BlueLine Series

TEF 2580 LED Floodlight

Safe Area

Document properties (TUM6650)

Revision	Comment	Revision date	Approved
A	Added more info on wiring QPD plug	06.10.2020	CKR
B	Added diameter on wire	16.06.2021	CKR
C	Added sealing plug	24.08.2022	CKR
D	Added updated info on wiring QPD plug	17.10.2022	CS
E	Minor changes due to the cable installation	02.10.2022	CS

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Installation and operating manual

Contents

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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.

Content in box

- The TEF 2580 LED Floodlight
- Mounting Bracket for floodlight
- 4 pcs. M8x20 screws, washers large OD and spring lock washers, stainless steel A4
- User Manual (TUM6650)

Marking and intended use

CAUTION
Not intended for use in “these” conditions (Where mud may be present, on helidecks, underground, direct sunlight, heavy vibrations, high risk of impact, harsh cleaning agents, high pressure washer etc.)

CE

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Technical data

Property	
Material	Seawater resistant aluminium (powder coated), acrylic or glass
Voltage	100-240 VAC, model dependant
Light output	Up to 30 000 lm, 5000K, 70 CRI
Power consumption	Up to approx. 300W
Ingress Protection (IP)	IP 66
Weight	Approx. 20 kg (with box 21,55 kg)
Mounting	Several mounting options available
Cable entries	2x Poenix QPD quick installation plugs for cable up to 2,5mm^2
Operating temperature	- 40 °C … +55 °C
Light distribution	Narrow, Medium, Wide and Oval. Details available upon request
Light source	LED

Product description

LED Floodlight in the highest quality, sustainable materials including seawater resistant aluminium and glass front. Maintenance free with a plug and play plug for fast and easy installation. With high lumen output and a uniform light distribution.

Application

- Area lighting for ships
- Suitable for harsh environments.

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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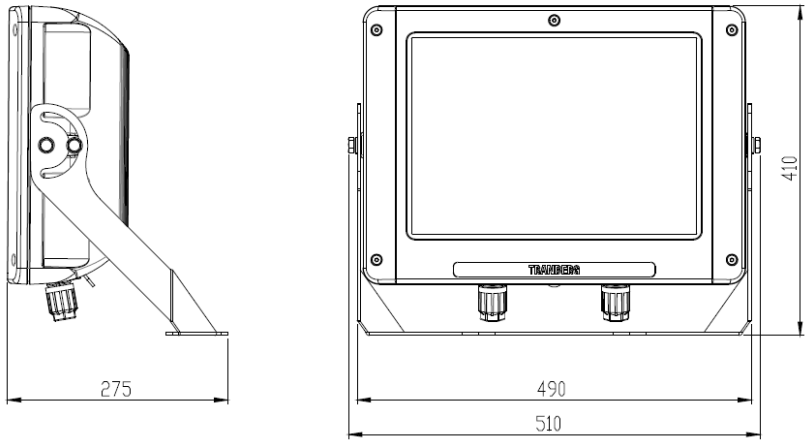
Mounting and installation

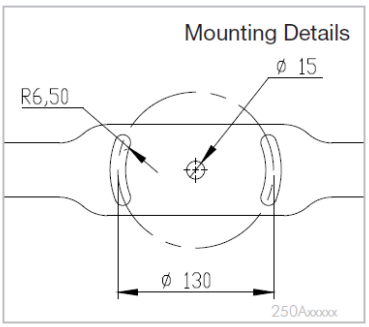
DANGER

Incorrect mounting and installation may lead to risk for falling objects, risk for electric shock or fire and risk for equipment malfunction. In turn, this can lead to severe damage and/or injuries.

Mounting

Dimensions:





Tools required

Regular tools required for installation:

- Tools for mounting, e.g. 13 mm wrench – to fasten the mounting bracket to the structure, and adjust the angle of the lamp.
- 30mm wrench to loosen and tighten the cable glands.

Fixing

Only qualified personnel are allowed to perform installation and maintenance tasks to this product.
The equipment is ready for installation when leaving the production facilities of R. Stahl Tranberg AS.

Check the condition of the equipment and the contents when unpacking. Any damage done to the equipment during transportation is not the responsibility of R. Stahl Tranberg AS. If the content is not complete, file a claim to the manufacturer immediately.

The TEF 2580 is delivered with a standard mounting bracket. The floodlight must be mounted on a flat surface coincident with the mounting bracket.

Any damage caused by the use of an incorrect combination of cable and cable gland is not the responsibility of R. Stahl Tranberg AS and is not covered by warranty.

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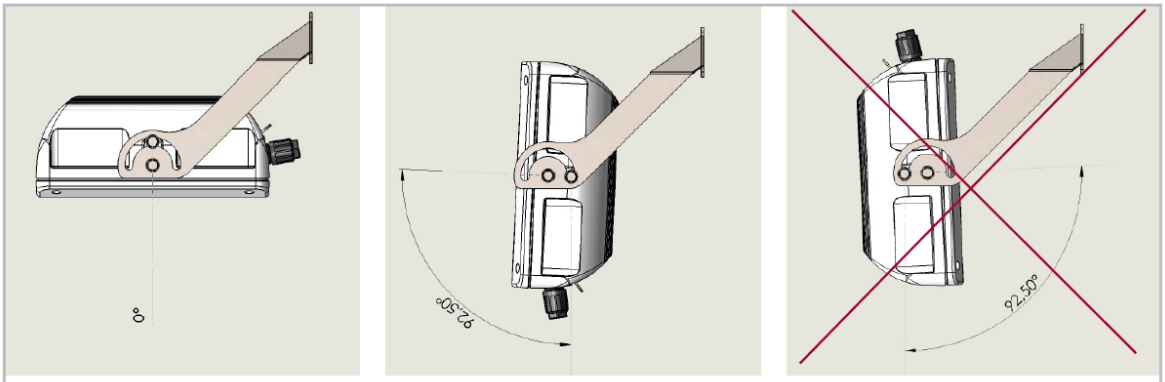
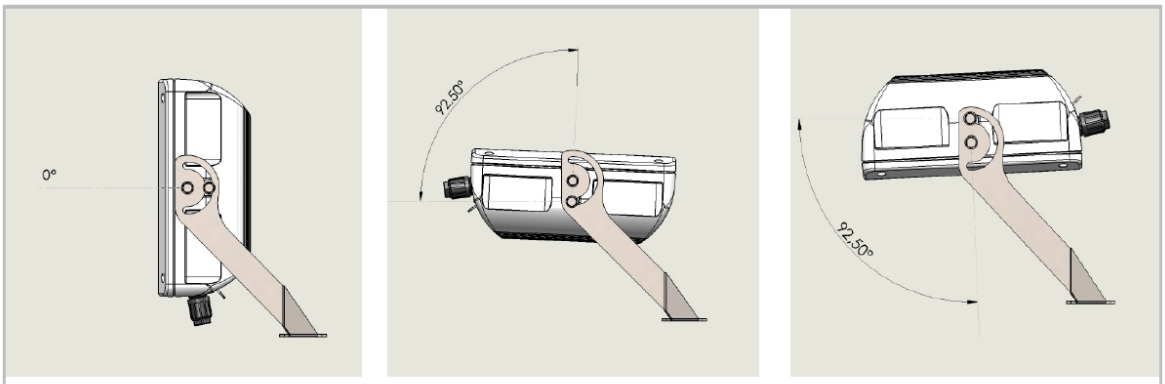
The luminaire can be adjusted into desired angle within a range of 185°.



Vertical mounting

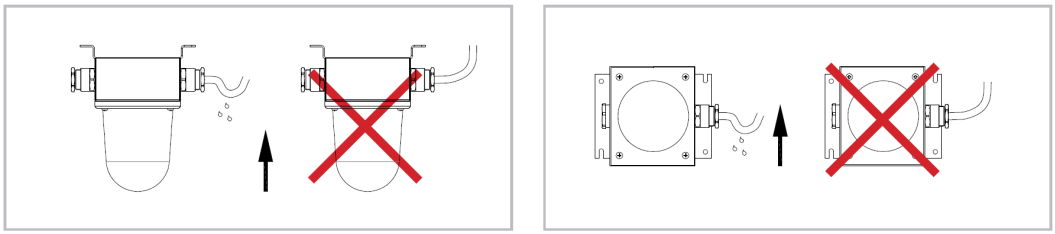


Horizontal mounting

Only qualified electrical personnel may install and start up the QPD components.

If the lamps are not electrical connected at the installation time, make sure that the QPD plugs are properly sealed by a sealing plug (or protective cap) for unused cable entries (part no 50500231). If this is not done the lamp will not be protected against water intrusion. The lamp is delivered with a sealing plug installed.

Note: *Be sure to install cable in a way which prevents water to penetrate into the enclosure through the connection plug, also make sure to use the correct QPD Plug connector size (according to the cable diameter) when you install the luminaire.*



When the lamp is ready for electrical connection the sealing plug can be removed and the cable can be connected to the QPD plug. After properly mounting of this parts the floodlight has an IP66/67.

For correct electrical termination please follow the Phoenix user manual, Appendix 1 in the end of this user manual. Below is an excerpt of the Phoenix user manual describing the main points of the procedure.

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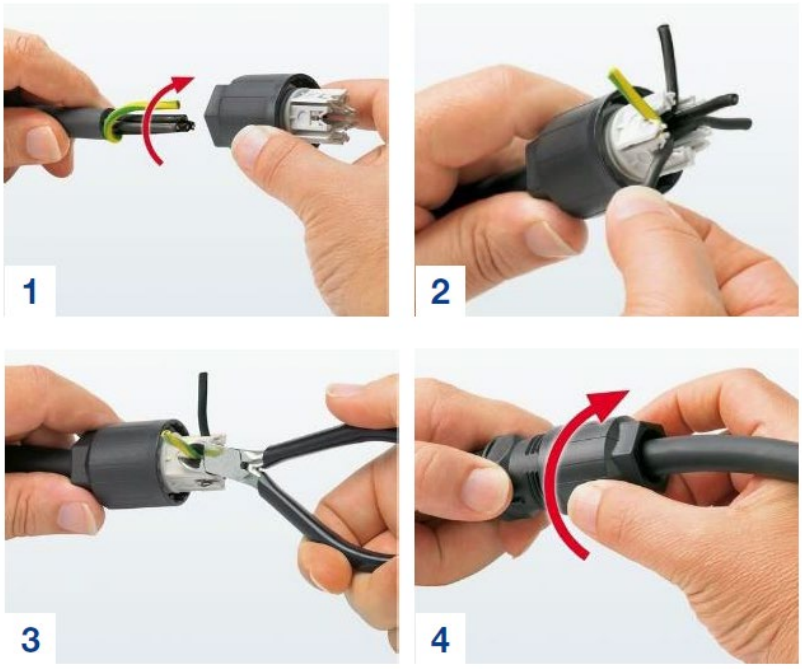
Electrical connections

Cable termination
Cable diameter: Ø6-11 mm or Ø9-16 mm.
*Part # 2880***0* delivered as standard with terminal nut for Ø6-11 mm cable. All other variants delivered with terminal nut for Ø9-16 mm cable.*

Wire cross section: 1.0 mm2 to 2.5 mm2.
Wire diameter incl. insulation: 2,0 mm to 3,80mm

1. Strip approx. 60 mm off the cable.
2. Loop the PE conductor around the live conductors (1). As a result, the PE conductor will be pulled out of the terminal block last if strong tension is exerted on the cable.
3. Insert the cable into the terminal nut.
4. Fix the wires in the conductor support of the splice body (2).
5. Cut off the wires with a diagonal cutter flush on the splice body (3).
6. When connecting the terminal nut to the light connector socket, make sure that their markings are aligned.
7. Screw the terminal nut together with the light connector socket (4). For this, we recommend using either the socket wrench, a wrench, or a plier. Screw the terminal nut as far as it will go, or with the specified torque. It must not be possible to unscrew the terminal nut again by hand.
8. **Seal off any non-allocated connections using a protective cap.**



Photos courtesy of Phoenix Contact GmbH.

Detailed information regarding the installation of the QPD connector you will find in the pictures below.

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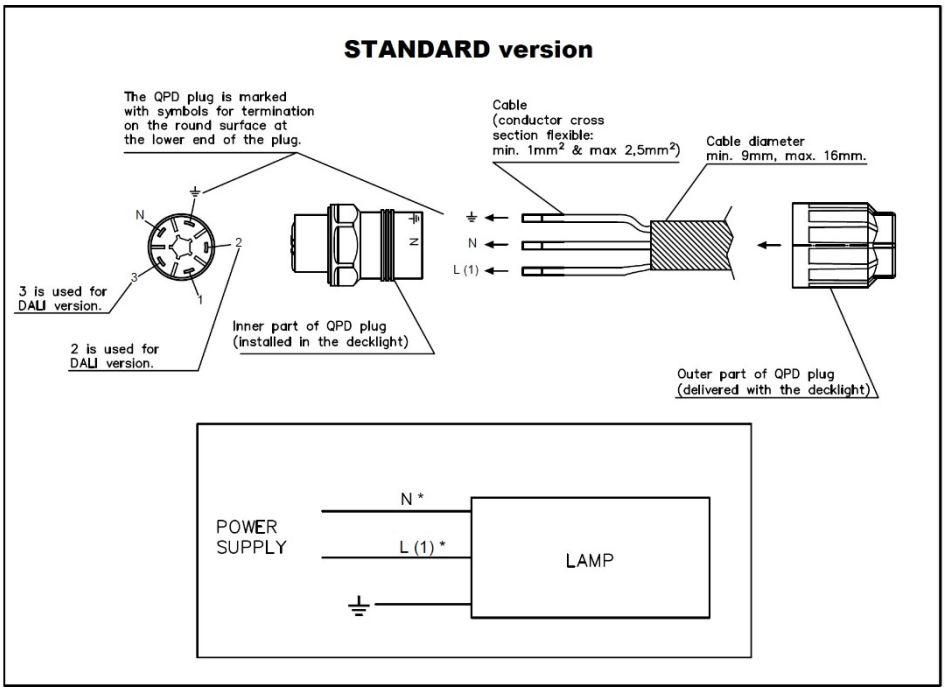

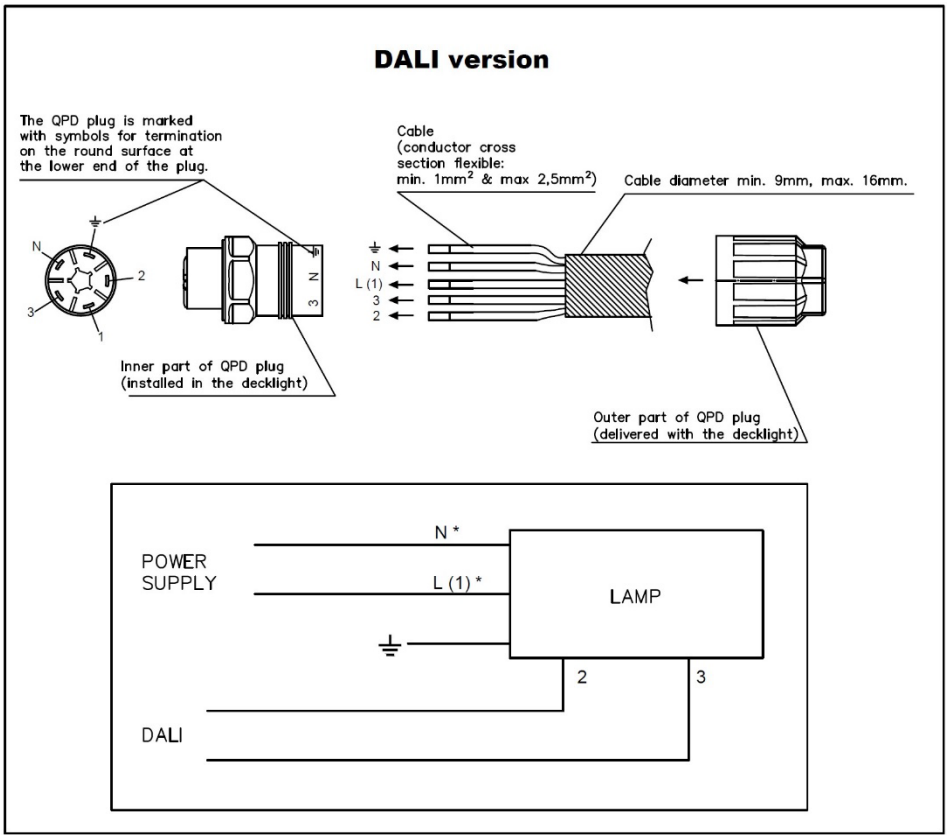

Ground bonding screw

The floodlight is equipped with an external M6 ground bonding screw. Connect to ground where national or company regulations require it.

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CAUTION
Do not open the product. The R. Stahl TRANBERG TEF2580 series is sealed for life. ***Non-compliance with the instruction may result in risk of injuries or damage to equipment***

Maintenance and cleaning

No maintenance required. Clean only with a damp cloth, water and mild detergents. Avoid chemicals with high or low pH, abrasives, high pressure washer, strong detergents, solvents, petroleum- or alcohol based cleaning agents and similar. Avoid any corrosive media.

Options and spare parts

Image	Description	Part No
	Cable termination nut Ø6 -11 mm	50500223
	Cable termination nut Ø9-16 mm	50091435
	Plug connector for cable Ø6 - 11 mm	-
	Plug connector for cable Ø9-16 mm	Digital output (Alarm output)
	Sealing plug 14x22 (delivered with the lamp)	50500231
	Protective cap for unused cable entries IP68 (to be ordered separately)	50500226
	Breather plug M12 IP68	50091434
	Blind plug M25	50091436

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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

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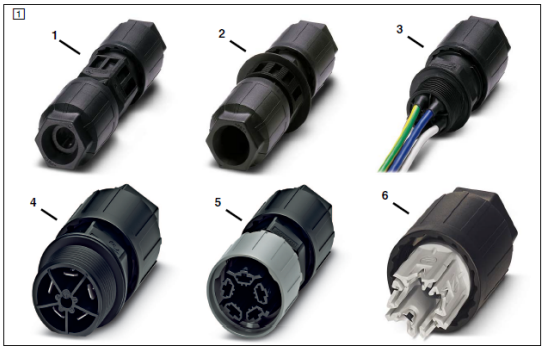
Appendix #1

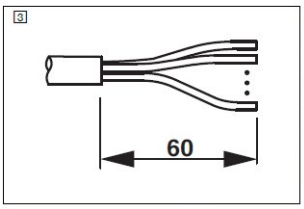
PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8, 32825 Blomberg, Germany
Fax +49-(0)5235-341200, Phone +49-(0)5235-300
phoenixcontact.com

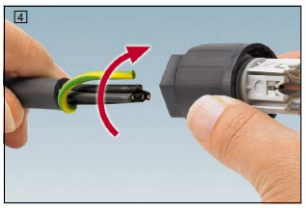
MNR 0139827 - 04 2018-06-06

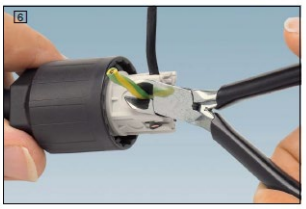
DE Einbauanweisung für den Elektroinstallateur
EN Installation notes for electricians
FR Instructions d'installation pour l'électricien
IT Istruzioni di installazione per l'elettricista
ES Instrucciones de montaje para el instalador eléctrico

QPD...1,5...
QPD...2,5...
QPD...6,0...









Technical data	QPD...1,5...	QPD...2,5...	QPD...6,0...
Rated voltage (III/3)		690 V	
Rated current (QPD W M20 FC = 15 A)	17,5 A	20 A	40 A
Contact resistance		< 3 mΩ	
Housing material		PA	
Contact material		CuZn	
Flammability rating according to UL 94		V0	
Degree of protection		IP66, IP68 (24 h / 2 m), IP69K	
Ambient temperature (operation)		-40 °C ... 100 °C	
Temperature while connecting cable		-5 °C ... 50 °C	
QUICKON connection			
Wire insulation material: PVC, PE, TPE, rubber		√	
Wire diameter incl. insulation	1,60 ... 3,00 mm	2,00 ... 3,60 mm	2,95 ... 5,00 mm
Stripping length		60 mm	
Litz wire structure / smallest wire diameter		VDE 0295 Class 1...6 / min. 0,15 mm	
Frequency of connections		10	
Conductor cross section (solid/stranded)	0,5 ... 1,5 mm²	1 ... 2,5 mm²	2,5 ... 6,0 mm²
AWG conductor cross section	AWG 20 ... 16	AWG 16 ... 14	AWG 14 ... 10
Tightening torque (QUICKON nut)	8 Nm	10 Nm	15 Nm
Loosening torque (QUICKON nut)		> 5 Nm	

Appendix #2, DoC

EU Declaration of Conformity
EU-Konformitätserklärung
Déclaration de Conformité UE

STAHL TRANBERG

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:*	**Floodlight**
Type(s), *Typ(en), type(s):*	**TEF 2580 "BlueLine"**

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: *2014/35/EU* *2014/35/UE:*	**Low Voltage Directive** *Niederspannungsrichtlinie* *Directive Basse Tension*	EN 61347-1:2015 EN 61347-2-13:2014 +A1:2017 EN 62384:2006 +A1:2009 EN 60529: 1991/AC:2016-12 IP66/67
2014/30/EU *2014/30/EU* *2014/30/UE*	**EMC Directive** *EMV-Richtlinie* *Directive CEM*	EN 60945:2002 Limited test scope – Conducted and radiated emissions EN 55015:2013 +A1:2015 (LED Driver) EN 61000-3-2:2014 (LED Driver) EN 61000-3-3:2013 (LED Driver) EN 61000-3-4 (-2, -3, -4, -5, -6, -8 and -11) (LED Driver)
2011/65/EU *2011/65/EU* *2011/65/UE*	**RoHS Directive** *RoHS-Richtlinie* *Directive RoHS*	EN 50581:2012
The technical documentation for this equipment is retained at the following address *Die technische Dokumentation für dieses Gerät wird unter folgender Adresse aufbewahrt* *La documentation technique de cet équipement est conservée à l'adresse suivante*		R. Stahl Tranberg AS, Strandsvingen 6, 4032 Stavanger, Norway.

Stavanger, 28.09.2020

Place and date
Ort und Datum
Lieu et date

Alf Kristoffer Askildsen
Certification Responsible

Chris Schneeberg
Product owner

Document No.: TDC6867
REV.: -

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