

Entry /ECO Standard /STD Professional/PRO ODM & OEM Intelligent/INT

PRO
Specifications



LED Down Light
DL284 Series



Introduction

DL284A: 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 (color 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 DL284A, DL284B added the extend frame which looks like a slim surface mounted downlight.

Based on DL284A, DL284C 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: 2.5/3/4/6/8inches.
- 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 etc



DL284A



COB+Lens+Tempered Glass



SMD+PC Cover+Tempered Glass



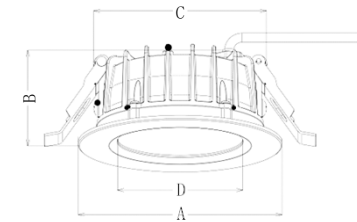
DL284B



COB+Lens+Tempered Glass



SMD+PC Cover+Tempered Glass



DL284C



COB+Lens+PC Cover



SMD+PC Cover+PC Cover



Measurement

Code	Dimension(mm)				Size (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/C TN	G.W/CTN				
DL284A/C-3	110	51	88.2	64.4	Ø110*51	0.34	0.375	11.25	12.35	36.5*29*33	30	25830	58290
DL284A/C-4	150	64	123.6	98.2	Ø150x64	0.62	0.71	7.44	9.52	39.5x36.5x26	12	8772	22320
DL284A/C-6	172	69	146.6	120.4	Ø172x69	0.79	0.95	9.48	12.65	44.5x41.5x30.5	12	5760	14064
DL284A/C-8	235	81	196.1	169	Ø235x81	1.27	1.49	7.62	10.44	54x27.5x34.5	6	3024	7392
DL284B-4	145	82	123.5	98.2	Ø145*82	0.72	0.82	9.84	10.84	39.5*36.5*30.5	12	7500	18168
DL284B-6	172	92	146.5	120.5	Ø172*92	0.9	1.05	12.6	13.8	44.5*41.5*36.5	12	4824	12000
DL284B-8	220	104	196.1	169	Ø220*104	1.45	1.64	9.84	11.34	54*27.5*36.5	6	3024	7392

Technical Data Sheet (DL284A)

Code No.	DL284A-3-10W	DL284A-3-13W	DL284A-4-18W	DL284A-4-25W	DL284A-6-18W	DL284A-6-25W	DL284A-6-30W	DL284A-8-18W	DL284A-8-25W	DL284A-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	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												
	Beam Angle (°)	COB:24°/38°/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 (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 (DL284B)

Code No.	DL284B-4-18W	DL284B-4-25W	DL284B-6-18W	DL284B-6-25W	DL284B-6-30W	DL284B-8-18W	DL284B-8-25W	DL284B-8-35W		
Dimension(mm)	Ø145*82		Ø172x92			Ø220*104				
Cutout (mm)	Ø125-135		Ø150-160			Ø200-210				
Watt(W)	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	1650-1950	2250-2750	1650-1950	2250-2750	3150-3500	1650-1950	2250-2750	3150-3850
			DIM	1500-1950	2150-2750	1500-1950	2150-2750	3000-3300	1500-1950	2150-2750
	Non-DIM	3-CCT	1500-1950	2000-2750	1550-1950	2100-2750	2900-3500	1650-1950	2250-2750	3150-3850
			DIM	1400-1950	1900-2750	1450-1950	2000-2750	2850-3300	1500-1950	2150-2750
CRI	Ra>80									
Beam Angle (°)	COB: 24°/38°/60° SMD:90°									
UGR (COB)	<19 (60°<22)	<22	<19	<19 (60°<22)	<19 (60°<22)	<19	<19 (60°<22)	<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 (DL284C)

Code No.	DL284C-3-10W	DL284C-3-13W	DL284C-4-18W	DL284C-4-25W	DL284C-6-18W	DL284C-6-25W	DL284C-6-30W	DL284C-8-18W	DL284C-8-25W	DL284C-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								
DIM	3-CCT	SMD	650-800	800-1000	1500-1950	2000-2750	1550-1950	2100-2750	2900-3500	1650-1950	2250-2750	3150-3850	
			580-740	720-950	1400-1950	1900-2750	1450-1950	2000-2750	2850-3300	1500-1950	2150-2750	3000-3650	
CRI	Ra>80												
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 (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										
Input	Flickering Index	0.5%(NO RISK)		0.8%(NO RISK)	0.5%(NO RISK)		0.8%(NO RISK)	0.5%(NO RISK)				
	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%				
Protection	No load wattage	<0.5W@230V										
	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										
Input	Flickering Index	5%(LOW RISK)		4%(LOW RISK)	3%(LOW RISK)		4%(LOW RISK)	3%(LOW RISK)				
	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%				
Protection	No load wattage	<0.5W@230V		≤0.5W@230V								
	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

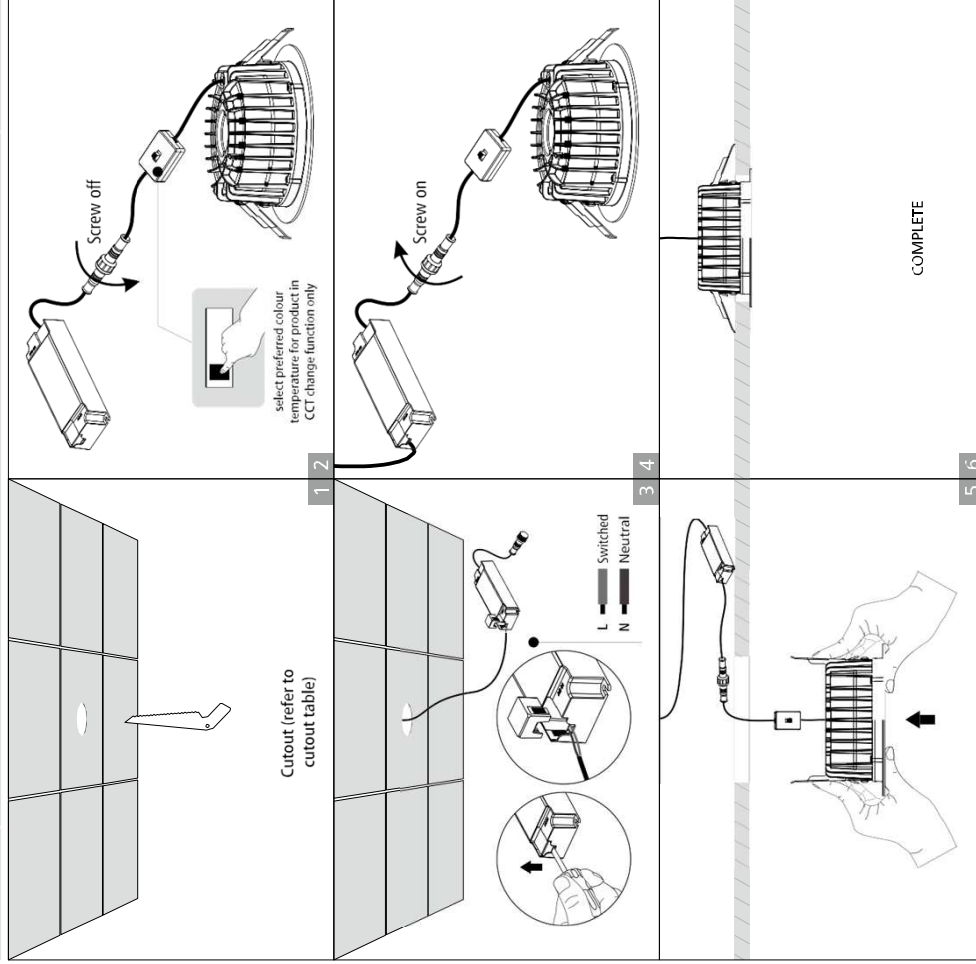
WARNING

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

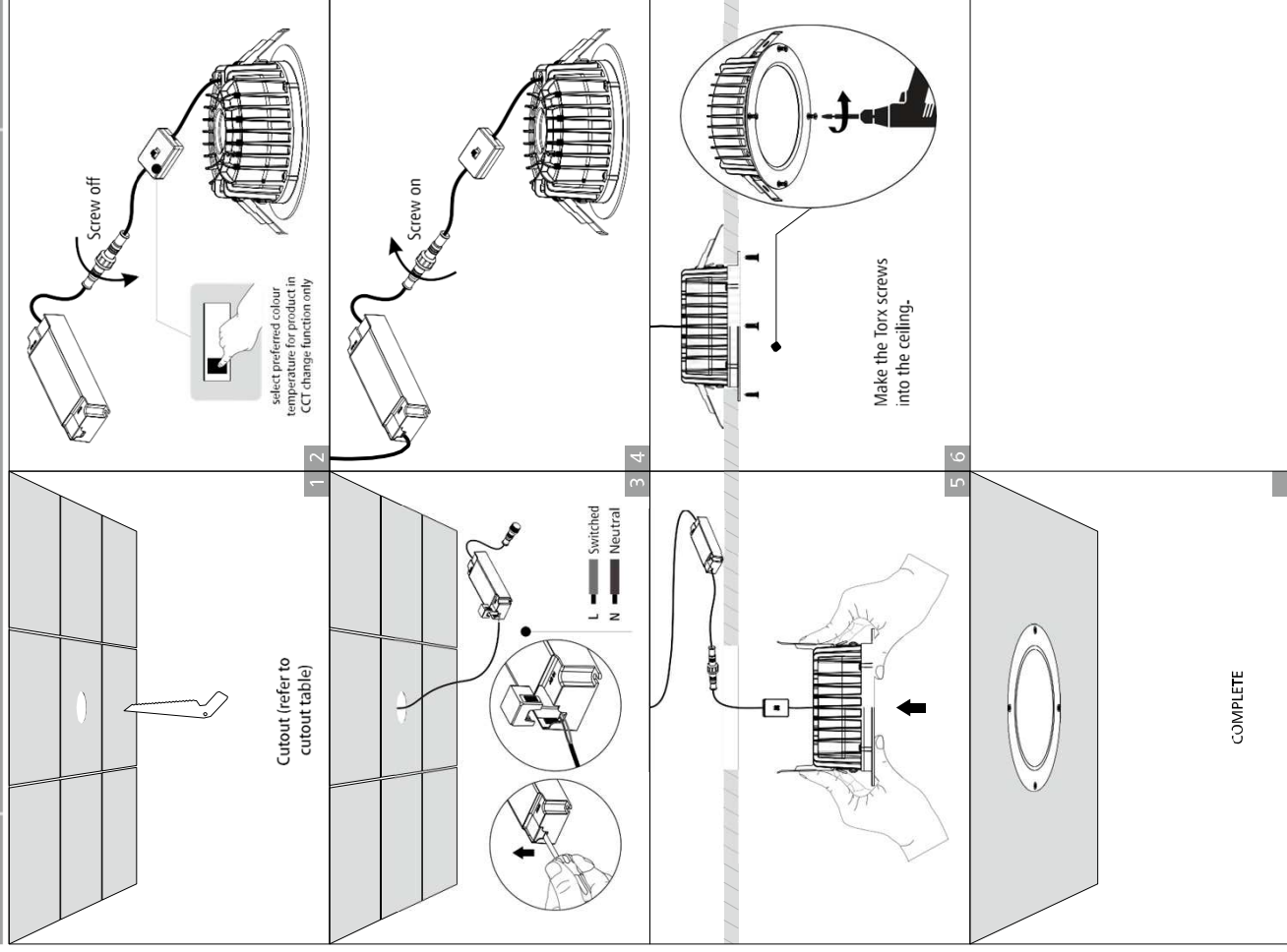


Turn Off
Power Supply

Downlight with external driver (AB)



Downlight with external driver (C)





RL Europe
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www.rleurope.ch

info@rleurope.ch

TEL: +41 (0)91 6832255

Add: via E. Bossi 12/B, CH-6830 Chiasso (TI)