

## PURPOSE

Explosion protected bulkhead light fitting type 0403.24/.. is intended for use:

- in industry areas endangered by flammable and explosive mixtures of gases and air, fumes of flammable liquids and air, or various combinations between the two, in danger zones 1,2 in ordinance with standards IEC 60079-10/03,
- in mines endangered by explosive and flammable mixtures of gases and air, fumes of flammable liquids and air, or various combinations between the two, or flammable mixtures of dust and air.

## TYPE OF PROTECTION

Explosion protection is achieved by the use of requirements of the protection types: "Ex d flameproof enclosure" in accordance with EN 60079-1:2007., "Ex e increased safety" in accordance with EN 60079-7:2007 and "General requirements" in accordance with EN 60079-0:2006.

EC-Type Examination Certificate: CESA 08 ATEX 017X

Apparatus category: I M2 II 2G

Marking of explosion-protection: - type 0403.24/10 - Ex ed IIC T2, T3  
 - type 0403.24/11,12 - Ex ed IIC T3  
 - type 0403.24/20 - Ex de I

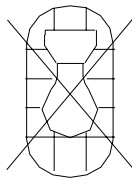
Degree of protection (IP Code): IP 64 in accordance with EN 60529+A1, category 1

Resistance to shock: IK 08 in accordance with EN 50102

Insulation class : I (protective earthing) in accordance with EN 61140

## MODEL CODE

**Type 0403.24/11** Ex ed IIC T3 – 40W DIN 49810 Bl.4 / 230V AC -30°C < T<sub>a</sub> < +50°C without limitations on connecting cable  
**Type 0403.24/12** Ex ed IIC T3 – 40W DIN 49810 Bl.4 / 230V AC -30°C < T<sub>a</sub> < +50°C without limitations on connecting cable  
**Type 0403.24/20** Ex ed I – 100W max. EN 60064 / 230V, 110V AC -20°C < T<sub>a</sub> < +40°C without limitations on connecting cable  
**Type 0403.24/10** - as shown on warning label below

| <b>MOUNTING<br/>LIMITATION</b><br> | IEC 60064  |  | DIN 49810 Bl.4                 |
|---|--|--|--------------------------------|
|   | 230V AC ; 110V AC  |  | 24V AC/DC                      |
|   | 100W max   |  | 60W max                        |
|   | -30°C < T <sub>a</sub> < +40°C                                       |  | -30°C < T <sub>a</sub> < +50°C |
|   | WITHOUT<br>LIMITATIONS<br>ON CABLE<br>WALL LIGHT<br>VERTICAL UP ONLY | USE CABLE<br>SUITABLE FOR A<br>MINIMUM<br>TEMPERATURE OF<br>90°C | WITHOUT<br>LIMITATIONS         |
|   | <b>T2</b>  |  | <b>T3</b>                      |

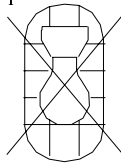
## TECHNICAL DATA

Rated bulkhead voltage: 250 V AC  
 Rated lightbulb voltage: 230V AC, 110V AC, 24V AC / DC  
 Lightbulb: 100W max. / 230V AC, 110V AC, 24V AC / DC – EN 60064  
 60W max / 230V AC – DIN 49810 Bl.4 [lightbulb with ▽ marking]  
 Lampholder: E27, EN 60238  
 Connecting terminals: L, N - max. 4mm<sup>2</sup> solid, stranded  
 Terminal for protective earthing conductor connection -PE; max 2 x 6 mm<sup>2</sup> stranded  
 EEx e cable gland and plug: I M2 trumpet-shaped cable gland and plug EEx e I are not delivered with light fitting  
 II 2G – one EEx e II cable gland M25x1,5 for cable ø6-15mm, and one EEx e plug M25x1,5 in accordance with EN 50262 are delivered with light fitting  
 Tightening torque: Lightbulb in E27 lampholder: 1,5 Nm  
 Nut for »T« screw M6x50: 4 Nm  
 Screw of connecting clamp of E27 lampholder: 1,8 Nm  
 Cable gland screw EEx e II: 2,5 Nm  
 Cable gland EEx e II body and plug: 3,5 Nm  
 Protective glass colour: Type 0403.24/11 – signal red RAL 3001  
 Type 0403.24/21 – signal green RAL 6032  
 Dimension: 355x190x195 mm  
 Mass: netto 3,8kg  
 Marking: CE

## ASSEMBLAGE AND ELECTRIC CONNECTION

Assemblage and installation is done according to technical and certification data on warning labels on lamp, this user manual of manufacturer, national regulations and laws. Only with that, explosion-proof protection of bulkhead light fitting is ensured with EC-type examination certificate.

Installation of lamp (on wall or ceiling) is done with two steel brackets with M6 screws which are delivered with lamp. For all types of lamp, vertical mounting is not allowed with lampholder in upper section of lamp.



In mining areas the lamp must be installed in places with low possibility of mechanical impact (on this special demand indicate the mark X from EC-type examination certificate).

Opening of Exe enclosure is done by unscrewing »T« screw M6x50 with wrench number 10. Connection cable is introduced in Exe casing through M25x1,5 Exe cable gland. Special attention must be dedicated to selection of inner gasket sealing ring of Exe gland according to diameter of connecting cable. Gland screw and gland body with threads must be tightened with torque regulated by manufacturer. Unused cable introduction must be closed with plug. The electric connection is performed by linking power supply cable (L, N, PE) on the lampholder E27 connecting clamps and tightening the screws of connecting clamps with tightening torque regulated by manufacturer.

Special attention have to be on following:

- lightbulb must be choosed correctly according to temperature class and ambient temperature, taking into account rated lightbulb voltage, power, and lamp type,
- type of connecting cable must be choosed correctly according to ambient temperature and lightbulb wattage, taking into account cable temperature class.

The closing of the Exe enclosure should be done by a reverse sequence of action.

## STORAGE AND TRANSPORT

Transport and storage is only allowed in the original packaging, on the way pointed out on the carton box.

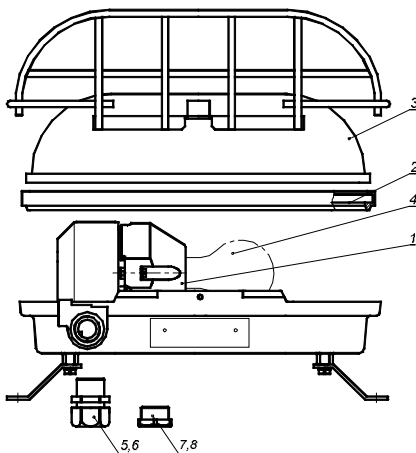
## CONTROL, MAINTENANCE AND REPAIR

It is necessary to conduct review and maintenance on all parts on which the explosion proof protection depends in accordance to standards IEC 60079-17, general and individual demands of the manufacturer and the regulations of the user, and especially:

- that the casing, the protective glass and the gaskets are completely without a cracks or damage,
- that the Exe gland and gasket, connecting terminals, lightbulb, and »T« screw are tightened with torque regulated by manufacturer.

Maintenance presume replacing of parts which are delivered by manufacturer as a spare parts.


All other interventions on lamp have attribute of a repair. The repair of the lamp is done by the manufacturer or a person legally authorized by the manufacturer, with original parts from the products documentation, and in accordance to the IEC 60079-19 standards. If the repair is done by a third person, the manufacturer is free of all responsibility from the product, and the declaration of conformity which is given by the manufacturer becomes insignificant.



### Spare parts:

1. EEx E27 lampholder, type 73.91.50
2. Glass gasket 0403.24
3. Protective glass 0403.24

### Accessories:

1. Lightbulb 100W, 60W, 40W / 230V, 110V, 24V – IEC 60064  
Lightbulb 60W, 40W / 230V – DIN 49810 Bl.4 (lightbulb with )
2. II 2G EEx e II cable gland M25 with gasket, type SPU25
3. I M2 EEx e I trumpet-shaped cable gland, set
4. II 2G EEx e II plug M25 with gasket, type SPC25
5. I M2 EEx e I plug M25, set

## RESPONSIBILITY AND AUTHORIZATION

Responsibility and authorization are defined by the "Regulation on technical supervision over the electrical stations, installations and equipment intended for usage in potentially explosive atmospheres". This Manual represents the most relevant information about the product. Adequate national laws and regulations supplement it. The person in charge is required to secure its employment in the industrial unit. Every improper usage, as well as every unofficial restructuring, repair or restoration of the product, release the manufacturer of all responsibilities.