

DL84 Anti-Theft/Hospital/Tamper Proof LED Downlight IP65

IP65 IK10 Deep Reflector LED Downlight DL84C

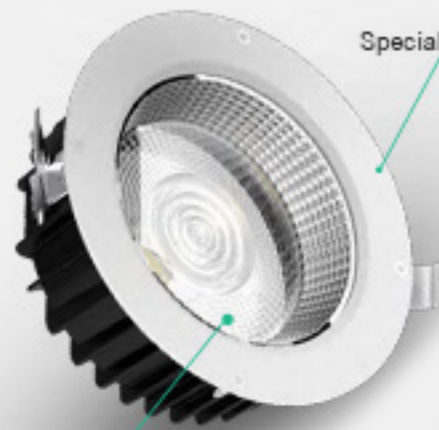
Triac, 0-10V & Dali dimmable



COB- Faceted



SMD-Specular



PC Cover
IK10 ingress protection

Special anti-theft screws



ADC12 aluminum housing



Introduction

DL84A: This downlight with traditional deep reflector which provides a perfect combination of high lighting efficiency, comfortable lighting and low glare design, without compromising on lighting performance (colour rendering and color uniformity). Two kinds of light source COB and SMD for option, CCT changeable function is available for SMD version. ADC12 aluminum housing provides a great thermal management, IP65 waterproof with high protection level, which offers a wider application area.

Based on DL84A, DL84B added the extend frame which looks like a slim surface mounted downlight.

Based on DL84A, DL84C changed the tempered glass to high transmittance PC, the lamp cover is fixed with special screws, so that the lamp can be used in special places. The strong structure design makes IP65 and IK10 high protection level.

Features

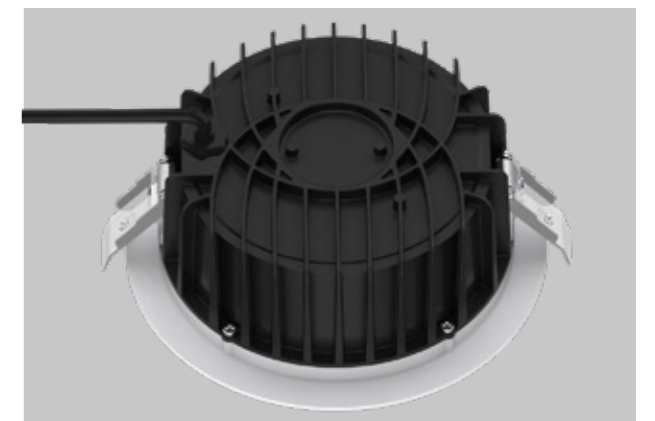
- Tempered glass cover with high transmittance rate.
- High lumen efficiency with COB and SMD light source options.
- Faceted reflector and specular reflector for option.
- Size range: 2.5/3/4/6/8 inches.
- IP65 waterproof for lamp part.
- Interchangeable CCT (3000K+4000K+5700K) with slide switch.(Only for SMD version)
- External flicker free driver.
- Dimming option: Non-dim, triac dim, 0-10V, DALI.

Application Areas

A: It can be used in both indoor and outdoor area, such as studios that need to be cleaned and damp, food processing plants, farm, indoor swimming pools, eaves, outdoor aisles, seaside buildings etc.

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

C: It is widely used in balcony, corridor, bathroom, shopping mall, jail, hospital etc.



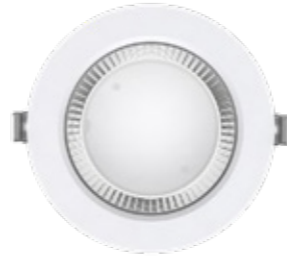
DL84A



COB+Lens+Tempered Glass



SMD+PC Cover+Tempered Glass



DL84B



COB+Lens+Tempered Glass



SMD+PC Cover+Tempered Glass



DL84C



COB+Lens+PC Cover



SMD+PC Cover+PC Cover

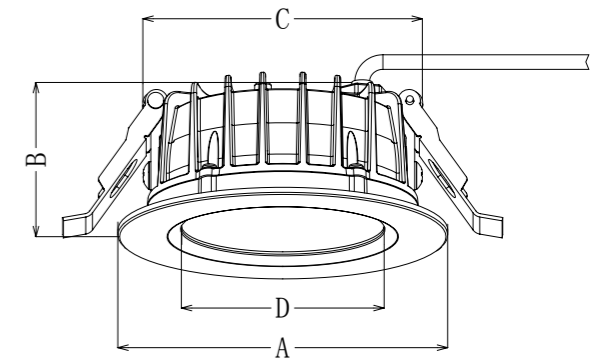


WW NW CW
Color changeable



Measurement

Code	Dimension(mm)				Size (mm)
	A	B	C	D	
DL84A/C-3	110	51	88.2	64.4	Ø110*51
DL84A/C-4	150	64	123.6	98.2	Ø150x64
DL84A/C-6	172	69	146.6	120.4	Ø172x69
DL84A/C-8	235	81	196.1	169	Ø235x81
DL84B-4	145	82	123.5	98.2	Ø145*82
DL84B-6	172	92	146.5	120.5	Ø172*92
DL84B-8	220	104	196.1	169	Ø220*104



Technical Data Sheet (DL84A)

Code No.	GUDL84A -3-10W	GUDL84A -3-13W	GUDL84A -4-18W	GUDL84A -4-25W	GUDL84A -6-18W	GUDL84A -6-25W	GUDL84A -6-30W	GUDL84A -8-18W	GUDL84A -8-25W	GUDL84A -8-35W				
Dimension(mm)	Ø110*51		Ø150x64		Ø172x69			Ø235x81						
Cutout (mm)	Ø90-Ø95		Ø125-140		Ø150-165			Ø200-220						
Watt(W)	10W	13W	18W	25W	18W	25W	30W	18W	25W	35W				
Rated Input Voltage(V)	AC230V													
Input Voltage(V)	AC220-240V													
LED Module Input	DC33-38V													
Light Source	COB / SMD													
SDCM	<6													
CCT(K)	COB:1-CCT: 2700K/3000K/4000K/5000K SMD:1-CCT: 3000K/4000K/5000K/5700K / 3-CCT: 3000K + 4000K + 5700K(Only SMD)													
CCT Selection DIP Switch	Yes													
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	COB	950-1050	1200-1350	1650-1950	2250-2750	1650-1950	2250-2750	3150-3500	1650-1950	2250-2750	3150-3850	
			SMD	750-950	900-1300									
	DIM	1-CCT	COB	850-960	1080-1250	1500-1950	2150-2750	1500-1950	2150-2750	3000-3300	1500-1950	2150-2750	3000-3650	
			SMD	670-900	810-1200									
	Non-DIM	3-CCT	SMD	COB	650-800	800-1000	1500-1950	2000-2750	1550-1950	2100-2750	2900-3500	1650-1950	2250-2750	3150-3850
				SMD	580-740	720-950	1400-1950	1900-2750	1450-1950	2000-2750	2850-3300	1500-1950	2150-2750	3000-3650
CRI	Ra>80, >90													
Beam Angle (°)	COB: 24°/36° /60° SMD:75°			COB: 24°/ 38°/60° SMD: 90°										
UGR (COB)	24° / 36°<21 ; 60°<24		<19 (60°<22)	<22	<19	<19 (60°<22)	<19 (60°<22)	<19	<19	<19 (60°<22)				
UGR (SMD)	-													
LED Driver	Built-out													
Dimming Option	Triac dim, 0-10V, DALI													
Sensor	NO													
Emergency Kits	NO													
Electrical Class	Class II													
Ingress Protection (IP Rating)	IP65													
Impact Resistance (IK Rating)	IK06			IK08										
Product Finishing(Base)	White RAL9016;Black RAL9005													
Materials of Optics	PC+Al1070+Tempered glass													
Materials of Housing	Aluminum Die-casting													
Lifetime (hr)	50,000h													
Glow wire test (°C)	750°C													
Operating Temp. (°C)	-20°C ~45°C													
Storage Temp. (°C)	-20°C ~65°C													
Installation	Recessed													

Technical Data Sheet (DL84B)

Code No.	GUDL84B -4-18W	GUDL84B -4-25W	GUDL84B -6-18W	GUDL84B -6-25W	GUDL84B -6-30W	GUDL84B -8-18W	GUDL84B -8-25W	GUDL84B -8-30W
Dimension(mm)	Ø145*82		Ø172x92			Ø220*104		
Cutout (mm)	Ø125-140		Ø150-165			Ø200-220		
Watt(W)	18W	25W	18W	25W	30W	18W	25W	30W
Rated Input Voltage(V)	AC230V							
Input Voltage(V)	AC220-240V							
LED Module Input	DC33-38V							
Light Source	COB / SMD							
SDCM	<6							
CCT(K)	COB:1-CCT: 2700K/3000K/4000K/5000K SMD:1-CCT: 3000K/4000K/5000K/5700K / 3-CCT: 3000K + 4000K + 5700K (Only SMD)							
CCT Selection DIP Switch	Yes							
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	COB	1650-1950	2250-2750	1650-1950	2250-2750	3150-3850
			SMD	1500-1950	2150-2750	1500-1950	2150-2750	3000-3650
	DIM	1-CCT	COB	1500-1950	2150-2750	1500-1950	2150-2750	3000-3650
			SMD	1400-1950	1900-2750	1450-1950	2000-2750	2850-3300
Non-DIM	3-CCT	SMD	COB	1500-1950	2000-2750	1550-1950	2100-2750	2900-3500
			SMD	1400-1950	1900-2750	1450-1950	2000-2750	2850-3300
CRI	Ra>80, >90							
Beam Angle (°)	COB: 24°/38°/60° SMD:90°							
UGR (COB)	<19 (60°<22)	<22	<19	<19 (60°<22)	<19 (60°<22)	<19	<19	<19 (60°<22)
UGR (SMD)	-							
LED Driver	Built-out							
Dimming Option	Triac dim, 0-10V, DALI							
Sensor	NO							
Emergency Kits	NO							
Electrical Class	Class II							
Ingress Protection (IP Rating)	IP65							
Impact Resistance (IK Rating)	IK08							
Product Finishing(Base)	White RAL9016, Black RAL9005							
Materials of Optics	PC+AL1070+Tempered glass							
Materials of Housing	Aluminum Die-casting							
Lifetime (hr)	50,000h							
Glow wire test (°C)	750°C							
Operating Temp. (°C)	-20°C ~45°C							
Storage Temp. (°C)	-20°C ~65°C							
Installation	Recessed							

Technical Data Sheet (DL84C)

Code No.	GUDL84C -3-10W	GUDL84C -3-13W	GUDL84C -4-18W	GUDL84C -4-25W	GUDL84C -6-18W	GUDL84C -6-25W	GUDL84C -6-30W	GUDL84C -8-18W	GUDL84C -8-25W	GUDL84C -8-35W			
Dimension(mm)	Ø110*51		Ø150x64		Ø172x69			Ø235x81					
Cutout (mm)	Ø90-Ø95		Ø125-140		Ø150-165			Ø200-220					
Watt(W)	10W	13W	18W	25W	18W	25W	30W	18W	25W	35W			
Rated Input Voltage(V)	AC230V												
Input Voltage(V)	AC220-240V												
LED Module Input	DC33-38V												
Light Source	COB / SMD												
SDCM	<6												
CCT(K)	COB:1-CCT: 2700K/3000K/4000K/5000K SMD:1-CCT: 3000K/4000K/5000K/5700K / 3-CCT: 3000K + 4000K + 5700K(Only SMD)												
CCT Selection DIP Switch	Yes												
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	COB	950-1050	1200-1350	1650-1950	2250-2750	1650-1950	2250-2750	3150-3500	1650-1950	2250-2750	3150-3850
			SMD	750-950	900-1300								
	DIM	3-CCT	COB	850-960	1080-1250	1500-1950	2150-2750	1500-1950	2150-2750	3000-3300	1500-1950	2150-2750	3000-3650
			SMD	670-900	810-1200								
	Non-DIM	3-CCT	SMD	650-800	800-1000	1500-1950	2000-2750	1550-1950	2100-2750	2900-3500	1650-1950	2250-2750	3150-3850
			DIM	580-740	720-950	1400-1950	1900-2750	1450-1950	2000-2750	2850-3300	1500-1950	2150-2750	3000-3650
CRI	Ra>80, >90												
Beam Angle (°)	COB: 24°/36° /60° SMD:75°			COB: 24°/ 38°/60° SMD: 90°									
UGR (COB)	24° / 36°<21 ; 60°<24		<19 (60°<22)	<22	<19	<19 (60°<22)	<19 (60°<22)	<19	<19	<19 (60°<22)	<19	<19 (60°<22)	
UGR (SMD)	-												
LED Driver	Built-out												
Dimming Option	Triac dim, 0-10V, DALI												
Sensor	NO												
Emergency Kits	NO												
Electrical Class	Class II												
Ingress Protection (IP Rating)	IP65												
Impact Resistance (IK Rating)	IK10												
Product Finishing(Base)	White RAL9016;Black RAL9005												
Materials of Optics	PC+Al1070+PC cover												
Materials of Housing	Aluminum Die-casting												
Lifetime (hr)	50,000h												
Glow wire test (°C)	750°C												
Operating Temp. (°C)	-20°C ~45°C												
Storage Temp. (°C)	-20°C ~65°C												
Installation	Recessed												

Driver Datasheet (Non-dimmable)

Total load wattage		10W	13W	18W	25W	30W	35W	18W	25W	30W	35W	
Output	Output Voltage range	DC30-40V										
	Rated output current	250mA	320mA	450mA	650mA	750mA	900mA	500mA	650mA	800mA	950mA	
	Line Regulation	±5%										
	Setup, Rise Time	≤500ms @230V										
	Flickering Index	0.5%(NO RISK)		0.8%(NO RISK)	0.5%(NO RISK)			0.8%(NO RISK)	0.5%(NO RISK)			
Input	Input Voltage	AC 200-264V										
	Rated Input Voltage(V)	AC220-240V										
	Light Source	COB/SMD			COB				SMD			
	Frequency	50/60Hz										
	Input Current	≤0.06A	≤0.08A	≤0.11A	≤0.15A	≤0.17A	≤0.2A	≤0.12A	≤0.15A	≤0.18A	≤0.21A	
	Rated Input Current	≤0.06A	≤0.07A	≤0.1A	≤0.14A	≤0.16A	≤0.19A	≤0.11A	≤0.14A	≤0.17A	≤0.2A	
	Power Factor	0.9										
	THD	<20% @230V										
	Efficiency	≥86%		≥88%	≥90%			≥88%	≥90%			
	No load wattage	<0.5W@230V										
	Protection	Short circuit protection	Pass									
Over voltage protection		Pass										
Over temperature protection		Pass										
Safety & EMC	Withstand voltage	I/P-O/P:3.75KVac, <5mA 60S										
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω										
	Surge	IEC/EN61000-4-5(P<25W;L-N:500V)			IEC/EN61000-4-5 (P≥25w;L-N:1KV)			IEC/EN61000-4-5(P<25W;L-N:500V)	IEC/EN61000-4-5 (P≥25w;L-N:1KV)			
	EMC Emission	IEC/EN55015, IEC/EN61000-3-2										
	EMC Immunity	IEC/EN61000-4-2,3,4,5,6,8,11; IEC/EN61547										

Driver Datasheet (Triac Dimmable)

Total load wattage		10W	13W	18W	25W	30W	35W	18W	25W	30W	35W	
Output	Output Voltage range	DC30-40V										
	Rated output current	230mA	300mA	450mA	600mA	700	850mA	450mA	600mA	750mA	900mA	
	Line Regulation	±5%										
	Setup, Rise Time	≤500ms @230V										
	Flickering Index	5%(LOW RISK)		4%(LOW RISK)		3%(LOW RISK)		4%(LOW RISK)		3%(LOW RISK)		
Input	Input Voltage	AC 200-264V										
	Rated Input Voltage(V)	AC220-240V										
	Light Source	COB/SMD			COB				SMD			
	Frequency	50/60Hz										
	Input Current	≤0.06A	≤0.08A	≤0.11A	≤0.15A	≤0.17A	≤0.21A	≤0.11A	≤0.15A	≤0.18A	≤0.21A	
	Rated Input Current	≤0.06A	≤0.07A	≤0.1A	≤0.13A	≤0.16A	≤0.19A	≤0.1A	≤0.14A	≤0.17A	≤0.2A	
	Power Factor	0.9										
	THD	<20% @230V										
	Efficiency	≥80%		≥83%	≥84%		≥83%	≥84%				
	No load wattage	<0.5W@230V			≤0.5W@230V							
	Protection	Short circuit protection	Pass									
Over voltage protection		Pass										
Over temperature protection		Pass										
Safety & EMC	Withstand voltage	I/P-O/P:3.75KVac, <5mA 60S										
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω										
	Surge	IEC/EN61000-4-5(P<25W;L-N:500V)			IEC/EN61000-4-5 (P≥25w;L-N:1KV)			IEC/EN61000-4-5(P<25W;L-N:500V)	IEC/EN61000-4-5 (P≥25w;L-N:1KV)			
	EMC Emission	IEC/EN55015, IEC/EN61000-3-2										
	EMC Immunity	IEC/EN61000-4-2,3,4,5,6,8,11; IEC/EN61547										

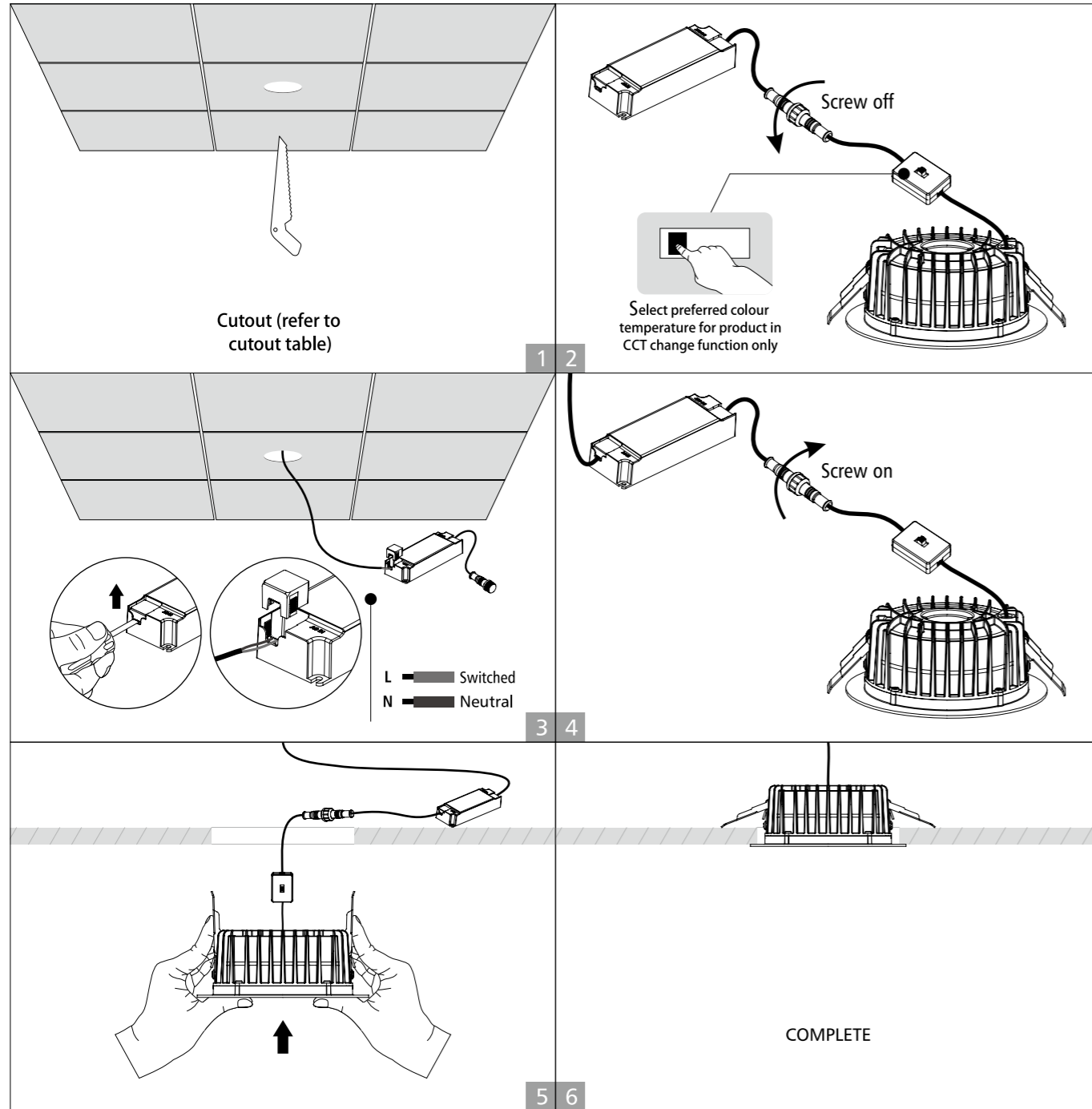
Installation Procedure

WARNING

1. Switch off power supply before installation / maintenance.
2. Switch on after completing installation and examination of the circuit.
3. The downlight must be installed and maintained by professional electrician.



Downlight with external driver (AB)



Downlight with external driver (C)

