

Constant voltage linear dimmable driver
DGV Series suffix D(DALI-2+pushDIM+1-10V/10V PWM/Rx+12V)



Features

- Support DALI-2/pushDIM+1-10V/10V PWM/Rx dimming +12V auxiliary power
- Provide 12V 100mA auxiliary power supply to power control module or sensor
- Soft dimming and flicker-free at any brightness
- Dimming range 1~100%,support multiple lights dimming
- Standby power input<0.5W, meets the requirements of ErP certification
- High PF, high efficiency, low THD
- SELV and Class I design, suitable for use inside of the light
- Passed CE, ENEC, UKCA, RCM, DALI-2 and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h
- 5-year guarantee

Interfaces

- DALI-2(DALI-2 DT6)
- PUSH(pushDIM)
- 1-10V 3in1(1-10V / 10V PWM/Rx)
- VCC Auxiliary power(12V,100mA)

Functions

- Support self-contained emergency application
- Protective features (short-circuit, overload,no-load protection)

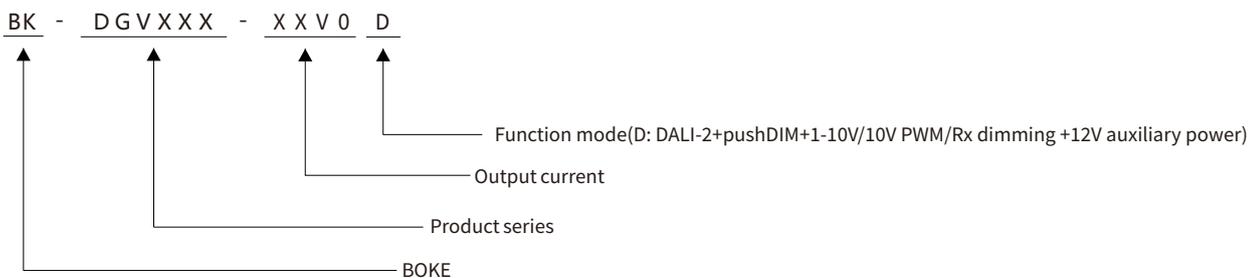
Suitable for lights

- Suitable for CV strip lights, CV linear lights, floor lights, three-proof lights, etc

Typical applications

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

Model coding rules of DGV series



Function list

Model	Suffix	Wired dimming			Aux power
		DALI-2	pushDIM	1-10V 3in1	12V/0.1A
BK-DGV036 BK-DGV060 BK-DGV100 BK-DGV150	D	√	√	√	√

* The description in this specification is only applicable to the products with the suffix D and the model are DGV036,DGV060,DGV100 and DGV150 .

Model list

Model	Input voltage	Output power	Output voltage	Output current	Dimension	Certifications
BK-DGV036-24V0D	200-240VAC	36W	24VDC	1.5A	L245*W30*H21mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV036-48V0D	200-240VAC	36W	48VDC	0.75A	L245*W30*H21mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV060-24V0D	200-240VAC	60W	24VDC	2.5A	L285*W30*H21mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV060-48V0D	200-240VAC	60W	48VDC	1.2A	L285*W30*H21mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV100-24V0D	200-240VAC	100W	24VDC	4.0A	L355*W30*H21mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV100-48V0D	200-240VAC	100W	48VDC	2.0A	L355*W30*H21mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV150-24V0D	200-240VAC	150W	24VDC	6.0A	L355*W36*H23mm	CE, ENEC, UKCA, RCM, DALI-2
BK-DGV150-48V0D	200-240VAC	150W	48VDC	3.0A	L355*W36*H23mm	CE, ENEC, UKCA, RCM, DALI -2

* The description in this specification is only applicable to the products with the suffix D and the model are DGV036,DGV060,DGV100 and DGV150 .

Technical data

Product model	BK-DGV036-24V0D	BK-DGV036-48V0D	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	1.5A	0.75A	
Rated output voltage	24V	48V	
Rated output power	36W Max	36W Max	
Output voltage adjustment	N/A	N/A	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±1%	±1%	
Load regulation	±5%	±5%	
No load output voltage	N/A	N/A	
Flicker-free	Flicker-free(High frequency exemption level)		
Input parameters			
Rated input voltage	200-240VAC		
Rated input voltage	180-264VAC		
Input voltage shock	<380 V AC, 1 h		
Input current	<0.25A (AC 200V)		
Input frequency	0/50/60Hz		
Input power factor	0.95 (230V AC & Full load)		
Input THD	12% (230V AC & Full load)		
Efficiency(typical)	88% (230V AC & Full load)		
In-rush current	16.24A peak ,260us duration(50% Ipeak), see the description below for details		
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)		
Switching cycles	> 50,000 switching cycles		
Power consumption	Full load(Pmax):36W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC,I/P-DALI: 1500VAC,O/P-DALI: 1500VAC		
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV(Performance criterion:A)		
Leakage current	<0.7mA (230V AC & Full load)		
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH		
Control interface			
DALI dimming port	Voltage range: DC9.5-22.5V, typical 16V, interface current consumption: 1.8mA		
pushDIM dimming port	Voltage range: AC180-264V 50/60Hz		
1-10V 3in1 dimming port	Voltage range: DC0-15V, interface current consumption: <1mA		
Auxiliary power supply	DC12V ±5% 100mA		
Dimming range	1-100%		
Dimming drive mode	H-PWM		
Emergency support			
Central emergency system	Not supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-20-60°C		
Case temperature	Tc=90°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not condensing		
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, Full load)		
Environmental protection	RoHS		
Certifications and standards			
Certified	CE, ENEC, UKCA, RCM, 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)		
EL	N/A		
RF	N/A		

Remarks

1.By default, all parameter are measured at 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-DGV060-24V0D	BK-DGV060-48V0D	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	2.5A	1.2A	
Rated output voltage	24V	48V	
Rated output power	60W Max	57.6W Max	
Output voltage adjustment	N/A	N/A	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±5%	±5%	
Load regulation	±5%	±5%	
No load output voltage	N/A	N/A	
Flicker-free	Flicker-free(High frequency exemption level)		
Input parameters			
Rated input voltage	200-240VAC		
Rated input voltage	180-264VAC		
Input voltage shock	<380 V AC, 1 h		
Input current	<0.35A (AC 200V)		
Input frequency	0/50/60Hz		
Input power factor	0.95 (230V AC & Full load)		
Input THD	10% (230V AC & Full load)		
Efficiency(typical)	90% (230V AC & Full load)		
In-rush current	34A peak ,260us duration(50 % Ipeak), see the description below for details		
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)		
Switching cycles	> 50,000 switching cycles		
Power consumption	Full load(Pmax):60W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC,I/P-DALI: 1500VAC,O/P-DALI: 1500VAC		
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV		
Leakage current	<0.7mA (230V AC & Full load)		
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH		
Control interface			
DALI dimming port	Voltage range: DC9.5-22.5V, typical 16V, interface current consumption: 1.8mA		
pushDIM dimming port	Voltage range: AC180-264V 50/60Hz		
1-10V 3in1 dimming port	Voltage range: DC0-15V, interface current consumption: <1mA		
Auxiliary power supply	DC12V ±5% 100mA		
Dimming range	1-100%		
Dimming drive mode	H-PWM		
Emergency support			
Central emergency system	Not supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-20-60°C		
Case temperature	Tc=90°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not condensing		
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, Full load)		
Environmental protection	RoHS		
Certifications and standards			
Certified	CE, ENEC, UKCA, RCM, 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)		
EL	N/A		
RF	N/A		

Remarks

1.By default, all parameter are measured at 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-DGV100-24V0D	BK-DGV100-48V0D	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	4A	2A	
Rated output voltage	24V	48V	
Rated output power	96W Max	96W Max	
Output voltage adjustment	N/A	N/A	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±5%	±5%	
Load regulation	±5%	±5%	
No load output voltage	N/A	N/A	
Flicker-free	Flicker-free(High frequency exemption level)		
Input parameters			
Rated input voltage	200-240VAC		
Rated input voltage	180-264VAC		
Input voltage shock	<380 V AC, 1 h		
Input current	<0.7A (AC 200V)		
Input frequency	0/50/60Hz		
Input power factor	0.95 (230V AC & Full load)		
Input THD	10% (230V AC & Full load)		
Efficiency(typical)	91% (230V AC & Full load)		
In-rush current	46.38A peak ,278us duration(50 % Ipeak), see the description below for details		
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)		
Switching cycles	> 50,000 switching cycles		
Power consumption	Full load(Pmax):96W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC,I/P-DALI: 1500VAC,O/P-DALI: 1500VAC		
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV		
Leakage current	<0.7mA (230V AC & Full load)		
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH		
Control interface			
DALI dimming port	Voltage range: DC9.5-22.5V, typical 16V, interface current consumption: 1.8mA		
pushDIM dimming port	Voltage range: AC180-264V 50/60Hz		
1-10V 3in1 dimming port	Voltage range: DC0-15V, interface current consumption: <1mA		
Auxiliary power supply	DC12V ±5% 100mA		
Dimming range	1-100%		
Dimming drive mode	H-PWM		
Emergency support			
Central emergency system	Not supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-20-60°C		
Case temperature	Tc=95°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not condensing		
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, Full load)		
Environmental protection	RoHS		
Certifications and standards			
Certified	CE, ENEC, UKCA, RCM, 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)		
EL	N/A		
RF	N/A		

Remarks

1.By default, all parameter are measured at 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-DGV150-24V0D	BK-DGV150-48V0D	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	6A	3A	
Rated output voltage	24V	48V	
Rated output power	144W Max	144W Max	
Output voltage adjustment	N/A	N/A	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±5%	±5%	
Load regulation	±5%	±5%	
No load output voltage	N/A	N/A	
Flicker-free	Flicker-free(High frequency exemption level)		
Input parameters			
Rated input voltage	200-240VAC		
Rated input voltage	180-264VAC		
Input voltage shock	<380 V AC, 1 h		
Input current	<1A (AC 200V)		
Input frequency	0/50/60Hz		
Input power factor	0.95 (230V AC & Full load)		
Input THD	10% (230V AC & Full load)		
Efficiency(typical)	92% (230V AC & Full load)		
In-rush current	50A peak, 468us duration(50 % Ipeak), see the description below for details		
Start/Switchover/Turn off	<0.6s(AC start), <0.6s(DC start), <0.3s(AC/DC switchover), <0.5s(Turn off)		
Switching cycles	> 50,000 switching cycles		
Power consumption	Full load(Pmax):144W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC,I/P-DALI: 1500VAC,O/P-DALI: 1500VAC		
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV		
Leakage current	<0.7mA (230V AC & Full load)		
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH		
Control interface			
DALI dimming port	Voltage range: DC9.5-22.5V, typical 16V, interface current consumption: 1.8mA		
pushDIM dimming port	Voltage range: AC180-264V 50/60Hz		
1-10V 3in1 dimming port	Voltage range: DC0-15V, interface current consumption: <1mA		
Auxiliary power supply	DC12V ±5% 100mA		
Dimming range	1-100%		
Dimming drive mode	H-PWM		
Emergency support			
Central emergency system	Not supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-20-60°C		
Case temperature	Tc=90°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not condensing		
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, Full load)		
Environmental protection	RoHS		
Certifications and standards			
Certified	CE, ENEC, UKCA, RCM, 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)		
EL	N/A		
RF	N/A		

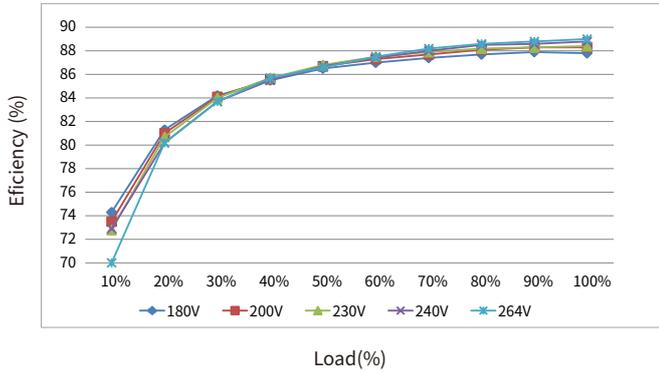
Remarks

1.By default, all parameter are measured at 230VAC input, full load and 25°C of ambient temperature.

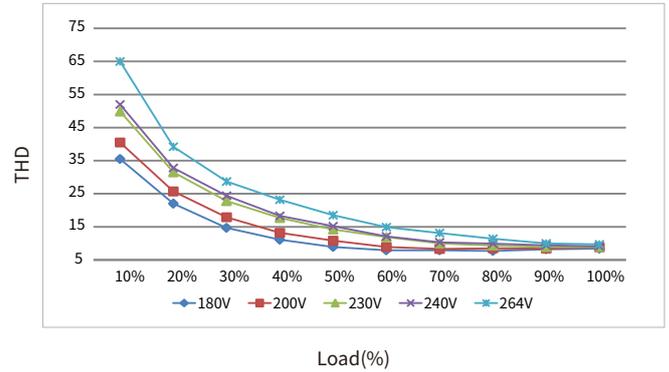
Electrical values and expected life-time

BK-DGV036-24V0D

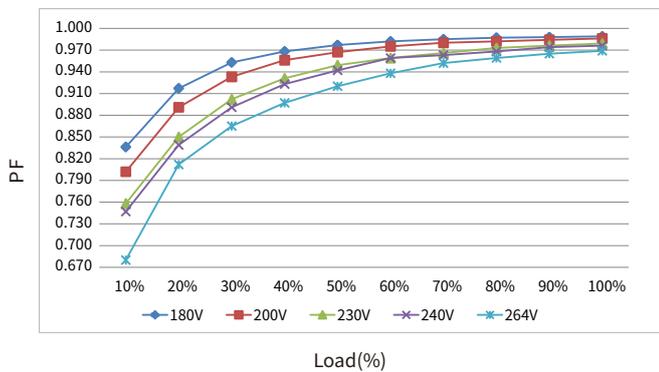
Efficiency vs load



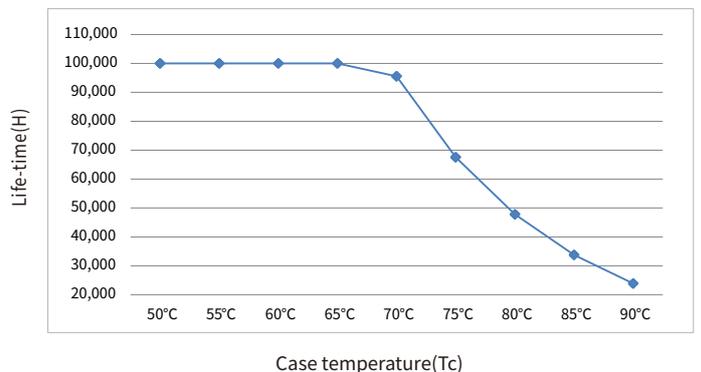
THD vs. Load



Power factor vs. Load



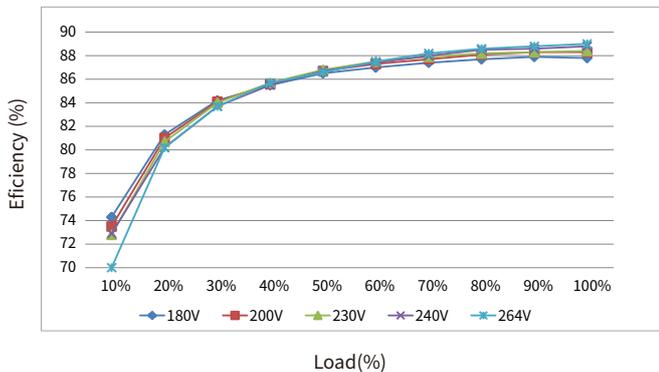
Life-time vs. case temperature



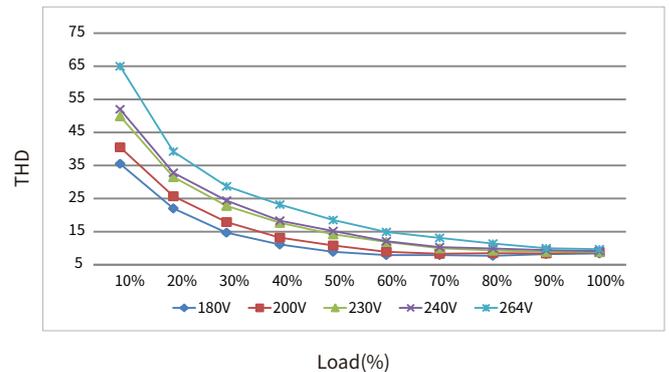
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

BK-DGV036-48V0D

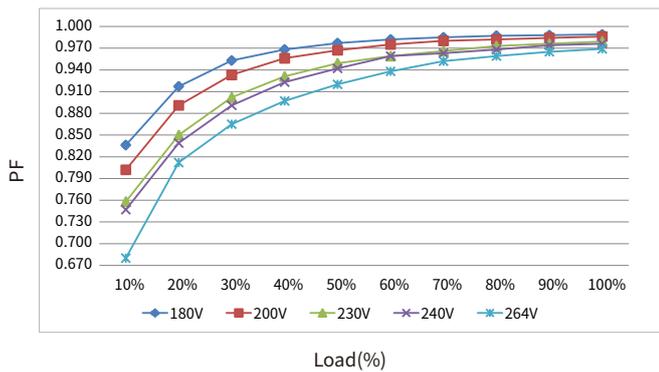
Efficiency vs load



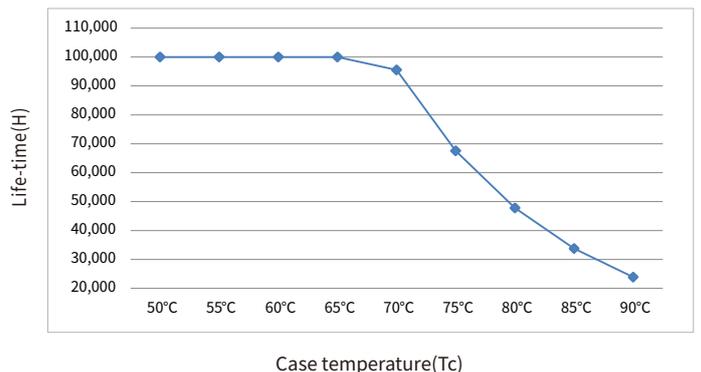
THD vs. Load



Power factor vs. Load



Life-time vs. case temperature

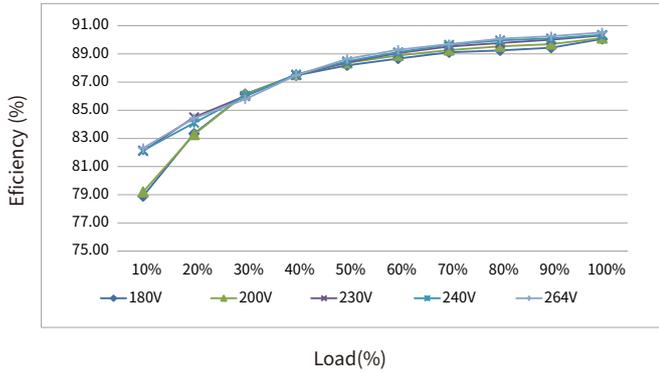


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 - The relation of tc to ta temperature depends also on the luminaire design.

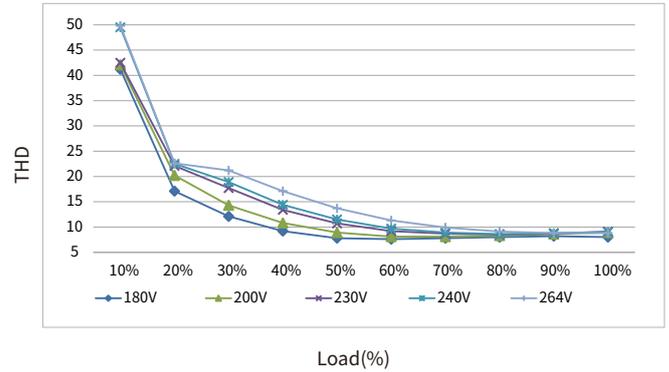
Electrical values and expected life-time

BK-DGV060-24V0D

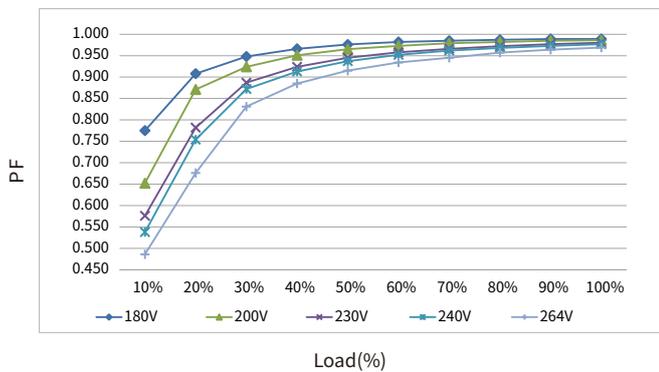
Efficiency vs load



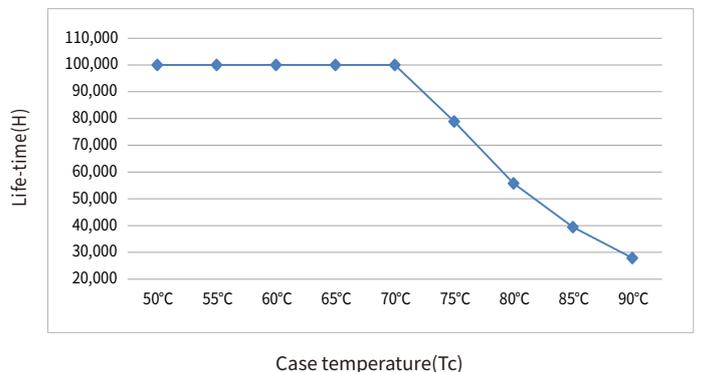
THD vs. Load



Power factor vs. Load



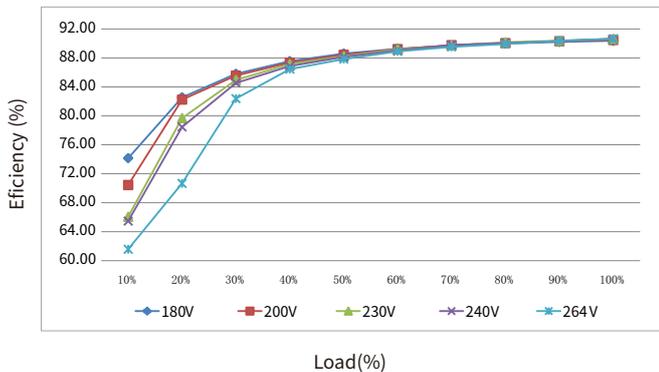
Life-time vs. case temperature



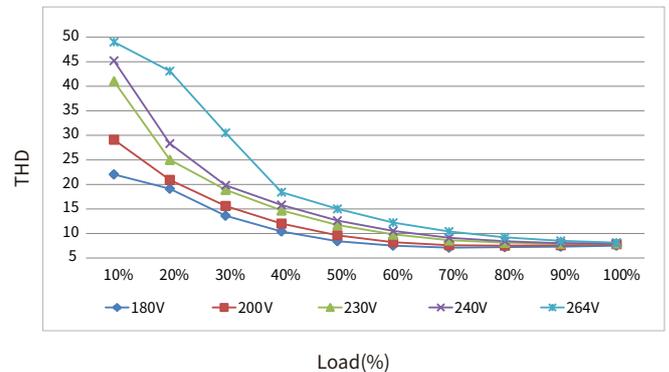
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

BK-DGV060-48V0D

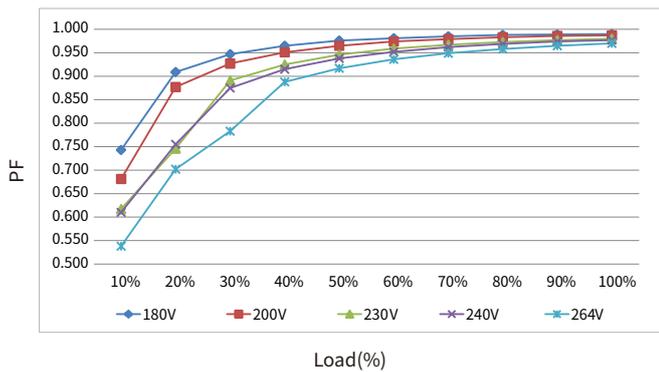
Efficiency vs load



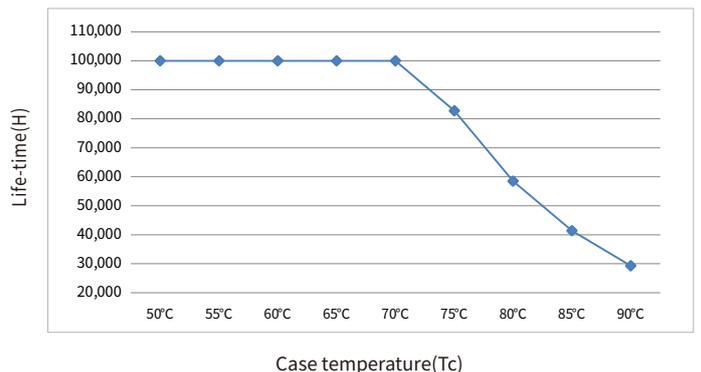
THD vs. Load



Power factor vs. Load



Life-time vs. case temperature

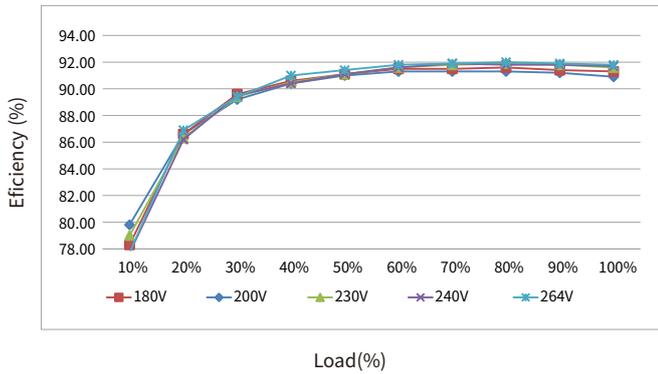


-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

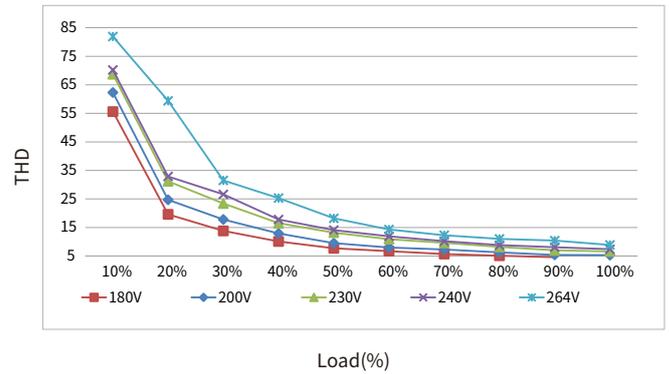
Electrical values and expected life-time

BK-DGV100-24V0D

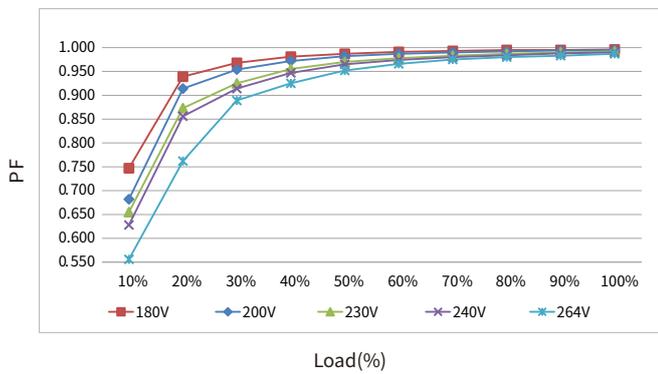
Efficiency vs load



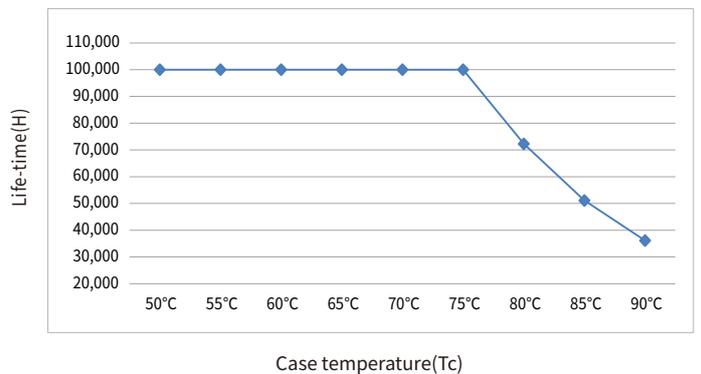
THD vs. Load



Power factor vs. Load



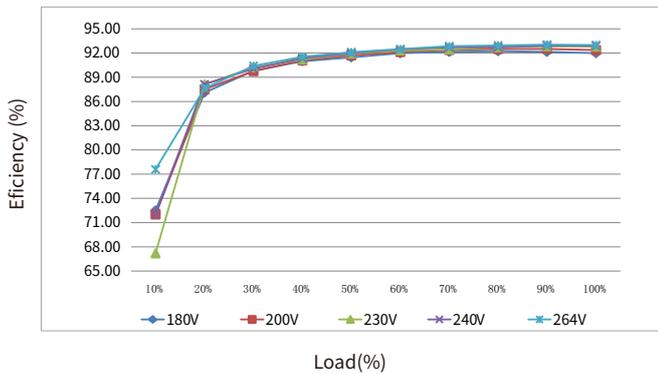
Life-time vs. case temperature



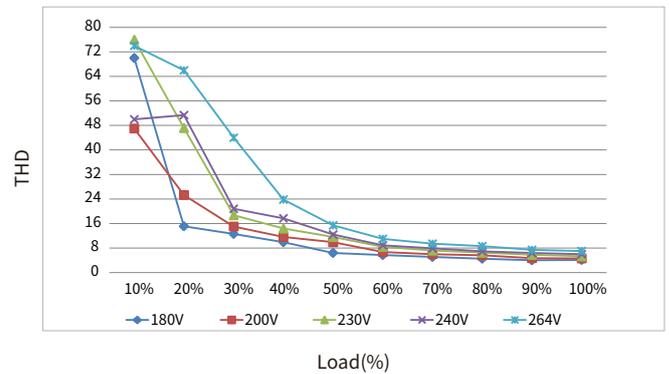
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

BK-DGV100-48V0D

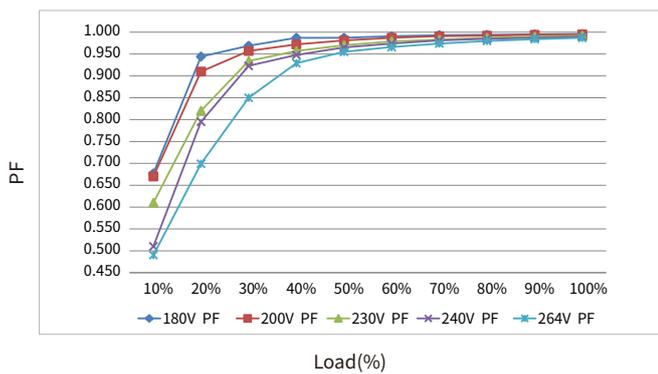
Efficiency vs load



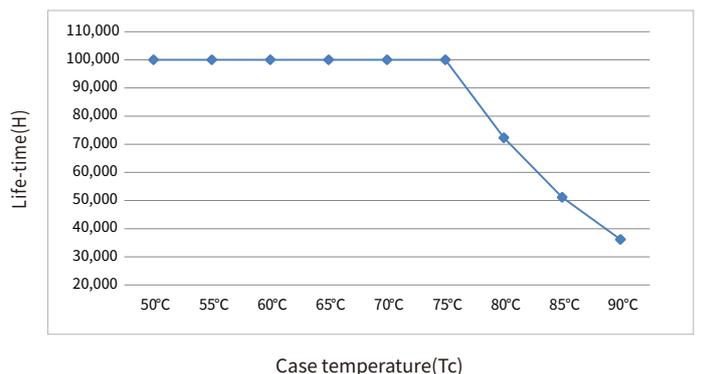
THD vs. Load



Power factor vs. Load



Life-time vs. case temperature

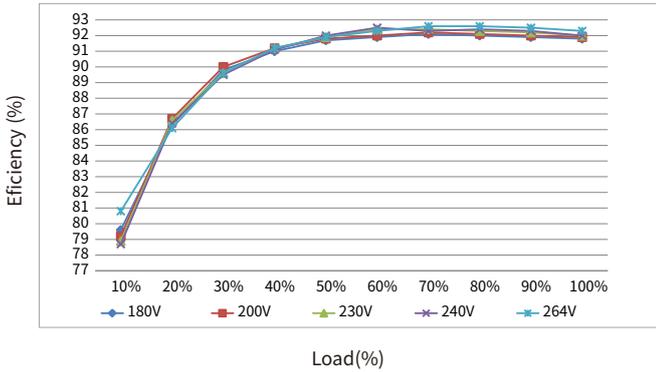


-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

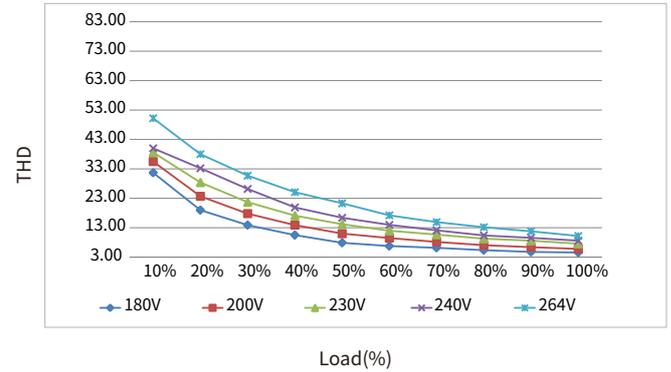
Electrical values and expected life-time

BK-DGV150-24V0D

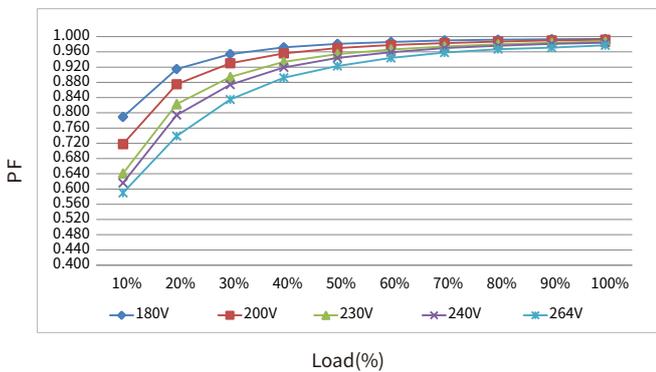
Efficiency vs load



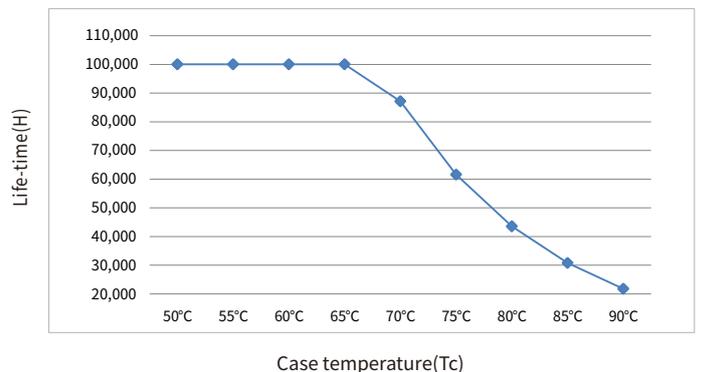
THD vs. Load



Power factor vs. Load



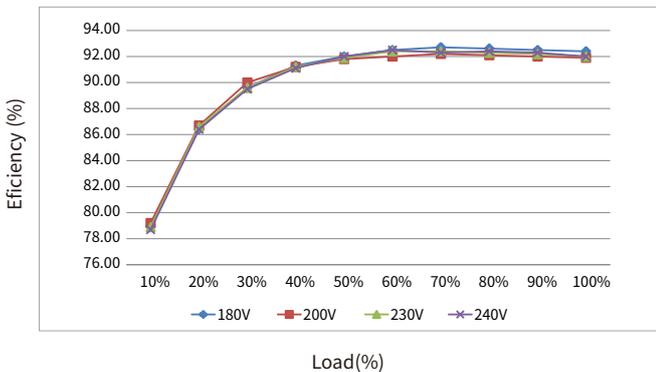
Life-time vs. case temperature



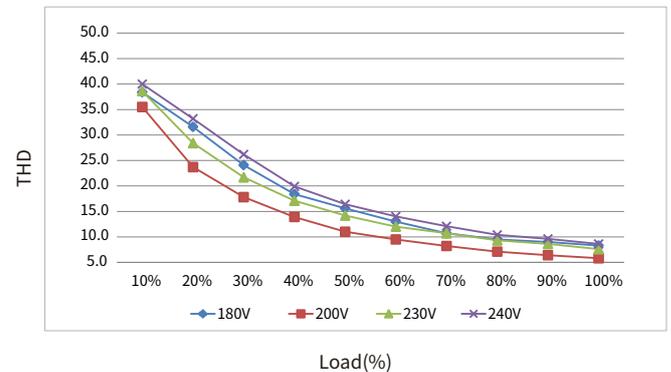
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).
 - The relation of tc to ta temperature depends also on the luminaire design.

BK-DGV150-48V0D

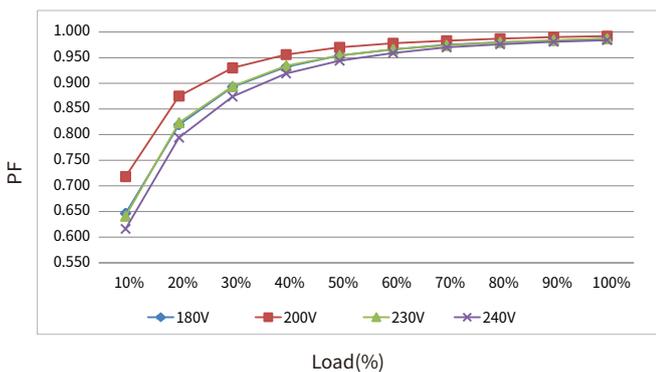
Efficiency vs load



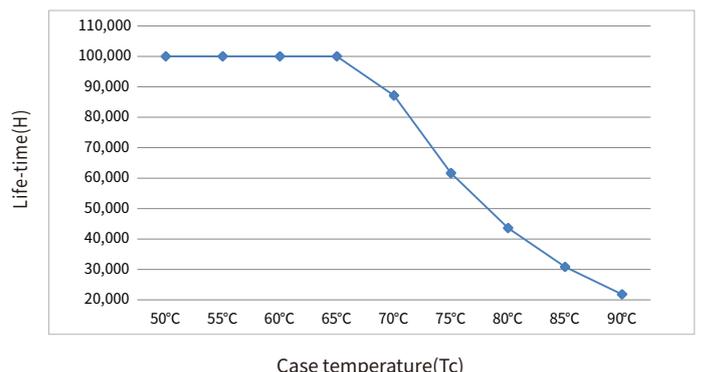
THD vs. Load



Power factor vs. Load



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.

Label

DGV100

INPUT <input type="radio"/> ACL <input type="radio"/> ACN <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA		BOKE Dimmable Constant Voltage LED Driver MODEL: BK-DGV100-24V0D INPUT: 200-240V ~ 0.8A Max. 50/60Hz Pin: 109W(typ.) λ: 0.95 OUTPUT: 24V 4A 96W Max. For LED modules use only www.bokedriver.com MADE IN CHINA	t _c : 95°C t _a : 60°C		OUTPUT <input type="radio"/> V+ <input type="radio"/> V- <input type="radio"/> VCC <input type="radio"/> GND <input type="radio"/> DIM

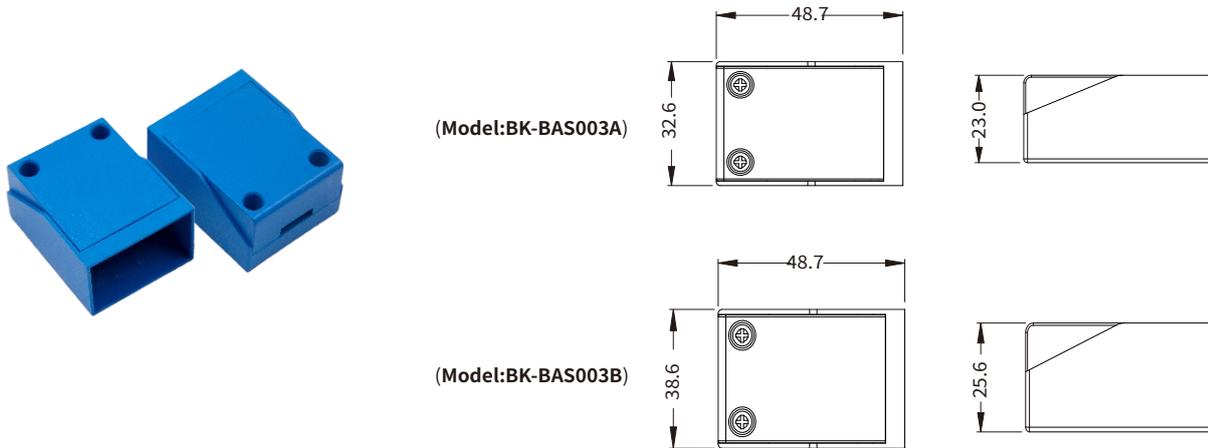
INPUT <input type="radio"/> ACL <input type="radio"/> ACN <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA		BOKE Dimmable Constant Voltage LED Driver MODEL: BK-DGV100-48V0D INPUT: 200-240V ~ 0.65A Max. 50/60Hz Pin: 109W(typ.) λ: 0.95 OUTPUT: 48V 2A 96W Max. For LED modules use only www.bokedriver.com MADE IN CHINA	t _c : 95°C t _a : 60°C		OUTPUT <input type="radio"/> V+ <input type="radio"/> V- <input type="radio"/> VCC <input type="radio"/> GND <input type="radio"/> DIM

DGV150

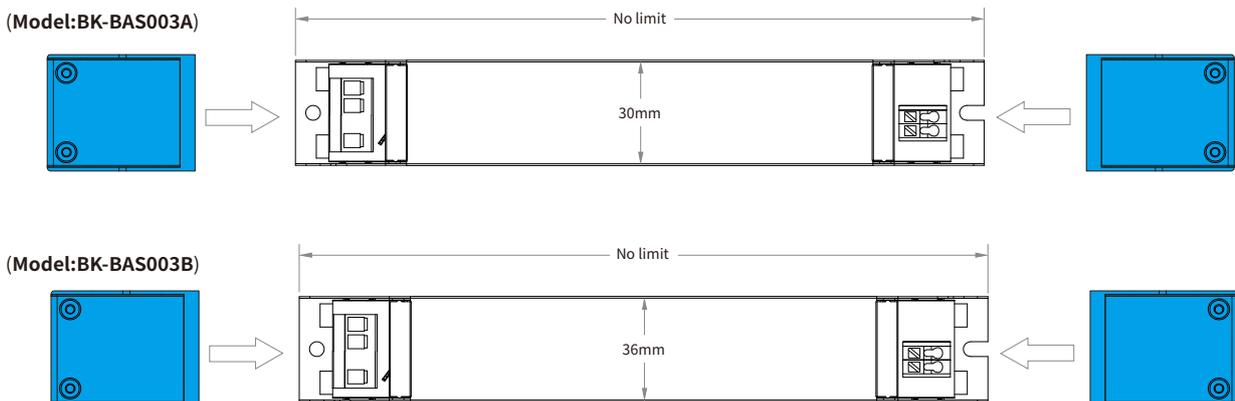
INPUT <input type="radio"/> ACL <input type="radio"/> ACN <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA		BOKE Dimmable Constant Voltage LED Driver MODEL: BK-DGV150-24V0D INPUT: 200-240V ~ 1A Max. 50/60Hz Pin: 166W(typ.) λ: 0.95 • t _c OUTPUT: 24V 6A 144W Max. For LED modules use only www.bokedriver.com MADE IN CHINA	t _c : 90°C t _a : 60°C		OUTPUT <input type="radio"/> V+ <input type="radio"/> V- <input type="radio"/> VCC <input type="radio"/> GND <input type="radio"/> DIM

INPUT <input type="radio"/> ACL <input type="radio"/> ACN <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA <input type="radio"/> DA		BOKE Dimmable Constant Voltage LED Driver MODEL: BK-DGV150-48V0D INPUT: 200-240V ~ 1A Max. 50/60Hz Pin: 166W(typ.) λ: 0.95 • t _c OUTPUT: 48V 3A 144W Max. For LED modules use only www.bokedriver.com MADE IN CHINA	t _c : 90°C t _a : 60°C		OUTPUT <input type="radio"/> V+ <input type="radio"/> V- <input type="radio"/> VCC <input type="radio"/> GND <input type="radio"/> DIM

Optional accessories



Installation diagram of accessories



DALI dimming application

Wiring diagram



Activating 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.
- The configuration parameters of the driver can be set through the DALI configuration tool or DALI application controller during installation, such as setting device address, group address, power-on level, bus-failure level, scene level, fade time, dimming curve, etc.

Please refer to the table below

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

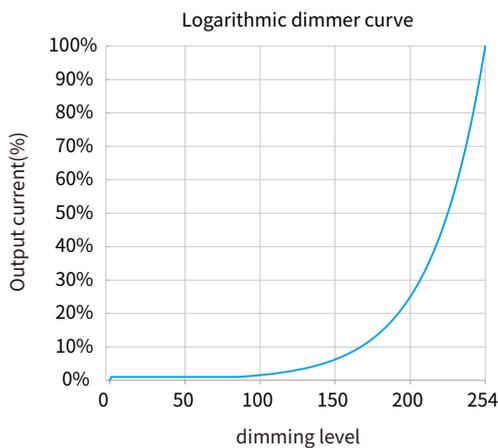
Power-on level :

When the driver is in DALI-2 dimming mode, the factory default level after each power-on is the brightest.

The power-on level can be set through the DALI configuration tool or DALI application controller during installation, and can be set to memory or fixed any brightness (such as off, darkest, 50%, etc.).

Note: The recommended setting for the default factory power-on level of the DALI-2 driver is the brightest in the DALI-2 standard.

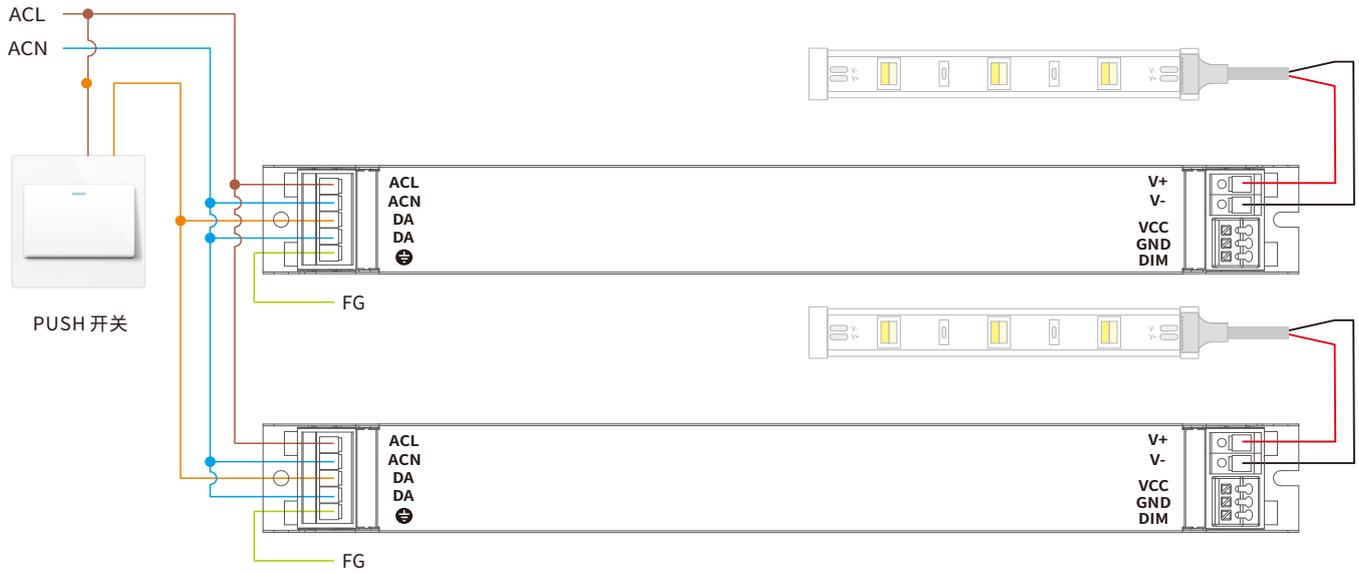
Dimming curve



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

pushDIM dimming application

Wiring diagram



Activating pushDIM dimming mode

After installation according to the wiring diagram of pushDIM dimming application, long press the pushbutton 3 times ,then the driver will automatically switch to pushDIM dimming mode.

Remarks:

Max. 50 drivers per pushDIM control line.

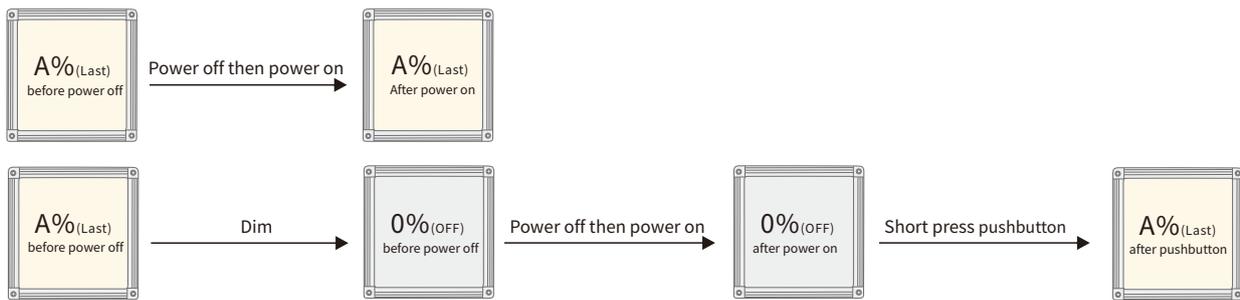
Turn on or turn off:short press pushbutton for 0.2-1s.

Dimming: long press pushbutton for 1-5s.

Power on status: after power on,the light state will be the same as the lighting on state.

If the light is on before power on,the light will be on after power on again,brightness will be the same as the last lighting on brightness.

If the light is off before power off,the light will be off after power on again,short press the pushbutton,then the light will be on,the brightness will be the same as the last brightness.



Multiple lights synchronize control operation

method 1:

Step 1:long press the pushbutton,confirm each light is on.

Step 2:short press the pushbutton,confirm each light is off.

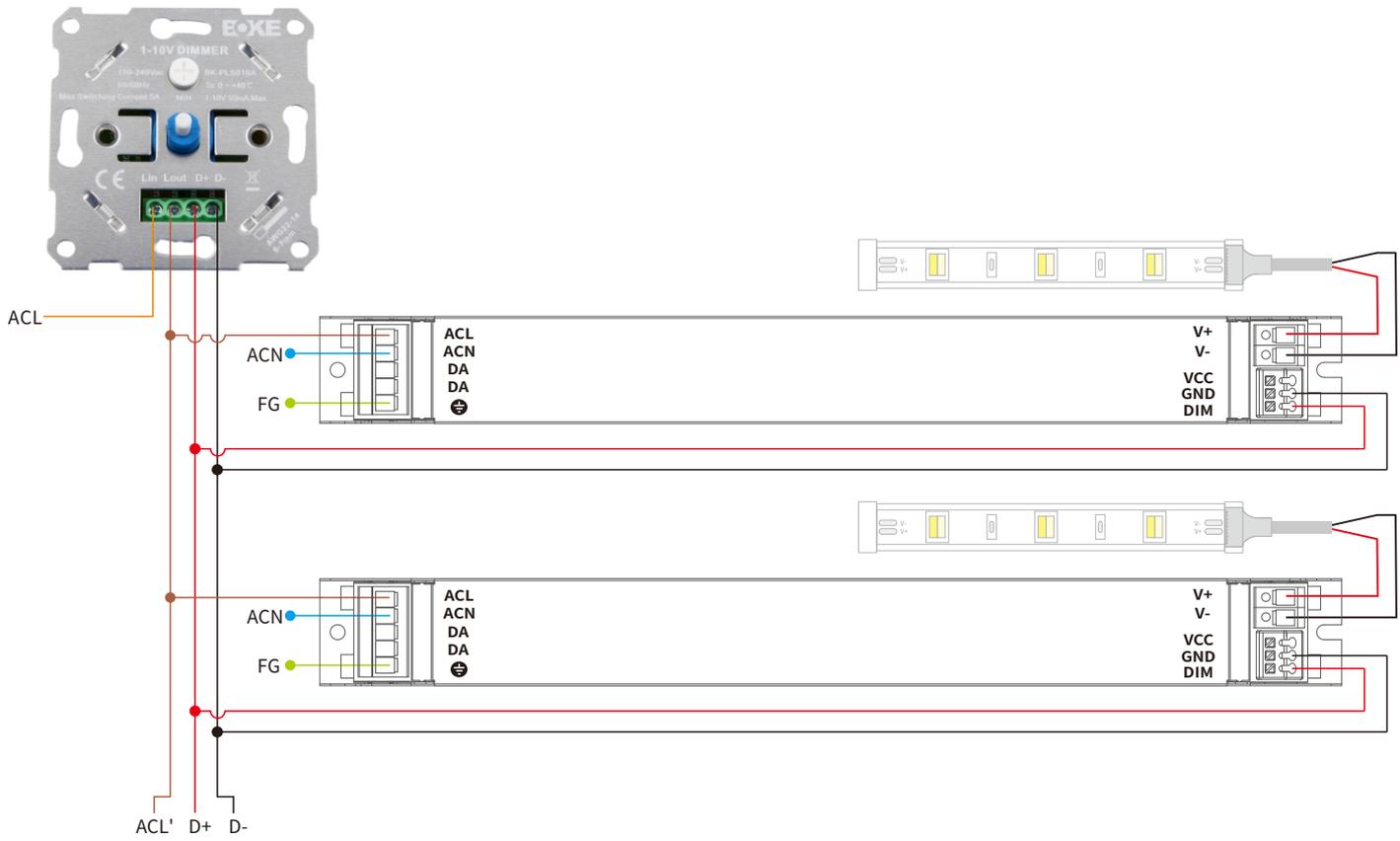
Step 3:long press the pushbutton,confirm each light is from darkest to brightest and all the lights are synchronous.

method 2:

- Long press the pushbutton 15s,all lights output to the brightest state.

1-10V/10V PWM dimming application

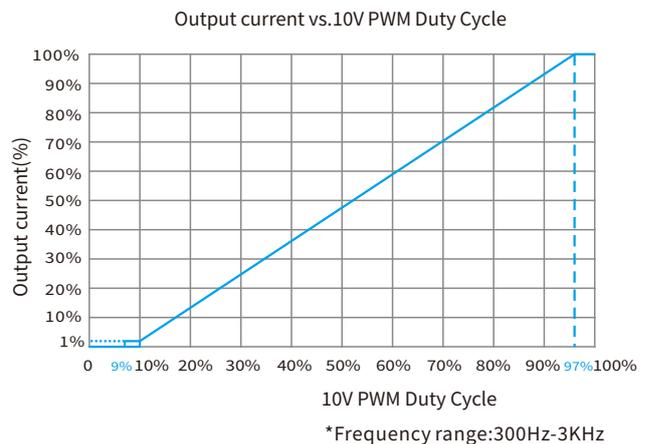
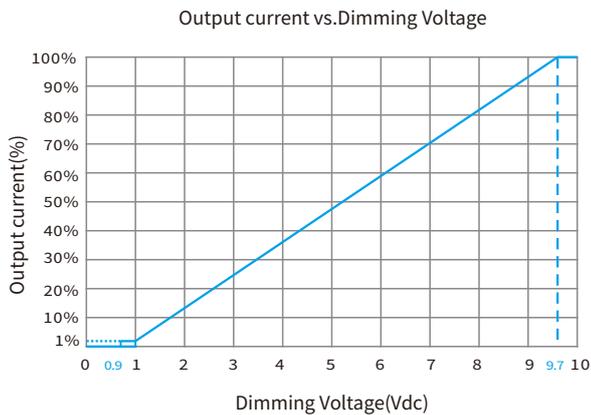
Wiring diagram



Remarks

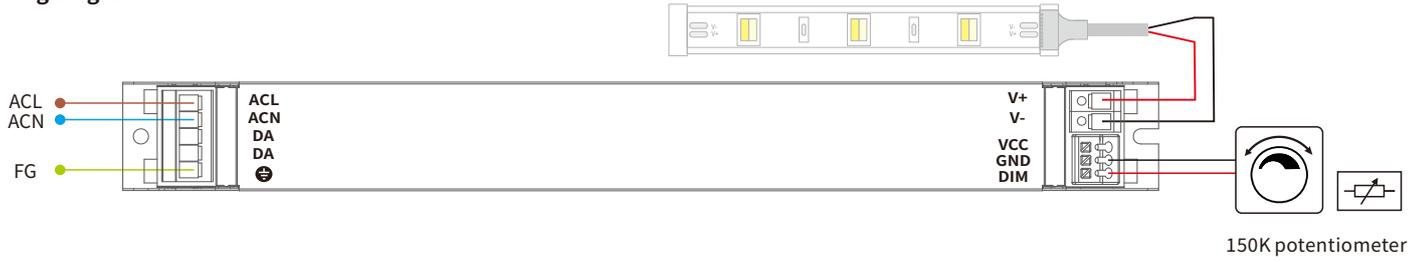
- Dimming interface characteristics: 0.9V and below are closed, 1V is the darkest, 10V is the brightest, 1-10V is the dimming range.
- The dimming interface distinguishes between positive and negative, DIM+ is positive, DIM- is negative, please do not reverse.
- Dimming interface does not support voltage access higher than 15V, otherwise it will cause damage to the internal components.
- When the dimming interface is open, the driver outputs the maximum current. When the interface is short-circuited, the current output is closed.
- When multiple synchronous dimming is required, the positive poles of the dimming interface of each driver are connected together, and the negative poles are connected together.
- Support passive dimmer or isolated active dimmer dimming, does not support non-isolated active dimmer dimming.
- In general, it is recommended that the number of mounted drives does not exceed 30pcs, and the wiring length does not exceed 100m.
- It is recommended that the dimming wires should not be lower than the 22AWG wire.
- Do not put the dimming wires with high voltage or interference sources. If it is unavoidable, please use the shielded wires.
- If you need a drive with 0-10V dimming characteristics, please contact BOKE.

Dimming curve



150K potentiometer dimming application

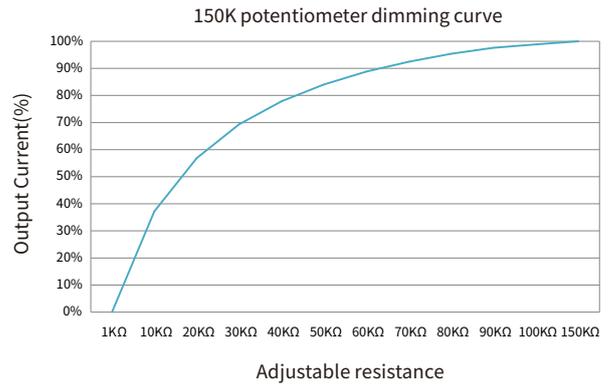
Wiring diagram



Remarks

- In the 150K potentiometer dimming mode, the potentiometer can only be connected to one driver.

Dimming curve



1-10V/10V PWM+12V dimming application

Wiring diagram



Electrical description

VCC: +12VDC ±5%, 100mA MAX

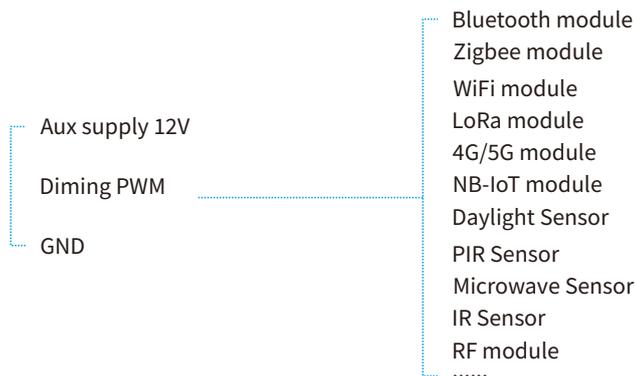
PDIM: Voltage: 3.3-10V

Frequency range: 300Hz-3kHz

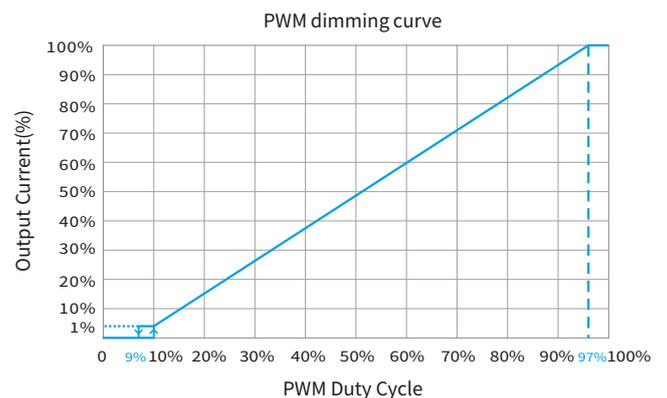
Phase position: positive logic

Duty cycle: 0% (OFF), 10% (darkest) ~ 100% (brightest)

Typical applications



Dimming curve

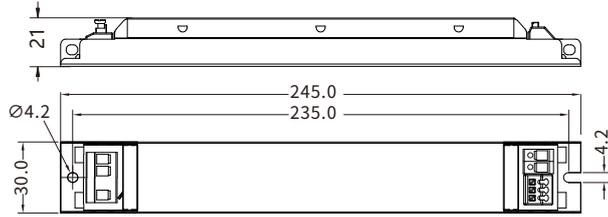


Installation

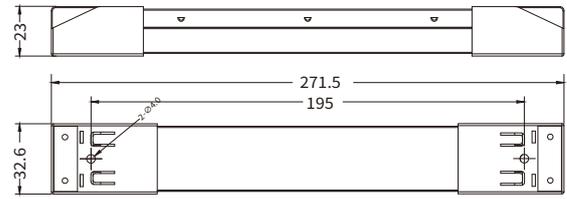
Mechanical dimensions

Unit:mm

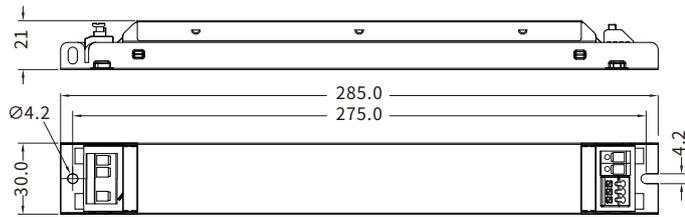
DGV036



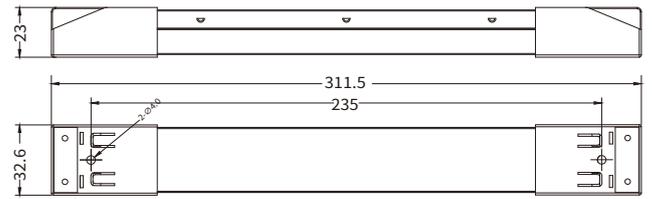
DGV036



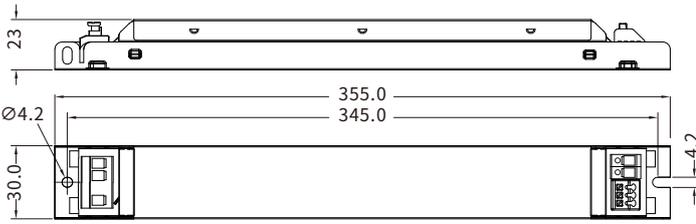
DGV060



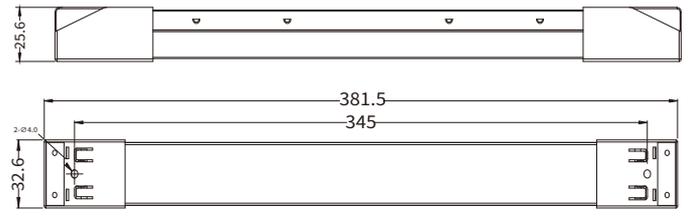
DGV060



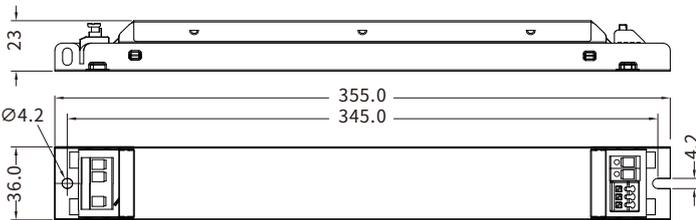
DGV100



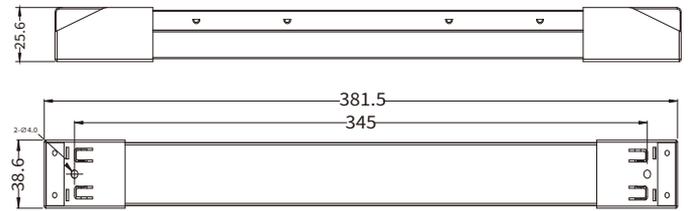
DGV100



DGV150

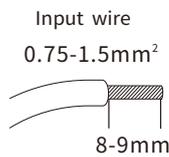


DGV150



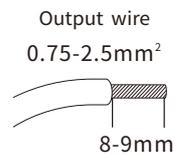
INPUT

Numbering	function	colour
1	ACL	orange
2	ACN	orange
3	DA	gray
4	DA	gray
5	FG	gray



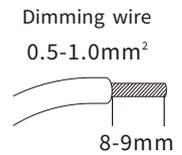
OUTPUT

Numbering	function	colour
1	V+	red
2	V-	black



DIMMING

Numbering	function	colour
1	VCC	red
2	GND	black
3	DIM	red



Installation note

Hot plug-in

- Hot plug-in is not supported due to residual output voltage of > 0V.

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.

Mounting screw specifications and torque

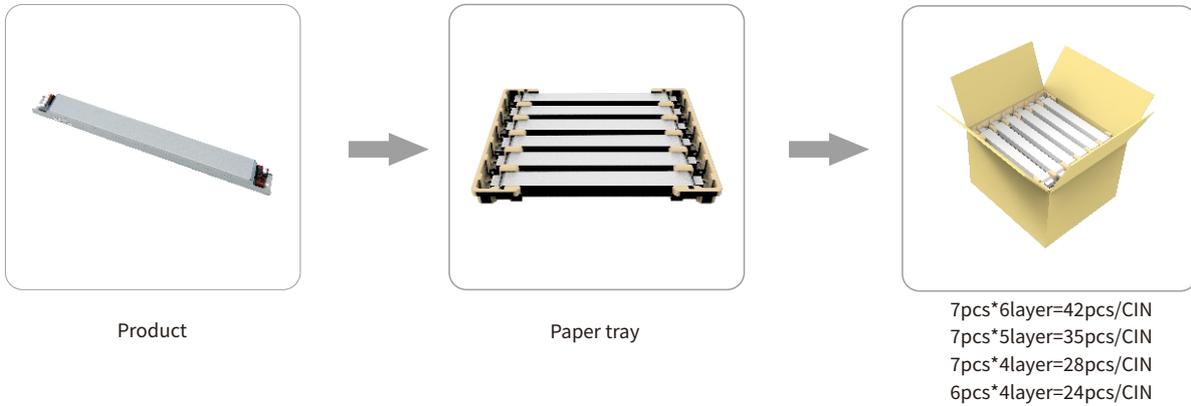
- Max. torque at the clamping screw: 0.5 Nm / M4

Replace LED module

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

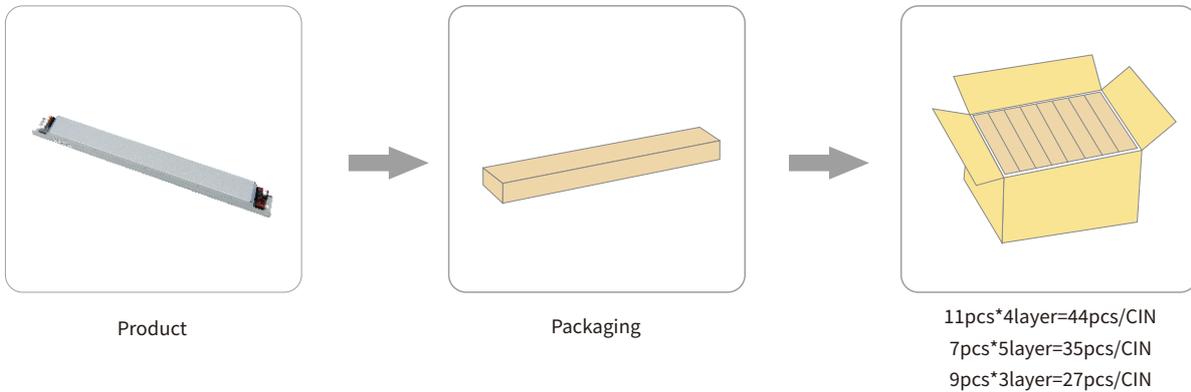
Packaging

Optional 1: factory default



Model	Product size	Weight	Paper tray	Carton size	Qty/carton	N.W	G.W
DGV036	L245*W30*H21mm	168g	L340*W75*H29mm	L355*W285*H205mm	42pcs	7.06KG	8.66KG
DGV060	L285*W30*H21mm	248g	L340*W75*H29mm	L355*W325*H170mm	35pcs	6.95KG	8.10KG
DGV100	L355*W30*H21mm	307g	L340*W75*H29mm	L395*W355*H140mm	28pcs	8.60KG	9.75KG
DGV150	L355*W36*H23mm	415g	L340*W75*H33mm	L395*W355*H160mm	24pcs	9.96KG	11.2KG

Optional 2:



Model	Product size	Weight	Packaging size	Carton size	Qty/carton	N.W	G.W
DGV036	L245*W30*H21mm	168g	L280*W40*H30mm	L345*W300*H175mm	44pcs	7.39kg	8.89g
DGV060	L285*W30*H21mm	248g	L320*W40*H30mm	L345*W300*H175mm	35pcs	8.68kg	10.5g
DGV100	L355*W30*H21mm	307g	L390*W40*H30mm	L410*W285*H155mm	27pcs	8.29kg	10.2kg
DGV150	L355*W33*H23mm	415g	L390*W43*H30mm	L410*W285*H155mm	27pcs	11.21kg	13.3kg

Additional information

1. The life and MTBF of the product are for reference only, and do not represent a warranty statement. If the drive has been turned on, there is no warranty.
2. For more information, please send an email to info@bokedriver.com.