



LED Downlight

DL178 SERIES

Introduction



DL178 down light with traditional deep reflector (UGR<19) that provides perfect combination of high lighting efficiency, comfortable lighting and humanization design, without compromising on light performance(color rendering and color uniformity); It offers a wide choice of options for creating the desired ambience.

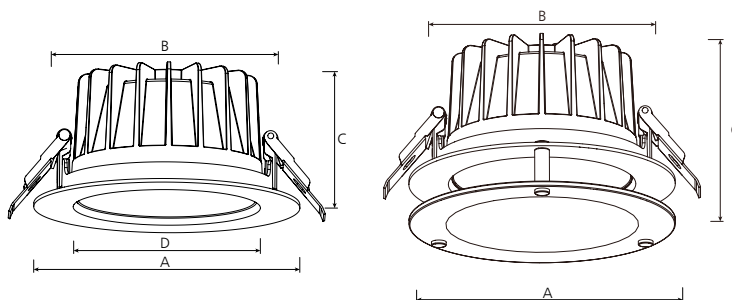
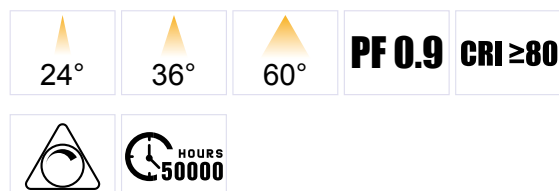
Features

1. High luminous efficiency.
2. 24°, 36°, 60°beam angle optional.
3. Easy installation and maintenance.
4. UGR<19 (not available for 3inch 60°beam angle and 8inch-35W 60°beam angle).
5. Different design drop glass as options.
6. Interchangeable reflector in white, matt silver,bright silver and black color.

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.

Diversified Combination



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/CTN	G.W/CTN				
3"-A	95	80	54	63	Ø95*54	0.23	0.31	8.28	12.7	48.5*37*29.5	36	19008	46656
3"-B	110	86	54	69	Ø110*54	0.27	0.35	9.7	14.2	48.5*37*29.5	36	19008	46656
4"	145	120	78	102	Ø145*78	0.475	0.575	8.6	11.8	50*34*38.5	18	7128	14904
6"	172	145	90	127	Ø172*90	0.705	0.84	8.5	11.6	59*40*23.5	12	5940	14400
8"	228	195	99	176	Ø228*99	1.135	1.305	13.6	17.1	52*52*35	12	3408	7872
4"+Glass	145	120	97	-	172.5x97	1.05	1.12	20.16	21.11	56.5x38x40	18	5832	14472
6"+Glass	172	145	109	-	197x109	1.3	1.39	16.68	17.72	65x44x29.5	12	3756	9072
8"+Glass	228	195	118	-	246x118	1.84	2.01	12.06	12.88	57x29x44.5	6	2400	5424

Technical Data Sheet (1)

Code No.		DL178A-3-10W	DL178B-3-10W	DL178B-3-13W	DL178-4-10W	DL178-4-18W	DL178-4-25W	
Watt(W)		10W		13W	10W	18W	25W	
Dimension(mm)		Ø95*54	Ø110*54		Ø145*78& Ø145*97 (drop glass)			
Cutout(mm)		Ø82-88	Ø90-95		Ø125-135			
Rated Input Voltage(V)		AC230V						
Input Voltage(V)		AC200-240V						
LED		COB						
SDCM		-						
CCT(K)		1-CCT: 2700K / 3000K / 4000K / 5000K						
"Luminous Flux (lm) ±5%	1-CCT	Non-DIM	1050~1120	1050~1120	1000~1300	1050~1150	2070~2250	2550~2750
		DIM	1000~1100	1000~1100	970~1230	1000~1100	2020~2200	2500~2700
CRI		≥80						
Beam Angle (°)		24° / 36° / 60°						
UGR		< 19 (not available for 3inch 60°beam angle and 8inch-35W 60°beam angle)						
LED Driver		Built-out						
DIM		Yes						
CCT Selection Switch		NO						
Protection Class		Class II						
IP Rating		IP54						
IK Rating		IK06						
Finishing color		Black RAL9005 / White RAL 9016						
Material		PC / Aluminum						
Lifetime (hr)		50,000						
Glow wire test (°C)		850°C						
Operating Temp.(°C)		-20°C ~45°C						
Storage Temp.(°C)		-20°C ~65°C						
Installation		Recessed						
Brand Driver option		Philips, Tridonic, Meanwell						

Technical Data Sheet (2)

Model No.	DL178-6-18W	DL178-6-25W	DL178-6-35W	DL178-8-18W	DL178-8-25W	DL178-8-35W	
Watt(W)	18W	25W	35W	18W	25W	35W	
Dimension(mm)	Ø172*90 & Ø172*109 (drop glass)			Ø228*99 & Ø228*118 (drop glass)			
Cutout(mm)	Ø150-165			Ø200-210			
Rated Input Voltage(V)	AC230V						
Input Voltage(V)	AC200-240V						
LED	COB						
SDCM	-						
CCT(K)	1-CCT: 2700K / 3000K / 4000K / 5000K						
"Luminous Flux (lm) ±5%	1-CCT	Non-DIM	2000~2200	2600~2850	3500~3670	1890~2070	2600~2850
		DIM	1980~2160	2500~2750	3320~3500	1800~1980	2500~2750
CRI	≥80						
Beam Angle (°)	24° / 36° / 60°						
UGR	< 19 (not available for 3inch 60°beam angle and 8inch-35W 60°beam angle)						
LED Driver	Built-out						
DIM	Yes						
CCT Selection Switch	NO						
Protection Class	Class II						
IP Rating	IP54						
IK Rating	IK06						
Finishing color	Black RAL9005 / White RAL 9016						
Material	PC / Aluminium						
Lifetime (hr)	50,000						
Glow wire test (°C)	850°C						
Operating Temp.(°C)	-20°C ~45°C						
Storage Temp.(°C)	-20°C ~65°C						
Installation	Recessed						
Brand Driver option	Philips, Tridonic, Meanwell						

Driver Datasheet (Non-Dimmable)

Power	10W	13W	18W	25W	35W
Rated Input Voltage(V)	AC230V				
Frequency	50/60Hz				
Input Voltage	AC200-240V				
Efficiency	≥79%	≥78%	≥82%	≥83%	≥84%
Total load wattage	10W±1W	13W±1W	18W±1W	25W±5%	35W±5%
Power Factor	0.9				
Rated Input Current	≤0.05A	≤0.07A	≤0.11A	≤0.13A	≤0.18A
Full load output voltage	DC28-40V	DC28-40V	DC28-40V	DC28-40V	DC28-40V
Rated output current	230mA	300mA	460mA	600mA	850mA
Output current range	230mA±5%	300mA±5%	460mA±5%	600mA±5%	850mA±5%
Power tolerance	±5%				
Current output tolerance	±5%				
Short circuit protection	PASS				
Over voltage protection	PASS				
Over temperature protection	PASS				
THD	<20% @ 230V				
Surge	500V			1KV	
Withstand voltage	AC3750				

Driver Datasheet (Triac Dimmable)

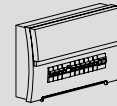
Power	10W	13W	18W	25W	35W
Rated Input Voltage(V)	AC230V				
Frequency	50Hz				
Input Voltage	AC200-240V				
Power Factor	0.9				
Efficiency	82%	82%	85%	85%	85%
Total load wattage	10W±1W	13W±1W	18W±1W	25W±5%	35W±5%
Rated Input Current	≤0.06A	≤0.08A	≤0.1A	≤0.14A	≤0.2A
Full load output voltage	DC23-40V	DC23-40V	DC23-40V	DC23-40V	DC23-40V
Rated output current	230mA	280mA	430mA	600mA	800mA
Output current range	230mA±5%	280mA±5%	430mA±5%	600mA±5%	800mA±5%
Power tolerance	±5%				
Current output tolerance	±5%				
Dimming Range	8%-100%				
Short circuit protection	PASS				
Over voltage protection	PASS				
Over temperature protection	PASS				
THD	<20% @ 230V				
Surge	500V			1KV	
Withstand voltage	AC3750V				

Note: DALI & 0-10V driver specification, please refer to individual driver datasheet.

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.

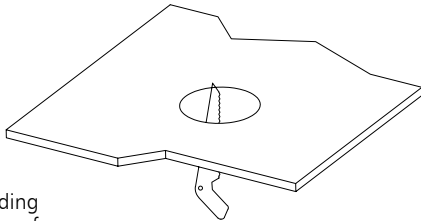


**Turn Off
Power Supply**

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

■ Installation

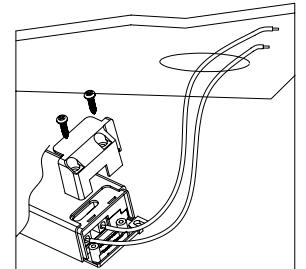
Step 1



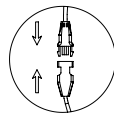
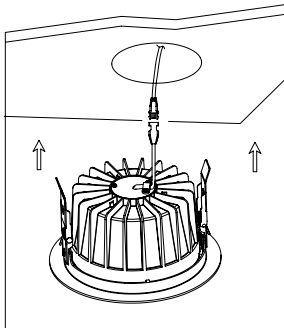
Open a hole according to the cutout size of led downlight.

Step 2

Use screw-driver to open the driver terminal cover, feed the main AC wire L. N. in terminal block respectively, then fix the cover back.

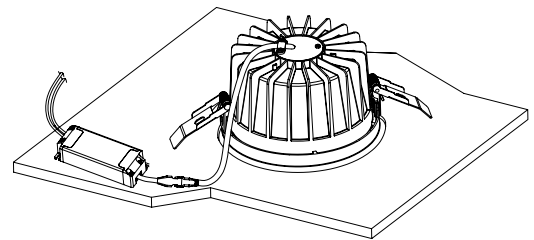


Step 3



3. Connect the downlight with driver, hold back the spring clips then push the downlight into the hole.

Step 4



Make sure the lamp fixed tightly in ceiling, turn on the power.