

Entry / ECO

Standard / STD

Professional / PRO

ODM & OEM

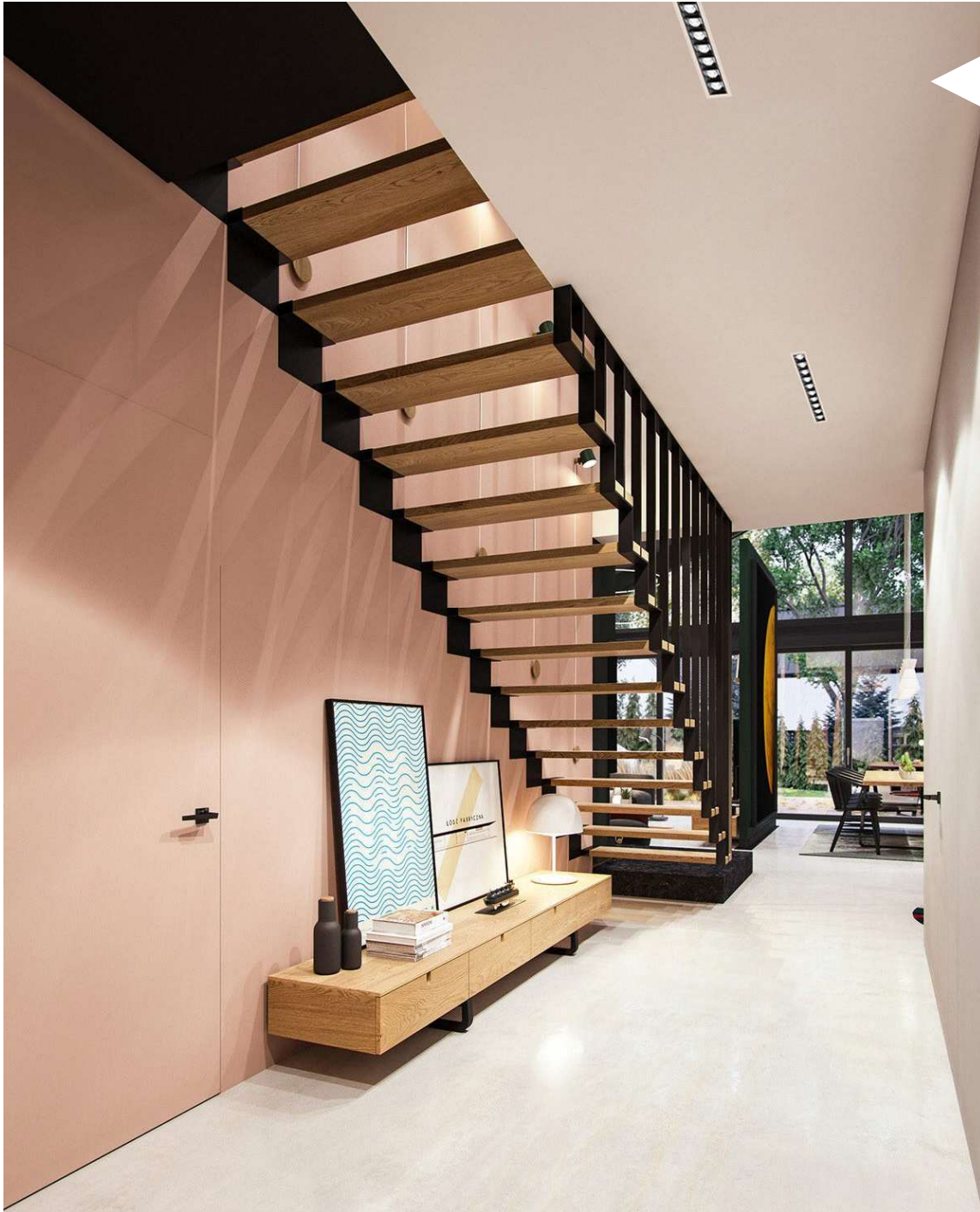
Intelligent / INT

2020

STD
Specifications



LED Downlight
DL248A Series



Introduction

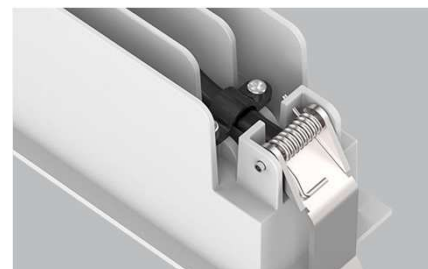
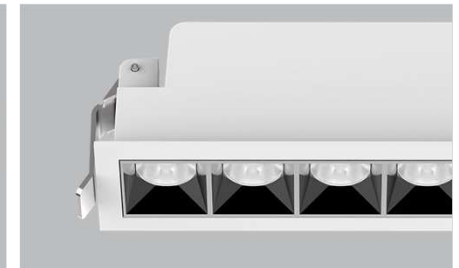
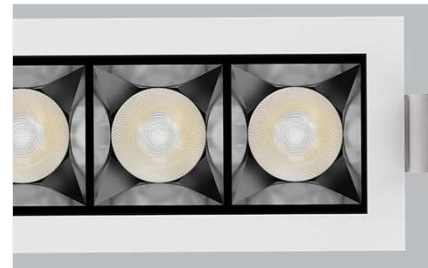
This is a linear recessed downlight, it has two beam design: Symmetric Beam(Type A) and Asymmetric Beam(Type B). The aluminum die-casting frame with UV-proof white powder coating finishing provides an excellent thermal management. Adopt CREE XP-G big power SMD light source, high lumen, high CRI, small SDCM. Modular lens and multi-louver reflectors design realize anti-glare UGR<19 effect, special light spot offers a great visual enjoyment.

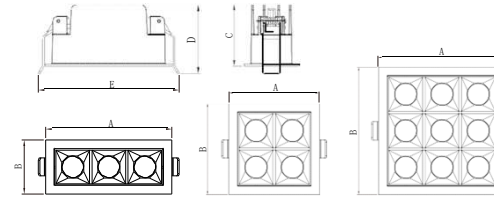
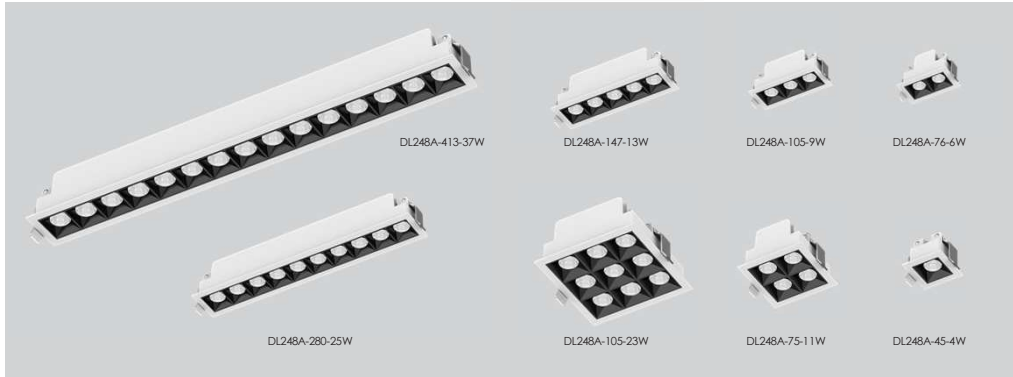
Features

- Special beam design: Symmetric beam(Type A) 15°/36°
- Lighting design: UGR<19, Ra>90, SDCM<6.
- Adopt CREE XP-G2 5W SMD light source, high lumen efficiency.
- Finished color: White/Black.
- External flicker free driver.
- Dimming options: Triac dimming / 0-10V dimming / DALI dimming

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.	DL248A-45-4W	DL248A-76-6W	DL248A-105-9W	DL248A-75-11W	DL248A-147-13W	DL248A-105-23W	DL248A-280-25W	DL248A-413-37W	
Dimension(mm)	45×45×42	76×45×51	105×45×51	75×75×51	147×45×51	105×105×51	280×45×51	413×45×51	
Cutout (mm)	37×37	68×37	97×37	67×67	139×37	97×97	272×37	405×37	
Watt(W)	4W	6W	9W	11W	13W	23W	25W	37W	
Rated Input Voltage(V)	AC220-240V								
Input Voltage(V)	AC220V								
LED Module Input	DC3V 700mA	DC6V 700mA	DC9V 700mA	DC12V 700mA	DC15V 700mA	DC27V 700mA	DC30V 700mA	DC45V 700mA	
Light Source	SMD								
SDCM	<6								
CCT(K)	1-CCT: 2700K/3000K/4000K								
CCT Selection DIP Switch	NO								
Luminous Flux (lm) ±5%	Non-DIM 1-DIM CCT	140-190	270-370	400-600	480-710	650-940	1160-1760	1220-1820	1990-2830
	Non-DIM 3-DIM CCT	-							
CRI	Ra>90								
Beam Angle (°)	15°/36°								
UGR	<19								
LED Driver	Built-out								
Dimming Option	NO	NO	Triac/DALI/ 0-10V						
Sensor	-								
Emergency Kits	-								
Electrical Class	Class II								
Ingress Protection (IP Rating)	IP20(Inside Ceiling)								
Impact Resistance (IK Rating)	IK06								
Product Finishing(Base)	White 9016, Black 9005								
Materials of Optics	PC								
Materials of Housing	Aluminum								
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								

Code	Dimension(mm)					Size(mm)	Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/CTN	20GP (pcs)	40HQ (pcs)
	A	B	C	D	E		N.W/PC	G.W/PC	N.W/CTN	G.W/CTN				
DL248A-45-4W	45	45	42	49	57	45*45*42	0.12	0.18	13.5	14.2	56.5*32*33.5	75	31500	73500
DL248A-76-6W	76	45	51	58	87	76*45*51	0.16	0.22	16.5	17.2	56.5*32*33.5	75	31500	73500
DL248A-105-9W	105	45	51	58	117	105*45*51	0.21	0.31	15.5	16.4	59.5*31.5*43	50	16500	39900
DL248A-75-11W	75	75	51	58	87	75*75*51	0.22	0.31	18.6	19.8	63.5*42*43	60	13500	32400
DL248A-147-13W	147	45	51	58	159	147*45*51	0.27	0.37	14.8	15.7	45*35.5*33	40	19200	44800
DL248A-105-23W	105	105	51	58	117	105*105*51	0.43	0.55	16.5	17.4	54*30.5*43	30	11100	27540
DL248A-280-25W	280	45	51	58	292	280*45*51	0.51	0.64	12.8	13.5	40*32.5*30	20	13440	31360
DL248A-413-37W	413	45	51	58	425	413*45*51	0.71	0.91	18.2	19.1	46*32.5*37	20	9840	23800

Driver Datasheet (Non-dimmable)

Total load wattage		4W	6W	9W	11W	13W	23W	25W	37W
Output	Output Voltage range	2-4V	5-9V	9-18V	9-18V	9-18V	25-34V	25-34V	36-51V
	Rated output current	700mA							
	Line Regulation	±5%							
	Setup, Rise Time	0.5S							
	Flickering Index	1.5%							
Input	Input Voltage	AC 198-264V							
	Rated Input Voltage(V)	AC 220-240V							
	Frequency	50/60 Hz							
	Input Current	≤0.05A	≤0.04A	≤0.06A	≤0.07A	≤0.09A	≤0.13A	≤0.14A	≤0.21A
	Rated Input Current	≤0.04A	≤0.04A	≤0.06A	≤0.07A	≤0.08A	≤0.12A	≤0.13A	≤0.19A
	Power Factor	0.5	0.8	0.8	0.8	0.8	0.9	0.9	0.9
	THD	≤15%(230V)							
	Efficiency	65%	71%	78%	78%	78%	88%	88%	89%
	No load wattage	<0.5W							
	Protection	Short circuit protection	Pass						
Over voltage protection		Pass							
Over temperature protection		Pass							
Safety & EMC	Withstand voltage	I/P-O/P:3KVac,<5mA 60S							
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω							
	Surge	IEC/EN61000-4-5(L-N:1KV)							
	EMC Emission	EN55015, EN61000-3-2							
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547							

Driver Datasheet (Triac Dimmable)

Total load wattage		9W	11W	13W	23W	25W	37W
Output	Output Voltage range	8-14V	8-14V	12-20V	26-42V	26-42V	30-52V
	Rated output current	700mA					
	Line Regulation	±5%					
	Setup, Rise Time	≤0.5S (230VAC)					
	Flickering Index	1.5%					
Input	Input Voltage	AC 198-264V					
	Rated Input Voltage(V)	AC 220-240V					
	Frequency	50/60 Hz					
	Input Current	80mA	80mA	100mA	160mA	160mA	220mA
	Rated Input Current	46mA	56mA	66mA	117mA	127mA	187mA
	Power Factor	0.90					
	THD	-			≤20% (230VAC)		
	Efficiency	78%	78%	81%	86%	86%	87%
	No load wattage	≤0.5W @230VAC					
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(L-N:1KV)					
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

Driver Datasheet (0-10V Dimmable)

Total load wattage		9W	11W	13W	23W	25W	37W
Output	Output Voltage range	3-84V					
	Rated output current	700mA					
	Line Regulation	±3%					
	Setup, Rise Time	≤0.5S (230VAC)					
	Flickering Index	1.5%					
Input	Input Voltage	AC 180-264V					
	Rated Input Voltage(V)	AC 200-240V					
	Frequency	47-63 Hz					
	Input Current	300mA					
	Rated Input Current	50mA	62mA	73mA	128mA	139mA	206mA
	Power Factor	0.90					
	THD	≤20% (230VAC)					
	Efficiency	89%					
	No load wattage	≤0.5W @230VAC					
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(L-N:2KV)					
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

Driver Datasheet (DALI Dimmable)

Total load wattage		9W	11W	13W	23W	25W	37W
Output	Output Voltage range	3-84V					
	Rated output current	700mA					
	Line Regulation	±3%					
	Setup, Rise Time	≤0.5S (230VAC)					
	Flickering Index	1.5%					
Input	Input Voltage	AC 180-264V					
	Rated Input Voltage(V)	AC 200-240V					
	Frequency	47-63 Hz					
	Input Current	300mA					
	Rated Input Current	50mA	62mA	73mA	128mA	139mA	206mA
	Power Factor	0.90					
	THD	≤20% (230VAC)					
	Efficiency	78%					
	No load wattage	≤0.5W @230VAC					
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(L-N:2KV)					
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

Installation Procedure

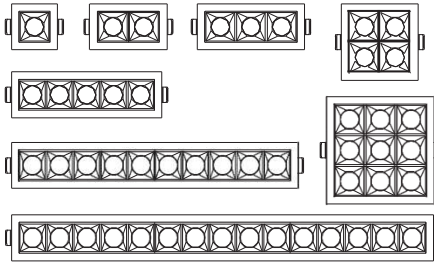
WARNING ⚡

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



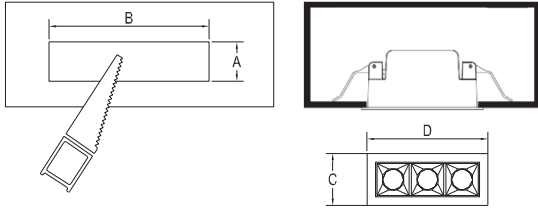
Turn Off power supply before starting any installation. Read instructions & check you have all the tools & accessories to complete the installation correctly.

Type A Symmetric light



Step 1

Open a hole according to the cutout size of the lamp.



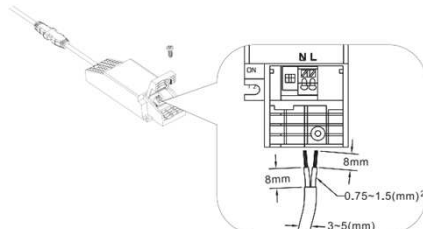
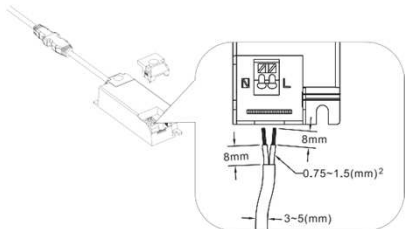
AxB mm	CxDmm
37x37	45x45
68x37	76x45
97x37	105x45
67x67	75x75
139x37	147x45
97x97	105x105
272x37	280x45
405x37	413x45

Step 2

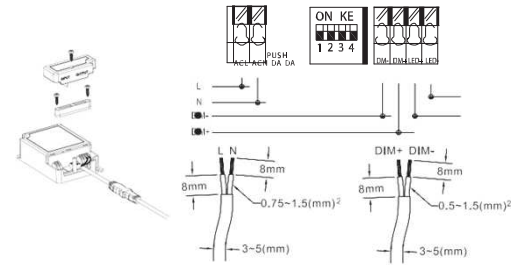
Remove the driver cover, do wire connection accordingly, then fix the driver cover.

2.1 Non-dimmable driver

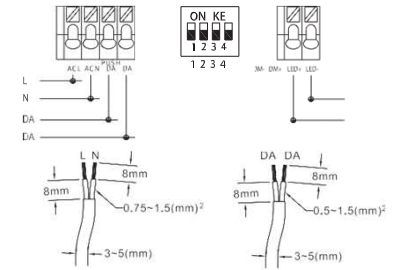
2.2 RPC triac dimmer(10%-100%)



2.3 0-10V dimmable driver

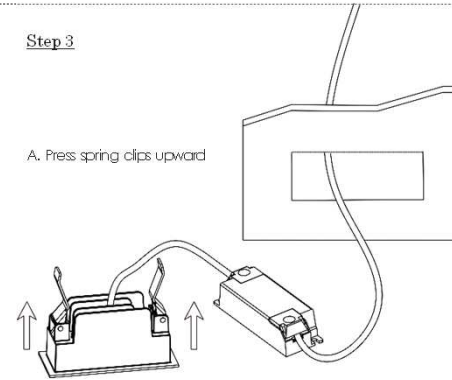


2.4 DALI dimmable driver



Step 3

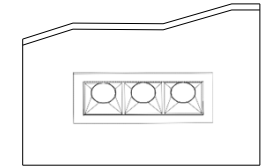
A. Press spring clips upward



B. Push downright into position

Step 4

Release spring clips which will hold luminaire securely





RL Europe
Your partner in LED

www.rleurope.ch

info@rleurope.ch

TEL: +41 (0)91 6832255

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