

Maintain the instructions and give them to the facility user.

## Safety instructions

Check the product for transport contents and damage. If you notice any defects or shortcomings in the delivery or in the product, please contact the seller immediately.

The luminaire must be disconnected from the mains before installation or maintenance work to avoid the risk of electric shock!

- The luminaire does not come with a terminal block. The installation or maintenance of the luminaire should only be carried out by an authorized person in accordance with these instructions.
- The light source of the luminaire may only be replaced by the manufacturer, a person authorized by him or an equivalent qualified person.



## Instructions

- No changes may be made to the product
- The manufacturer is not responsible for misuse of the product
- The installed product must not be subjected to external mechanical stress
- The installed product must not be exposed to strong chemicals
- Do not look directly at the luminaire that is on

## Service instructions

- If necessary, use neutral soap solutions and non-abrasive cleaners to clean the luminaire

## Storage

- The product is stored in a dry and clean environment
- Do not strain the product mechanically or chemically during storage

## Brackets:

Use the brackets that came with the shipment only if they are suitable for the intended purpose. If the fasteners are included in the order, they are packaged separately. Please note that for partial shipments, mounts may only be included with the first delivery batch.

The number of fasteners must be used according to the instructions (see table).



## Table of Contents:

1. Installation of the luminaire frame	
1a-b.) Surface mounted luminaire frame	p.3
1c.) Recess mounted luminaire frame	p.3
2. Joining the luminaire frames	
2a-d.) Joining the luminaire frames together	p.4
2e.) Frame corner installation	p.4
2f.) Installation of the frame in tight spaces	p.5
2g.) Post tightening of the frames	p.5
3. Preparation of the electrical connections	
3a.) Cable from the end	p.6
3b.) Cable from the top	p.6
3c-e.) Electrical connections to the terminal	p.7
4. LED-module installation	
4a.) Selection of the coupling phase	p.8
4b-g.) LED-module installation into the luminaire frame	p.8-11
5. Installation of the other modules	p.11
6. Removal of the modules	
6a.) Removal on the modules from the luminaire frame	p.12
6b.) LED-module connector release	p.12
6c.) Track-module release from the luminaire frame	p.13



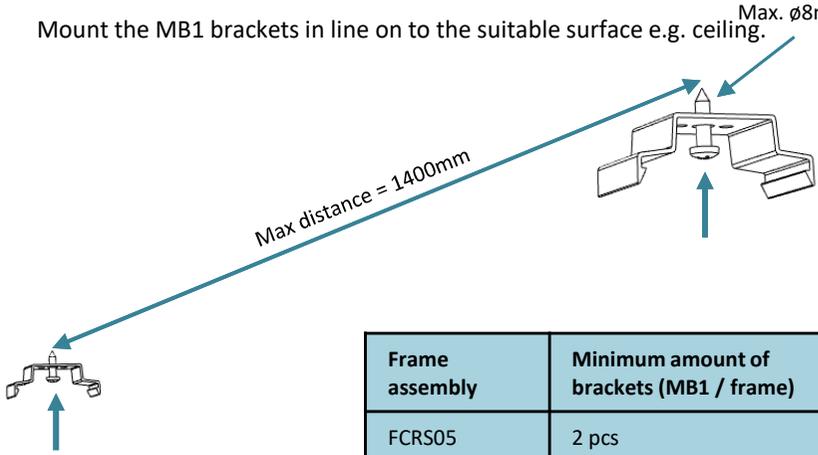
# SNEP® Mode CR installation instructions

## 1. FCR frame installation:

### 1a. FCRS surface mounted frame installation with MB1 brackets:

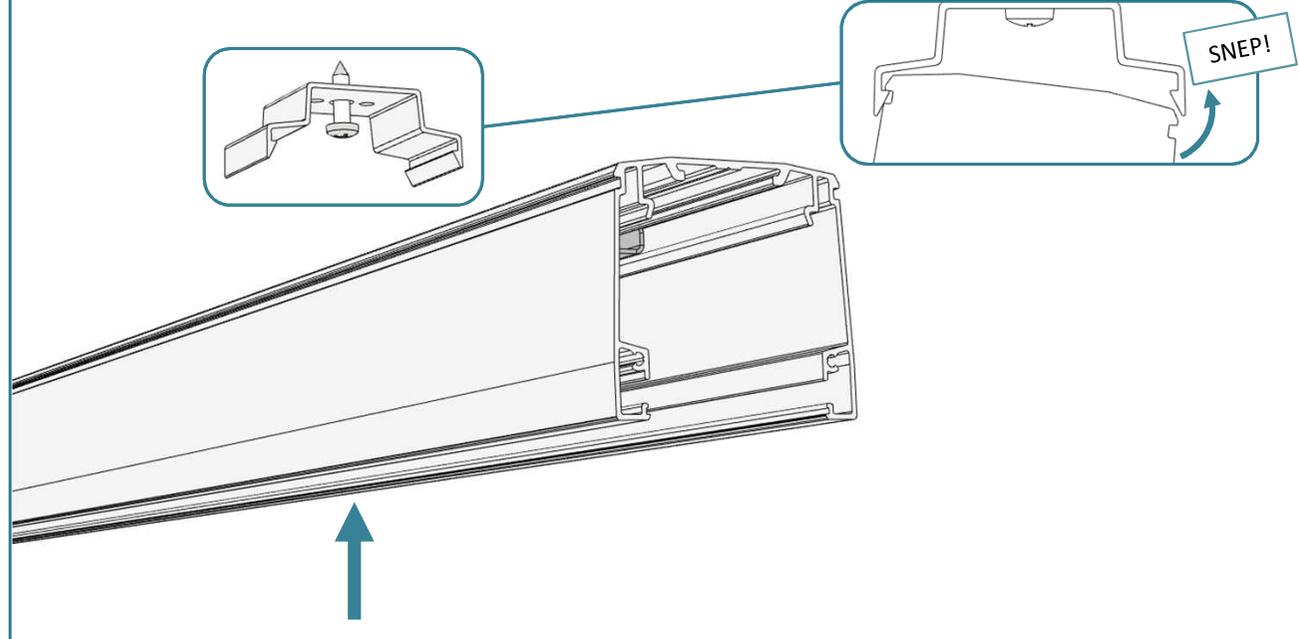
Mount the MB1 brackets in line on to the suitable surface e.g. ceiling. Max.  $\varnothing$ 8mm

Max distance = 1400mm



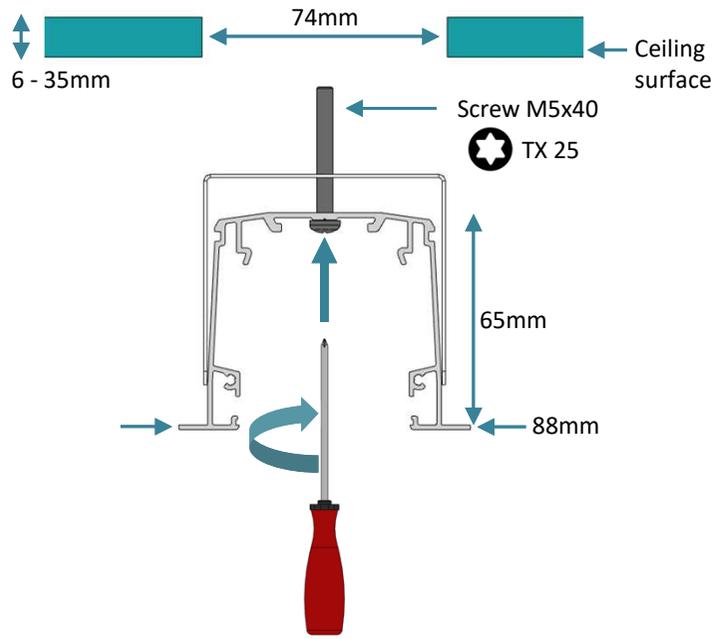
Frame assembly	Minimum amount of brackets (MB1 / frame)
FCRS05	2 pcs
FCRS15	4 pcs

### 1b. Fasten the frames to the brackets:



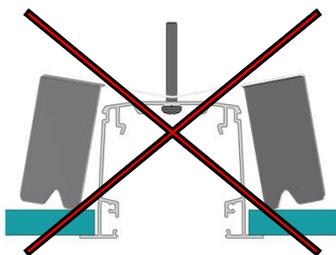
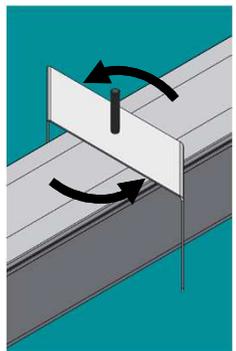
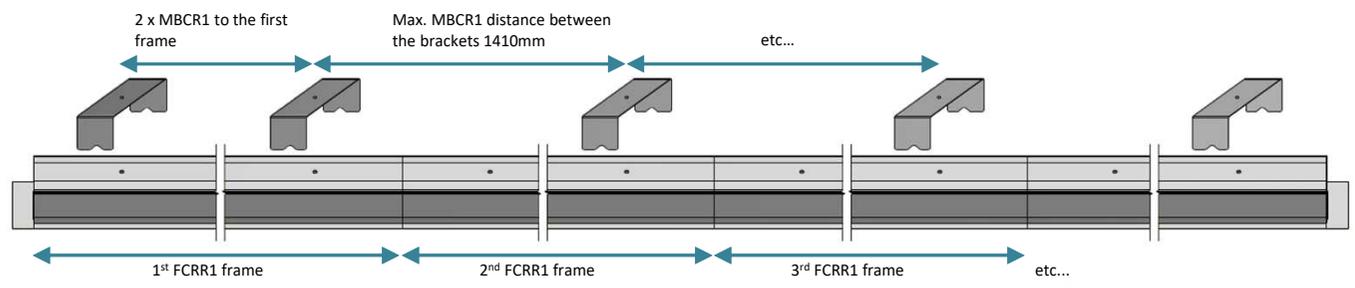
### 1c. FCRR recessed frame installation with MBCR1 brackets:

Cut the hole to the ceiling and fasten the frame



Note the minimum number of brackets:

**NOTE!** Joining the frames is shown on the paragraph 2.



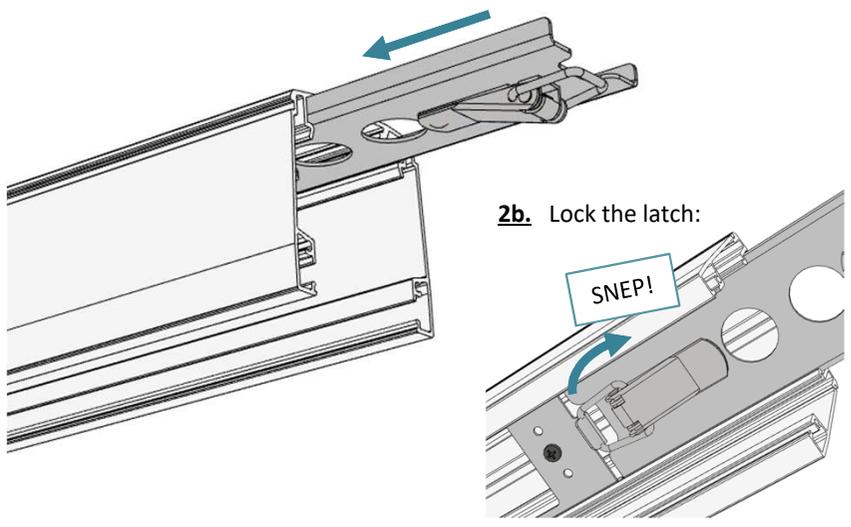
**NOTE!** Do not over tighten.

**NOTE!** Must not cover with insulating material.

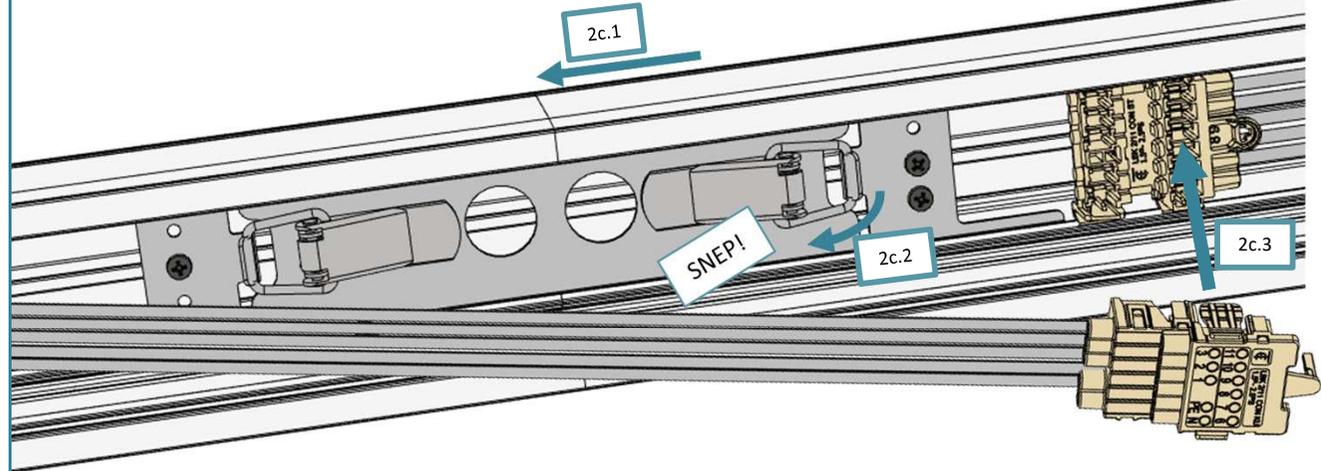
# SNEP® Mode CR installation instructions

## 2. FCR frame joining:

**2a.** Mount the MODE CR joining part (VMU20101) by sliding it into the frame groove:



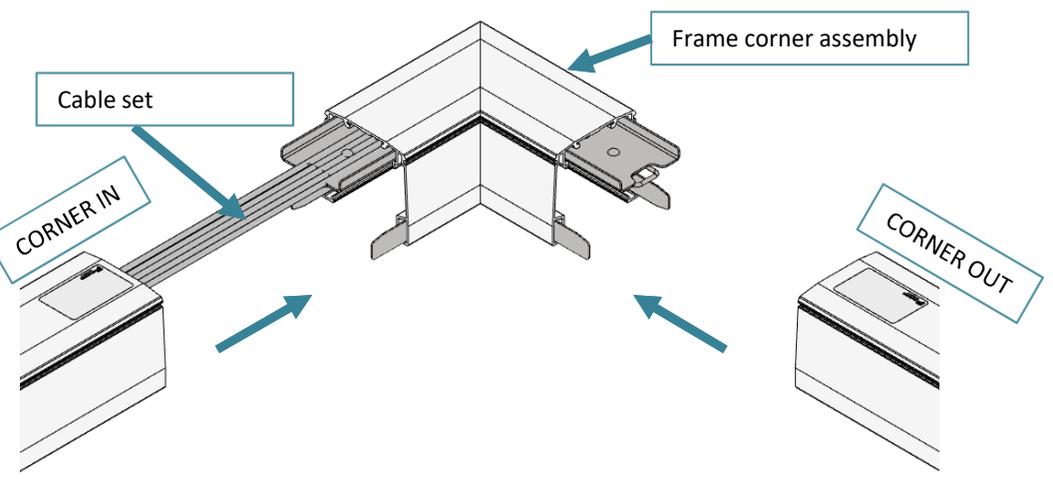
**2c.** Repeat the 2a) and 2b) to every frame in the installation.  
With each FCR-FRC frame joint: Slide the frame together (2c.1), lock the joining part latch from the other end, (2c.2) and connect "LBK 2/11 CON KU" –connector to the connector "LBK 2/11 CON ST"–connector on the next frame (2c.3).



**2d.** Repeat the steps 2a. – 2c. to each frame prior moving to next phase.  
**NOTE!** If the installation consists also of corners, please move on to the 2e. Installation of frame corners. Otherwise move on to the 3 "Preparation of electrical connections"

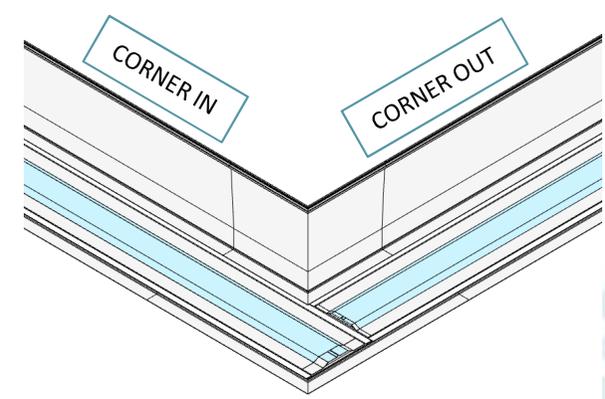
## 2e. Installation of frame corners :

Installation of the FCR frame corner:  
2e.1: The Frame corner is symmetrical, thus it can be installed in either direction. Frame assembly with sticker "CORNER IN" is connected to the side where the electricity is fed in into the installation. The frame assembly with sticker "CORNER OUT" will be installed to the other side of the corner frame assembly.



2e.2 Lock the frame corner latches like in 2a-2c.  
2e.3 Bend the cable set inside the frame corner and connect to the next frame like in 2c.3

2e.4 When installing the LED-modules (paragraph 4), the LED-modules are installed on to the frame corner as shown below.

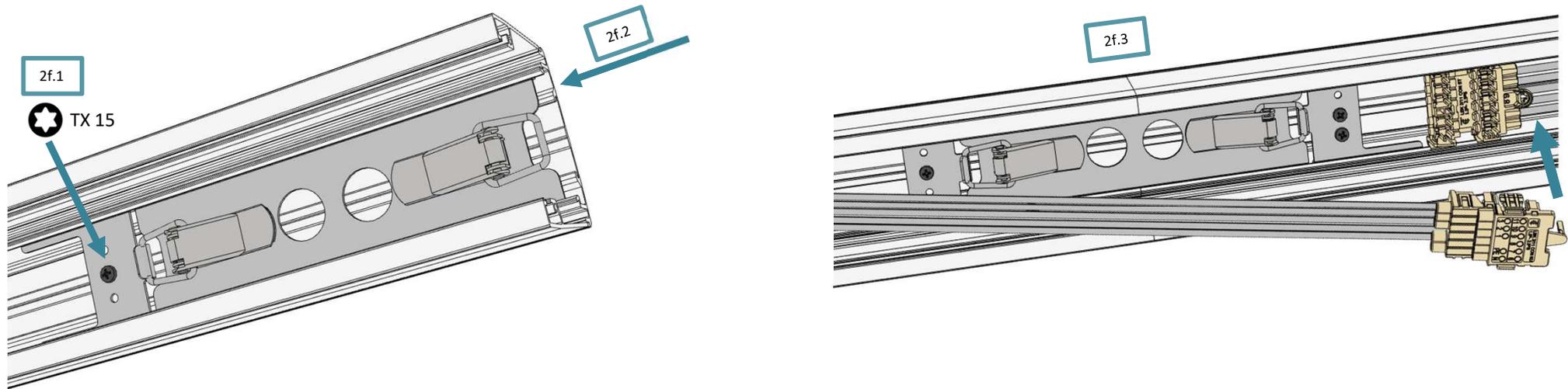


# SNEP® Mode CR installation instructions

**2f. OPTION:** Installation of the frame in tight spaces. When there is not enough space for sliding the final frame module in its position. Otherwise go on to the 3.

Mount the frames following the principles shown earlier, but with the final frame follow the below instructions:

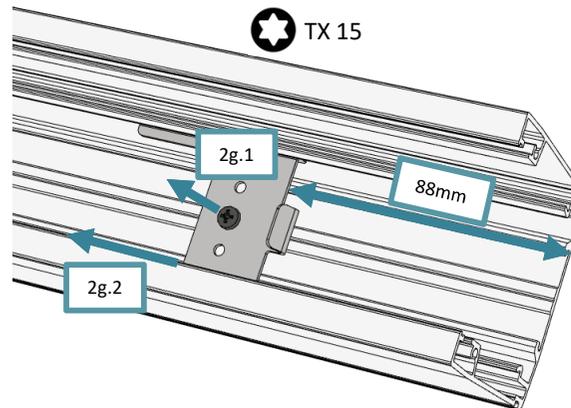
- Release the second last frame's joining part's counter part 2f.1 and slide it deeper into the frame profile (2f.2) so that the joining part goes inside the frame profile. Sliding distance ~100mm.
- Mount the last frame right next to the second last frame, with suitable brackets.
- Slide the joining part and its counter part back to their positions (2f.3), tighten the counter part to the frame and lock the latches (ref to 2.c).



**2g. OPTION:** Post tightening of the frames. Otherwise go on to the 3.

If the frames get loose from each other, one can tighten the frames by following the next steps:

- Loosen the counter parts screw (2g.1)
- Slide the counter part a bit deeper into the frame profile (2g.2), so that the joining part's locking latch distance provides tight connection between the frames (nominal distance 88mm)
- Tighten the counter part screw.
- If needed repeat the steps in 2g to the other side of the joining part
- Finally join the frames by following the steps shown in 2a.

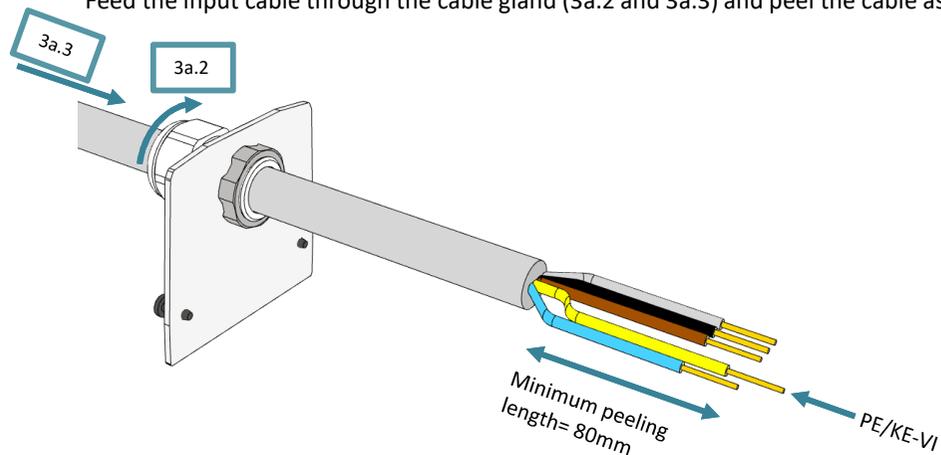


# SNEP® Mode CR installation instructions

## 3. Preparation of the electrical connections:

### 3a: Cable from the end:

Feed the input cable through the cable gland (3a.2 and 3a.3) and peel the cable as instructed in below (3a.1):



### (3a.1) Preparation of the input cable:

Nominal voltage:  
400 V

Nominal current:  
2.5 mm<sup>2</sup>: 16A  
1.5 mm<sup>2</sup>: 5 x 16A ja 6 x 10A

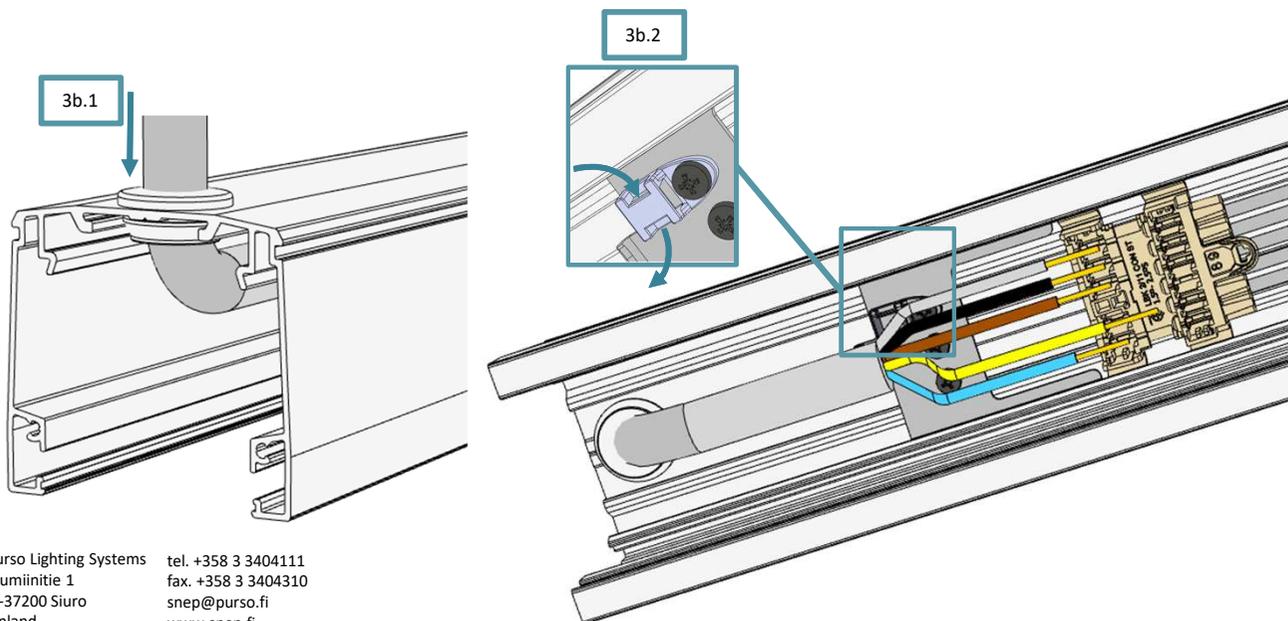
Supported wire types:  
1.5-2.5 mm<sup>2</sup> solid copper (ML)

Peeling length of the wire:  
15 ± 0.5 mm

Minimum peeling length of the cable= 80mm

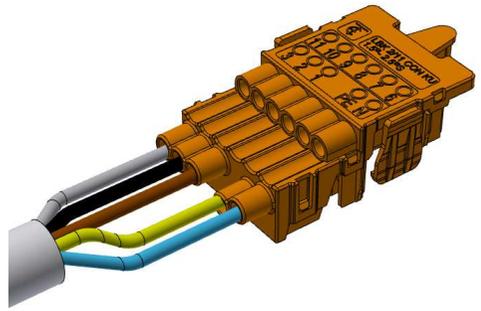
### 3b: Cable from the top:

Peel the cable as in (3a.1). Feed the cable through the cable grommet (3b.1). Mount the cable tie (max width 4.8mm) to cable tie anchor (3b.2) and tighten the cable tie on to the cable.



# SNEP® Mode CR installation instructions

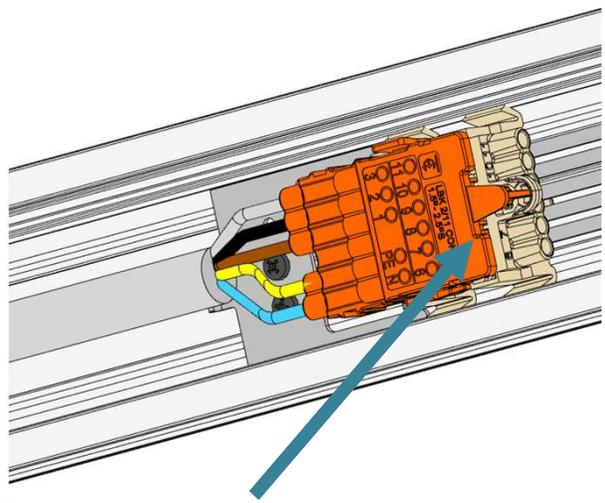
**3c:** Connect the wires into the “LBK 2/11 CON KU” –connector following the below table:



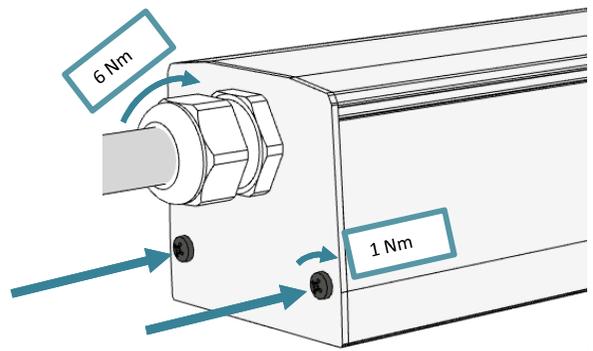
**NOTE!**  
Select the phase for each LED-module as shown in paragraph 4.

Liitin	5x2,5mm <sup>2</sup>	4x1,5mm <sup>2</sup>
N	N (blue)	
PE	PE (yellow-green)	
1	L1 (brown)	
2	L2 (black)	
3	L3 (grey)	
6		Option
7		Option
10		DA+ / 1
11		DA- / 2

**3d.** Fasten the connector to the connector in the frame:

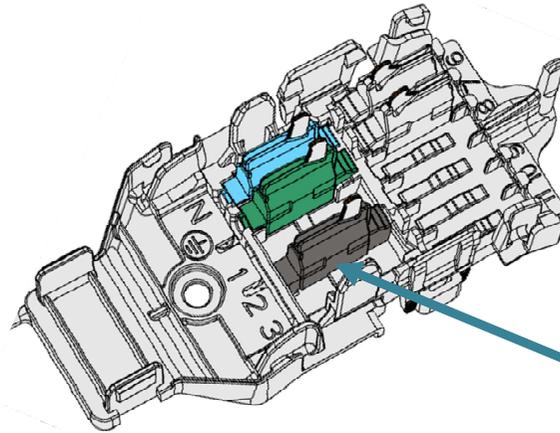


**3e.** If cable was connected from the end (3a.): Tighten the screws of the end cap into the frame and tighten the cable gland. The end cap for the other end of the installation can be fixed in this phase with same torque.



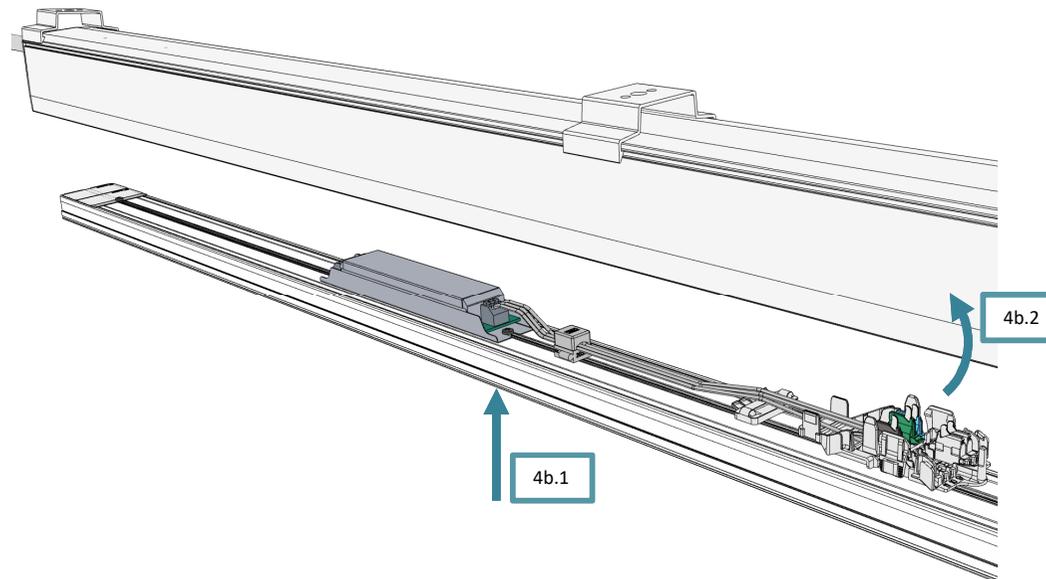
## 4. LED-module installation:

**4a:** Ensure you have selected the correct phase for the LED module prior installing the LED-module to the frame.



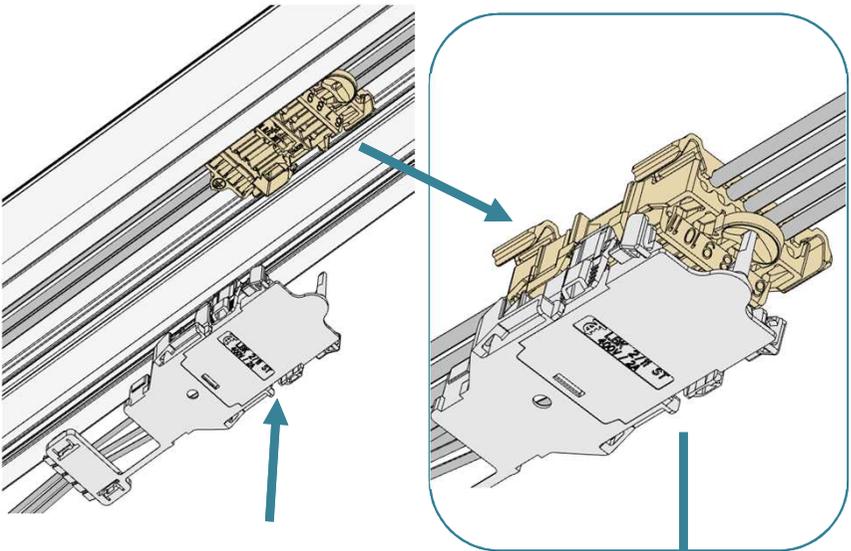
The phase can be selected to the LED-module by gliding the phase selector to the selected phase (Phase 1, 2 or 3)

**4b:** Bring the LED-module close to the frame (4b.1), so that the LED-module connector reaches the connector's counterpart (4b.2). Note the direction of the LED-module:

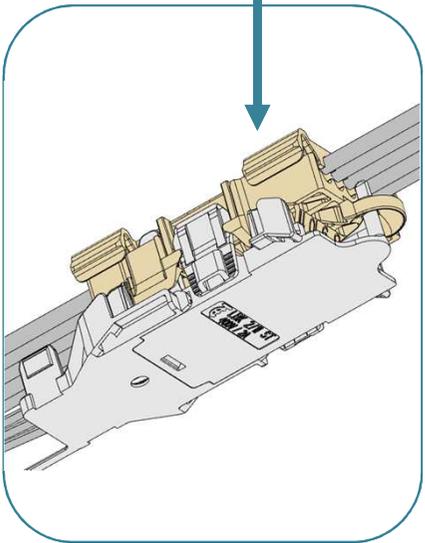


# SNEP® Mode CR installation instructions

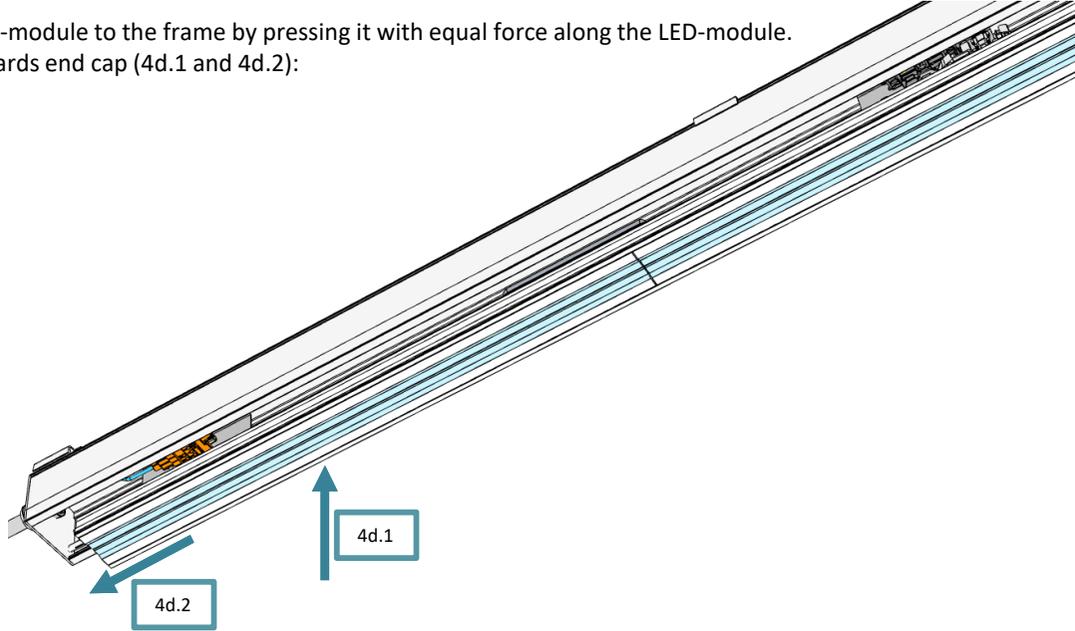
**4c.** Fix the connector to its counterpart as shown below:



Ensure that the connector is fixed to the bottom in order to have proper connection.

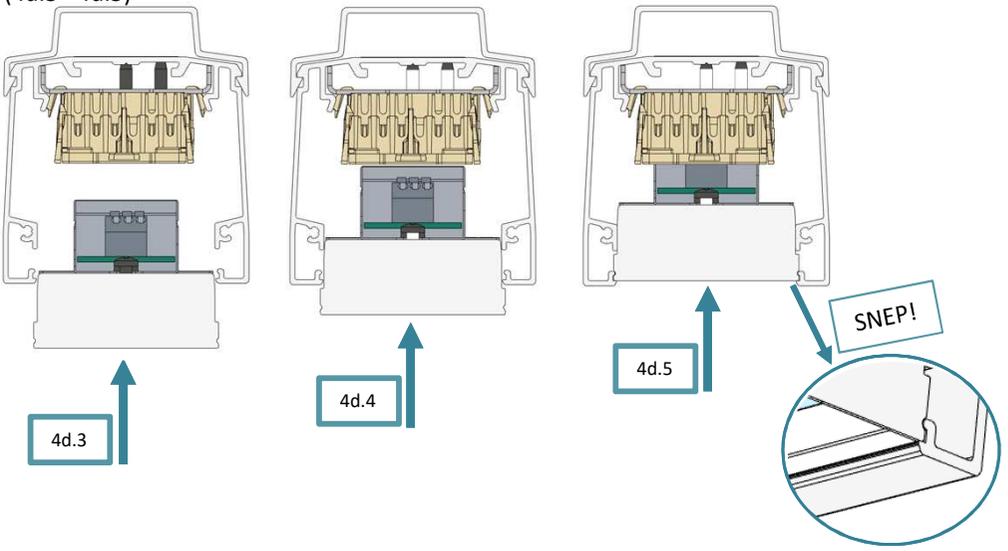


**4d:** Install the LED-module to the frame by pressing it with equal force along the LED-module. Finally slide it towards end cap (4d.1 and 4d.2):

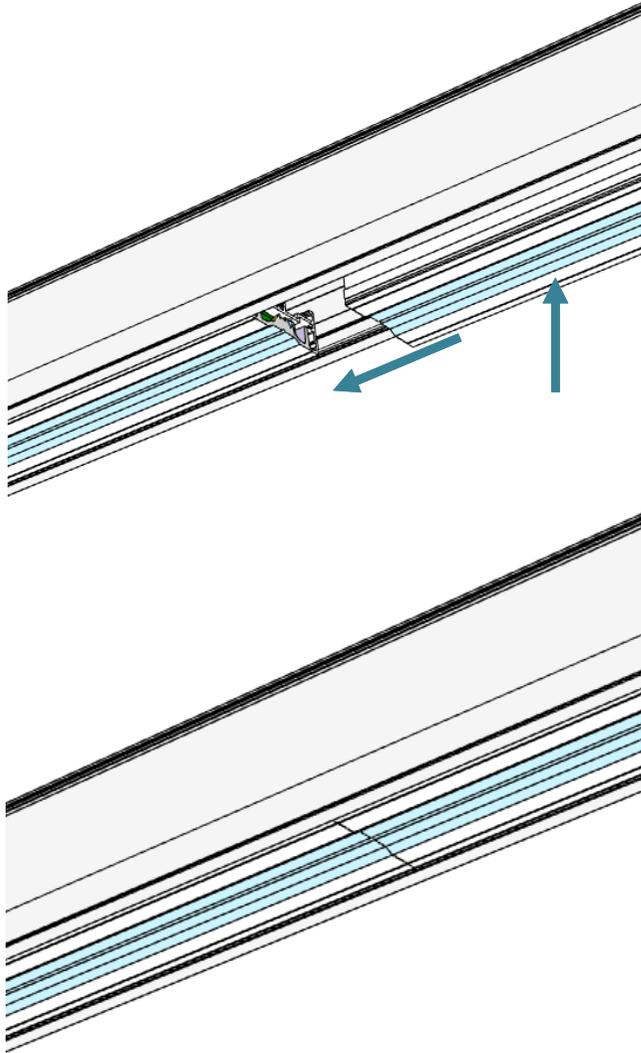


**NOTE!**

Ensure that the LED-module has been mounted correctly and it has found its locking position at the frame as shown below (4d.3 - 4d.5)



**4e.** Install the next module like the first LED-module and slide it next to the previous LED-module.



**4f:** NOTE!

It is suggested to install the final LED-module prior to the second last LED-module.

Installation of the last LED-module:

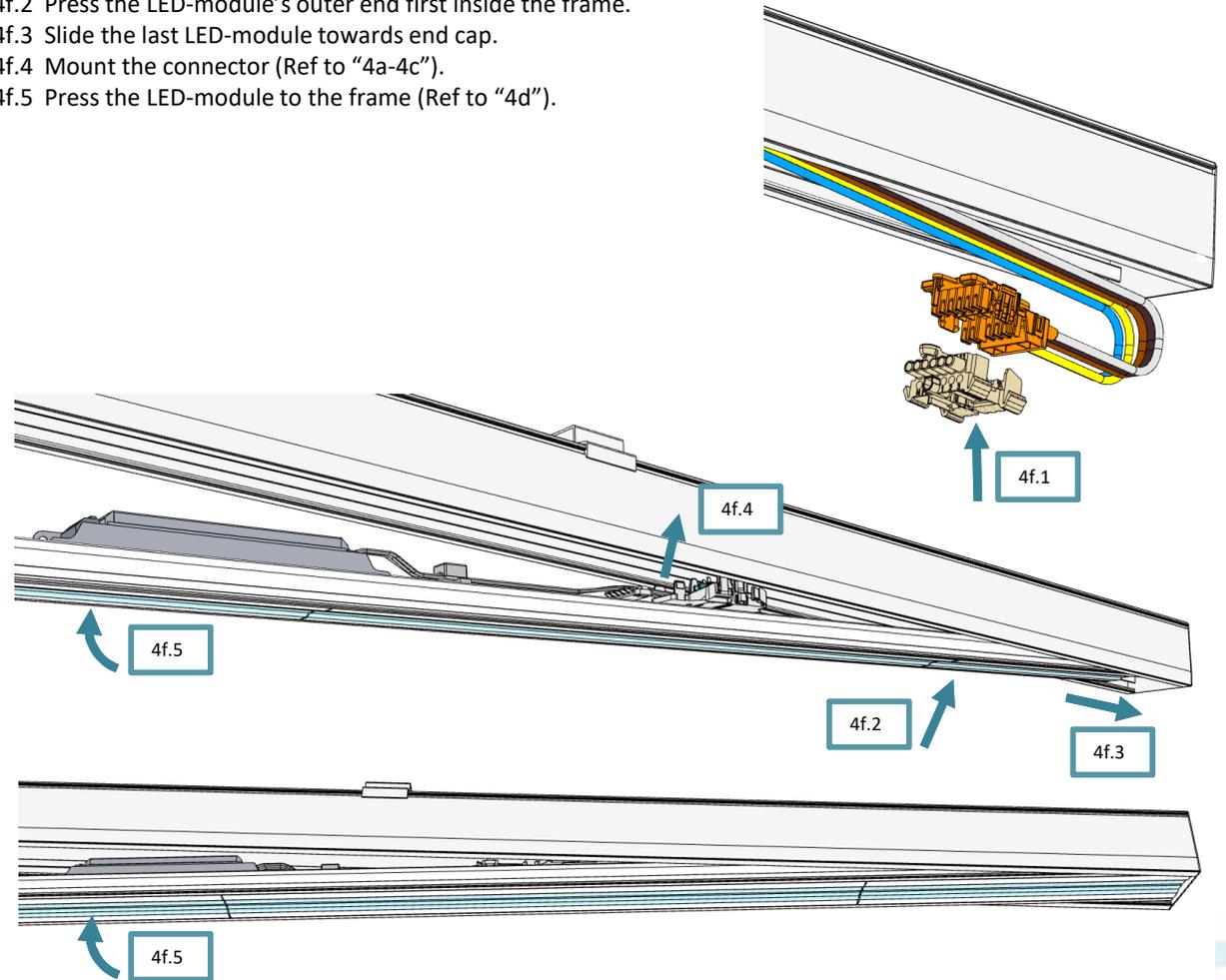
4f.1 Press "LBK 2/11 CON Cover" to the "LBK 2/11 CON KU -frame connector and bend the cable set inside the frame in neat manner.

4f.2 Press the LED-module's outer end first inside the frame.

4f.3 Slide the last LED-module towards end cap.

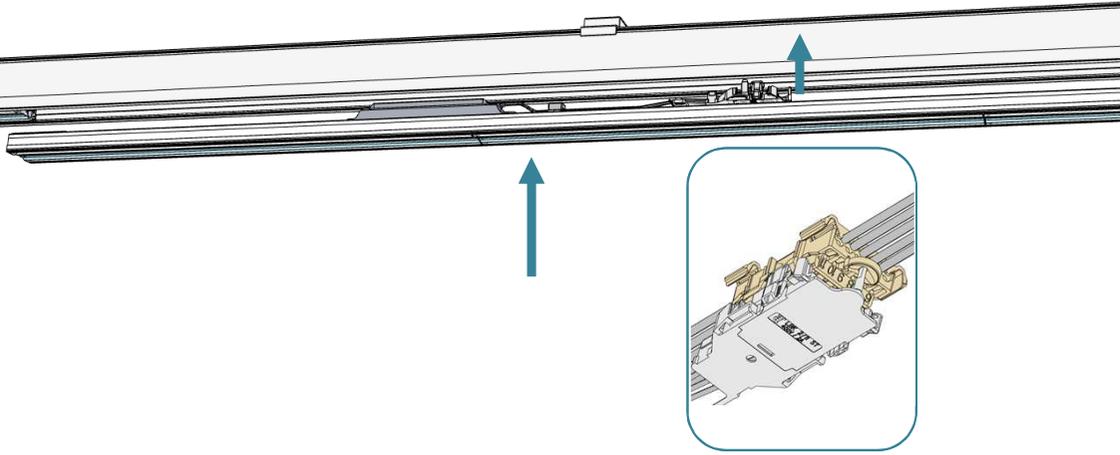
4f.4 Mount the connector (Ref to "4a-4c").

4f.5 Press the LED-module to the frame (Ref to "4d").



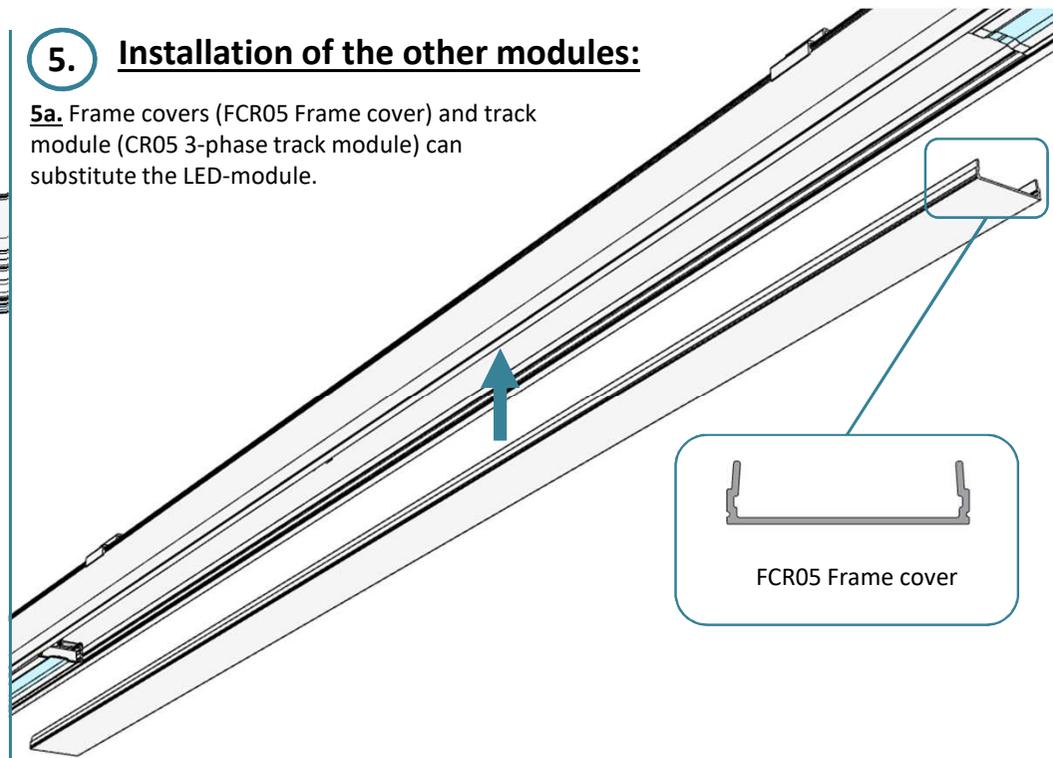
**4g: NOTE!**  
Installation of the second last LED-module:

- 1. Connect the connector to the frame connector (Ref to "4a-4c").
- 2. Press the LED-module directly into its position in the frame (Ref to "4d").

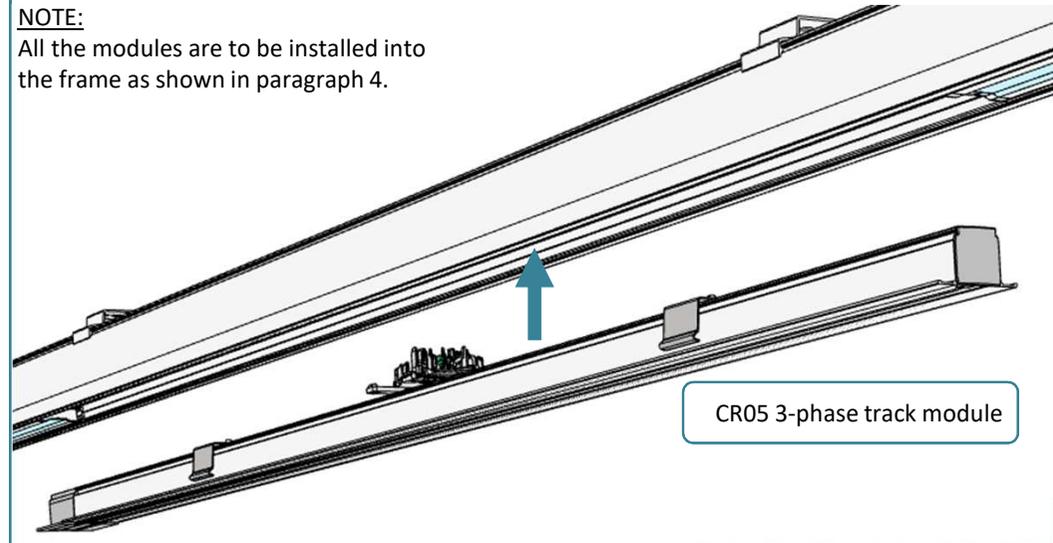


## 5. Installation of the other modules:

**5a.** Frame covers (FCR05 Frame cover) and track module (CR05 3-phase track module) can substitute the LED-module.



**NOTE:**  
All the modules are to be installed into the frame as shown in paragraph 4.

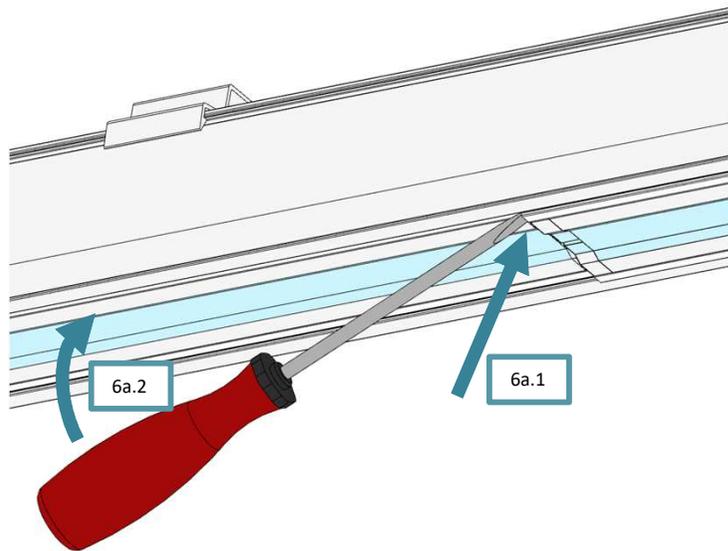


## 6. Removal of the modules:

### NOTE!

The luminaire must be disconnected from the mains prior removal of anything from it!

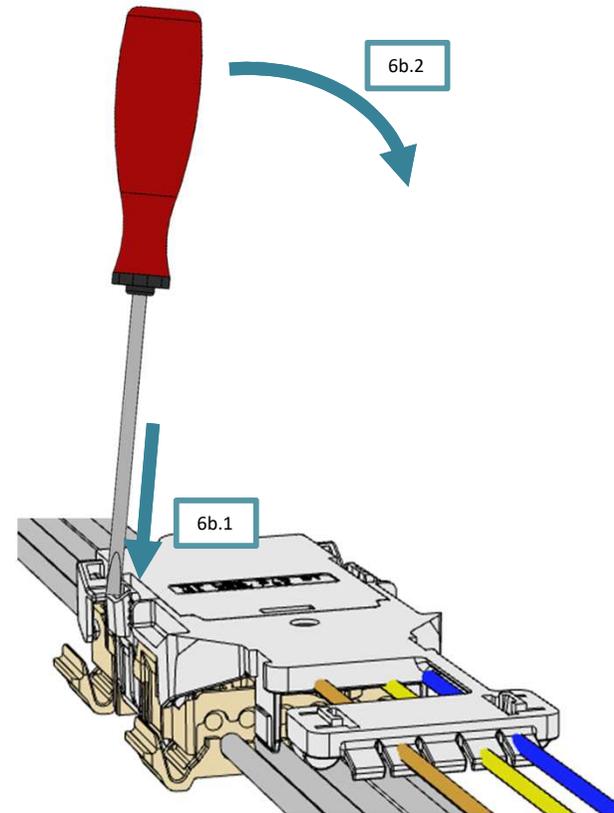
6a. The LED-modules and frame covers can be removed as shown below:



Use flat screw driver (or similar thin flat tool). Press the end into the module joint and carefully bend the module off from the frame. NOTE! Touch only the aluminium parts of the module with the screw driver. The LED module optics are too fragile. (6a.1 ja 6a.2). Once the module is loosened enough grasp it with hands and release it using your hands.

6b. Release the connector from the frame connector following the figures (6b.1 ja 6b.2):

Suggested screw driver size:  1×3,5 - 4×0,6 mm



# SNEP® Mode CR installation instructions

**6c.** When removing the track-module, remove two screws from the bottom of the track module (6c.1 ja 6c.2), take the module from the frame release the connector as shown in (6b).

