting, it is necessary to fit the cover onto the light-fitting body correctly (if necessary, turn the cover counterclockwise).

The cover can then be screwed into the enclosure base by turning it in a clockwise direction until the stop is reached. After this, the cover shall be fixed in position with the interlocking screw of the cover, see Fig.