



- Status light as described in CAA UK CAP437, NORMAM-27/DPC and 2009 MODU Code
- Height of light units <25 cm. Allows for on-deck installation
- Automatic monitoring of all light units when in combination with Tranberg control system. No need for redundancy units
- Maintenance free
- Night vision goggle (NVG) compatible
- Low power consumption: Main light, 30 W and Repeater light 2.6 W

E6

WebCode **T9980A**



The TEF9980 Status lights are designed to fulfil the latest requirements of CAA UK CAP 437, as well as operator's needs for products that are cost-effective, reliable, require no maintenance and are applicable for use in all environments.

The TEF 9980 Status light is available as a main light and as a repeater light. Both versions are fully monitored, which eliminates the light units' redundancy need. In combination with Tranberg control system the lights can be set up for automatic test intervals, timeouts for both dim level diagnostics.

A status light system should be installed if a condition can exist on an installation which may be hazardous for the helicopter or its occupants. The system should be a flashing red light (or lights), visible to the pilot from any direction of approach and on any landing heading. The aeronautical meaning of a flashing red light is either "do not land, aerodrome not available for landing" or "move clear of landing area". The system should be automatically initiated at the appropriate hazard level (e.g. impending gas release)

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table					
Power	30.00 W				
Product Description	Width	Height	Length	Product Type	Art. No.
Main light For helicopter deck	263 mm	245 mm	200 mm	TEF9980000	262975
Repeater light For helicopter deck	263 mm	245 mm	200 mm	TEF9980005	262976

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex db op is IIB+H2 T5 Gb
ATEX gas explosion protection	Ex II 2 G Ex db op is IIB+H2 T5 Gb
Electrical Data	
Rated operational voltage DC	16 – 32 V
Ambient Conditions	
Ambient temperature	-40 °C ... +55 °C
Lighting Data	
Lamp	Red LED + IR
Mechanical Data	
Degree of protection (IP)	IP66

## Technical Data

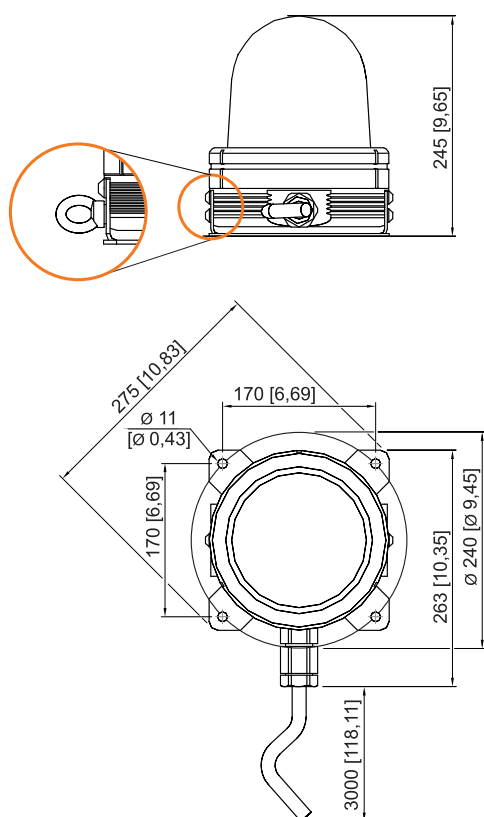
### Mechanical Data

IP degree of protection (IEC 60529)	IP67
Enclosure material	Aluminium, powder-coated, Seawater-resistant
Material dome	Glass Temperature-resistant
Conductor length	3 m
Type of connection cable	BFOU 0.6/1.2kV P5/P12

### Mounting / Installation

Mounting part material	Stainless steel
Connection type	Connection line

## Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

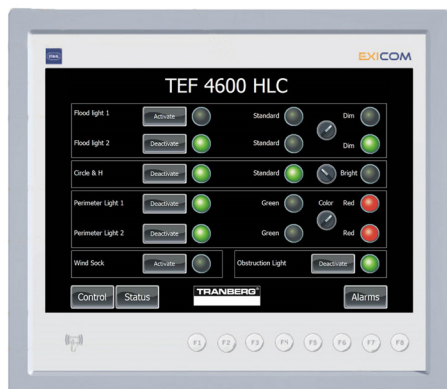


# TEF 4600

## INTEGRATED HELIDECK LIGHT CONTROL

### ZONE 1 OR NON-EX VERSIONS AVAILABLE

Subject to change without prior notice TPS5462 REV. B 30.06.2017



### APPLICATIONS

- Control and supervision of all helideck lighting fixtures
- Onshore or offshore installations; vessels and fixed installations
- Remote control possible through a wide range of accessories

### FEATURES

- All control gear in one cabinet, simplifying connections, control and monitoring
- Smaller footprint than individual control cabinets for each type of light
- Combined with Tranberg's new line of LED helideck lights means an installation with an absolute minimum of required inspections and minimized maintenance
- Connection with a supervisory control system through Ethernet, Profibus, or similar standards
- Pre-programmed touchscreens with an intuitive and user-friendly man-machine interface
- Optional remote button and lamp control panel, allowing additional control of lights
- Optional integration towards HMS (Helideck Monitoring System), allowing direct input from the HLO (Helideck Landing Officer)
- Integration towards SCADA (Supervisory Control And Data Acquisition) systems, allowing remote control from other locations, helicopter pilots, etc.

### APPROVALS AND CERTIFICATES

- Control system and all operators panels are available in both Zone 1 and non-Ex versions
- Functionality according to CAA CAP437
- All explosion-proof equipment certified according to ATEX/IECEx

The TEF 4600 integrated Helideck Lights Control is an industry-first integrated control system an easy and safe control and monitoring of all lights installed on and at helideck.

The unique design of the control system can be delivered for use in both safe areas and Zone 1 areas. All types of Tranberg lights can be connected, such as perimeter lights, floodlights, obstruction lights, illuminated windsocks, Circle and H lights, status lights, and more.

Central to the system is a touchpanel, which can be delivered for safe areas, or Zone 1 areas. Using an intuitive and very user-friendly menu, the user can simply set the lights on or off, or dim respective lights when needed.

The touchpanel can be mounted in the door of the main panel (safe areas only), or mounted in an adjacent room or elsewhere. For the Zone 1 or 2 needs, we have prepared for the use of an R.Stahl Exicom MT-498 operator panel. All touchpanels come fully loaded with software and configuration options.

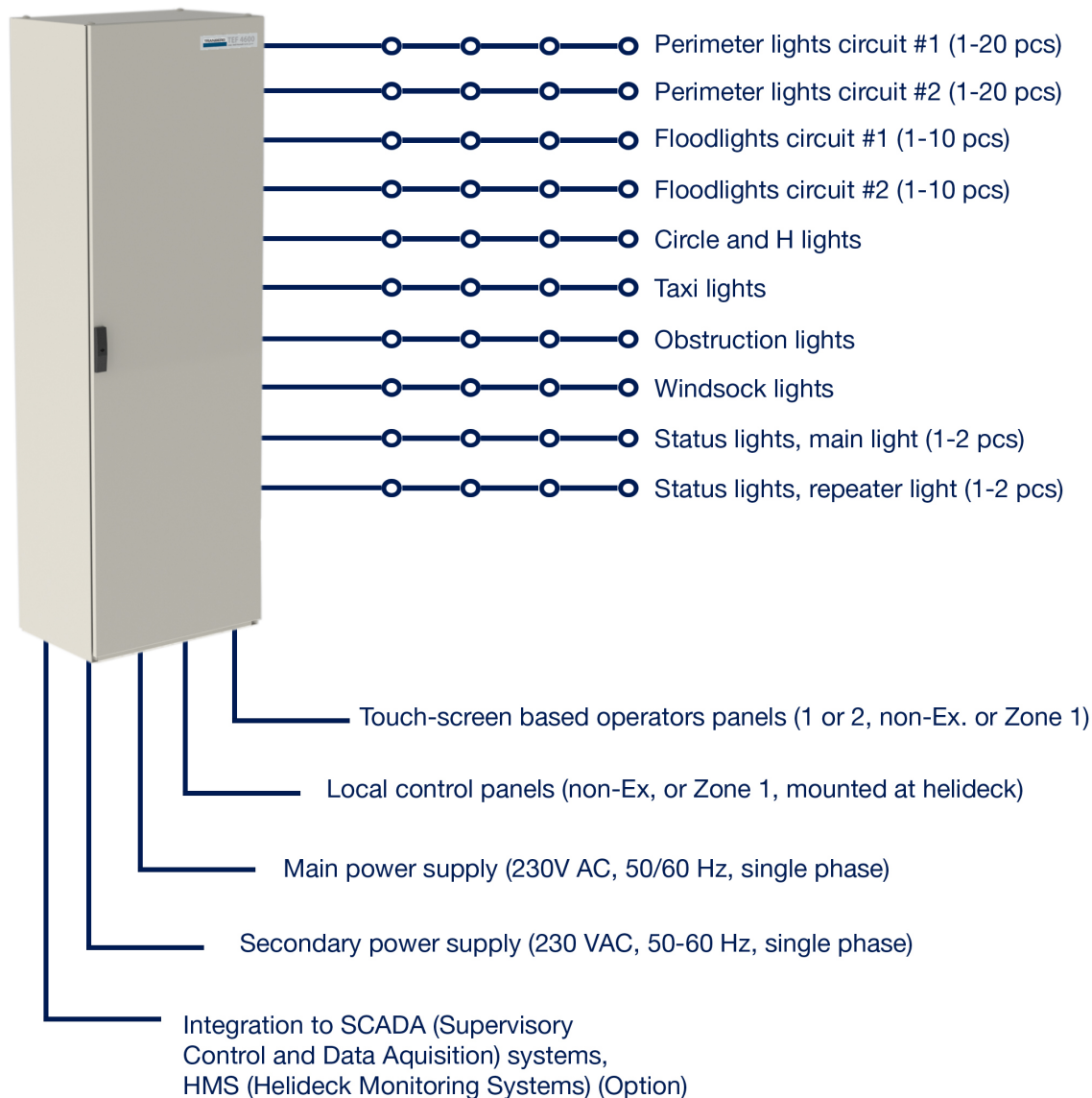
Regardless of type of control panel, additional remote control panels may be connected. These are push-button panels with integrated illumination, allowing local control of lights, and in full synchronization with the computer screens.

### TECHNICAL DATA

<b>Power supply:</b>	Dual 230VAC power supply, with continuous supervision and automatic selection between main and secondary power sources
<b>Examples of use:</b>	Control all lights on helideck; perimeter lights, floodlights, windsock, obstruction lights, status lights, Circle and H, taxi lights, and more
<b>Dimensions ( W x H x D ):</b>	Non-Ex control cabinet: 600mmx1900mmx 400mm  Zone 1 cabinet: Flexible size and shape
<b>Connections:</b>	Ethernet connection to operator panels.  Optional hardwired connection to local control panels
<b>Ingress protection:</b>	IP55 (safe area) and IP66 (Zone 1)

## SYSTEM TOPOLOGY

### TEF 4600





- Rugged construction
- Complies with: ICAO Annex 14 Vol. 1 Ch. 6 Low Intensity Type B
- Low maintenance
- Low power consumption
- Resistant to vibrations
- Long lifetime expectancy
- Integrated drain plug

E6

## WebCode T2440B

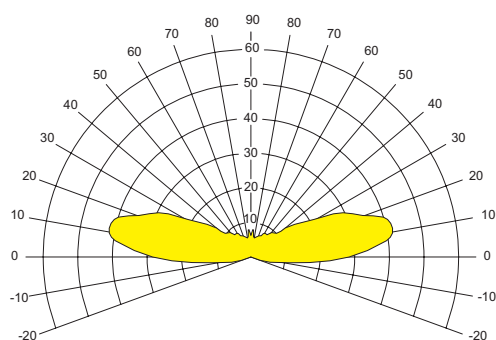
Tranberg luminaires are all designed for use in rough environments. The design of Tranberg luminaires is based on many years of experience and extensive research in the field of professional marine lighting. Carefully selected materials and components are used to ensure maximum performance, low maintenance and a long-trouble free life. The luminaire consist of five powerful light emitting diodes (LEDs), mounted on a machined aluminium base. The LED driver is placed in the lamp bottom along with terminals.

### Selection Table

Product Description		Obstruction light		
Rated operational voltage AC	Product Type	Art. No.	Weight kg	
24 V	TEF2440162	170638		
110 – 230 V	TEF2440160	170636		

### Technical Data

Electrical Data	
Power	10 W
Ambient Conditions	
Ambient temperature	-30 °C ... +45 °C
Lighting Data	
Effective luminous intensity	32 cd
Mechanical Data	
Degree of protection (IP)	IP66
Enclosure material	Stainless steel, powder-coated, Acid-resistant
Components	
Cable glands and entries	1 x M25 x 1.5
Drilled holes	2 x M25
Stopping plugs	1 x M25 x 1.5



Luminous intensity distribution

## Accessories

Figure	Description	Art. No.	Weight kg
Cable gland			
	M25 Ø 11 ... 15 / 15 ... 20 mm TEF6222502	241042	–
Stopping plug			
	Exe M25 with lock nut TEF6502502	259505	–

## Spare Parts

Figure	Description	Art. No.	Weight kg
Gasket			
	Silicon gasket for globe TEF50010021	165844	0.070
Globe			
	with red LEDs, without gasket TEF4417	170639	0.750
Globe retainer ring			
	Globe retainer ring TEF4249	241038	–
LED Driver			
	24 V TEF4399	165831	0.150
	110 – 230 V TEF50890047	302226	–
Terminal block			
	Terminal block TEF50280008	241039	–

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

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