ARCHITECTURAL LIGHTING



LED Ceiling Light
DISC AL99C-UGR
Series









Black RAL 9005

White RAL 9016

Mood arain





DISC AL99C IP40

The AL99C-UGR ceiling light is a large-sized series with a large luminous surface. Its unique and bold exterior design enhances the decorative and artistic aspects of a space, while the high-quality texture showcases the fixture's premium quality and special allure. The design with a large luminous surface and anti-glare UGR<19 design illuminates the space while providing users with a very soft and comfortable lighting experience. Its unique design allows it to be used in various installation scenarios. With the option for 100% downward light or up and down light, and the choice of ceiling-mounted, recessed, or suspended installation, it offers both flexibility and consistency in the entire series in terms of aesthetics.

FEATURES

- Anti-glare UGR <19
- Interchangeable CCT (3000K+4000K) by slide switch.
- DALI dimming.
- Lighting design options: 100% direct lighting, up and down lighting (not suitable for recessed installation).
- IK06 rating.
- Multiple functions: adjustable sensor, emergency.
- Various installation options: recessed/surface mount/pendant (with pole suspension, wire suspension, cable suspension).

APPLICATIONS

It is designed for general lighting applications in office, supermarket, shop, school, hotel, etc.















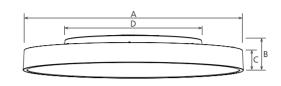






PRODUCT DIMENSION





Code	Dimension(mm)					
Code	А	В	С	D		
ART-AL99C-16-20W	400	86	55	219		
ART-AL99C-24-40W	600	86	55	383		
ART-AL99C-32-75W	800	86	55	383		
ART-AL99C-40-100W	1000	86	55	383		





PENDANT ACCESSORY



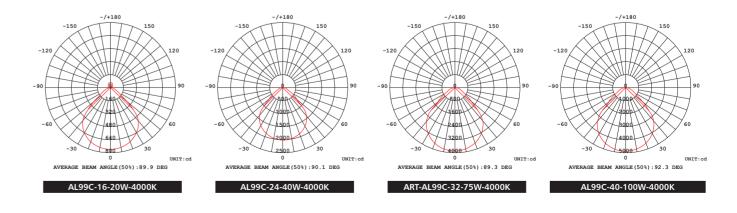
ACC-AL99C-16-WT/BK/WD-50 ACC-AL99C-24/32/40-WT/BK/WD-50

ACC-AL99C-WT/BK/WD-52

ACC-AL99C-16/24-WT/BK/WD-51

Code	Size(mm)	Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/	20GP	40HQ
Code	Size(IIIII)	N.W/PC	G.W/PC	N.W/CTN	G.W/CTN	Carton Size(ciii)	CTN	(pcs)	(pcs)
ACC-AL99C-16-WT/BK/WD-50 ACC-AL99C-24/32/40-WT/BK/WD-50	Ø200*41	0.86	0.9	5.16	6.4	26.5*23*23	4PCS	8520	18876
ACC-AL99C-WT/BK/WD-52	Ø200*41	0.86	0.9	5.16	6.4	26.5*23*23	4PCS	8520	18876
ACC-AL99C-16/24-WT/BK/WD-51	Ø140*35	0.78	0.9	4.68	6.4	55.5*41.5*44.5	18PCS	5040	11970

OPTICS



BASIC INFORMATION

Housing Material	Aluminium
Product Finishing	White RAL9016/ Black RAL9005/ Wood grain
Optic Material	PMMA; PET+PC
Light Source	SMD
SDCM	<6(@3000K 4000K)
CRI	≥80
Lifetime(hr)	50,000h
LED Driver	Built-in; Flicker Free
Installation	Surface mount/ Pendant/ Recessed
Electrical Class	Class I
Operating Temp.(°C)	-20°C~40°C
Storage Temp.(°C)	-20°C~65°C
Glow Wire Test (°C)	-

FEATURES & BENEFITS

General Efficacy	100Lm/W
CCT Selection DIP Switch	1-CCT: 3000K / 4000K 2-CCT: 3000K + 4000K
Watt Selection DIP Switch	-
Dimming Option	DALI
Functions	Sensor, Emergency
UGR	<19
Ingress Protection (IP Rating)	IP40
Impact Resistance (IK Rating)	IK06
Certification	CE / SAA / RoHS

TECHNICAL DATA SHEET

CODE			ART-AL99C-16-20W	ART-AL99C-24-40W	ART-AL99C-32-75W	ART-AL99C-40-100W		
Dimension(mm)		Ø400*86	Ø600*86	Ø800*86	Ø1000*86		
Cutout(mm)			Ø220~250		Ø385~415			
Watt(W)			20W	40W	75W	100W		
Input Voltage				AC198	3-264V			
LED Module Inp	out				-			
Light Source				SN	MD			
CCT(K)				1-CCT: 3000K/4000K	2-CCT: 3000K + 4000K			
CCT Selection D	IP Swite	:h		Υ	ES			
Luminous	1-CCT	Non-DIM	1420-1780	3800-4580	6540-7860	9270-10660		
Flux (lm) ±5%	1-001	DALI	1350-1680	3690-4280	6500-7640	9080-10520		
(White or Wood grain	2 ((T	Non-DIM	1400-1750	3750-4500	6540-7860	9270-10660		
finish)CRI80	2-CCT	DALI	1300-1680	3680-4250	6500-7640	9080-10520		
	1-CCT	Non-DIM	1280-1600	3420-4100	6260-7270	8880-10150		
Luminous Flux (lm) ±5%		DALI	1200-1500	3320-3850	6210-7210	8740-10070		
(Black finish) CRI80		Non-DIM	1260-1570	3375-4050	6260-7270	8880-10150		
	2-001	DALI	1170-1500	3310-3820	6210-7210	8740-10070		
Beam Angle (°)			90°					
UGR			<19					
Dimming Optio	n		DALI					
Sensor			Microwave sensor & Daylight sensor					
Emergency				Υ	ES			
Product weight	·(Ka)	N.W/PC	2.61	5.96	7.17	10.83		
rioduct weight	.(NY)	G.W/PC	3.07	6.79	-	-		
Packago weigh	t(Ka)	N.W/CTN	15.66	11.92	-	-		
Package weight	u(NY)	G.W/CTN	19.84	14.74	9.85	13.82		
Qty/CTN (PCS)			6	2	1	1		
Carton Size(cm)		64.5*46.5*47.5	68.5*23.5*68.5	85.5*14*89	111.5*14*112		
20GP(pcs)			1008	486	256	164		
40HQ(pcs)			2580	996	584	392		

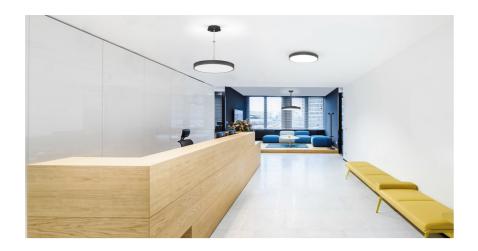
DRIVER DATASHEET(NON-DIMMABLE)

	Total load wattage	20W	40W	75W	100W				
	Rated output current	500mA	250mA	480 mA	650mA				
	Output Voltage range	28-42V	80-200V	110-160V	50-153V				
	Line Regulation		±5%						
utput	Setup Rise Time		<0.5s	@230V					
	Flickering Index		<3%(NO RISK)		0.3%(NO RISK)				
	IEC-PST		≤	≤1					
	CIE (SVM)		≤	0.4					
	Rated Input Voltage		220-2	40VAC					
	Input Voltage	198-264VAC							
	Frequency		50/60Hz						
	Rated Input Current	0.23A	≤0.21A	0.47A	≤0.57A				
	Input Current	0.21A	≤0.23A	0.37A	≤0.51A				
nput	Power Factor	0.9							
	THD		<20% @230V						
	Efficiency	87%	≥89%	90%	≥92%				
	Inrush current	15.2A/560uS		≤45A&200uS					
	No load wattage		<0.5W	@230V					
	Stand-by power consumption	-							
	Short circuit protection		P.A	4SS					
rotection	Over voltage protection	PASS							
	Over temperature protection		P.A	4SS					
	Withstand voltage		I/P-FG:1.5KV	ac,<5mA 60S					
	Isolation Resistance		500VDC	., ≥2M Ω					
Safety & EMC	Surge		IEC/EN61000-4-5 (I	L-N:1KV, L/N-PE:2KV)					
	EMC Emission		EN55015, E	N61000-3-2					
	EMC Immunity		EN61000-4-2,3,4,	5,6,8,11; EN61547					

DRIVER DATASHEET(DALI DIMMABLE)

	Total load wattage	20W	40W	75W	100W				
	Rated output current	550mA	250mA	500mA	650mA				
	Output Voltage range	9-42V		54-240V					
	Line Regulation		±5%						
Output	Setup Rise Time	<1S @230V							
	Flickering Index	<3%(NO RISK)							
	IEC-PST		≤1						
	CIE (SVM)		≤0	4					
	Rated Input Voltage		220-24	0VAC					
	Input Voltage	198-264VAC							
	Frequency	50/60Hz							
	Rated Input Current	≤0.11A	≤0.24A	≤0.38A	≤0.51A				
	Input Current	≤0.12A	≤0.23A	≤0.43A	≤0.56A				
	Power Factor	0.9							
	THD		<20% @)230V					
	Efficiency	≥85%		≥92%					
	Inrush current	≤20A&120uS	≤37A&300uS	≤60A&	200uS				
	No load wattage		<0.5W (@230V					
	Stand-by power consumption	<0.5W @230V							
	Short circuit protection	PASS							
Protection	Over voltage protection		PAS	S					
	Over temperature protection		PAS	S					
	Withstand voltage		I/P-FG:1.5KVac	:,<5mA 60S					
	Isolation Resistance		500VDC,	≥2M Ω					
Safety & EMC	Surge		IEC/EN61000-4-5 (L-	N:1KV, L/N-PE:2KV)					
-	EMC Emission		EN55015, EN	61000-3-2					
	EMC Immunity		EN61000-4-2,3,4,5	,6,8,11; EN61547					





Driver Datasheet (Emergency)

Input power	3W(16")	5W(24"/32"/40")			
Discharge power	2W	5W			
Rated Input Voltage(V)	AC2	230V			
Frequency	50/60Hz				
Input Voltage	AC200-240V				
Rated Input Current	≤0.03A ≤0.04A				
Battery	6.4V 1500mAh (LifepO4)	6.4V 4000mAh (LifepO4)			
Lifetime	Over 200	00 cycles			
Battery duration	≥3	Bhrs			
Charge Period	≤24hrs				
Emergency switching time	≤15				
Emergency Operating Temp. (°C)	0°C-	25°C			

Instructions for automatic test option

- 1. Once the unit is powered up it will automaticlly initiate a self test and diagnostics as follows:
- $\bullet \ \ \text{Every 4 seconds:} Checks \ \text{for battery disconnection,} charger \ \text{board fault,} lamp \ \text{failure and transformer failure.} \\$
- Every month:Performs a 3 minutes duration test.
- Every yeat:Performs 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 Mesnings

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

•	One flash, 4 seconds pause	Battery not connected
••	Two flashes, 4 seconds pause	Battery short or low battery voltage
•••	Three flashes, 4 seconds pause	Charger board fault
••••	Four flashes, 4 seconds pause	Transformer fault
••••	Five flashes, 4 seconds 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 Testing

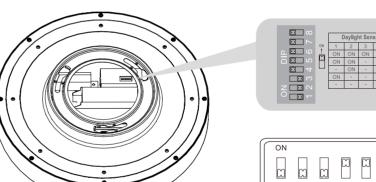
Press test button once	30 seconds duration test			
Press test button twice within 2 seconds	3 minutes duration test			
Press test button 3 times within 2 seconds	30 minutes duration test			
Press test button 4 times within 2 seconds	1 or 3 hours duration test			

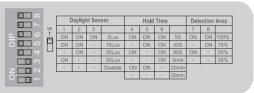


Datasheet (Sensor)

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%/75%/50%/25% are adjustable by DIP switch
Hold time	5S/30S/90S/5Min/20Min/30Min are adiustable by DIP switch
Daylight sensor	2lux/10lux/30lux/50lux/Disable are adjustable by DIP switch
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 mounting distance should be more than 3m
Operating temperature(°C)	-20°C~60°C

Sensor Setting





ON							$\overline{}$
	\square	\square				\square	
1	2	3	4	5	6	7	8

Daylight Sensor	Hold Time	Detection Area	
Disable	5S	100%	

Daylight Sensor								
	1	2	3					
I	ON	ON	ON	2Lux				
II	ON	ON	-	10Lux				
III	-	ON	-	30Lux				
IV	ON	-	-	50Lux				
V	-	-	-	Disable*				

	Hold Time							
	4	5	6					
I	ON	ON	ON	58				
II	-	ON	ON	30S				
III	ON	-	ON	908				
IV	-	-	ON	5min				
V	ON	ON	-	20min				
VI	-	-	-	30min				

Detection Area							
7 8							
I	ON	ON	100%				
II	-	ON	75%				
III	ON	-	50%				
IV -		-	25%				

Daylight Sensor:

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

Hold Time:

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.

Detection Area:

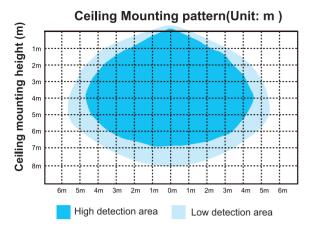
Sensor test condition: The test is based on 3m height, the detect distance radius is based on ground, the detect distance can be adjusted through the slide switch.

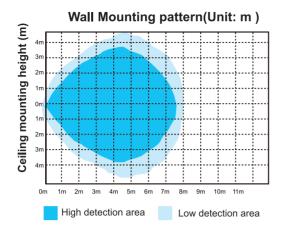
Sensor test environment and reference: The detective range is measured by human body whose stature is around 1.6-1.7M with medium size and traveling speed is around 1.0-1.5M per second. If the stature, bodily form and traveling speed are changed, then the detective range will be changed accordingly.

Sensor lamp's reaction under open/narrow environment: 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.

Sensor Setting based on environmental disturbance: Some environmental disturbances will cause abnormal induction, such as the lamp can not automatically turn off for a long time or the sensor function is invalid, then users can adjust sensor distance to reach the ideal effect. It is recommended to adjust the sensing distance to 50% for the environment where near the heavy equipment, metal sheets and metal pipes, concretewall(<30cm thickness)etc.Recommend to keep 100%sensordistance in open environment. For environment where near the routers, telecommunications base stations, electrical machinery etc, it is recommended to keep the installation distance of more than 5 meters and adjust to 50% sensor distance.

Induction Range





Function Table

Function Table	AL99C-16-20W	AL99C-24-40W	AL99C-32-75W	AL99C-40-100W
Non-dim	√	V	√	V
Non-dim + CCT Switchable	√	V	√	√
Emergency	√	V	√	√
Emergency + Non-Dim + CCT Switchable	√	V	$\sqrt{}$	$\sqrt{}$
Sensor	√	V	V	V
Sensor + CCT Switchable	√	V	V	V
Sensor + Emergency	√	V	$\sqrt{}$	$\sqrt{}$
Sensor + Emergency + CCT Switchable	√	V	√	V
DALI Dim	√	V	√	$\sqrt{}$
DALI + CCT Switchable	√	V	√	√

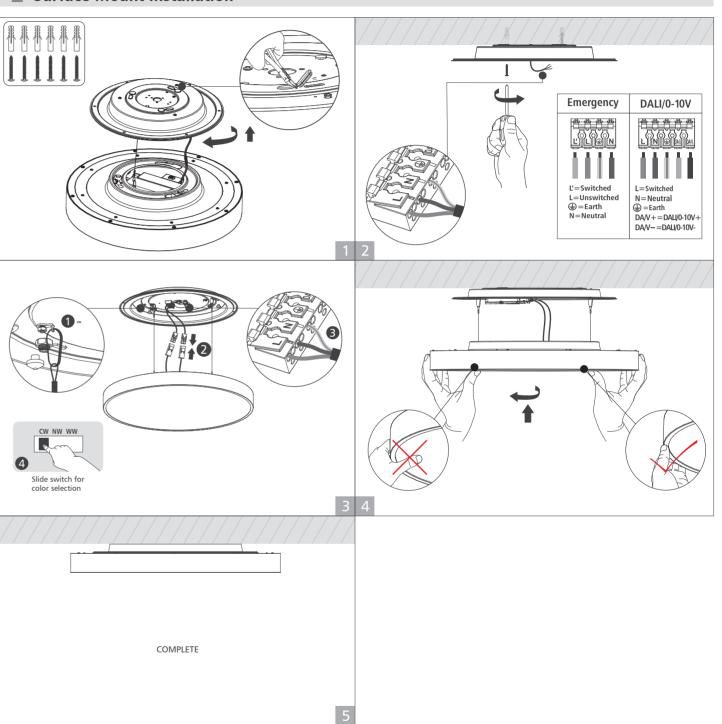
Installation Procedure

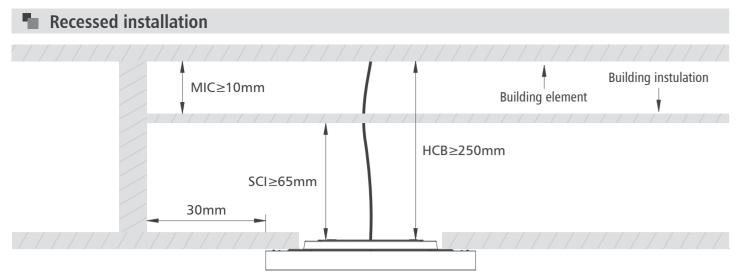
WARNING //

- 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.



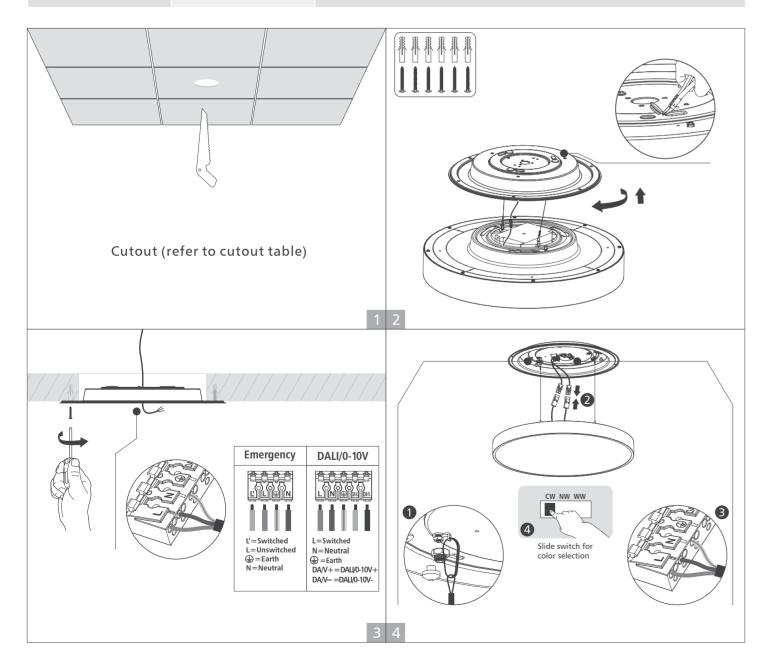
Surface Mount installation

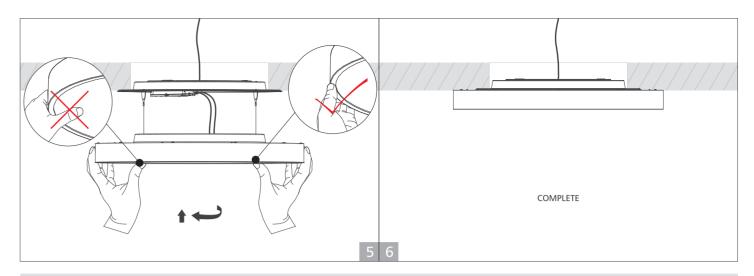




Ceiling cutout table

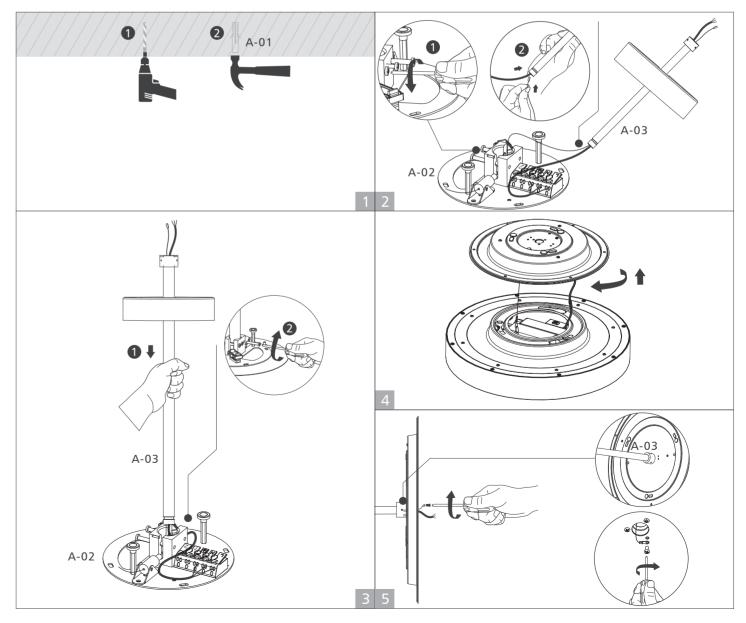
Downlight Dia (inch)	16	24	32	40
Ceiling Cutout (mm)	Ø220-250		Ø385-415	

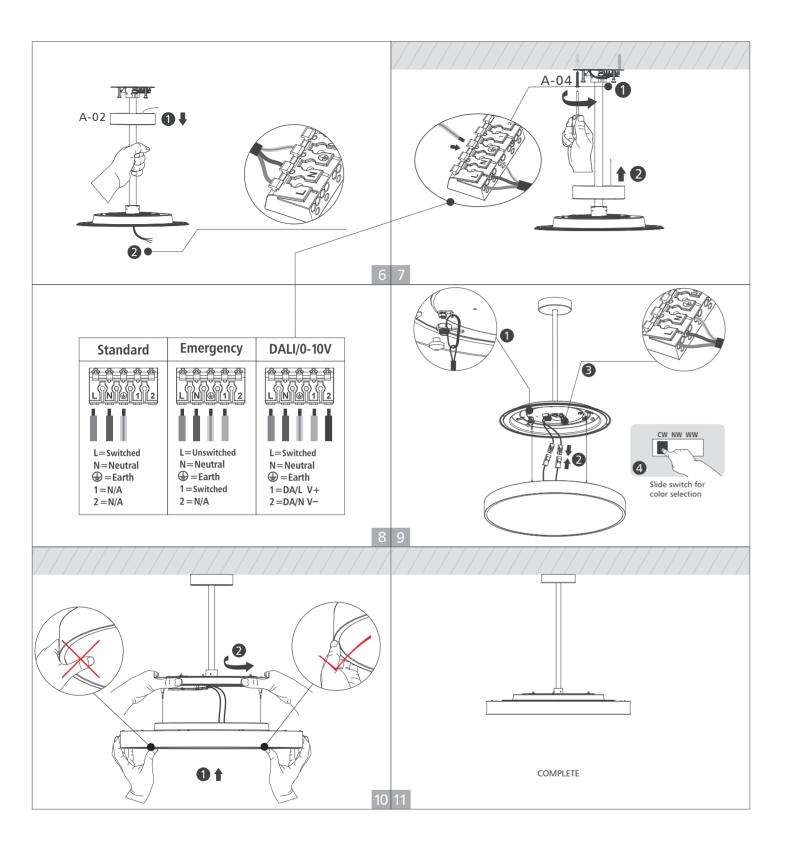




■ With pendant rod suspension installation

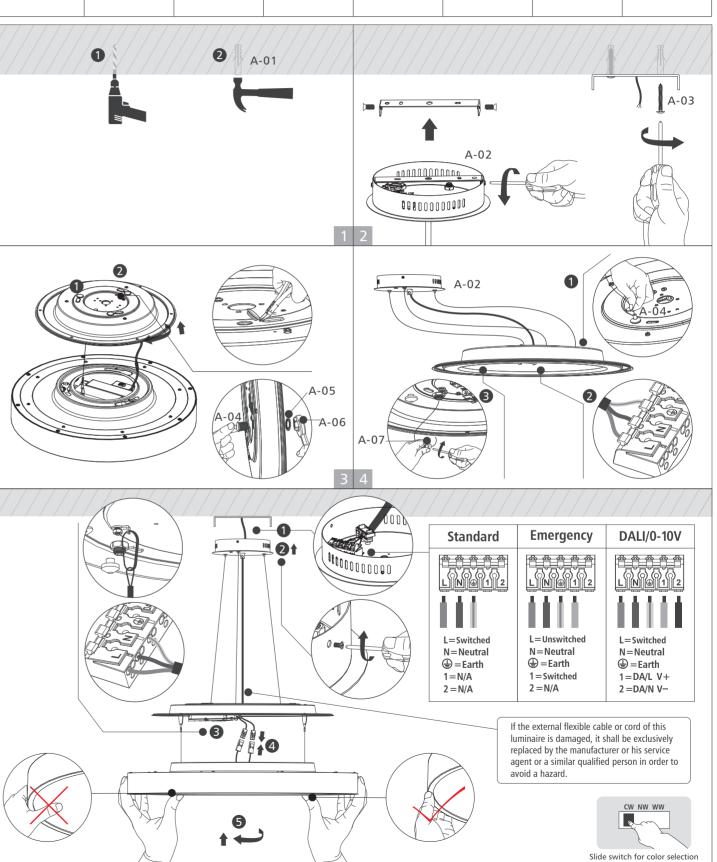
Code	A-01	A-02	A-03	A-04 ************************************
	x4	x1	x1	x4

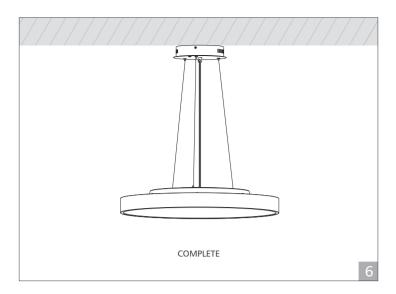




■ With steel wire suspension installation

Code	A-01	A-02	А-03	A-04	A-05	A-06	A-07
	x2	x1	x2	х3	х3	х3	х3





■ With wire harness suspension installation

Code	A-01	A-02	А-03	A-04	A-05	A-06	A-07
	x2	x1	x2	х3	х3	х3	х3

