INSTALLATION AND MAINTENANCE MANUAL FOR THE EMERGENCY LUMINAIRE TYPES TW802, TW844, TW868 AND TW850

Product Description

Luminaire is *maintained emergency luminaire,* which includes an internally illuminated safety sign.

Usage targets: Facilities, cruise ships and other locations where emergency lighting is required.

Points to note

Installation of this product must be done only by a qualified electrician

Only original spare parts may be used for this product. Any modifications to this product are prohibited without manufacturer's written permission. This product may only be used for manufacturer's specified use.

Technical Data

- casing: IP20
- applied European Directives and standards: 89/336EEC, 92/31/EEC EMC-directive, 73/23/EEC, 93/68/EEC LVD-directive, EN 55015, EN 61547, EN 60598-2-22, EN 60598-1, EN1838
LVD-directive only for the types with 230V supply voltage.
- insulation class: 1 (230V all models)
- insulation class: 0 (24V fluorescent lamp types)
- insulation class: 3 (24V only led types)

-Type code ending to -K: The type is compatible with the Teknoware central battery unit with automatic addressable testing. It can also be used with the Teknoware Local Controller unit.

TW8XX81(K): - supply voltage: 230 V AC/DC
- Lumen output TW802: 13lm:
- TW802 light source: fluorescent lamp 6W TL
- TW844 and TW850 light source: fluorescent lamp 6W TL

TW8XX21: - supply voltage: 24 V AC/DC
- TW802 light source: fluorescent lamp 6W TL
- TW844 and TW850 light source: fluorescent lamp 6W TL

TW8XX82: - supply voltage: 230 V AC
- light source: 8W TL
- self-contained luminaire with 1h battery mode duration and test-button

TW8XX83: - supply voltage: 230 V AC
- light source: 8W TL
- self-contained luminaire with 3h battery mode duration and test-button

TW8XX41W: - supply voltage: 24 V AC/DC
- light source: white led

TW8XX51W(K) - supply voltage: 230 V AC/DC
- light source: white led
- the -K type is compatible with the Teknoware central battery unit with automatic addressable testing. It can also be used with the Teknoware Local Controller unit.

TW8XX53W: - supply voltage: 230 V AC
- light source: white LED
- self-contained luminaire with 3h battery mode duration and test-button

Electrical and mechanical installation

TW850 and TW802 is suitable for both ceiling and wall-mounting with separate brackets.

Ceiling bracket:	**TW77501**
Wall bracket:	**TW77503**
Suspension bracket:	**TW77504**
Flag bracket	**TW77505**

TW844 is suitable for wall mounting only. TW868 is suitable for recessed mounting only.

The light-plate of the luminaire is covered with a protecting plastic sheet. Don't remove the sheet before installing is finished to avoid scratching the light-plate.

TW802, TW850: Loosen the screws marked with arrows and remove the upper part of the luminaire. Attach the removed upper part of luminaire to the bracket. When this has been done connect cable(s) to connector. Luminaire is equipped with chaining connector. (max 2x 3x2,5mm). Then attach the lower part back to the casing and now remove the plastic sheet.

TW844 Open the arrow-marked screws and the endplate in other end of the luminaire and pull the light-plate out. Then remove the front-profile. Pull the inner part of luminaire out. Place cables inside the luminaire and attach the side of the casing to the wall. Connect wires to connector and then place inner parts back into luminaire. Install front-panel and attach it to the end of the luminaire. Now remove the plastic sheet, push the light-plate back and attach the removed end of luminaire. Finally mount the luminaire to the wall from the other end.

In case of luminaries with own battery the date of installation shall be marked to the sticker on battery. Finally attach the sticker that indicates the classification of luminaire to the outer surface of luminaire by following the instructions attached.

TW868 Mounting space for recessed mounting is 244x115x80mm. (LxWxD)

Open the screws in the cover of the luminaire and remove the frame. Open the screws in the intermediate plate and remove the plate. After this install the luminaire to the mounting space and take cables into the luminaire. After this connect the cables to the connector and place the plate back to the luminaire. Finally attach frame back to the luminaire.

Testing

The operation of the luminaire shall be verified according to the requirements of the authorities. The battery mode duration of the self-contained types can be tested by switching off the mains supply voltage.

Periodical checks and maintenance

Condition of the emergency lighting system shall be ensured by regular maintenance according the regulations of local authorities.

Removing from usage

Batteries and fluorescent lamps are hazardous waste. Metal parts should be recycled as steel or aluminium waste. Wires, connectors and circuit boards are electronics waste. Plastic parts should be recycled according to the material markings of them.

POINTS TO NOTE WHEN INSTALLING -K TYPE LUMINAIRES

The luminaire types that have their codes ending with -K are compatible with Teknoware Control central battery unit with addressable testing. These types of luminaries must be set up according to manual before installation. **Neutral line of the luminaire groups shall not be grounded in any case.**
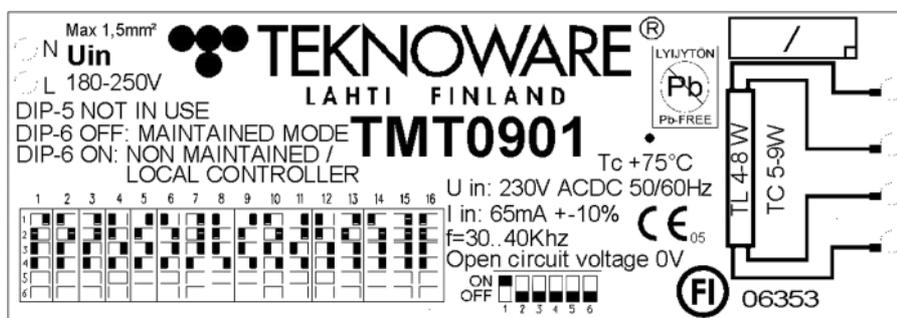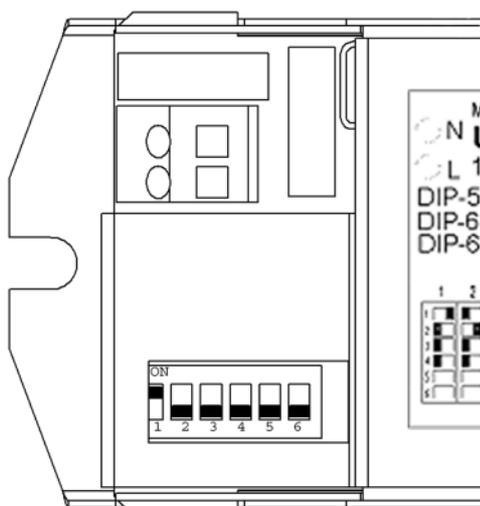
Setting the address

NOTE: THE ADDRESS SHALL BE NOT SET WHEN THE SUPPLY VOLTAGE IS CONNECTED

Setting the address takes place as follows:

Open the luminaire as for installation. Inside the luminaire there is an address module TMT0901 or TST1401, which has a code switch. The address can be set from 1 to 16 according to the instructions on the label of the address module. The address can be chosen freely or according to the installation plan. However, care must be taken that each luminaire in the same group has a different address. Dip 5 is not in use and dip 6 choose whether the luminaire is set on maintained or non-maintained mode. **NOTE! However, you have to check on your central battery unit, what is maximum address number.**

Here below the example the luminaire is set for address one and it is also set as maintained with DIP number six. The black squares indicate the dip so that the dip one for example is set in position ON.

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L I G H T I N G   T E C H N O L O G Y

DIP5   : NOT IN USE
DIP6 OFF : MAINTAINED EMERGENCY LUMINAIRE
DIP6 ON : NON-MAINTAINED EMERGENCY LUMINAIRE

Please note that luminaries set on non-maintained mode will only lit by DC supply or a signal from Local Controller.

LUMINAIRE CLASSIFICATION LABEL

Emergency lighting luminaires shall be classified and marked as to their construction as follows.
A unique designation denoting the type, mode of operation, the facilities included and the rated duration of the luminaire shall be clearly affixed to the luminaire.

The designation consists of a rectangle divided the three or four segments each containing one or more positions. Relevant to the construction a position will obtain a letter or a figure, or a point if no has to be given. The shape of the emergency lighting luminaire designation as follows:

*	*	* * * *	* * *

The segments and positions have to be completed by letters and figures indicating the intended constructions.

a) First segment containing one position: TYPE
    X   self-contained
    Z   central supply

b) Second segment containing one position: MODE OF OPERATION
    0   non-maintained
    1   maintained
    2   combined non-maintained
    3   combined maintained
    4   compound non-maintained
    5   compound maintained
    6   satellite

c) Third segment containing four positions: FACILITIES. To be completed where appropriate at the time of installation.
    A   including test device
    B   including remote rest mode
    C   including inhibiting mode
    D   high-risk task-area luminaire

d) Fourth segment containing three positions:
    FOR SELF-CONTAINED LUMINAIRES to indicate the minimum DURATION of the emergency mode expressed in minutes:
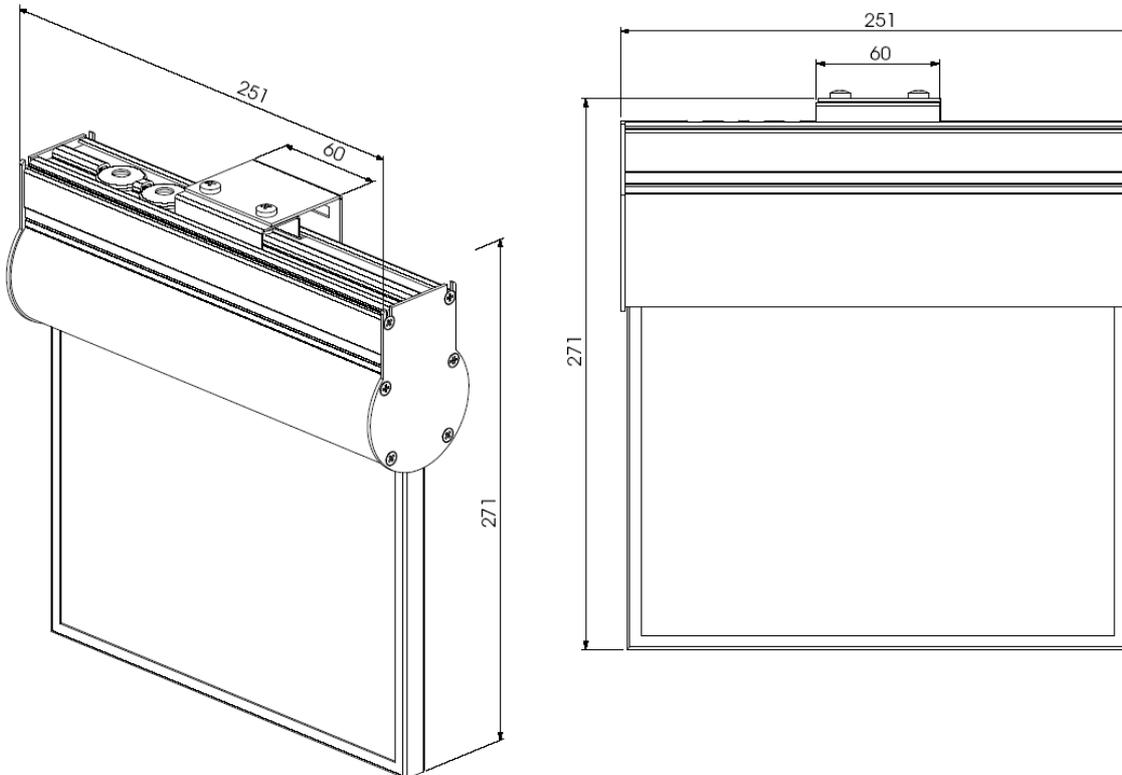   *10   to indicate   10 min duration
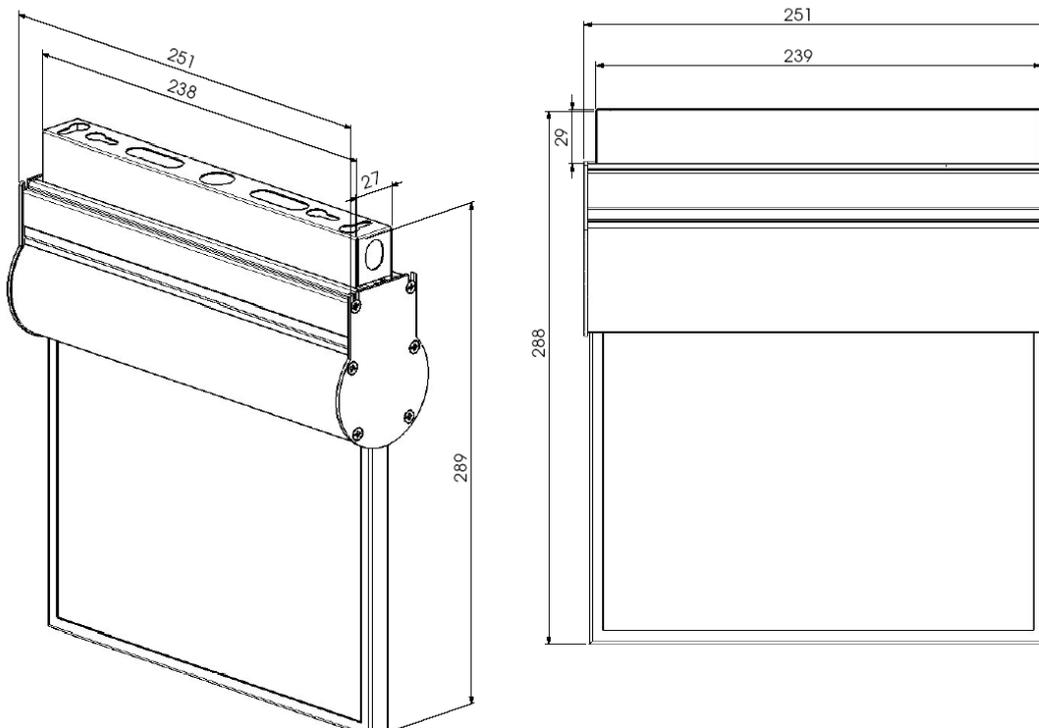   *60   1 h duration

L I G H T I N G   T E C H N O L O G Y

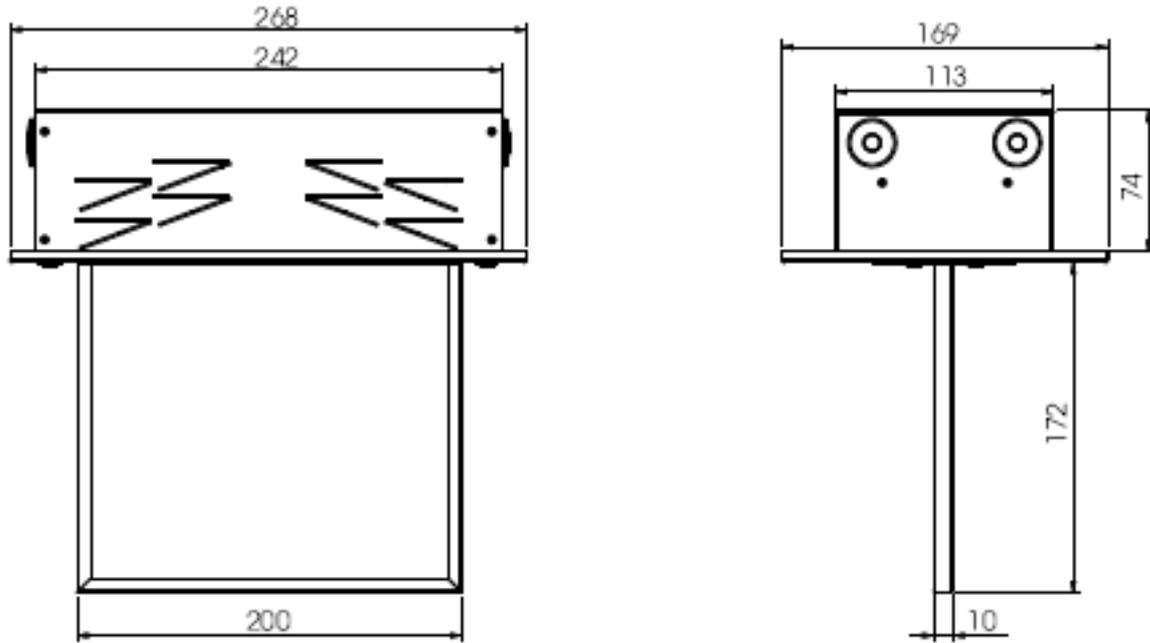|	
120	2 h duration
180	3 h duration

Mechanical dimensions

TW850 + TW77503 Bracket

TW850 + TW77501 Bracket

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TW868

TW844