



	Scope : USER MANUAL n°2013-03 For ENCLOSURE TYPE TB-AMG-132-HFL Zones 1, 2 & 21 and 22				Date : 25-08-2016
	Rev. 9	Checked by : JG.	Approved by : EG.	Page : 1 of 4	Procedure no. :

1. Marking:

IECEX with ATEX version 110-230V IECEX with ATEX version 24V DC

Warning sign

 CE 0344	
TB-AMG-132 HFL S.No.	
Year of construction: 2014	U _n = 110 - 230 VAC 50/60 HZ
 INERIS 13ATEX 0047X Ex d e IIC T4 Gb Ex tb IIIC T135°C Db IP66	T.amb. -50°C / +50°C P dis. max 50W
IECEX INE 13.0061X Ex d e IIC T4 Gb Ex tb IIIC T135°C Db IP66	
TechNed Benelux Veersteeg 15 4212LR Spijk (NL)	

 CE 0344	
TB-AMG-132 HFL S.No.	
Year of construction: 2014	U _n = 24V DC
 INERIS 13ATEX 0047X Ex d e IIC T4 Gb Ex tb IIIC T135°C Db IP66	T.amb. -50°C / +50°C P dis. max 50W
IECEX INE 13.0061X Ex d e IIC T4 Gb Ex tb IIIC T135°C Db IP66	
TechNed Benelux Veersteeg 15 4212LR Spijk (NL)	

Warnings:
<ul style="list-style-type: none"> • DO NOT OPEN WHEN ENERGIZED • DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

This equipment is made in accordance with the IECEX scheme and the ATEX Directive 94/9/CE, with the following standards:

- | | |
|-----------------------|--------------------|
| - IEC 60079-0 : 2011 | EN 60079-0 : 2009 |
| - IEC 60079-1 : 2007 | EN 60079-1 : 2007 |
| - IEC 60079-31 : 2008 | EN 60079-31 : 2009 |
| - IEC 60079-7 : 2006 | EN 60079-7 : 2007 |
- Ingress protection IP 66

2. Installation:

The installation must be realised in accordance with IEC/EN 60079-14 and/or in accordance with the national requirements. This equipment must be installed and used only by qualified personnel, having knowledge concerning electrical equipment for use in potentially explosive areas containing gas and/or dust. Qualified personnel must have knowledge regarding the types of explosion protection.

This equipment is intended to be used in zone 1, 2, 21 and 22 for groups IIC and IIIC with temperature class T4 or T135°C. It is necessary to control if this equipment is in accordance with the atmosphere where it is installed.

This equipment can be used in the following ranges of ambient temperatures: **-50°C to 50°C**.
 Verify that the voltage marked on label is correct before powering.

3. Connections:

Electrical parameters:

Maximum supply voltage : 230 V
 Maximum powers dissipated : 50 Watts


Characteristics of the lamp:

Type : Xenon
 Maximum power : 35 Watts

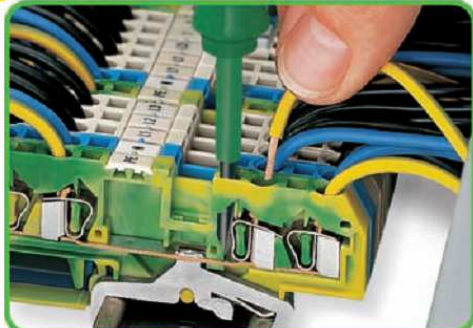
The terminals are suitable to receive:

- Solid wires
- Braided wires
- Stranded wires

Wires to de-isolated for a length of 13 mm

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The connection in the terminal box must have a minimum clearance of > 20 mm



Wire connection with screwdriver

Example of type connection

Cable glands :

The cable entry must be made in order not to alter the specific properties of the increased safety junction box, as indicated in the IEC/EN 60079-7 standard and with a minimum degree of protection IP66 in accordance with IEC/EN 60529 standard.

The connection to the external circuits must be realized by cable glands covered by a separate certificate in accordance IECEx and/or ATEX.

If a cable gland is not used the entry must be closed by a stopping plug covered by a separate certificate in accordance IECEx and/or ATEX with a minimum degree of protection IP 66 in accordance with IEC/EN 60529 standard.

The threading of the cable gland entry is cylindrical ISO M25 x 1.5.

Note: Take care to verify the minimum/maximum temperature range of the cable gland/blind plug.

Earthing connection:

In addition to the earth terminal in the Ex e junction box, this equipment is also provided by an external secondary earth connection on the metallic enclosure. Both must be connected. For the internal earth the section must be equal to the active conductors. The external earth connection can receive a wire of 4 mm².

The user/installer must connect the internal and external earthing before powering.

4. Dismantling:


All repairs of this equipment must be made according the specified criteria of IEC/EN 60079-19 by qualified personnel, having knowledge concerning electrical equipment for potentially explosive areas containing gas and/or dust. Qualified personnel must have knowledge regarding the types of explosion protection.

5. Maintenance:

The maintenance must be realised in accordance with IEC/EN 60079-17 and/or in accordance with the national requirements. This equipment must be installed and used only by qualified personnel, having knowledge concerning electrical equipment for use in potentially explosive areas containing gas and/or dust. Qualified personnel must have knowledge regarding the types of explosion protection.

For Ex d or Ex tb compartment when re-installing the covers, make sure the threads are clean, not damaged, and well lubricated. If the O-Ring is damaged it is necessary to change with the same type of silicone O-Ring, please contact TechNed Benelux BV for replacement parts.

The lubricant must not harden over time, must not contain solvents that evaporate and should not cause corrosion of the joints. (e.g. Copper Slib)

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Do not forget the locking screw when opening/closing the cover.

For Ex e or Ex tb junction box when re-installing the cover, it is necessary to verify the gasket. If it is damaged it will be necessary to replace the cover, please contact TechNed Benelux BV for replacement parts.

When performing a lamp change we refer to the manual: 'Lamp change for TB-AMG-132-HFL_rev 0'

6. Cleaning:

Over time the helideck (including the floodlight) may be subject to bird droppings. It is common to clean the helideck with a high pressure water jet, however it is preferred that cleaning is done with desalinated water (no salt water) in order to protect the helideck (and surrounding installations) from potential corrosion.

The floodlight is certified to IP66, meaning that it is dust free (IP6x) and no water will occur when sprayed upon (100l/min = 1 bar) from any direction / angle at a distance of 3 meters (IPx6).

The cleaning of the helideck deck is normally done with a high pressure water jet, sometimes > 100 bar. The TB-AMG-132-HFL series are not designed to withstand these pressures and need to be cleaned separately in accordance with the IP 66 standard, see above. If not there will be water inside the luminaire which could affect the performance of the floodlight.


7. Special conditions for safe use:

For installation in zone 21 and 22 (dust) dust accumulation on the enclosure must be absolutely avoided to prevent build-up of dust superior to 5 mm: regular cleaning is mandatory.

The dimensions of the flameproof joints are superior to the value specified in tables of the standard IEC/EN 60079-1. For more information, contact TechNed Benelux bv.

The helideck floodlight is designed to be used during night and bad visibility (fog) during approach, landing and take off of helicopters. It is not designed for continuous uninterrupted use, to protect the lifetime of the Xenon light source.

This floodlight can be used only in horizontal position.

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EU- Declaration of Conformity:

Equipment: **Helideck floodlight TB-AMG-HFL**
 Manufacturer: **TechNed Benelux bv**
 Address: **Veersteeg 15, 4212 LR Spijk, Netherlands.**

TechNed Benelux bv declares that the equipment is in compliance with the applicable requirements in the following European Directives:
 ATEX Directive 2014/34/EU and EMC Directive 2014/30/EU

EC-Type Examination Certificate **INERIS 13ATEX0047X** issued by:
Ineris (0080)
 Parc Technologique Alata BP2
 F060550 Verneuil-en-Halatte (France)

The following standards have been applied for certification:
EN 60079-0:2009, EN 60079-1:2007 EN 60079-7:2007, EN 60079-31:2009

Some standards indicated above are no longer harmonised. A review against the standards listed below, which are harmonised, identified no significant changes relevant to this equipment. The previously applied standards continue to represents the "state of the art":
EN 60079-0:2012

The following harmonised standards have been applied to comply with the applicable requirements in EMC Directive 2014/30/EU:
EN 55015:2013, EN 61000-3-2:2014, EN 61000-3-3:2013 and EN 55022:2010

Spijk, 25-08-2016


 QA Manager