

Constant current independent color temperature driver
DWL Series suffix D(DALI-2 + pushDIM + pushCCT)



Features

- Support DALI-2+pushDIM+pushCCT control
- Suitable for emergency lighting acc. to EN 50172
- 10-level current output can be realized through DIP-switch, easier to adjust the luminaire power
- Soft dimming and flicker-free at any brightness, meets the new requirements of ErP certification
- Using HPC patented technology, at any dimming level, the current output between drivers is the same
- Dimming range 1%~100%, output current accuracy 1%
- Standby power input<0.5W, meets the requirements of ErP certification
- High PF, high efficiency, low THD
- Screw-free and pressing type strain relief, easier install
- Support 1.5mm²x5 or 2.5mm²x3 wire
- Intelligent LED hot-plug protection function
- SELV and Class II design, suitable for use outside of the light
- Passed CE,ENEC,UKCA,RCM,DALI-2,EL and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h
- 5-year guarantee

Interfaces

- DALI-2(DALI-2 DT8)
- PUSH(pushDIM)
- PUSH(pushCCT)

Functions

- PUSH dimming (pushDIM) and PUSH color temperature (pushCCT) with memory
- Support central emergency application (normal dimming and color temperature in DC input)
- Support self-contained emergency application
- Protective features (short-circuit, overload,no-load, hot plug-in protection)

Suitable for lights

- Suitable for lights with independent drivers such as downlights, spotlights, panel lights, etc
- Not suitable for lights with built-in drivers

Typical applications

- LED indoor lighting
- LED office lighting
- LED commercial lighting



Technical data

Product model	BK-DWL042-1050AD
Output parameters	
Regulation method	Constant Current
Rated output current range	0.6-1.05A
Rated output voltage range	12-40/42VDC
Rated output power	42W Max
Output current adjustment	DIP S.W(10 levels)
Output current ripple LF	±2%
Output current accuracy	±1%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.089%, Flicker index(IEEE 1789)=0.000, Pst LM = 0.01, SVM = 0.002, (The above parameters are obtained from testing the panel lights)
Input parameters	
Rated input voltage range	200-240VAC 200-240VDC
Input voltage range	180-264VAC 200-264VDC
Input voltage shock	<380 VAC
Input current	<0.25A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.95 (230V AC & Full load)
Input THD	10% (230V AC & Full load)
Efficiency(typical)	89% (230V AC & Full load)
In-rush current	8.25A peak ,206us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 50,000 switching cycles
Power consumption	Full load(Pin):47.5W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P:3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV
Leakage current	0.5mA (230V AC & Full load)
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported(Normal dimming and color temperature in DC input)
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-50°C
Case temperature	Tc=85°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	EN61347-1, EN61347-2-13, EN62384
EMC	EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2), IEC 62386-209(DALI-2)
EL	Compatible IEC 61347-2- 13 Annex J , compatible with EN 60598-2-22 and EN 50172
RF	N/A

Remarks

- 1.By default, all parameter are measured at 230V AC input, full load and 25°C of ambient temperature.
- 2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DWL060-1500AD	BK-DWL060-2000AD	
Output parameters			
Regulation method	Constant Current	Constant Current	
Rated output current range	1.05-1.5A	1.55-2A	
Rated output voltage range	12-42VDC	12-31/35/33/34/35/36/38/40/42VDC	
Rated output power	63W Max	62W Max	
Output current adjustment	DIP S.W(10 levels)	DIP S.W(10 levels)	
Output current ripple LF	±2%	±2%	
Output current accuracy	±1%	±1%	
Linear regulation	±1%	±1%	
Load regulation	±1%	±1%	
No load output voltage	50VDC	50VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.042%, Flicker index(IEEE 1789)=0.000, Pst LM = 0.000, SVM = 0.001, (The above parameters are obtained from testing the panel lights)		
Input parameters			
Rated input voltage range	200-240VAC 200-240VDC		
Input voltage range	180-264VAC 200-264VDC		
Input voltage shock	<380 V AC		
Input current	<0.36A (Rated input voltage)		
Input frequency	0/50/60Hz		
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.95 (230V AC & Full load)		
Input THD	10% (230V AC & Full load)		
Efficiency(typical)	90% (230V AC & Full load)		
In-rush current	11.4A peak ,190us duration(50 % Ipeak), see the description below for details		
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)		
Switching cycles	> 50,000 switching cycles		
Power consumption	Full load(Pin):74.5W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P:3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.		
Mains surge capability	L-N:2KV		
Leakage current	0.54mA (230V AC & Full load)		
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH		
Control interface			
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA		
pushDIM dimming port	Voltage range: 180-264V 47/63Hz		
1-10V 3in1 dimming port	N/A		
Auxiliary power supply	N/A		
Dimming range	1-100%		
Dimming drive mode	AM(amplitude modulation)		
Emergency support			
Central emergency system	Supported(Normal dimming and color temperature in DC input)		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-20-50°C		
Case temperature	Tc=85°C		
Operating humidity	5-85% RH, not condensed		
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed		
IP grade	IP20		
MTBF	500,000H,MIL-HDBK-217F(25°C)		
Life-time	Nominal life-time up to 100,000 h, see the description below for details		
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes		
Acoustic Noise	<25dB(30cm, Normal operation)		
Environmental protection	RoHS		
Certifications and standards			
Certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2		
Safety	EN61347-1, EN61347-2-13, EN62384		
EMC	EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2), IEC 62386-209(DALI-2)		
EL	Compatible IEC 61347-2- 13 Annex J , compatible with EN 60598-2-22 and EN 50172		
RF	N/A		

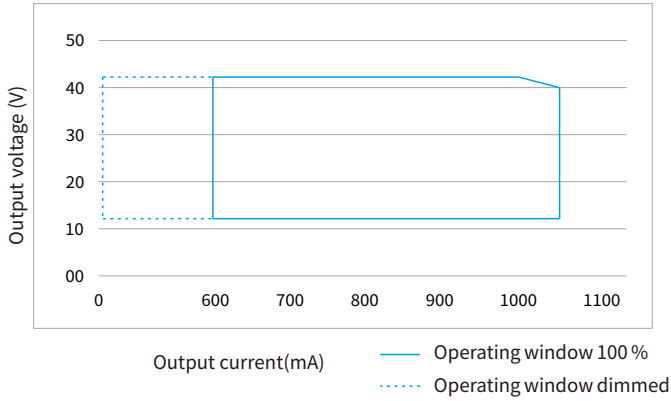
Remarks

- 1.By default, all parameter are measured at 230V AC input, full load and 25°C of ambient temperature.
- 2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

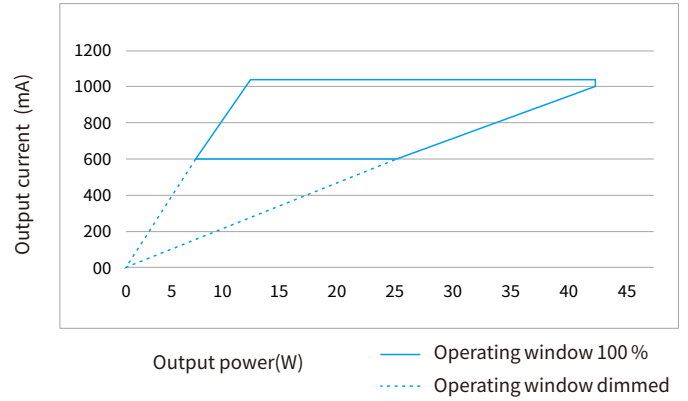
Electrical values

BK-DWL042-1050AD

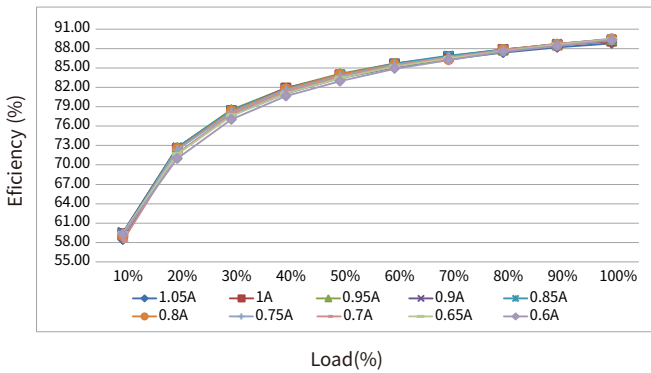
Operating window



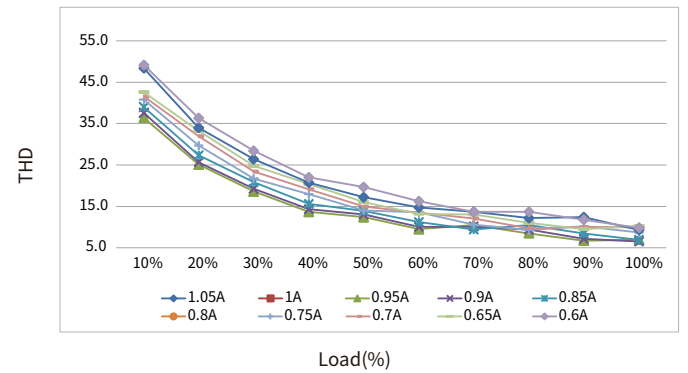
Operating window



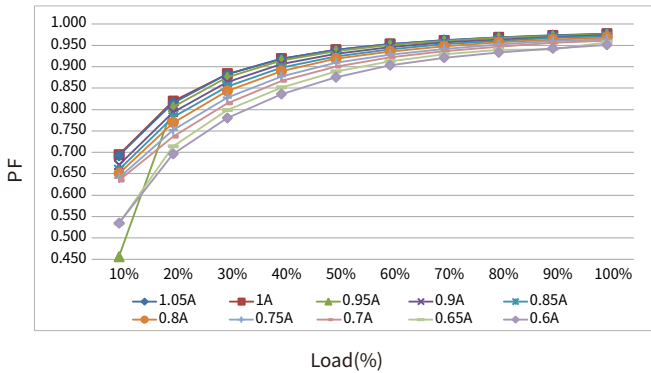
Efficiency vs load



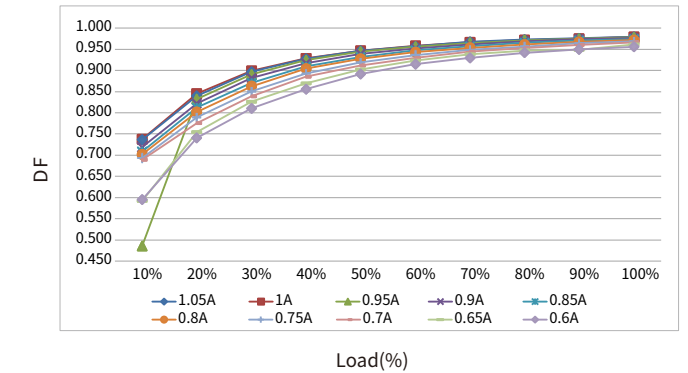
THD vs. Load



Power factor vs. Load

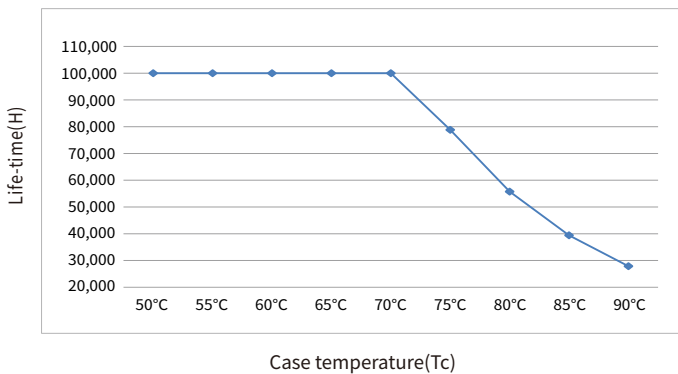


Displacement power vs. Load



Expected life-time

Life-time vs. case temperature

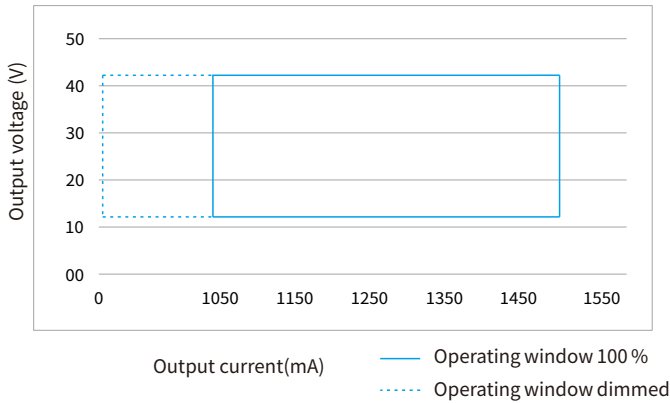


- The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of t_c to t_a temperature depends also on the luminaire design.

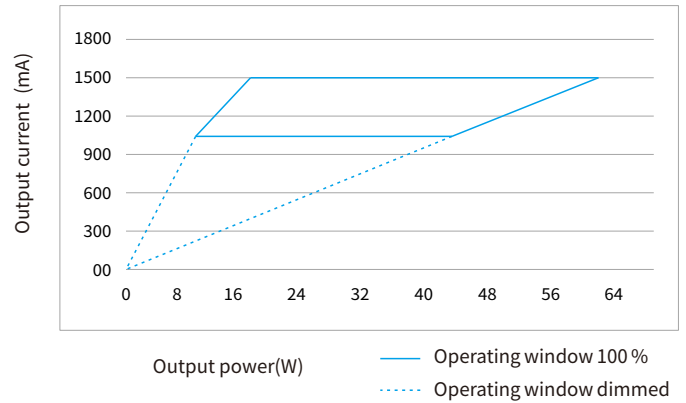
Electrical values

BK-DWL060-1500AD

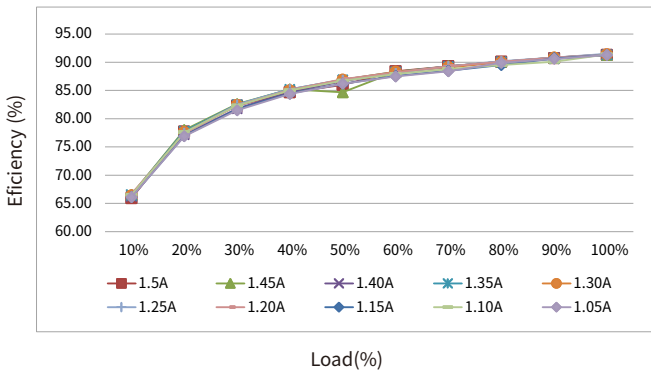
Operating window



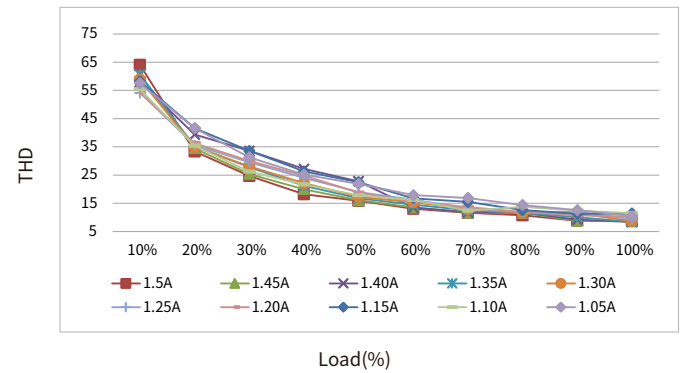
Operating window



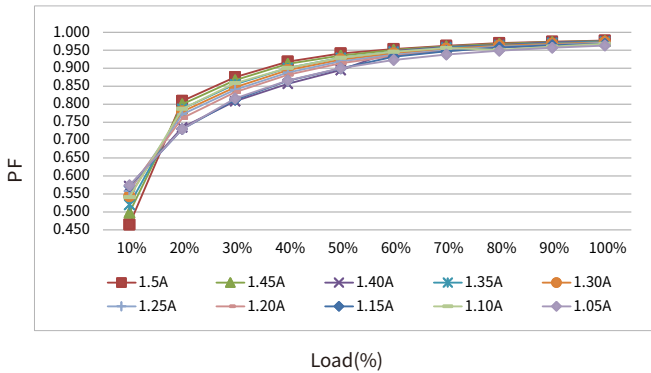
Efficiency vs load



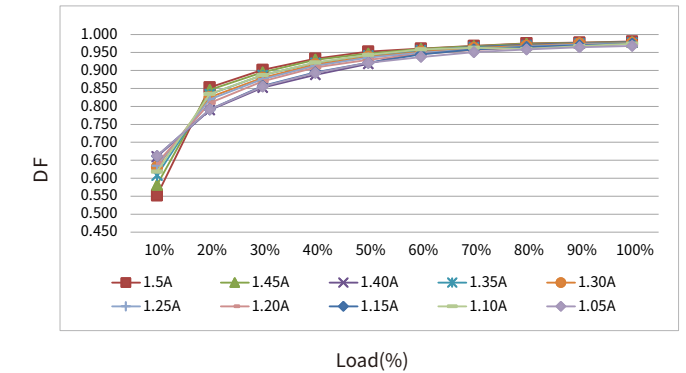
THD vs. Load



Power factor vs. Load

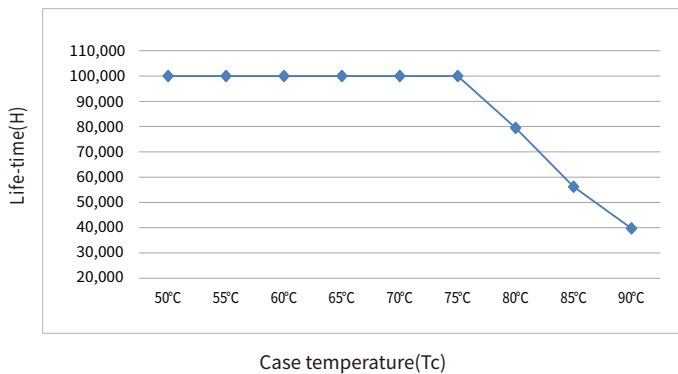


Displacement power vs. Load



Expected life-time

Life-time vs. case temperature

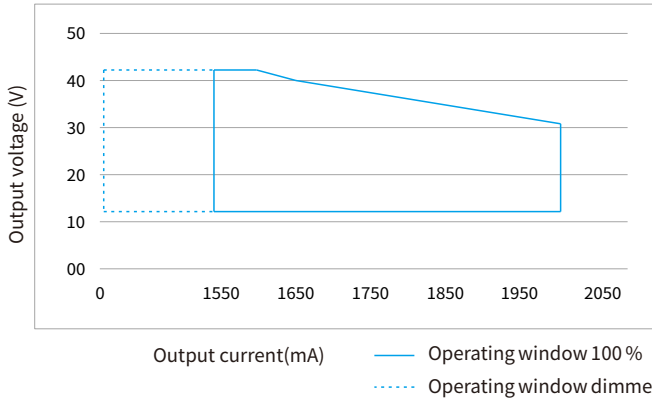


-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

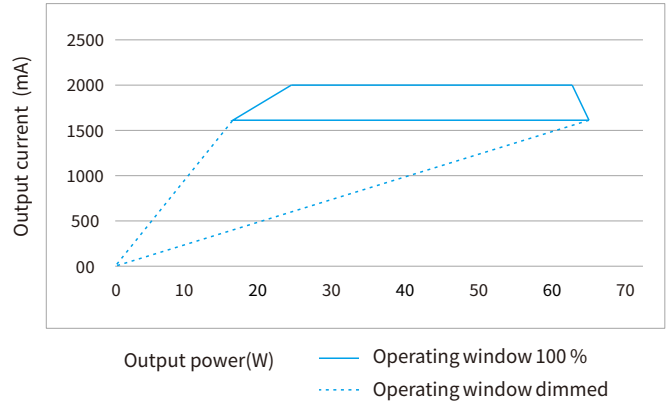
Electrical values

BK-DWL060-2000AD

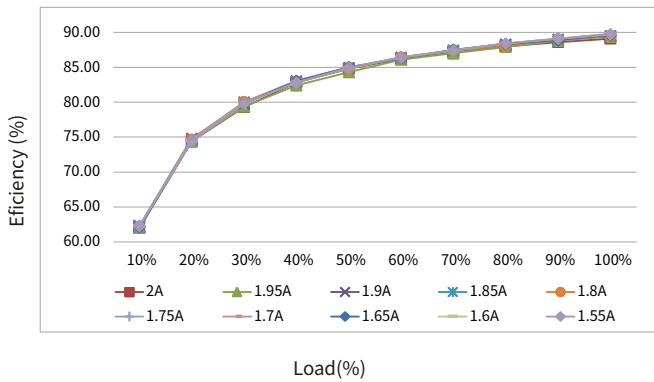
Operating window



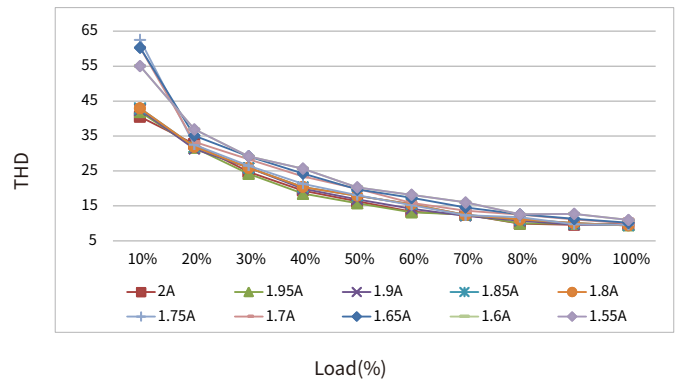
Operating window



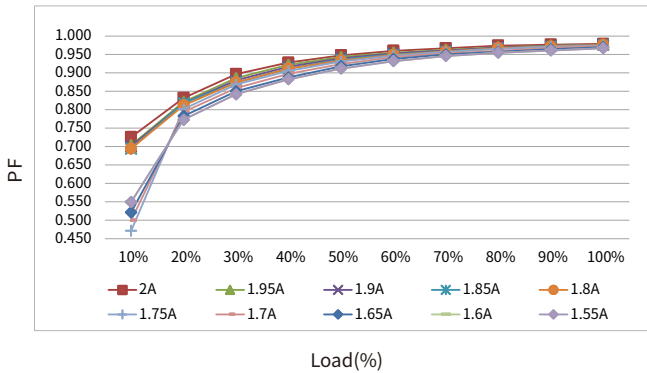
Efficiency vs load



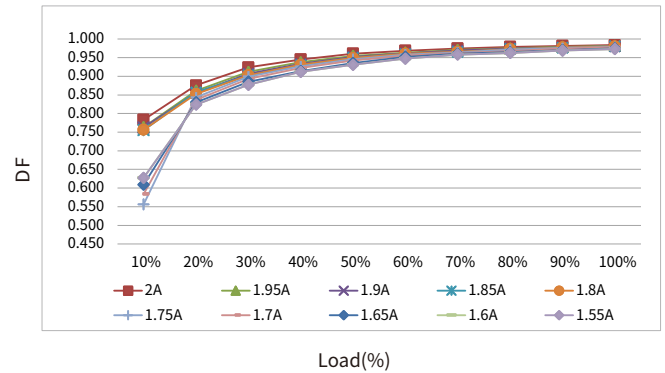
THD vs. Load



Power factor vs. Load

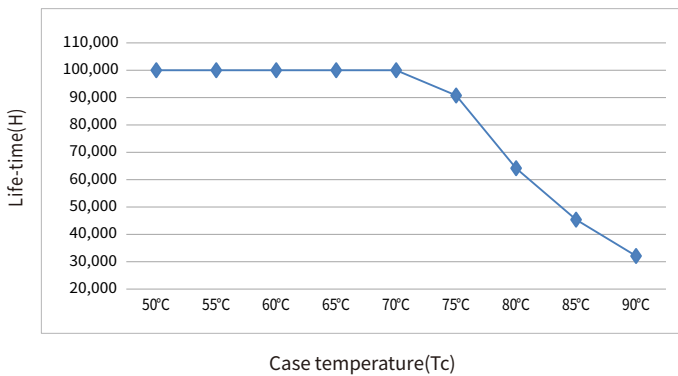


Displacement power vs. Load



Expected life-time

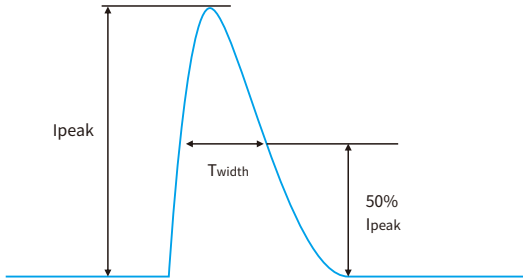
Life-time vs. case temperature



- The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

Surge

Model	Ipeak	Twidth	Condition	Relative number of MCB/pcs														
				B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
BK-DWL042-1050AD	8.25A	206us	AC 230V, Full load, Cold start, Ta ≤ 30°C, MCB is not installed side by side	33	43	52	65	82	33	43	52	65	82	33	43	52	65	82
BK-DWL060-1500AD	11.4A	190us		22	29	36	45	56	22	29	36	45	56	22	29	36	45	56
BK-DWL060-2000AD	11.1A	188us		23	30	36	45	57	23	30	36	45	57	23	30	36	45	57



Remarks

- The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- Calculation uses typical values from ABB series S200 as a reference.
- Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.
- If the ambient temperature of the MCB installation exceeds 30°C or multiple MCBs are installed side by side, the number of drives mounted will be reduced and the calculation needs to be recalculated.
- Electrician's usually consider Type B for household lighting and Type C for commercial lighting application.

Functions

Output short-circuit behaviour

- Output short-circuit will not damage the driver.
- After removing the short circuit fault, the driver will automatically resume output.

Output no-load operation

- Output no-load will not damage the driver.
- Please turn off the driver first if you need to connect the LED load.

Output overload protection

- The LED driver turns off the output if the output voltage range is exceeded. The output will be activated again after restart the LED driver .

Output hot plug-in

In the following two cases, the LED driver will automatically turn off the output to protect the LED:

- When the driver is powered on first and the LED is connected later.
- When the driver is powered on, disconnected and connected again.

The output will be activated again after restart of the LED driver .

Driver restart method

There are two ways to restart the driver:

- Through the AC input: disconnect the AC of the driver and power it again.
- Through dimming interface.
 - DALI: send "OFF" command first, then send "MAX" command.
 - pushDIM: short press pushbutton two times, then long press pushbutton.

Tunable white functionality

- This driver has 2 output channels used to control the intensity and temperature of white colour as well known as "Tunable White" .
- These drivers respond to DALI type 8 (DT8) commands, which in practice means that they only have 1 common address for both output channels .
- The tunable white level of intensity and colour temperature can be set either with a DALI command or by PUSH switch control.
- The higher the brightness, the wider the color temperature range can be obtained.

Insulation between circuits

Isolation	Input	Output	Case	DALI	PUSH
Input	-	Double	Double	Basic	-
Output	Double	-	Basic	Double	Double
Case	Double	Basic	-	Double	Double

DIP-switch & output current

BK-DWL042-1050AD

Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
29.0	25.2	600	12-42	--	ON	ON	ON
31.0	27.3	650	12-42	ON	--	ON	ON
33.5	29.4	700	12-42	--	--	ON	ON
36.0	31.5	750	12-42	--	ON	--	ON
38.0	33.6	800	12-42	--	--	--	ON
40.5	35.7	850	12-42	ON	ON	ON	--
43.0	37.8	900	12-42	--	--	ON	--
45.0	39.9	950	12-42	--	ON	--	--
47.5	42.0	1000	12-42	ON	--	--	--
47.5	42.0	1050 ★	12-40	--	--	--	--

BK-DWL060-1500AD

Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
50.0	44.1	1050	12-42	--	ON	ON	ON
52.0	46.2	1100	12-42	ON	--	ON	ON
54.5	48.3	1150	12-42	--	--	ON	ON
57.0	50.4	1200	12-42	--	ON	--	ON
59.5	52.5	1250	12-42	--	--	--	ON
61.5	54.6	1300	12-42	ON	ON	ON	--
64.0	56.7	1350	12-42	--	--	ON	--
66.5	58.8	1400	12-42	--	ON	--	--
69.0	60.9	1450	12-42	ON	--	--	--
70.5	63.0	1500 ★	12-42	--	--	--	--

BK-DWL060-2000AD

Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
73.0	65.1	1550	12-42	--	ON	ON	ON
72.0	64.0	1600	12-40	ON	--	ON	ON
74.5	66.0	1650	12-40	--	--	ON	ON
73.0	64.6	1700	12-38	--	ON	--	ON
71.0	63.0	1750	12-36	--	--	--	ON
71.0	63.0	1800	12-35	ON	ON	ON	--
71.0	62.9	1850	12-34	--	--	ON	--
71.0	62.7	1900	12-33	--	ON	--	--
71.0	62.4	1950	12-32	ON	--	--	--
70.5	62.0	2000 ★	12-31	--	--	--	--

Remarks:

- ★ It means that this item is the factory default current.
- It means that this channel is OFF.

Label

BOKE Dimmable Tunable White LED Driver(DT8)
MODEL: BK-DWL042-1050AD
 INPUT: 200-240V \approx 0/50/60Hz 0.25A Max. λ : 0.95
 OUTPUT: 12-42V \approx 1050mA 42W 50VDC Max.
 Other ratings see selection sheet
 For Australia and New Zealand, the marking label with

Switching selection sheet

Pin(W) typ.	Output			Switch			
	Prated(w)	Irated(mA)	Voltage(Vdc)	1	2	3	4
29.0	25.2	600	12-42	--	ON	ON	ON
31.0	27.3	650	12-42	ON	--	ON	ON
33.5	29.4	700	12-42	--	--	ON	ON
36.0	31.5	750	12-42	--	ON	--	ON
38.0	33.6	800	12-42	--	--	--	ON
40.5	35.7	850	12-42	ON	ON	ON	--
43.0	37.8	900	12-42	--	--	ON	--
45.0	39.9	950	12-42	--	ON	--	--
47.5	42.0	1000	12-42	ON	--	--	--
47.5	42.0	1050	12-40	--	--	--	--

For LED Modules use only
 BOKE Drivers Co., LTD.
 Address: 2nd and 3rd Floor, No.51, Xihuan 5th Road, South District, 528455 Zhongshan City, Guangdong, CHINA
 MADE IN CHINA

pushCCT: DA → ACN, DA → ACL
 pushDIM: PUSH → ACN, PUSH → ACL

Do not energize the driver before connecting the LED.

BOKE Dimmable Tunable White LED Driver(DT8)
MODEL: BK-DWL060-1500AD
 INPUT: 200-240V \approx 0/50/60Hz 0.36A Max. λ : 0.95
 OUTPUT: 12-42V \approx 1500mA 63W 50VDC Max.
 Other ratings see selection sheet
 For Australia and New Zealand, the marking label with

Switching selection sheet

Ta	Pin(W) typ.	Output			Switch			
		Prated(w)	Irated(mA)	Voltage(Vdc)	1	2	3	4
50°C	50.0	44.1	1050	12-42	--	ON	ON	ON
	52.0	46.2	1100	12-42	ON	--	ON	ON
	54.5	48.3	1150	12-42	--	--	ON	ON
	57.0	50.4	1200	12-42	--	ON	--	ON
	59.5	52.5	1250	12-42	--	--	--	ON
	61.5	54.6	1300	12-42	ON	ON	ON	--
	64.0	56.7	1350	12-42	--	--	ON	--
	66.5	58.8	1400	12-42	--	ON	--	--
	69.0	60.9	1450	12-42	ON	--	--	--
	70.5	63.0	1500	12-42	--	--	--	--

For LED Modules use only
 BOKE Drivers Co., LTD.
 Address: 2nd and 3rd Floor, No.51, Xihuan 5th Road, South District, 528455 Zhongshan City, Guangdong, CHINA
 MADE IN CHINA

pushCCT: DA → ACN, DA → ACL
 pushDIM: PUSH → ACN, PUSH → ACL

Do not energize the driver before connecting the LED.

BOKE Dimmable Tunable White LED Driver(DT8)
MODEL: BK-DWL060-2000AD
 INPUT: 200-240V \approx 0/50/60Hz 0.36A Max. λ : 0.95
 OUTPUT: 12-31V \approx 2000mA 62W 50VDC Max.
 Other ratings see selection sheet
 For Australia and New Zealand, the marking label with

Switching selection sheet

Ta	Pin(W) typ.	Output			Switch			
		Prated(w)	Irated(mA)	Voltage(Vdc)	1	2	3	4
50°C	73.0	65.1	1550	12-42	--	ON	ON	ON
	72.0	64.0	1600	12-40	ON	--	ON	ON
	74.5	66.0	1650	12-40	--	--	ON	ON
	73.0	64.6	1700	12-38	--	ON	--	ON
	71.0	63.0	1750	12-36	--	--	--	ON
	71.0	63.0	1800	12-35	ON	ON	ON	--
	71.0	62.9	1850	12-34	--	--	ON	--
	71.0	62.7	1900	12-33	--	ON	--	--
	71.0	62.4	1950	12-32	ON	--	--	--
	70.5	62.0	2000	12-31	--	--	--	--

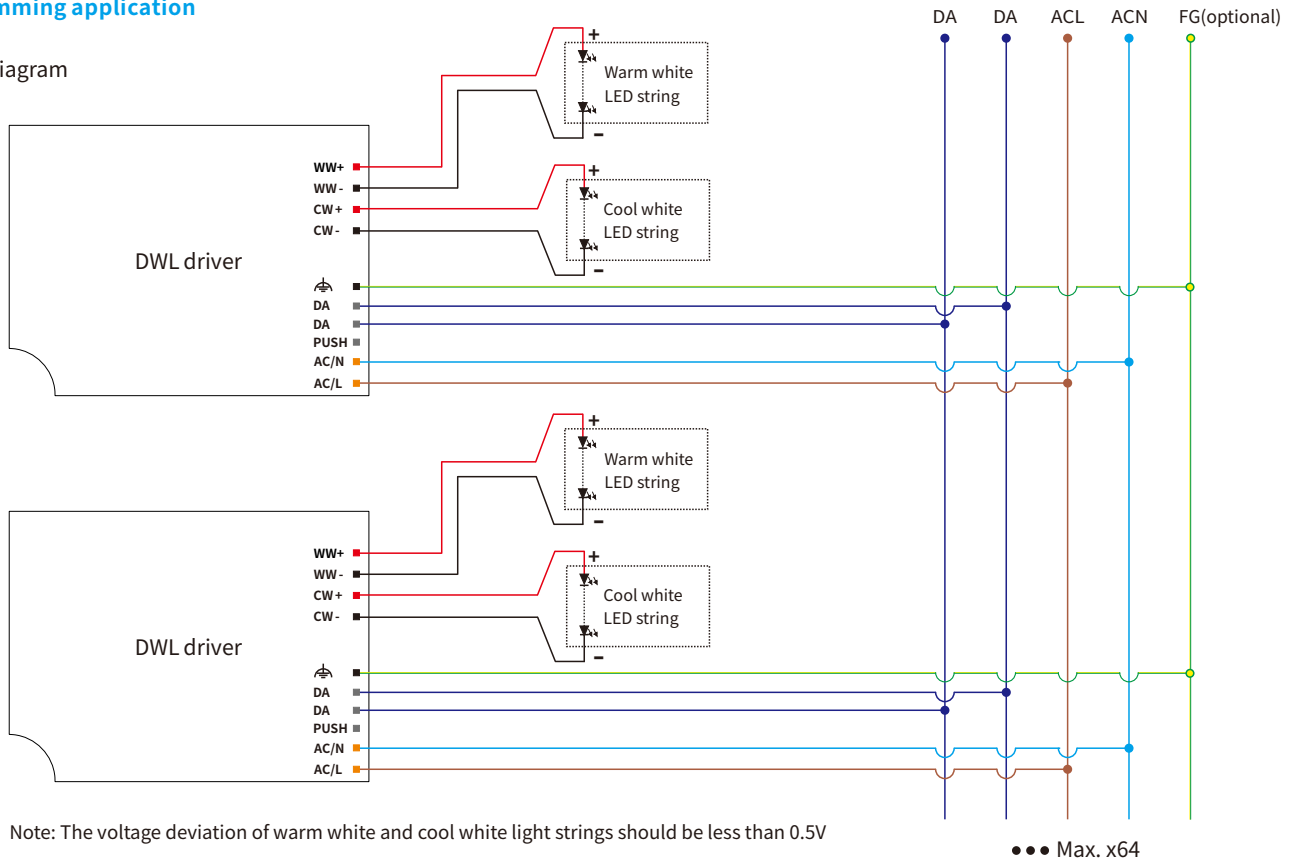
For LED Modules use only
 BOKE Drivers Co., LTD.
 Address: 2nd and 3rd Floor, No.51, Xihuan 5th Road, South District, 528455 Zhongshan City, Guangdong, CHINA
 MADE IN CHINA

pushCCT: DA → ACN, DA → ACL
 pushDIM: PUSH → ACN, PUSH → ACL

Do not energize the driver before connecting the LED.

DALI dimming application

Wiring diagram



Switch to the DALI dimming mode

- After installation according to the wiring diagram of DALI dimming application, the driver will automatically switch to the DALI control mode after receiving any DALI command.

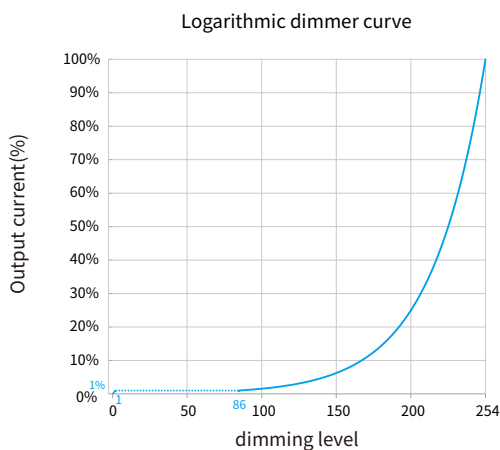
Remarks:

- Standard DALI control line voltage range: 9.5V to 22.5V, type 16V.
- The two DALI control lines polarity-reversible.
- Max. 64 DALI drivers per DALI control line.
- The maximum distance length of the DALI control line is 300m at 2×1.5mm².
- DALI bus can be wired together with any mains voltage cables, but separate wiring is recommended.

Wiring distance vs cable size

Cable size	Distance
2×0.50mm ²	max.100m
2×0.75mm ²	max.150m
2×1.00mm ²	max.200m
≥2×1.50mm ²	max.300m

Dimming curve

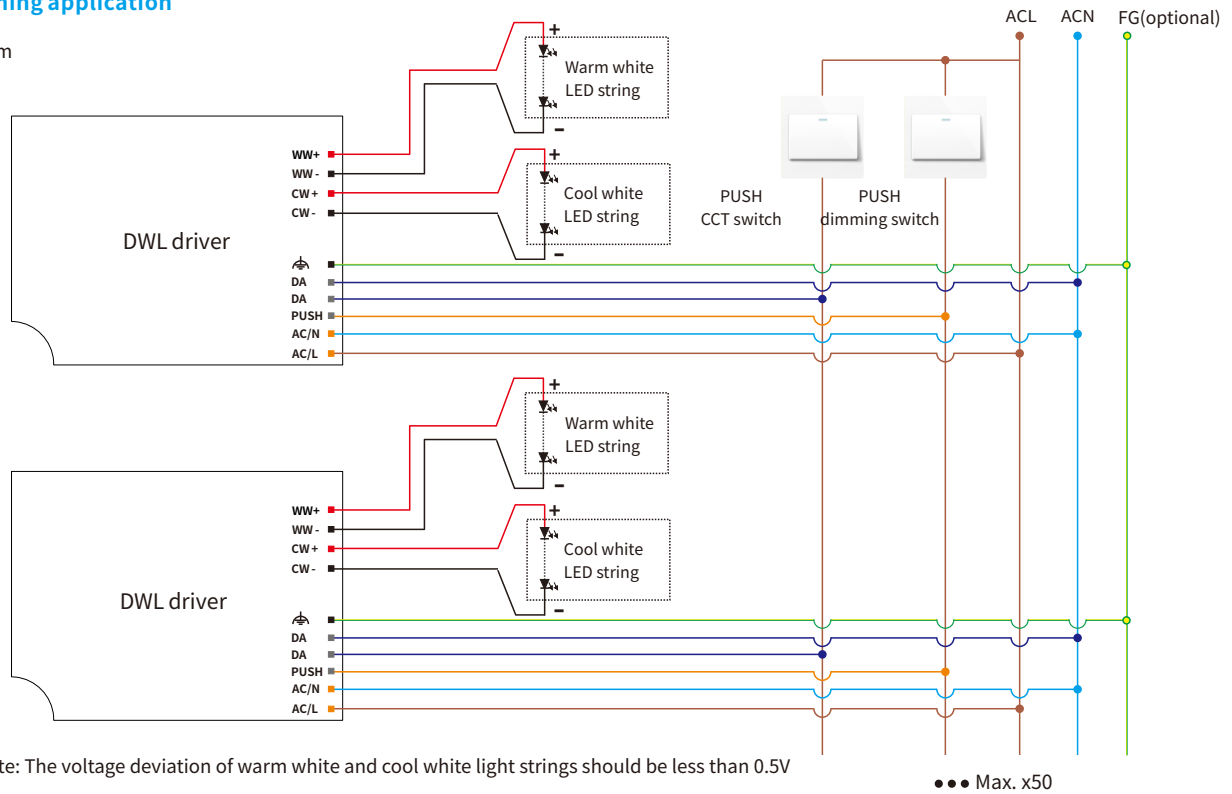


Remarks:

The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.

PUSH dimming application

Wiring diagram



Switch to the pushDIM control mode

- After installation according to the wiring diagram of pushDIM control application, short press the dimming pushbutton(pushDIM port) 5 times within 3 seconds, the driver will automatically switch to pushDIM control mode.
- After switch to the pushDIM, pushCCT control mode, corridorDIM mode will be automatically closed.

Number of mounted drivers

- Up to 50pcs drivers can be mounted.

Dimming pushbutton operating instructions

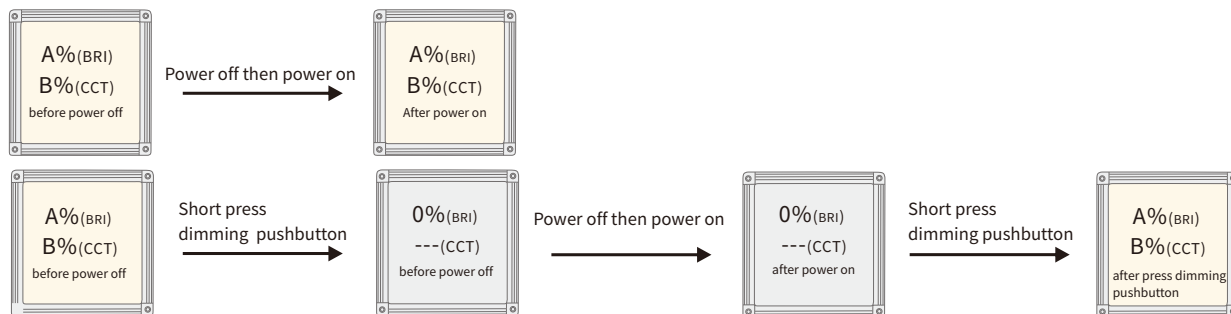
- Turn on or turn off: short press dimming pushbutton for 0.2-1s.
- Stepless dimming : long press dimming pushbutton for 1-6s, Press again to switch dimming directions.

CCT pushbutton operating instructions

- Switch CCT level: short press CCT pushbutton for 0.2-1s, 9 levels of preset CCT can be switched.
- Stepless CCT adjustment: long press CCT pushbutton for 1-6s, Press again to switch CCT adjustment directions.

Power on status:

- After power on, the light state will be the same as the last dimming level and the last CCT level.
- If the light is on before the power is turned off, after turning the power back on, the brightness will be the same as the last time, and the color temperature will be the same as the last time.
- If the light is off before the power is turned off, the light will be turned off after the power is turned back on. You need to press the dimming pushbutton for a short time to turn on the light. The brightness after lighting will be the same as the last time, and the color temperature will be the same as the last time.



Multiple lights synchronize control operation

method 1:

- Step 1: long press the dimming pushbutton, confirm each light is on.
- Step 2: short press the dimming pushbutton, confirm each light is off.
- Step 3: long press the dimming pushbutton, confirm each light is from darkest to brightest and all the lights are synchronous.

method 2:

- Long press the dimming pushbutton for more than 15s, all drivers will output 100% brightness and the color temperature is natural white (middle of color temperature range).

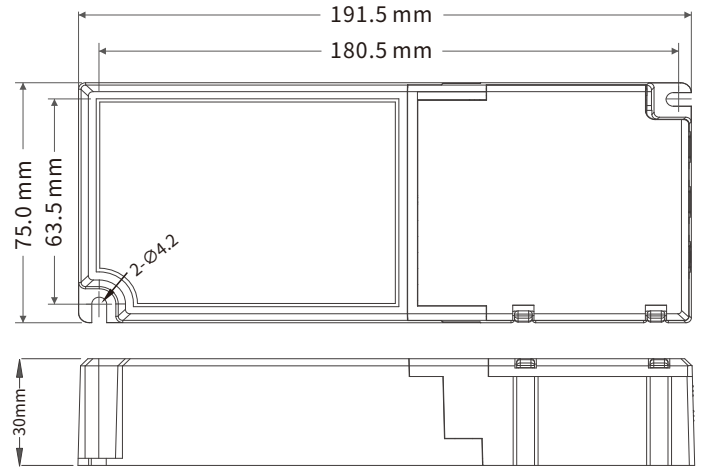
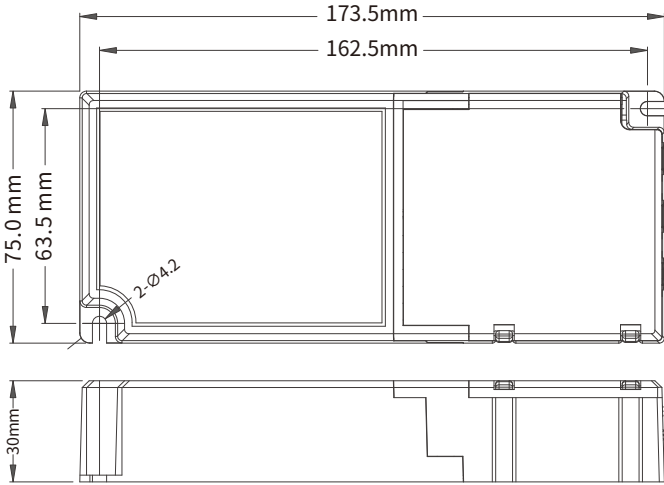
Installation

Mechanical dimensions

Unit:mm

DWL042

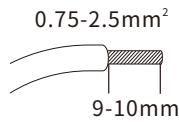
DWL060



INPUT

Numbering	function	colour
1	FG	black
2	DA	gray
3	DA	gray
4	PUSH	gray
5	ACN	Orange
6	ACL	Orange

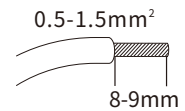
Input wire



OUTPUT

Numbering	function	colour
1	WW+	red
2	WW-	black
3	CW+	red
4	CW-	black

Output wire



Installation note

Hot plug-in

- Hot plug-in is not supported due to residual output voltage of > 0 V.
- If a LED load is connected the device has to be restarted.
- Restart can be achieved by re-powering the driver or executing a on/off command (action) through the control interface (DALI,pushDIM,pushCCT).

Wiring guidelines

- All connections must be kept as short as possible to ensure good EMI behaviour.
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Max. length of output wires is 2 m.
- Incorrect wiring can damage LED modules.

Installation requirements

- The driver should be installed in a dry, acid-free, oil-free, fat-free environment.
- The installation ambient temperature of the drive shall not exceed the value of Ta at any time.
- The driver should keep a certain distance from the heating stuff (such as the luminaire radiator).
- If the driver is used externally (it needs to be used with the accessories), the installation of the driver should also meet the following conditions:
 - 1.The driver should be a certain distance between the drivers, as shown in Figure 1.
 - 2.The driver keeps a certain distance from surrounding objects, as shown in Figure 2.

Mounting screw specifications and torque

- Max. torque at the clamping screw: 0.5 Nm / M4

LED module

- The voltage deviation of warm white and cool white light strings should be less than 0.5V

Replace LED module

1. Mains off
2. Remove LED module
3. Wait for 5 seconds
4. Connect LED module again

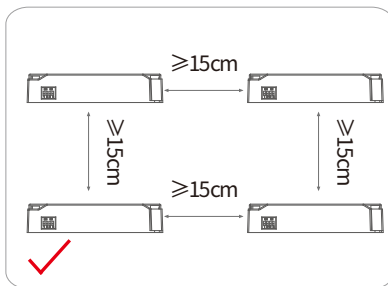
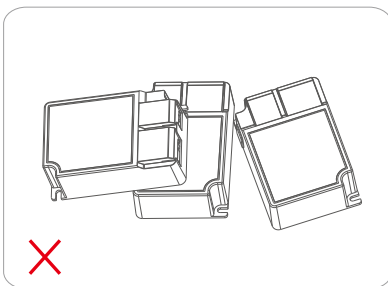


Figure 1

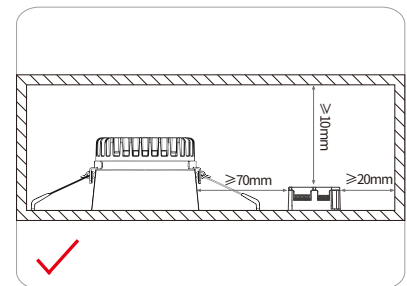
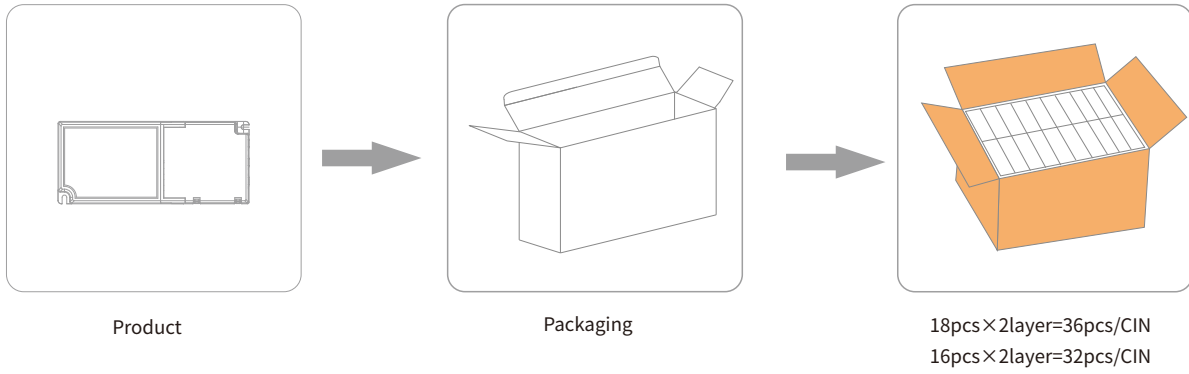


Figure 2

Packaging



Model	Product size	Weight	Packaging size	Carton size	Qty/carton	N.W	G.W
DWL042	L173*W75*H30mm	225g	L185*W38*H80mm	L390*W365*H180mm	36pcs	8.10kg	10.0kg
DWL060	L191.5*W75*H30mm	255g	L225*W38*H82mm	L465*W325*H185mm	32pcs	8.20kg	10.2kg

Additional information

1. This product can only be used outside the light body, Can not be used inside of the light, and it must be used within the specified working environment.
2. The life and MTBF of the product are for reference only, and do not represent a warranty statement.
3. For more information, please send an email to info@bokedriver.com.