

Entry / ECO

Standard / STD

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ODM & OEM

Intelligent / INT



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**STD**  
Specifications



LED Vapor proof  
DB145 Series





## Introduction

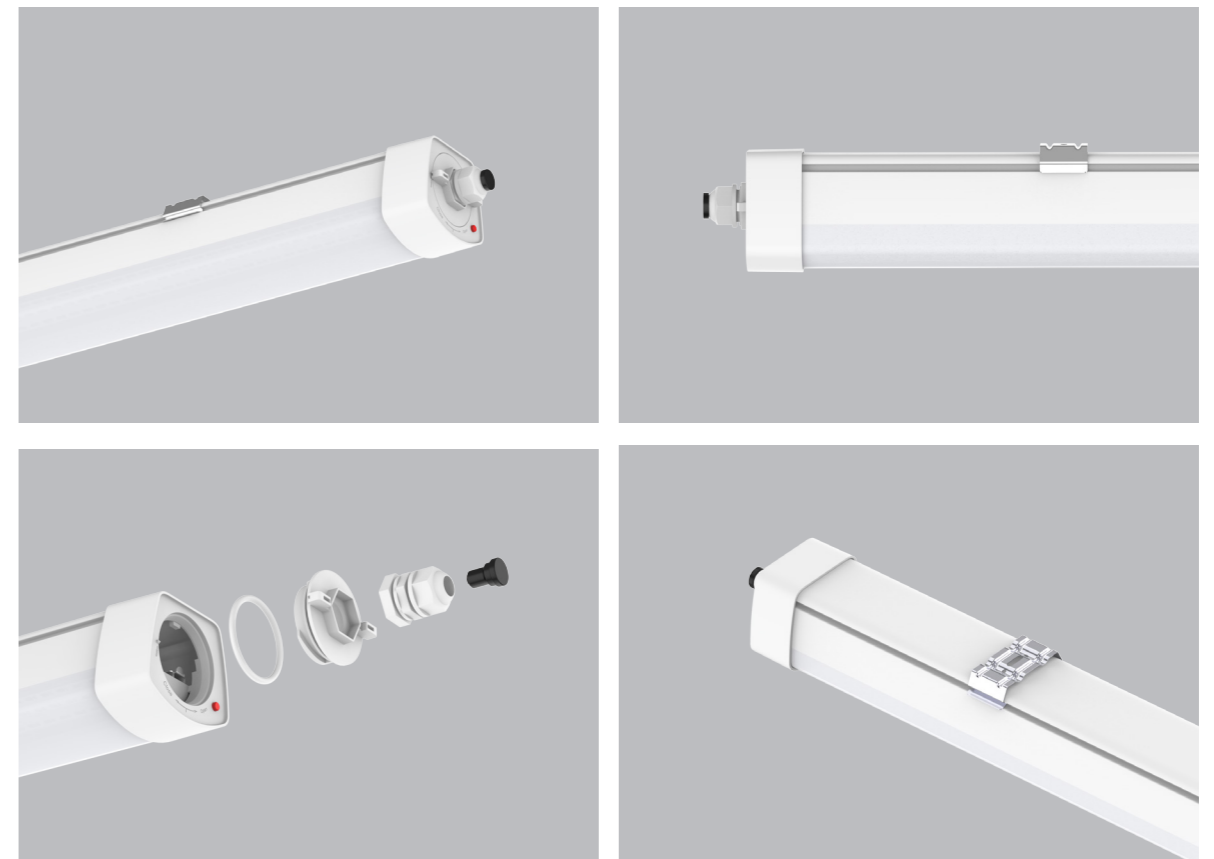
DB145 is a high quality LED Vapor proof with high luminous efficacy 150lm/w. With a reliable and robust housing structure (IK08 & IP65), this maximizes the endurance and contributes to its long lifetime. With its flexible installation accessories, it can install as surface mounting, pendant and splicing, which can be used in a wider applications. Three size options: 1200mm, 1500mm, 1800mm, it's an ideal replacement for traditional fluorescent Vapor proof.

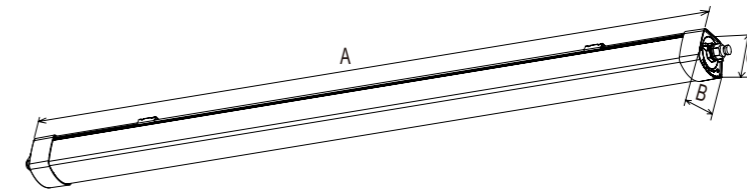
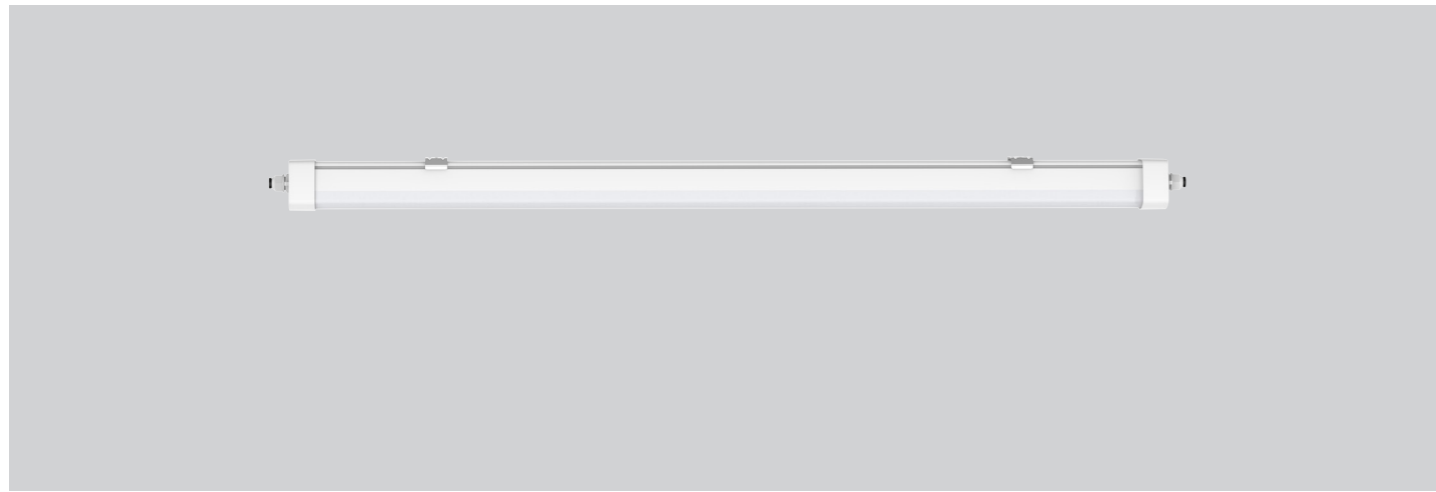
## Features

- Compact design, suitable for both indoor and outdoor applications.
- IP65 waterproof, IK08 impact protection.
- Lifespan: approx. 50,000 hours.
- End caps: made of shockproof polycarbonate (PC).
- Flexible installation through sliding mounting bracket.
- Splicing, Sensor, Emergency and interchangeable CCT available.
- Tool free mains cable installation on both sides through twist lock fastener cover at both sides.

## Application Areas

This linear fixture is widely used in shopping mall, office, car park, station, home.





## Technical Data Sheet

Code No.	DB145-1200-38W	DB145-1500-52W	DB145-1500-68W	DB145-1800-68W		
Dimension(mm)	1200*77*69	1500*77*69		1800*77*69		
Cutout (mm)	-					
Watt(W)	38W	52W	68W	68W		
Rated Input Voltage(V)	AC230V					
Input Voltage(V)	AC220-240V					
LED Module Input	-					
Light Source	SMD					
SDCM	<6					
CCT(K)	1-CCT: 3000K/4000K/5000K/5700K    3-CCT:3000K+4000K+5700K					
CCT Selection DIP Switch	Yes					
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	5200-5600	7500-7900	9200-9800	9200-9800
	DIM		5000-5500	7300-7700	-	9000-9600
	Non-DIM	3-CCT	5200-5700	7500-8000	-	9200-10000
	DIM		5000-5500	7300-7900	-	9000-9800
CRI	80					
Beam Angle (°)	120°					
UGR	-					
LED Driver	Built-in					
Dimming Option	DALI					
Sensor	Microwave sensor+Daylight sensor					
Emergency Kits	Yes					
Electrical Class	Class I I					
Ingress Protection (IP Rating)	IP65					
Impact Resistance (IK Rating)	IK08					
Product Finishing(Base)	White RAL9016					
Materials of Optics	PC					
Materials of Housing	PC					
Lifetime (hr)	50,000h					
Glow wire test (°C)	750°C					
Operating Temp. (°C)	-20°C ~40°C					
Storage Temp. (°C)	-20°C ~60°C					
Installation	Surface mount/ Pendant					

## Measurement

Code	Dimension(mm)			Size(mm)	Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/CTN	20GP (pcs)	40HQ (pcs)
	A	B	C		N.W/PC	G.W/PC	N.W/CTN	G.W/CTN				
DB145-1200-38W	1200	77	69	1200*77*69	1.7	1.8	10.2	13	133*25*18.5	6	2676	6390
DB145-1500-52W	1500	77	69	1500*77*69	2.1	2.3	12.6	16	163*25*18.5	6	2166	5382
DB145-1500-68W	1500	77	69									
DB145-1800-68W	1800	77	69	1800*77*69	2.3	2.6	13.8	18	193*25*18.5	6	1998	4620

## Driver Datasheet (Non-Dimmable)

Total load wattage		38W		52W		68W	
Output	Output Voltage range	DC80-110V	DC28-42V	DC100-150V	DC28-42V	DC110-160V	DC60-75V
	Rated output current	370mA	950mA	400mA	1500mA	500mA	950mA
	Line Regulation	±5%					
	Setup, Rise Time	<0.5s @230V					
	Flickering Index	0.6% (NO RISK)	-	0.2% (NO RISK)	-	0.3% (NO RISK)	-
	Input	Input Voltage	AC200-240V				
Rated Input Voltage(V)		AC220-240V					
Frequency		50/60Hz					
Input Current		≤0.23A	≤0.23A	≤0.36A	≤0.36A	≤0.47A	≤0.45A
Rated Input Current		≤0.21A	≤0.21A	≤0.29A	≤0.31A	≤0.37A	≤0.37A
Power Factor		≥0.9					
THD		<20% @230V					
Efficiency		≥90%	≥87%	≥90%	≥87%	≥90%	≥89%
No load wattage		-					
Protection		Short circuit protection	Pass				
	Over voltage protection	Pass					
	Over temperature protection	Pass					
Safety & EMC	Withstand voltage	I/P-FG:1.6kVac, <5mA 60SI					
	Isolation Resistance	I/P-PG,O/P-PG: 500VDC, ≥100M Ω					
	Surge	IEC/EN61000-4-5 (P≥25w L-N:1KV, L/N-PE:2KV)					
	EMC Emission	EN55015, EN61000-3-2					
EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547						

## Driver Datasheet (DALI Dimmable)

Total load wattage		38W		52W		68W	
Output	Output Voltage range	DC3-42V					
	Rated output current	950mA		1500mA		1900mA	
	Line Regulation	±5%					
	Setup, Rise Time	<0.5s					
	Flickering Index	3%(NO RISK)					
Input	Input Voltage	AC200-240V					
	Rated Input Voltage(V)	AC230V					
	Frequency	50/60Hz					
	Input Current	AC230V		≤0.16A		≤0.16A	
	Rated Input Current	≤0.21A		≤0.12A		≤0.12A	
	Power Factor	≥0.9					
	THD	<20% @230V					
	Efficiency	≥90%	≥87%	≥90%	≥87%	≥90%	≥89%
	No load wattage	-					
	Protection	Short circuit protection	Pass				
Over voltage protection		Pass					
Over temperature protection		Pass					
Safety & EMC	Withstand voltage	I/P-FG:1.5KVac, <5mA 60S					
	Isolation Resistance	500VDC, ≥2M Ω					
	Surge	IEC/EN61000-4-5( P<25W; L-N:500V, L/N-PE:1KV)		IEC/EN61000-4-5 (P≥25w L-N:1KV, L/N-PE:2KV)			
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

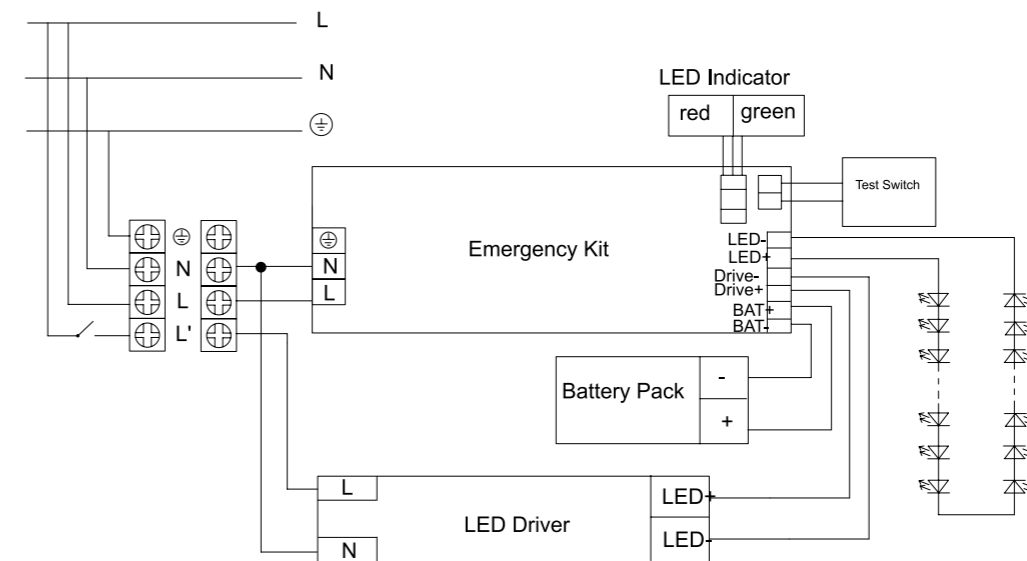
## Driver Datasheet (Sensor)

Sensor datasheet	
Operating Voltage	220-240VAC 50/60Hz
Power consumption	1.5W±0.5W
Microwave frequency	5.8GHz±75MHz, ISM wave band
Transmission power	<0.5mW
Detection angle	140°
Detection Area	4-6M 100%/50% Adjustable DIP
Hold time	5S/30S/1min/3min/5min/10min/15min/20min Adjustable DIP
Daylight sensor	Disable/10Lux/30Lux/50Lux Adjustable DIP
Stand-by DIM Level	-
Stand-by Period	-
Dimming Range	-
Microwave ON/OFF function	-
Installation Height	Recommended Installation Height: Wall mounted height 1.8m. Ceiling mounted height 3m.
Minimum mounting distance	Recommended install height should be more than 3m
Operating temperature(°C)	-20°C ~60°C

## Driver Datasheet (Emergency)

Power	3W
Rated Input Voltage(V)	AC230V
Frequency	50/60Hz
Input Voltage(V)	200-240V
Total load Wattage	3W±0.5W
Rated input current	≤0.03A
Battery	6.4V 1500mAh(LiFePO4)
Lifetime (hr)	Over 2000 cycles
Battery duration	≥3hrs
Charge Period	24H
Emergency switching time	≤ 1S

## Wiring Diagram(Emergency):



## Instructions for automatic test option

### 1. Once the unit is powered up it will automatically initiate a self test and diagnostics as follows:

- Every 4seconds: Check for battery disconnection, charger board fault, lamp failure and transformer failure.
- Every month: Perform a 3minute duration test.
- Every year: Perform a 1 Hour or 3 Hours duration test.

All test functions are factory preset and do not need field adjustment.

### 2. Dual Colour Indicator LED Status Meanings

- Green Solid On Ready/Normal Operation
- Red Requires Service

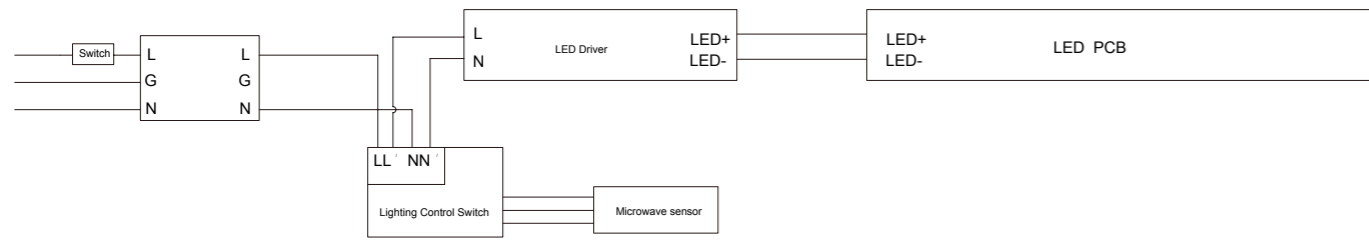
•	One flash, 4 second pause	Battery not connected
••	Two flashes, 4 second pause	Low battery voltage
•••	Three flashes, 4 second pause	Charger board fault
••••	Four flashes, 4 second pause	Transformer fault
•••••	Five flashes, 4 second pause	LED lamp fault

**NOTE:** After repairing a service fault, press and hold the test button for 2 seconds to reset the flashing indicator light to green.

### 3. Manual Test

Press test button once	30 second duration test
Press test button twice within 2 seconds	3 minute duration test
Press test button 3 times within 2 seconds	30 minutes duration test
Press test button 4 times within 2 seconds	1 or 3 hours duration test

## Wiring Diagram(Sensor):



## Daylight & Microwave Sensor:

### Sensor Setting:

Detection Area	
1	
-	100%
ON	50%

Hold Time			
2	3	4	
-	-	-	5S
-	-	ON	30S
-	ON	-	1min
ON	-	-	3min
-	ON	ON	5min
ON	-	ON	10min
ON	ON	-	15min
ON	ON	ON	20min

Daylight Sensor		
5	6	
-	-	disable
-	ON	10lux
ON	-	30lux
ON	ON	50lux

### Detection area:

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely each application.

Notice 1: The test is based on a height of 3m, the radius is the ground detect distance, which can be selected through the slide switch.

Notice 2: The detective range is measured by human body whose stature is around 1.6-1.7M with medium size and traveling speed is around 1.0-1.5M per second. If the stature, bodily form and traveling speed are changed, then the detective range will be changed accordingly.

Notice 3: Test result will be highly influenced by test environment, the more open environment, the closer detect distance; the narrower environment, the longer detect distance. The detector may do self-excitation in a narrow environment.

### Hold time:

Refers to the time period the lamp remains at 100% illumination after no motion detected.

Notice 1: The hold time can be selected by the slide switch.

The hold time counting should be started after the sensor is powered on and initialized.

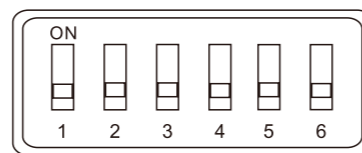
### Daylight sensor:

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.

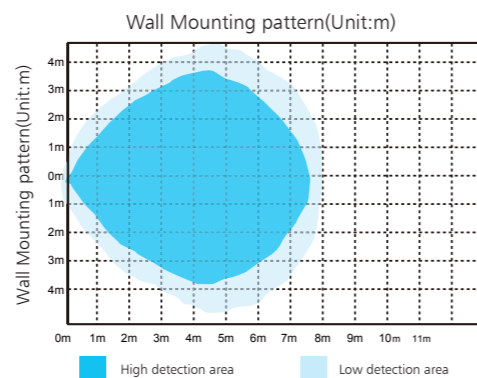
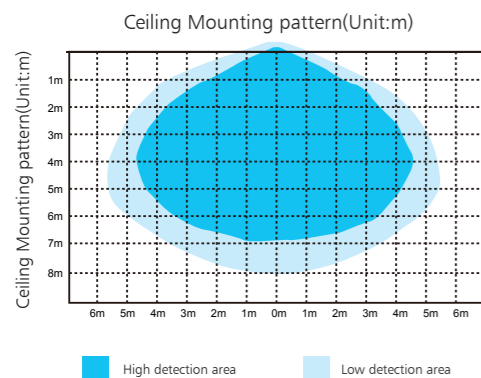
Notice 1: The light threshold can be selected through the slide switch, it may cause a large deviation in different lamps.

## Factory settings:

Detection Area	Hold Time	Daylight Sensor
100%	5S	Disable



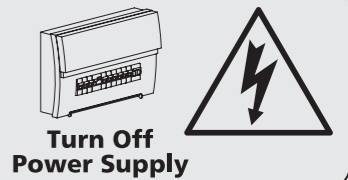
## Induction Range



## Installation Procedure

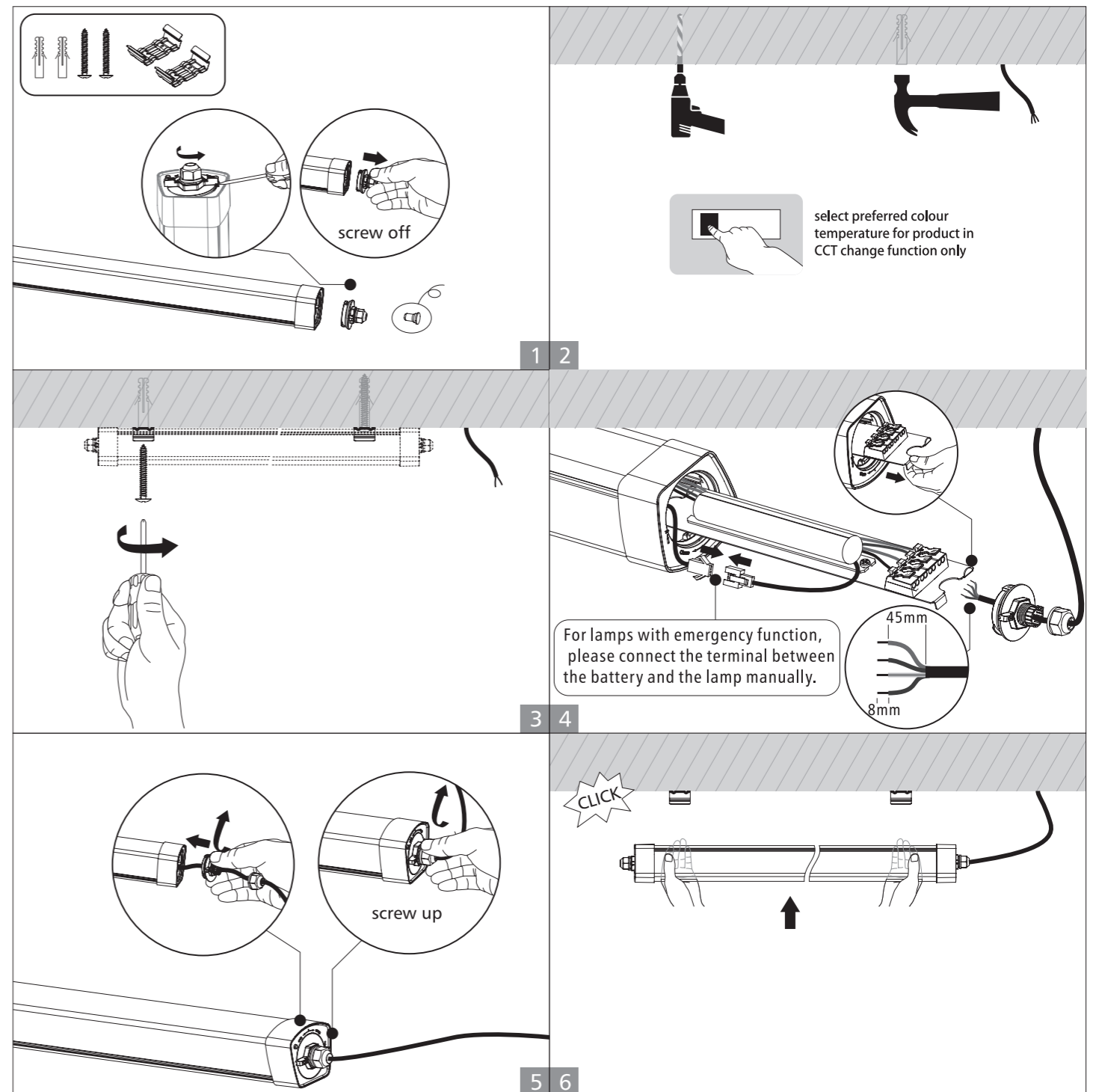
### WARNING

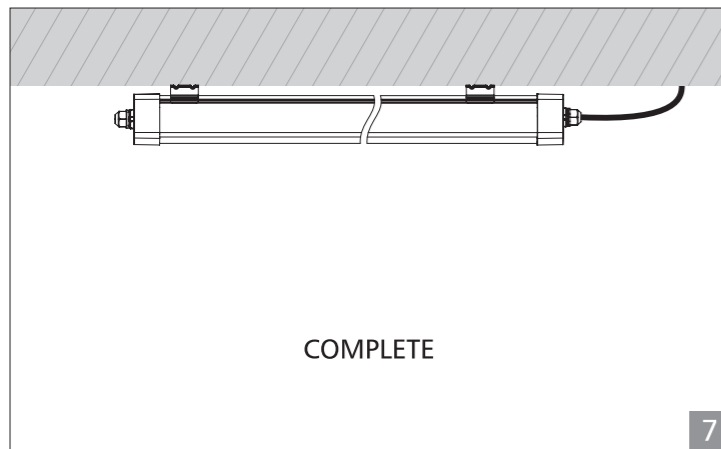
1. Switch off before installation.
2. Switch on only after complete installation and examination of the circuit.
3. Professional electrician for installation and maintenance only.



Turn Off power supply before starting any installation. Read instructions & check you have all the tools & accessories to complete the installation correctly.

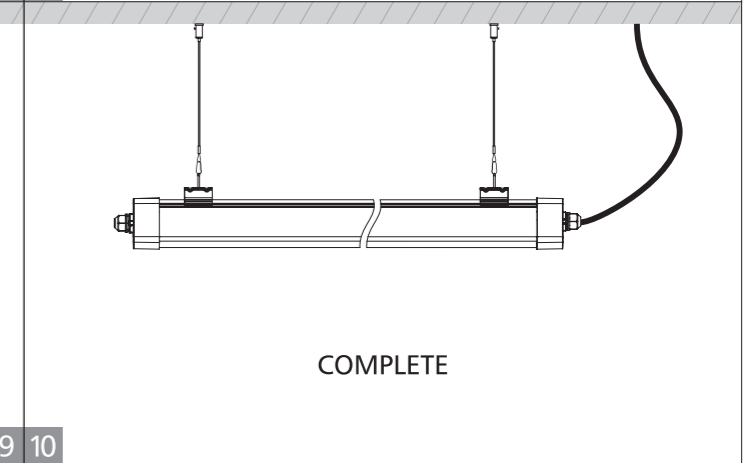
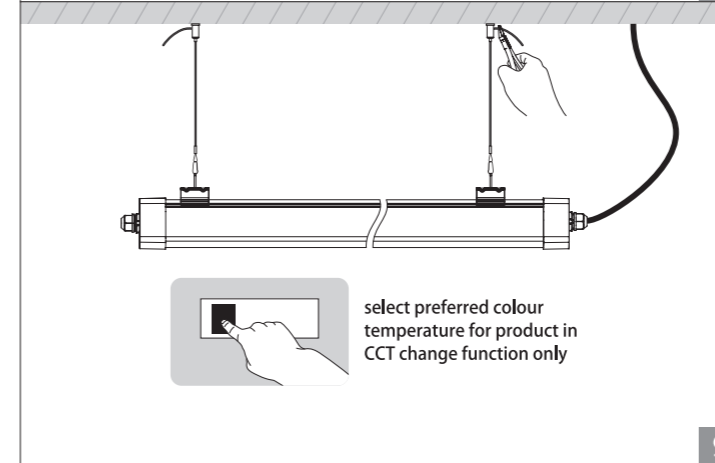
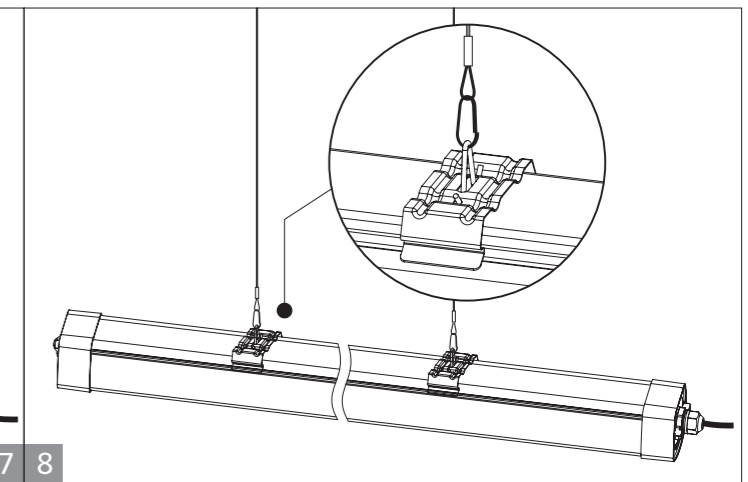
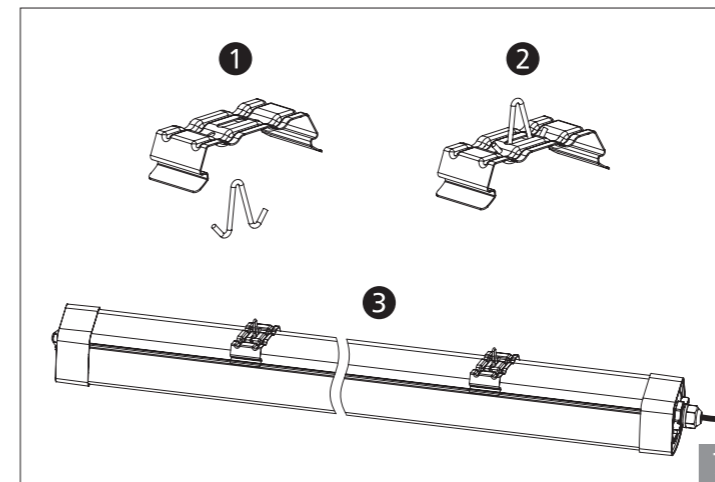
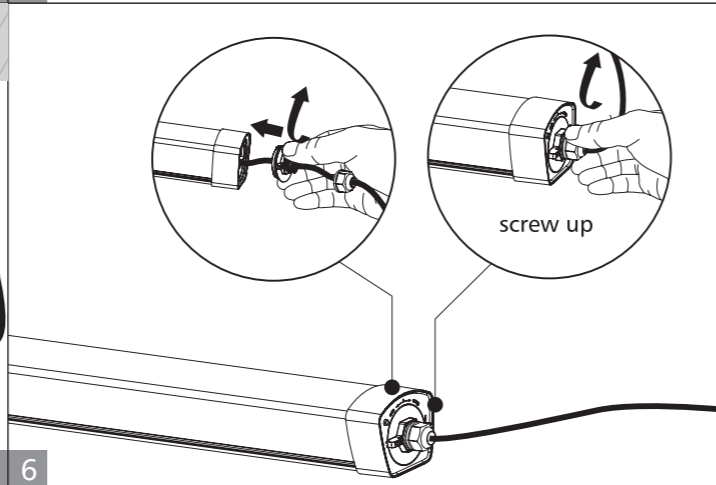
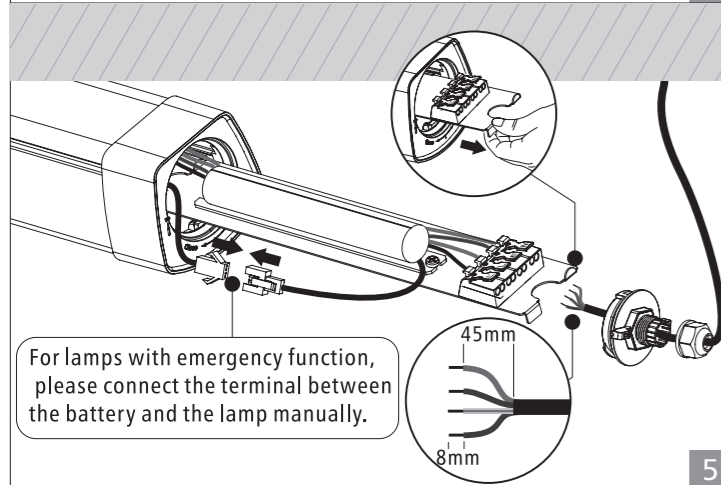
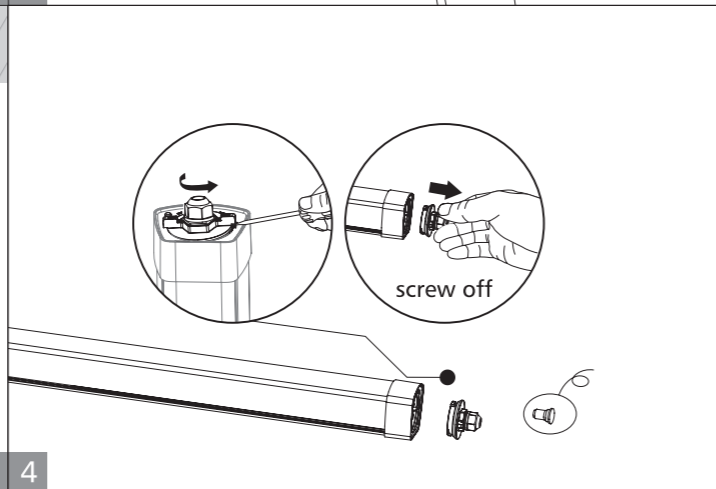
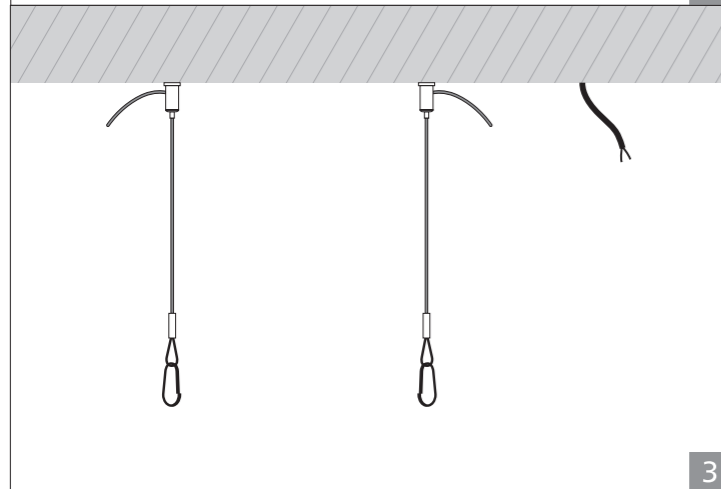
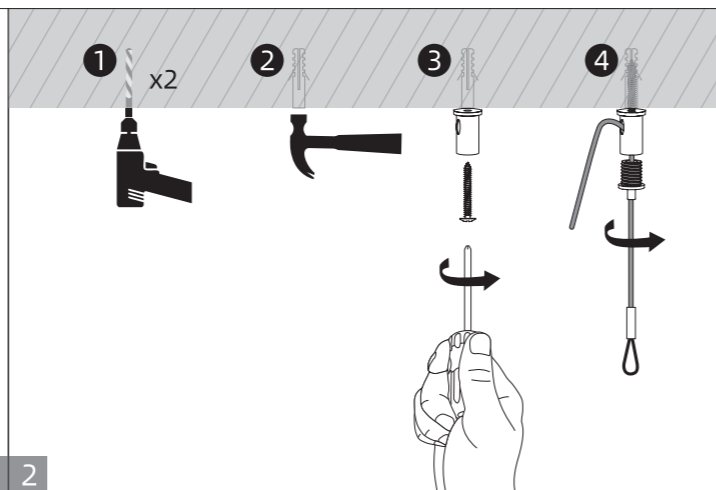
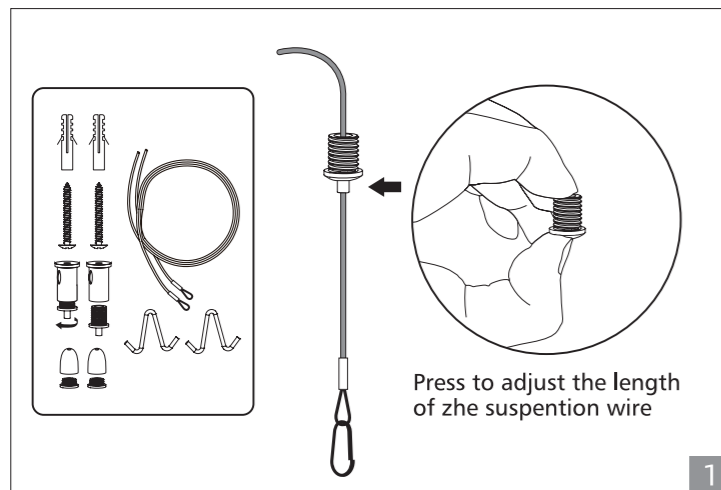
## Surface mounted installation



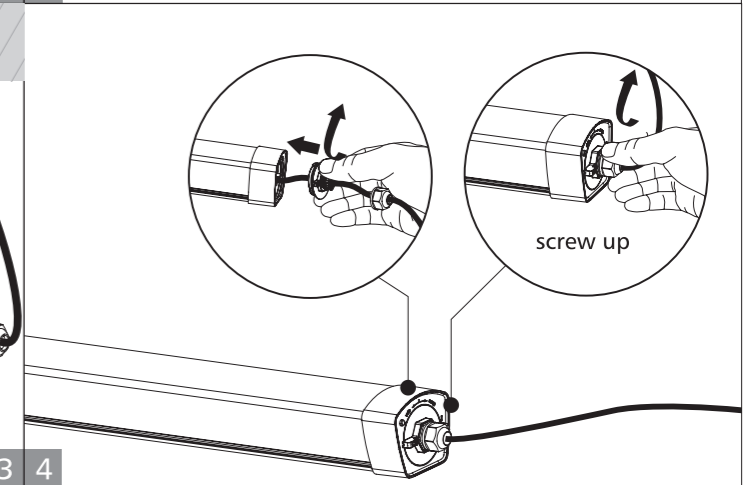
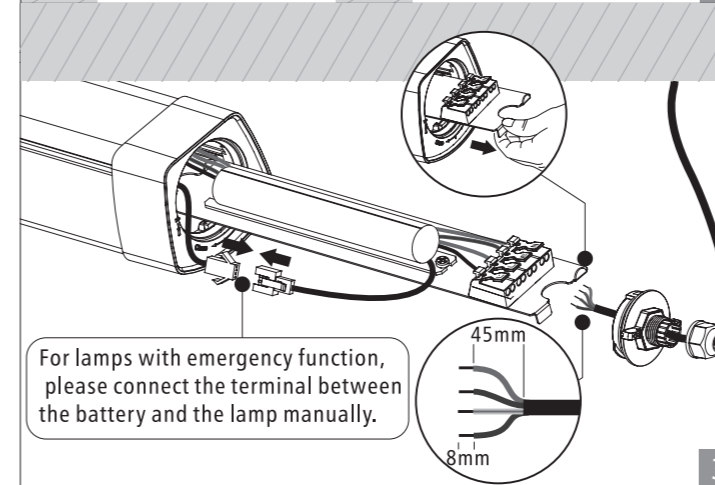
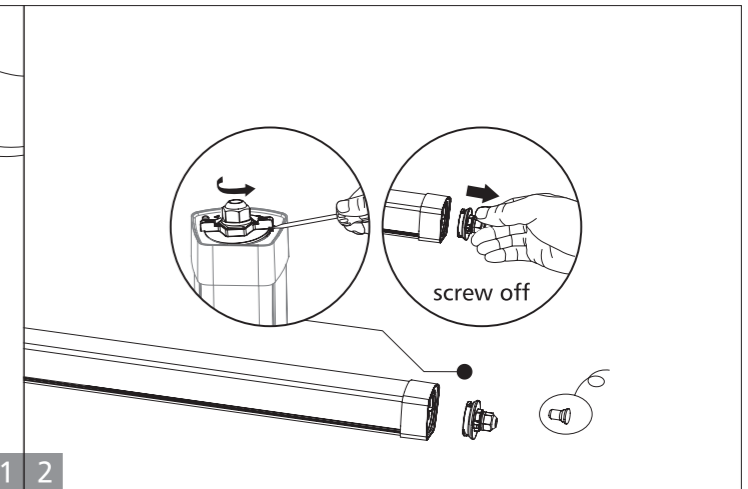
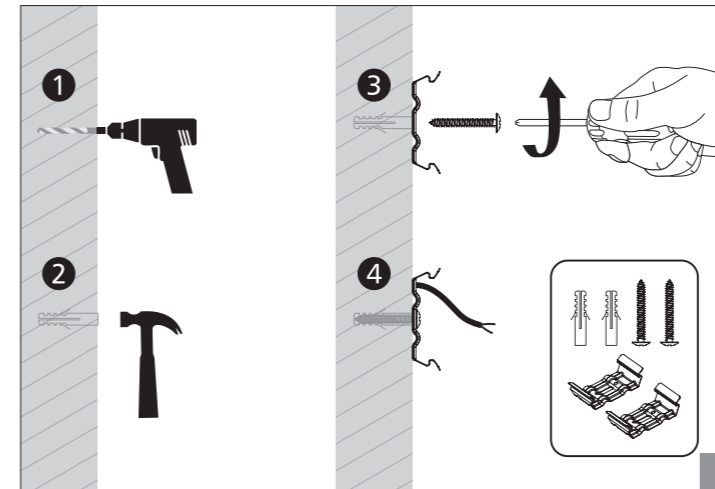


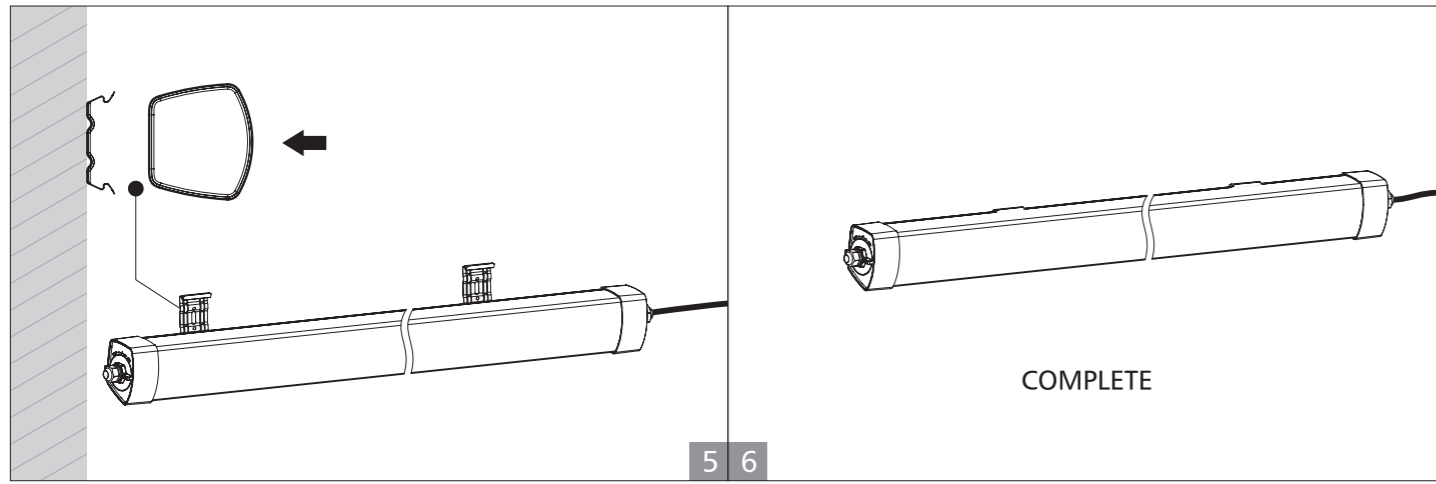
Standard/Sensor	Emergency	DALI
N=Neutral E=Earth L=Switched	L'=Switched L=Unswitched E=Earth N=Neutral	L=Switched E=Earth N=Neutral DA=DIM+ DA=DIM-

### Suspended installation

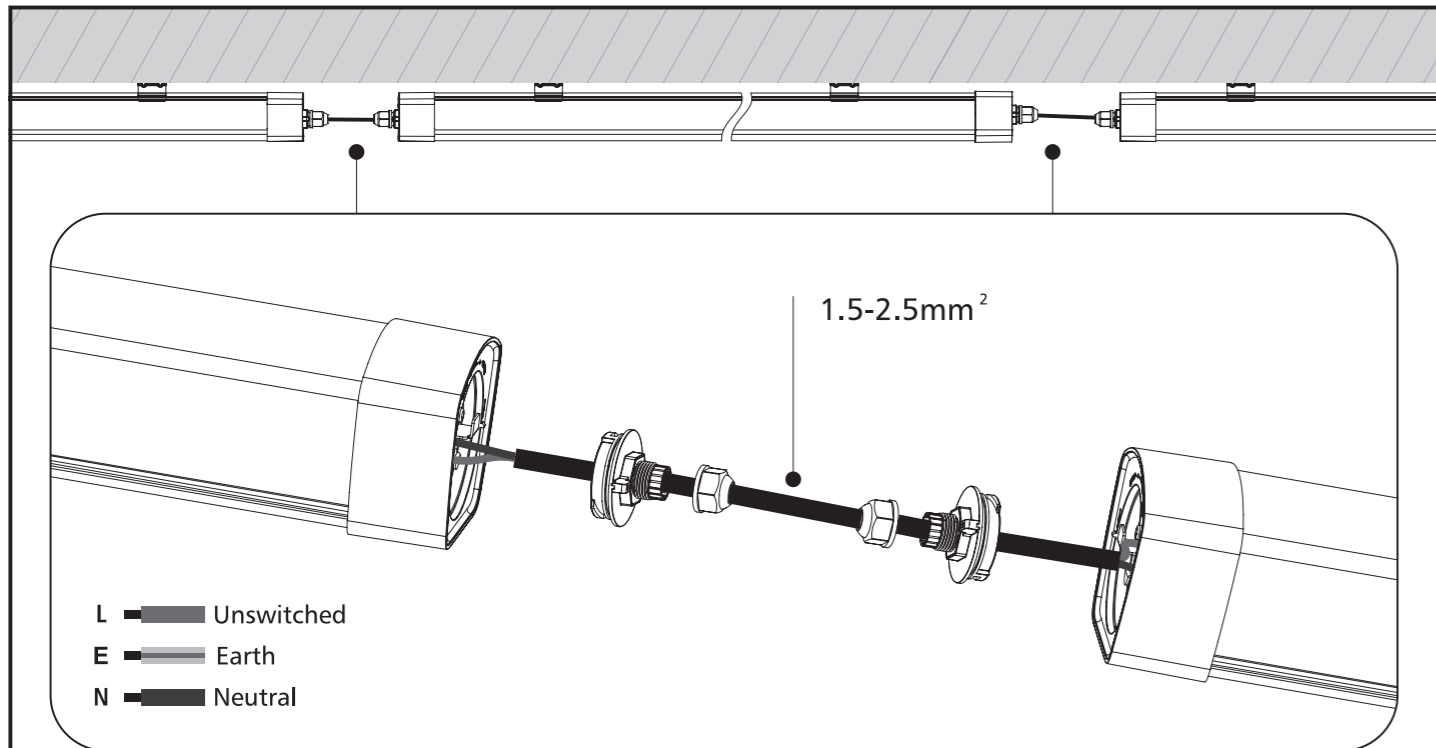


### Wall mounted installation





### Splicing for installation



ART-NR		38W	52W	68W
Linkable luminaries Qty	220-240V	27	20	15

### Replace battery

