

## TWT09 Trispot Emergency Luminaire Installation and Maintenance



### INSTALLATION

#### Product Description

A non-maintained emergency luminaire.

#### Usage targets

Buildings and other locations where emergency lighting is required by local authorities.

#### Points to note

- This product may only be installed or maintained by a qualified electrician.
- Only original spare parts may be used for this product.
- Any modifications to this product without a written consent from the manufacturer are prohibited.
- This product may only be used for purposes specified by the manufacturer.

#### Electrical and mechanical installation

The luminaire is suitable for surface mounting on walls. Installation images can be found on page 4.

1. **Image 1:** Remove the luminaire's back plate by opening the three screws

**NOTE!**

*Never open the luminaire when it's connected to mains!*

2. Set the address and/or the Local Controller function for the luminaire. For more information see chapter "About the installation of addressable luminaires".
3. Strip off 12 mm off the supply cable (1,5 mm<sup>2</sup> - 2,5 mm<sup>2</sup>) wire coating.
4. **Image 2:** Puncture a hole or holes to the rubber seal(s) for the supply cable(s) and attach the rubber seal(s). Please note that both rubber seals need to be pushed to their places, even if the looping connectors are not used.
5. **Image 3:** Pull the supply cable through the rubber seal, and attach the supply cable according to the markings on the connector. The connector has additional slots for power out cable.
6. **Image 3:** Attach the luminaire with two screws.
7. **Image 1:** Close the lid of the luminaire with three screws.
8. Attach the sticker indicating the luminaire classification on the outer surface of the luminaire, according to the instructions included in the delivery.

#### About the installation of addressable luminaires

The addressable luminaires (product code TW... K) are compatible with addressable Teknoware Tapsa Control central battery units, Local Controller and Intelligent Controller.

- Each output circuit must have a separate neutral line.
- Neutral lines are not allowed to be connected together.
- The address must always be set prior to connecting the power supply to the luminaire.
- The luminaires are set as non-maintained at the factory.

To set the address:

1. Find the address module with a DIP switch inside the luminaire.
2. Check on your central battery unit for the maximum number of addresses (16 or 32). If the maximum number is 16, use the LO setting.
3. Set the address from 1 to 16 (LO) or 17 to 32 (HI) 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 circuit has a different address.

DIP 5 OFF: ADDRESSES 1-16 (1-16 LO)  
DIP 5 ON: ADDRESSES 17-32 (17-32 HI)  
DIP 6 ON: NON-MAINTAINED EMERGENCY LUMINAIRE / LOCAL CONTROLLER MODE

ON  
 OFF

DIP

1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

#### LUMINAIRE CLASSIFICATION LABEL

According to the EN 60598-2-22 standard requirements, the emergency luminaires shall be classified and marked according 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 indication has to be given.

The shape of the emergency lighting luminaire designation is as follows:

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

**a) First segment containing one position: TYPE (Marked already in the factory)**

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  
E with non replace lamp(s) and/or battery  
F automatic test gear complying with IEC 61347- 2-7 denoted EL-T  
G internally illuminated safety sign.

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

\*10 10 min duration  
\*60 1h duration  
120 2h duration  
180 3h duration

Two examples of a marking given to elucidate a selection:

X	1	*B*D	*60
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- A self-contained maintained luminaire including a remote rest mode and which is suitable for a high-risk task-area and having an emergency mode duration of 60 min.

Z	1	****
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- A central supplied maintained luminaire.

## MONITORING AND MAINTENANCE

### 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
- using self-testing feature, or
- using Aalto Control software.

### Periodical checks and maintenance

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

The maintenance of the emergency lighting system is to be carried out according to the standard EN 50172.

- the indicators of the emergency lighting system must be visually inspected daily
- the emergency mode of each luminaire is tested monthly by switching the luminaire to battery feed
- once per year the full duration test of 1 h, or a separately determined longer time, is to be made by switching to battery feed
- all the tests and results shall be recorded in the logbook of the emergency lighting system and when asked it shall be presented to the authorities
- in addition, we recommend a daily visual inspection of the maintained luminaires.

The life time of the battery is ca. 4 years and of the super capacitor ca. 10 years in normal conditions. The backup power source must be replaced when the luminaire is no longer working during the required duration of 1 or 3 hours.

### Removing from usage

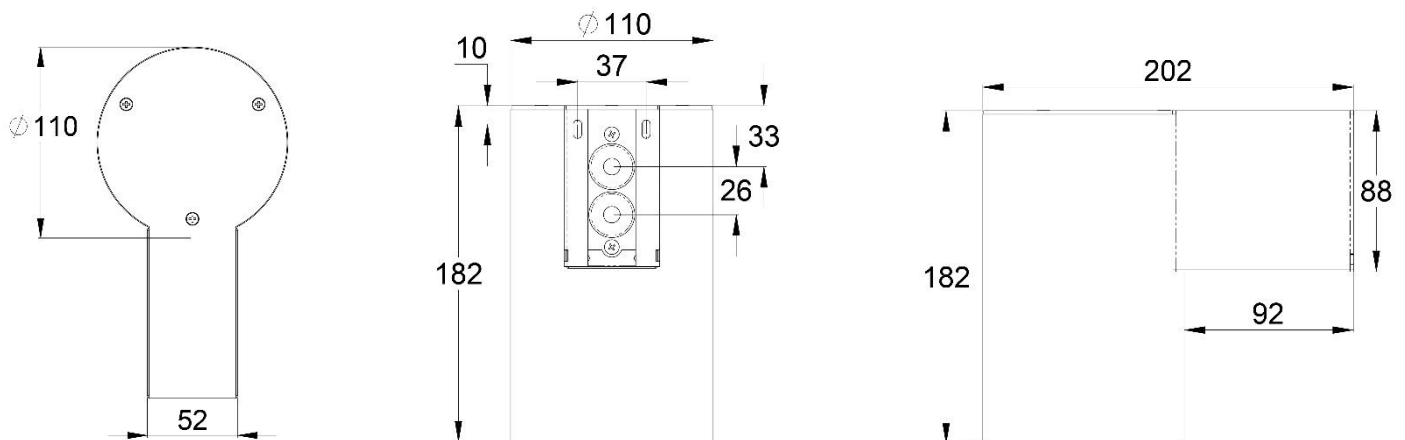
The LED luminaires which are removed from usage are electronics waste and shall be disposed of according to the requirements of local laws and regulations.

## TECHNICAL DATA

<b>Casing</b>	IP20
<b>Applicable European directives and standards</b>	2004/108/EC, EMC directive 2006/95/EC, LVD directive EN 55015 EN 61547 EN 60598-2-22 EN 60598-1 EN1838 NOTE: LVD directive applies only to luminaires using 230 V supply voltage.

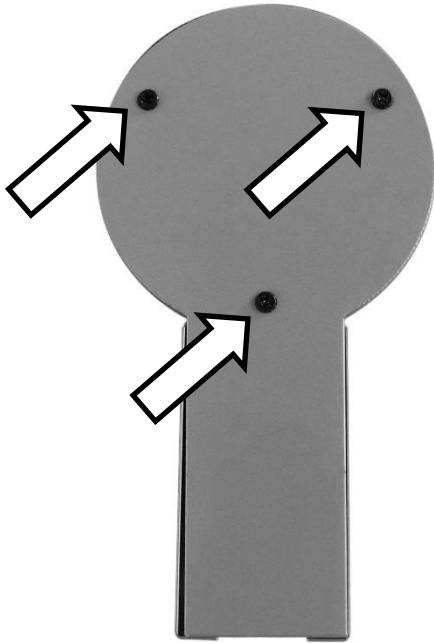
Product code	Supply voltage	Input power	Insulation class	Nominal luminous flux	Self-contained	Centrally supplied	Tapsa Control	Aalto Control	Lumi Test
TWT0951WK	220...240 V AC 50/60 Hz, DC	15,3 VA / 9,5 W	I	265 lm	-	X	X	-	-

## MECHANICAL DIMENSIONS

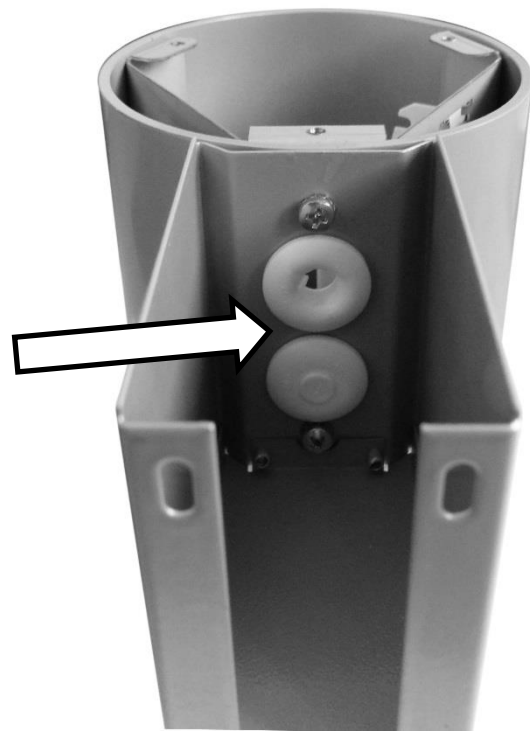


INSTALLATION IMAGES

1.



2.



3.

