

Entry / ECO

Standard / STD

Professional / PRO

ODM & OEM

Intelligent / INT

STD
Specifications



LED Ceiling Light

AL12B-E/SS/M/SSC3 Series

 **RL Europe**
Your partner in LED



Introduction

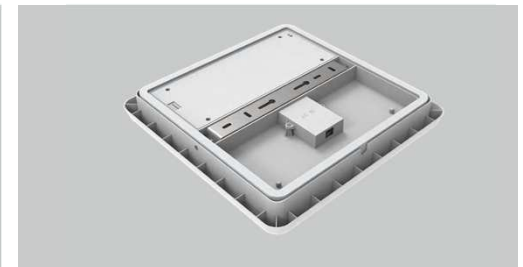
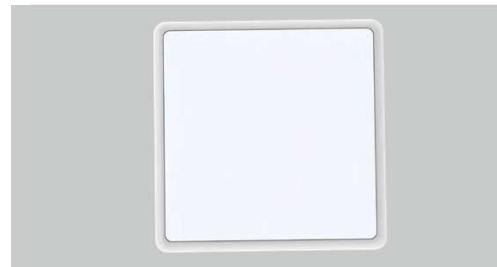
This ceiling light is a super slim design—48mm. High lumen SMD LED and lighter weight fire-rated material to ensure better heat resistance and corrosion resistance. The color is interchangeable within 3000k, 4000k and 5700k by slide switch, also dimmable with triac dimmers. Multi-functional design shares great popularity.

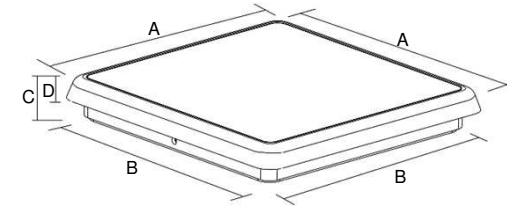
Features

- High lumen efficiency
- Interchangeable CCT(3000/4000/5700k) with slide switch
- IP54 in front
- Triac dimming
- Internal driver
- Multiple functions as below:
 - E: Emergency
 - SS: Adjustable sensor with slide switch
 - SSC3: Adjustable sensor and interchangeable CCT with slide switch

Application Areas

It is designed for general lighting applications in office, supermarket, shop, school, hotel, etc. It is also widely used for public areas, such as stairway, lobby, reception, corridors etc





Technical Data Sheet

Code No.	AL12B-12-18W	AL12B-12-25W	AL12B-14-25W		
Dimension(mm)	300*300*50mm	300*300*50mm	350*350*52mm		
Cutout (mm)	-				
Watt(W)	18W	25W	25W		
Rated Input Voltage(V)	AC100-240V AC230V				
Input Voltage(V)	AC85-265V AC200-240V				
LED Module Input	-				
Light Source	SMD				
SDCM	<6 (@3000K 4000K 5000K)				
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	1700~2050	2400~2700	2580~3000
	DIM	1-CCT	1650~2050	2250~2690	2450~2990
	Non-DIM	3-CCT	1700~2100	2400~2720	2580~3100
	DIM	3-CCT	1660~2050	2450~2600	2480~3000
CRI	80				
Beam Angle (°)	120°				
UGR	-				
LED Driver	Built-in				
Dimming Option	Triac				
Sensor	Yes				
Emergency Kits	Yes				
Electrical Class	Class II				
Ingress Protection (IP Rating)	IP54(non-sensor type), IP40(sensor type)				
Impact Resistance (IK Rating)	IK10				
Product Finishing(Base)	White RAL9016				
Materials of Optics	PC				
Materials of Housing	PC				
Lifetime (hr)	40,000h @ L70B50				
Glow wire test (°C)	750°C (Cover) 850°C (Lamp Base)				
Operating Temp. (°C)	-20°C ~45°C				
Storage Temp. (°C)	-20°C ~65°C				
Installation	Surface mounted				

Measurement

	Dimension(mm)				Product Weight (Kg)		Package weight(Kg)		Carton Size(cm)	Qty/CTN	20GP (pcs)	40HQ (pcs)	
	A	B	C	D	N.W/PC	G.W/PC	N.W/CTN	G.W/CTN					
AL12B-12-18W	300	270	50	30	300*300*50	1.25	1.38	12.5	15	61*32.5*33.5	10	3780	9310
AL12B-12-25W	300	270	50	30	300*300*50	1.25	1.38	12.5	15	61*32.5*33.5	10	3780	9310
AL12B-14-25W	350	320	52	31.4	350*350*52	1.42	1.62	14.2	19.22	63*38*38	10	3240	7130

Driver Datasheet(Non-dimmable)

Total load wattage		18W	25W
Output	Output Voltage range	DC60-80V	DC60-75V
	Rated output current	230mA	325mA
	Line Regulation	±5%	
	Setup, Rise Time	<1S	
	Flickering Index	-	
Input	Input Voltage	AC85-265V	
	Rated Input Voltage(V)	AC100-240V	
	Frequency	50/60Hz	
	Input Current	≤0.24A	≤0.33A
	Rated Input Current	≤0.2A	≤0.28A
	Power Factor	0.9	
	THD	<20% @230V	
	Efficiency	≥88%	
	No load wattage	<1W	
	Protection	Short circuit protection	Pass
Over voltage protection		Pass	
Over temperature protection		Pass	
Withstand voltage		-	
Safety & EMC	Isolation Resistance	-	
	Surge	IEC61000-4-5(L-N:0.5KV)	IEC61000-4-5(L-N:1KV)
	EMC Emission	EN55015, EN61000-3-2	
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547	

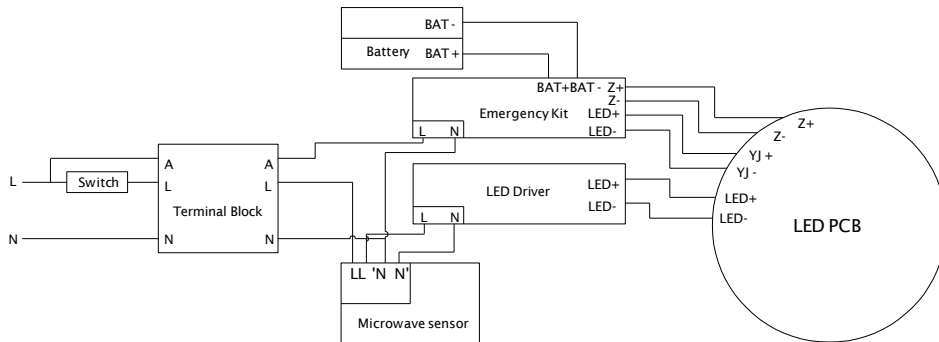
Driver Datasheet (Sensor SS)

Sensor datasheet	
Operating Voltage	AC200-240V
Power consumption	1.5W±0.5W
Microwave frequency	5.8GHz±75MHz, ISM wave band
Transmission power	<0.5mW
Detection angle	140°
Detection Area	5-7m(100%/75%/50%/25%)
Hold time	20S/60S/3min/10min
Daylight sensor	5lux/10Lux/50lux/disable
Stand-by DIM Level	-
Stand-by Period	-
Dimming Range	-
Microwave ON/OFF function	-
Installation Height	Recommended Installation Height: Ceiling mounted height 3m.
Operating temperature(°C)	-20°C ~60°C

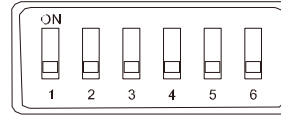
Driver Datasheet (Emergency)

Power	3W
Rated Input Voltage(V)	AC230V
Frequency	50/60Hz
Input Voltage	AC200-240V
Total load wattage	3W±0.5W
Rated Input Current	≤0.03Az
Battery	6.4V 1500mAh (LiFePO4)
Lifetime	Over 2000 cycles
Battery duration	≥3hrs
Charge Period	≅ 24hrs
Emergency switching time	≅ 1S

Wiring Diagram:



factory setting:



Sensor Setting:

Detection Area	
1	2
● ●	25%
●	50%
●	75%
	100%

Hold Time	
3	4
● ●	10Min
●	3Min
●	60S
	20S

Daylight Sensor	
5	6
● ●	5Lux
●	10Lux
●	50Lux
	Disable

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 detectable 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 detectable 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.

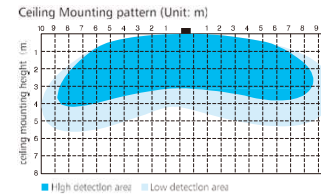
The hold time counting should be started after the sensor is powered on and initialized.

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.

Sensor Detection Pattern



Installation Procedure

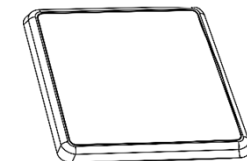
WARNING

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.



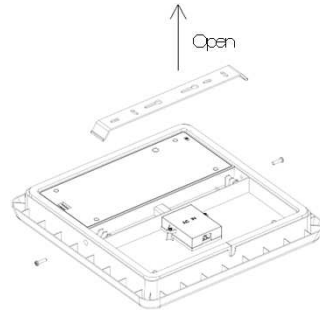
Surface mounted Installation

Step1



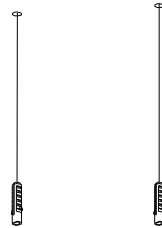
Take out ceiling light and accessory pack from box.

Step2



Remove screw, take out bracket

Step3



Knock-in the plastic anchor into ceiling

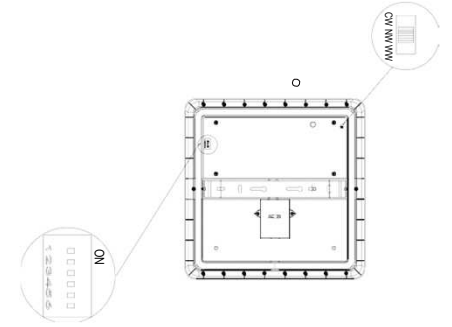
Step4



Fix bracket with screw into the ceiling

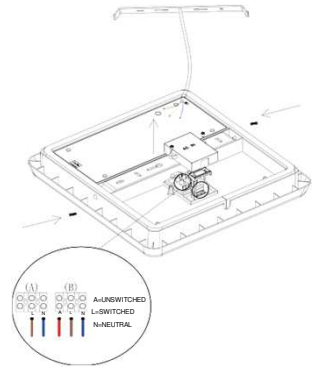
Step5

If you get functional product, please follow below operation:
CCT switchable function: Choose CCT by slide switch before mounting to ceiling/wall.
Adjustable sensor function: Select the sensor mode before mounting to ceiling/wall.



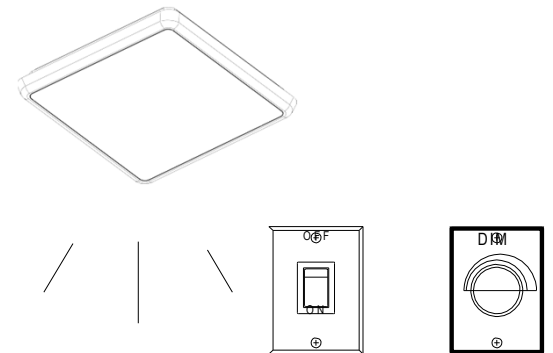
Step6

Put the main AC wire through line pressing clip, feed the L, N to the fast connection terminal block respectively then compress the line pressing clip.



Step7

Switch on





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