TRANBERG® IMT HELIDECK FLOODLIGHT

TEF 9976 LED Floodlight

Helideck Lighting System

Document properties (TUM7707)

Revision	Comment	Revision date	Approved
00	First issue	22.11.2024	
01	Add inrush data	14.02.2025	

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Installation and operating manual

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Warnings and risk levels

DANGER
Non-compliance with the instruction results in risk of severe or fatal injuries to persons

WARNING
Non-compliance with the instruction may result in risk of severe or fatal injuries to persons

CAUTION
Non-compliance with the instruction may result in risk of injuries or damage to equipment

NOTICE
Non-compliance with the instruction may result in reduced lifetime of equipment, malfunctions etc.

General information

Before installation, make sure to read and understand this installation and operating manual.

Observe national assembly and installation regulations.

Always contact the manufacturer if anything is unclear, or if you notice any faults on the product or in this document.

This installation and operating manual shall be available to anyone operating, installing, inspecting, modifying or repairing the equipment.

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Marking and intended use

DANGER
Not for use in EX areas
CAUTION
TEF9976 LED floodlight is intended for use on onshore, offshore and ship-borne helidecks. TEF9976 is made from aluminum, and should not be exposed to corrosive media such as acids and bases. Never open the sealed parts of the lighting fixtures. Do not clean the fixtures with a high-pressure steam or water jet. This may cause damage that is not covered by the warranty. Only clean by washing down with cloths / soft brushes. Do not use chemicals or caustic substances of any kind when cleaning plastic parts.
NOTICE
Only suitably qualified personnel may install the products. Observe the locally applicable safety standards and safety regulations. During assembly, make sure the fixtures are not subjected to undue mechanical stress. Install the light with 4 pcs M12 bolts through the mounting holes on a flat surface. For the Ingress Protection (IP) to be valid you must ensure that the cable gland used is suitable for the dimensions and type of cable to be connected. The cable gland IP must be IP66, IP66/67 or IP66/68 in conformance with the EN 60529, and suitable for use in an increased safety light fixture, certified as equipment according to EN/IEC 60079-0. Ensure there is a reliable connection to the earthing system, both with the external earthing point and with the connection in the light fitting junction box.

EX-marking: n/a
Other markings

For use in marine/industrial/onshore/offshore/helideck areas

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Specific conditions for use

DANGER
Specific conditions for use are critical conditions to maintain the explosion protection of the equipment. These shall be adhered to in all cases and under all circumstances.

- Connect to a circuit breaker with a breaking capacity of 1500A
- Prospective short-circuit current max 200A

Technical data

Property	AC Version
Input voltage and frequency	AC 100-240V 50/60Hz
Input current	Max. 0,5A AC
Inrush Current (max)	65A at 230VAC input 25°C Cold Start (time wide=500µS, measured at 50% I_{peak})
Units / MCB 10A type B (max)	12 PCS @ 230VAC
Ingress protection	IP66
Power	Max. 40W
Temperature	-40°C to +55°C
Size	322x279x139
Mounting	Mounting holes: 292x160 (M12)
Terminals	Spring terminals, 1-4mm²
Entries/Cable glands	2x M25x1,5
Housing material	Marine grade aluminum anodized
Other materials	

Product description

The 9976 LED floodlight consist of a junction box/termination compartment, a driver housing with LED driver and a LED compartment in the front. LEDs and drivers are potted and are non-serviceable. The only part of the equipment, which may be opened for installation, inspection and similar is the junction box in the back.

The AC version of the product is equipped with a DALI port for external communication.

Transport and storage

- Transport and store the equipment only in the original packaging
- Store the equipment in a dry and vibration free place
- Do not drop!

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Mounting and installation

DANGER
Incorrect mounting and installation may lead to explosion risks, risk of falling objects, risk for electric shock and risk for equipment malfunction. In turn, this can lead to severe damage and/or injuries.
NOTICE
Only qualified personnel may install this product.

General

Make sure you read the entire manual before starting the installation.

Check whether the fixture is to be installed in an environment that meets the ambient temperatures, gas group and temperature class. This data is included on the fixture type plate.

Remove the fixture from the package and check it for mechanical damage.

Ensure that the surface where the fixtures are to be mounted on is flat.

Mounting

Mount the light fitting to the construction.

Ensure there is a reliable connection to the earthing system, both with the external earthing point and with the connection in the light fitting junction box. Take precautions to prevent corrosion to ensure the functionality of the earth connection.

Ensure that the cable glands has the correct IP level of IP66, IP66/67 or IP66/68 and is suitable for the dimensions of the type of cable that is connected to the fixture. Also make sure that the gland is certified according to the Ex-approval of the fixture.

Electrical connections

Cable glands and stopping plugs must be installed according to the instructions of the manufacturer. This is important to guarantee the IP level. The cable entries are 2 pcs M25x1,5.

Open the back lid (4 screws)

Fig. 1 Remove back lid

Cables shall be stripped according to the instructions of the cable manufacturer with the appropriate tools to guarantee the properties of the cable. Wire sleeves suitable for the quadratic wire diameter shall be placed at the bare wire ends and fixed with a specified tool according to the instructions of the manufacturer.

Cut the cable to the required length.

Connect the cable to the terminals. The standard terminals in the junction box are suitable as a standard for a core diameter up to 4mm^2.

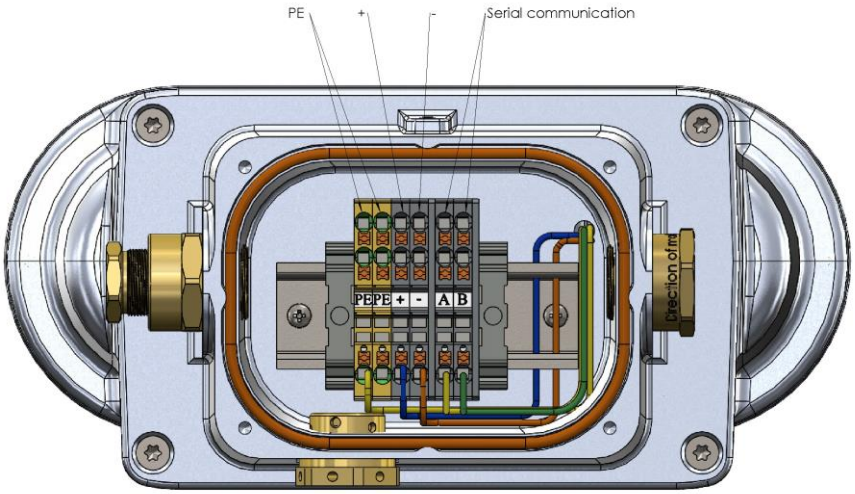


Fig. 2 Connection DC version

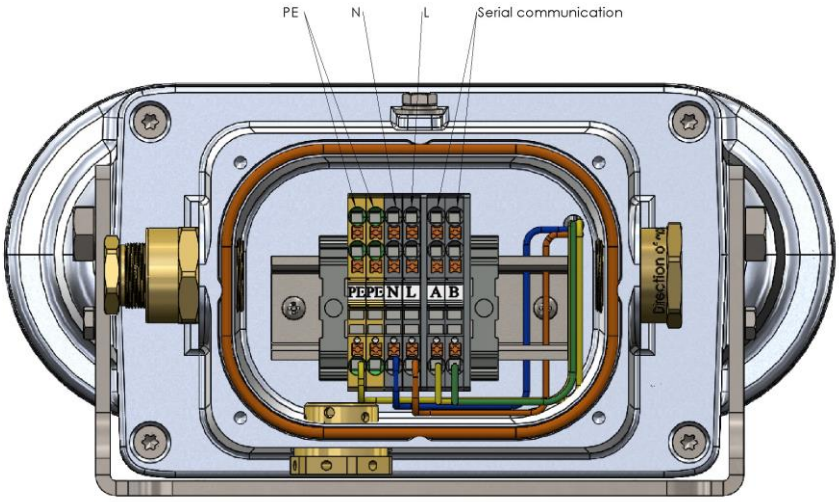


Fig. 3 Connection AC version

Check the connections that have been made.

Close the junction box.

NOTICE
Terminals A and B are for external communications - DALI

Commissioning

Installations in which the TRANBERG® IMT Floodlight (TEF 9976) are installed can be tested by means of an insulation test. For this test, apply a maximum of 500 V DC between earth and (+ and -).

All the light fittings are subjected to a dielectric test during manufacture (DC version: 700 VDC for 60 seconds, AC version: 2100 VDC for 60 seconds).

Operation

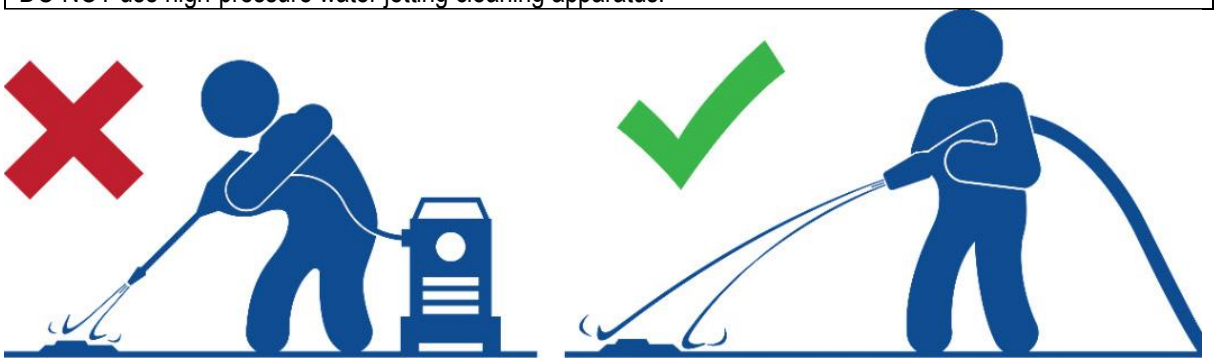
The TRANBERG® IMT Floodlight (TEF 9975) can be switched on immediately after installation by switching on the supply voltage.

Maintenance and cleaning

The front of the light fixture is "sealed for life" and shall therefore not be opened. The terminal box on the rear of the light fixture is of the type of protection "e" and inspection/maintenance is subject to EN/IEC 60079-17. Only qualified personnel with competence on the type of protection shall carry out inspection and maintenance on this product. Detailed inspection shall only be done when the product is de-energized.

It is no recommended that the inspection interval exceeds 3 years, in harsh and exposed areas a more frequent interval shall be considered.

NOTICE
Clean only with cloths or soft brushes that have been dampened with clean water. DO NOT use chemicals or caustic substances of any kind for cleaning purposes of fixtures and lenses. Prevent contact of chemical and caustic substances of any kind on the fixtures and lenses. DO NOT use high-pressure water jetting cleaning apparatus.



Remember:

IPx6 means 100l/min H2O out of a mains water hose with a nozzle of Ø 12.5 mm at a distance of 2.5 m.

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Disposal

CAUTION
This equipment or part of this equipment is considered EE-Waste, and shall be handled accordingly

- Observe national and local regulations and statutory regulations regarding disposal
- Separate materials when sending it for recycling
- Ensure environmentally friendly disposal of all components
- No component or packaging shall end up in the ocean during any stage of the product's lifetime

Compliance/Conformity

Standards:

- EN IEC 60079-0:2018
- EN IEC 60079-7:2015/A1:2018
- EN 60079-18:2015/A1:2017
- EN 60079-31:2014

- IEC 60079-0:2017 Ed. 7.0
- IEC 60079-7:2017+AMD1:2017 Ed. 5.1
- IEC 60079-18:2017+AMD1:2017 Ed. 4.1
- IEC 60079-31:2013 Ed. 2.0

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EU Declaration of Conformity
EU Konformitätserklärung
Déclaration de Conformité UE

R. STAHL Tranberg AS • Strandsvingen 6 • 4032 Stavanger, Norway
declares in its sole responsibility, */ erklärt in alleiniger Verantwortung / déclare sous sa seule responsabilité,*

That the product: *dass das Produkt:* *que le produit:*	**Helideck Floodlight**
Type(s), *typ(en), type(s):*	**TEF9976 Floodlight**

is in conformity with the requirements of the following directives and standards.
mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.
est conforme aux exigences des directives et des normes suivantes.

Directive(s) / *Richtlinie(n) / Directive(s)*	**Standard(s)** / *Norm(en) / Norme(s)*
2014/35/EU **Low Voltage Directive** *2014/35/EU* *Niederspannungsrichtlinie* *2014/35/UE* *Directive Basse Tension* *(OJ L 96, 29.03.2014, p. 357-374)*	EN IEC 60598-1:2021+A11:2022 EN 60598-2-5:2015
2014/30/EU **EMC Directive** *2014/30/EU* *EMV-Richtlinie* *2014/30/UE* *Directive CEM* (OJ L 96, 29/03/2014, p. 79–106)	EN IEC 55015:2019/A11:2020 EN 61547:2009 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 60945:2002
2011/65/EU & (EU) 2015/863 RoHS Directives *2011/65/EU & (EU) 2015/863 RoHS-Richtlinien* *2011/65/UE & (EU) 2015/863 Directives RoHS* (OJ L 174, 1/07/2011, p. 88–110 & OJ L 137, 04/06/2015, p. 10-12)	EN IEC 63000:2018
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Signed for and on behalf of: */ unterzeichnet für und im Namen von: / signé pour et au nom de:*

R.STAHL Tranberg AS

Stavanger, 2024-10-15

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