FEATURES

- Constant voltage output design
- 200-240V voltage input
- Optional DC12V or DC24V output
- Flicker-free,meets the requirements of IEEE Std 1789
- Energy efficiency in V (Energy efficiency level 5)
- Turn in delay time < 0.5s
- With SCP / OCP / OPP protection
- Suitable for constant voltage lights, such as strip lights, linear lights, etc.
- 5 years warranty

APPLICATION

- LED indoor lighting
- LED office lighting
- LED architectural lighting
- LED strip lighting

MODEL CODE

BK - LGVXXX - XXXX

- XXXX: Output voltage
- LGVXXX: Product series
- BK: BOKE

ELECTRICAL SPECIFICATION

MODEL	BK-LGV036-12V0	BK-LGV036-24V0	BK-LGV060-12V0	BK-LGV060-24V0	
OUTPUT					
Output voltage range	12V	24V	12V	24V	
Output current	3A	1.5A	5A	2.5A	
Output power	36W Max.	36W Max.	60W Max.	60W Max.	
Voltage ripple & noice(note.2)	≤250mV(Vpp)	≤250mV(Vpp)	≤250mV(Vpp)	≤250mV(Vpp)	
Voltage & current accuracy	±5%	±5%	±5%	±5%	
Linear regulation	±5%	±5%	±5%	±5%	
Load regulation	±5%	±5%	±5%	±5%	
INPUT					
Rated input voltage	200-240VAC 200-240VDC				
Input voltage range	180-264VAC 180-264VDC				
Frequency range	47-63Hz				
Power factor	>0.95 (230VAC & full load)				
Total harmonic distortion	<15% (230VAC & full load)				
Efficiency(Typ.)	86%	87%	87%	88%	
Standby power (note.2)	<0.3W		<0.2W		
Energy efficiency index	V(Energy efficiency level 5)		V(Energy efficiency level 5)		
Input current	<0.5A		<0.45A		
Inrush current(cold start)	See data table for details				
Max. drivers under the MCB	See data table for details				
Power on delay	<0.5s				
PROTECTION					
Short circuit protection (SCP)	Hiccup,recovers automatically after environment temperature declines				
Over-current protection(OCP)	≤4.5A	≤2.2A	≤8A	≤4A	
Over-Voltage protection(OVP)	≤16Vdc	≤30Vdc	≤16Vdc	≤30Vdc	
ENVIROHMENT					
Operation temperature	-20-45°C				
Operation humidity	10-90% RH,non-condensing				
Storagr tempera-ture/humidity	-25-80°C,5-95% RH,non-condensing				
IP class	IP20				
Vibration	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes				
Tc (note.3)	Tc=85°C(Ta=45°C)				
MTBF	500000H,MIL-HDBK-217F(25°C)				
Life time	See life time curve table for details				
Environmental protection	RoHS				
EMC					
EMC emisson (note.4)	EN55015,GB17743,EN61000-3-2 Class C,EN61000-3-3				
EMC immunity	EN61000-4-2,3,4,5,6,8,11,EN61547				
SAFETY					
Safety standards	EN61347-1/2-13,GB19510.1/14,EN62384				
Flicker-free standard	IEEE1789:2015				
Certificate	Conform to CE ENEC-TUV				
Withstand voltage	I/P-O/P:3750VAC				
Surge	DM 2KV CM 2KV				
Leakage current	<0.7mA @ 240Vac				
Isolation resis-tance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH				

NOTE

1.All parameter are measured at 230VAC input,rated load and 25°C of ambient temperature.

2.Ripple & Noise are measured at 20MHz of bandwith by using a 12" twised pair-wire terminated with a 0.1uF & 47uF paralled capacitor.

3.If this driver used for led lighting, the tc should not higher than tc showed on the driver when the lighting working on the highest working tempreture.

4.The driver is considers as a compent that wil be operated in combination with final equipment,since EMC performance will be affected by the complete installation the final equipment mancfactures must re-quality EMC direcive on the complete installation again.

ELECTRICAL SPECIFICATION

MODEL	BK-LGV072-12V0	BK-LGV072-24V0	BK-LGV100-12V0	BK-LGV100-24V0	
OUTPUT					
Output voltage range	12V	24V	12V	24V	
Output current	6A	3A	8.4A	4.2A	
Output power	72W Max.	72W Max.	100.8W Max.	100.8W Max.	
Voltage ripple & noice(note.2)	≤250mV(Vpp)	≤250mV(Vpp)	≤250mV(Vpp)	≤250mV(Vpp)	
Voltage & current accuracy	±5%	±5%	±5%	±5%	
Linear regulation	±5%	±5%	±5%	±5%	
Load regulation	±5%	±5%	±5%	±5%	
INPUT					
Rated input voltage	200-240VAC 200-240VDC				
Input voltage range	180-264VAC 180-264VDC				
Frequency range	47-63Hz				
Power factor	>0.95 (230VAC & full load)				
Total harmonic distortion	<15% (230VAC & full load)				
Efficiency(Typ.)	87%	88%	89%	90%	
Standby power (note.2)	<0.5W		<0.5W		
Energy efficiency index	V(Energy efficiency level 5)		V(Energy efficiency level 5)		
Input current	<0.6A		<0.65A		
Inrush current(cold start)	See data table for details				
Max. drivers under the MCB	See data table for details				
Power on delay	<0.8s		<0.5s		
PROTECTION					
Short circuit protection (SCP)	Hiccup,recovers automatically after environment temperature declines				
Over-current protection(OCP)	≤8.5A	≤4.5A	≤10.5A	≤5.5A	
Over-Voltage protection(OVP)	≤16Vdc	≤28Vdc	≤17.5Vdc	≤33Vdc	
ENVIROHMENT					
Operation temperature	-20-45°C		-20-50°C		
Operation humidity	10-90% RH,non-condensing				
Storagr tempera-ture/humidity	-25-80°C,5-95% RH,non-condensing				
IP class	IP20				
Vibration	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes				
Tc (note.3)	Tc=90°C(Ta=45°C)		Tc=90°C(Ta=50°C)		
MTBF	500000H,MIL-HDBK-217F(25°C)				
Life time	See life time curve table for details				
Environmental protection	RoHS				
EMC					
EMC emisson (note.4)	EN55015,GB17743,EN61000-3-2 Class C,EN61000-3-3				
EMC immunity	EN61000-4-2,3,4,5,6,8,11,EN61547				
SAFETY					
Safety standards	EN61347-1/2-13,GB19510.1/14,EN62384				
Flicker-free standard	IEEE1789:2015				
Certificate	Conform to CE ENEC-TUV				
Withstand voltage	I/P-O/P:3750VAC				
Surge	DM 2KV CM 2KV				
Leakage current	<0.7mA @ 240Vac				
Isolation resis-tance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH				

NOTE

1.All parameter are measured at 230VAC input,rated load and 25°C of ambient temperature.

2.Ripple & Noise are measured at 20MHz of bandwith by using a 12" twised pair-wire terminated with a 0.1uF & 47uF paralled capacitor.

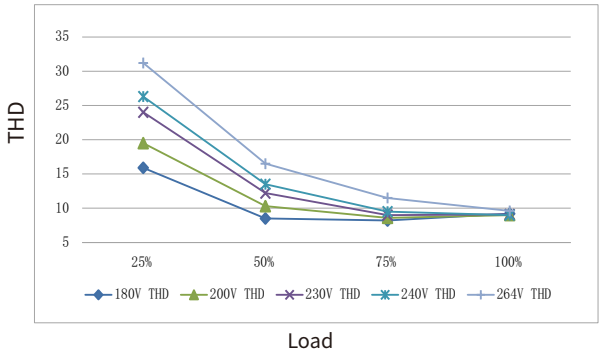
3.If this driver used for led lighting, the tc should not higher than tc showed on the driver when the lighting working on the highest working tempreture.

4.The driver is considers as a compent that wil be operated in combination with final equipment,since EMC performance will be affected by the complete installation the final equipment mancfactures must re-quality EMC direcive on the complete installation again.

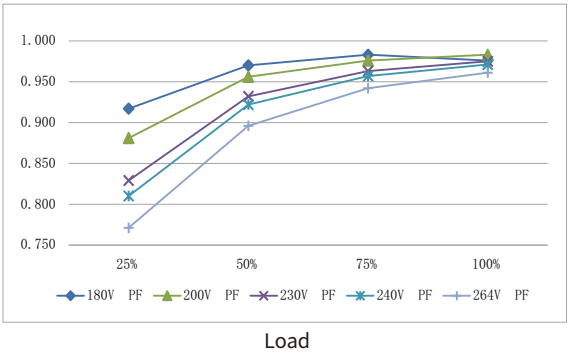
Electrical characteristics

BK-LGV036-12V0 Electrical characteristics

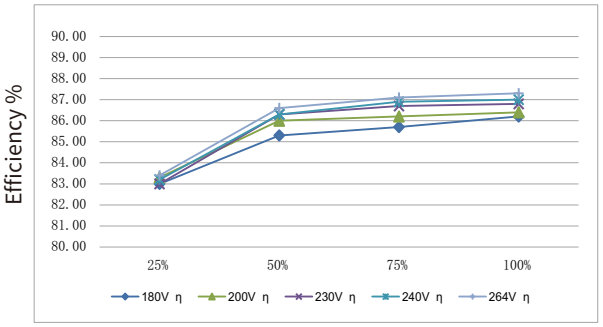
THD vs. Load



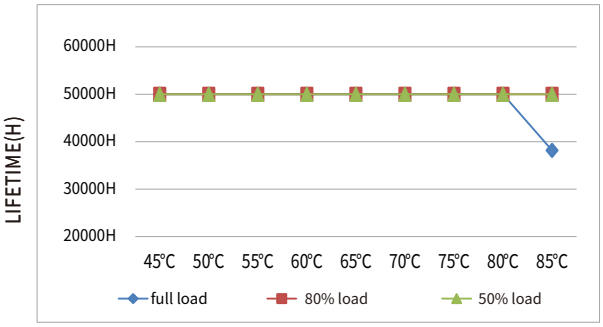
Power factor vs. Load



Efficiency vs. Load

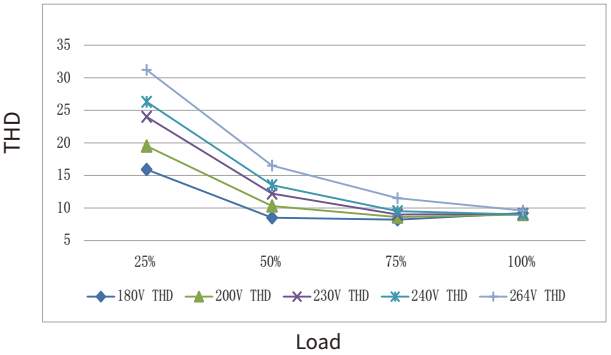


Lifetime vs. case temperature

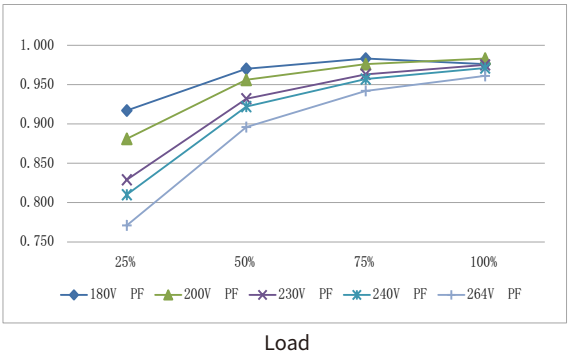


BK-LGV036-24V0 Electrical characteristics

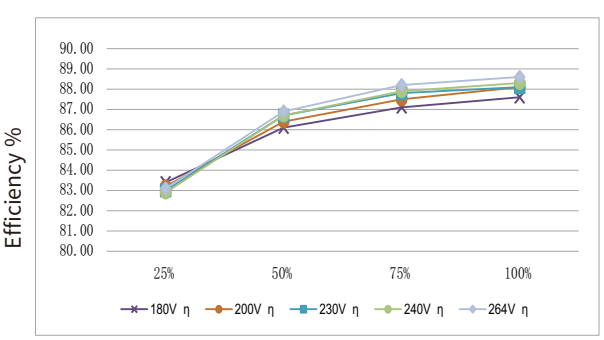
THD vs. Load



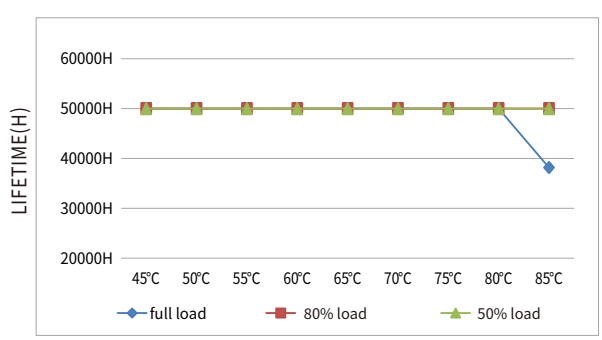
Power factor vs. Load



Efficiency vs. Load



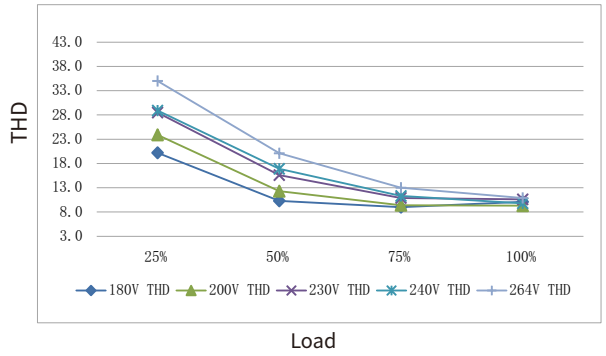
Lifetime vs. case temperature



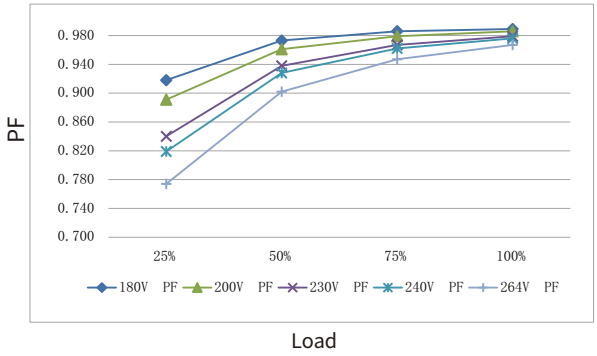
Electrical characteristics

BK-LGV060-12V0 Electrical characteristics

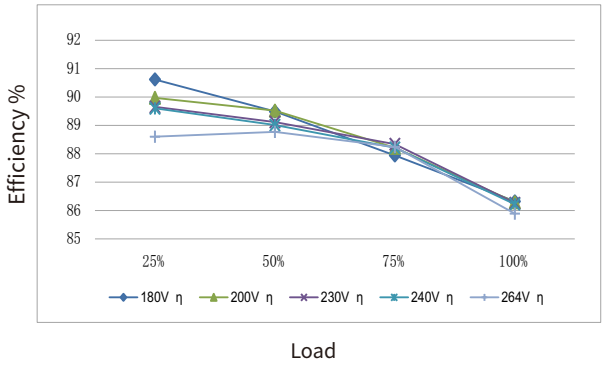
THD vs. Load



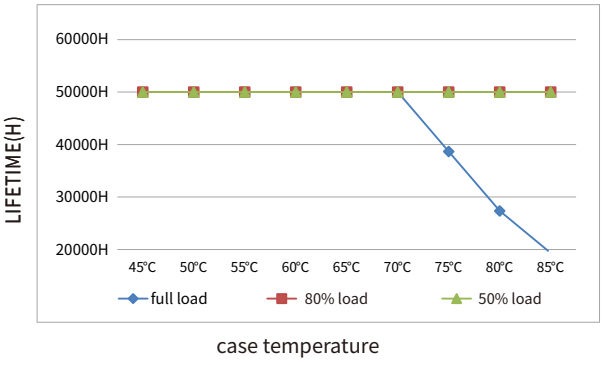
Power factor vs. Load



Efficiency vs. Load

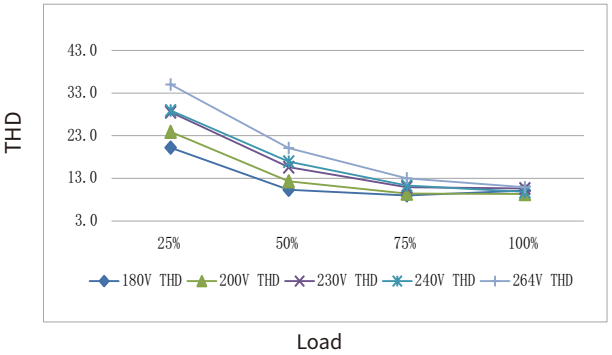


Lifetime vs. case temperature

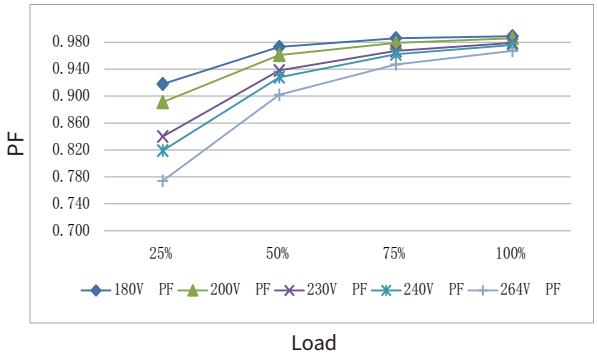


BK-LGV060-24V0 Electrical characteristics

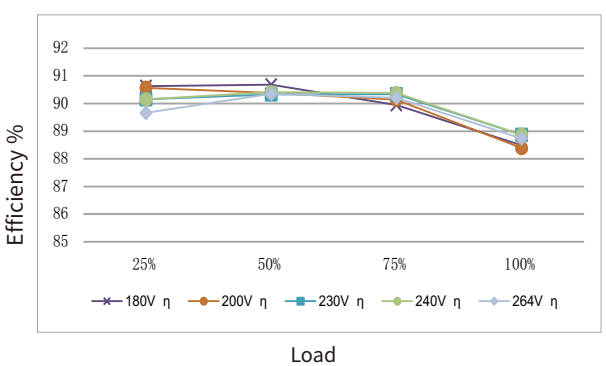
THD vs. Load



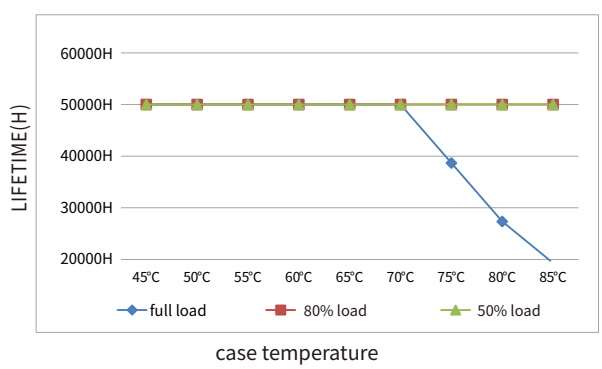
Power factor vs. Load



Efficiency vs. Load



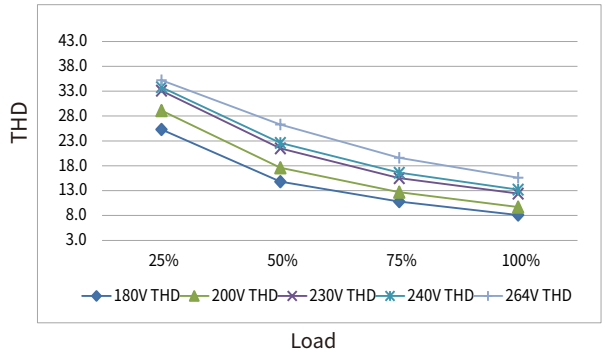
Lifetime vs. case temperature



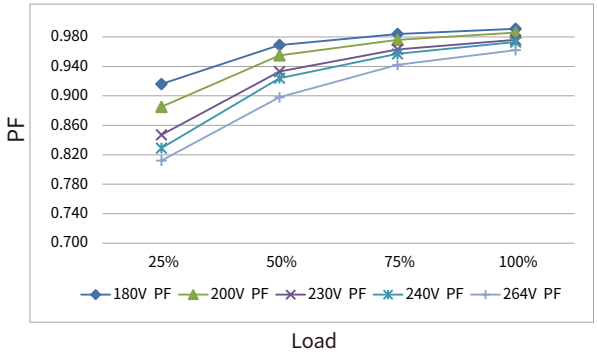
Electrical characteristics

BK-LGV072-12V0 Electrical characteristics

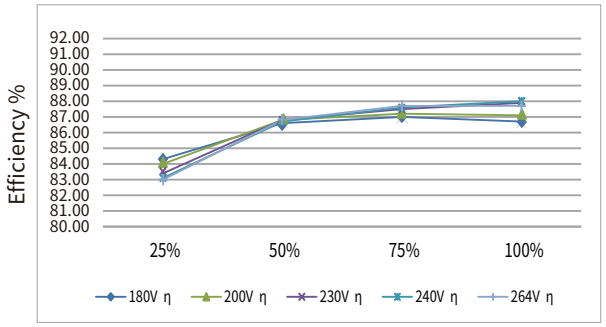
THD vs. Load



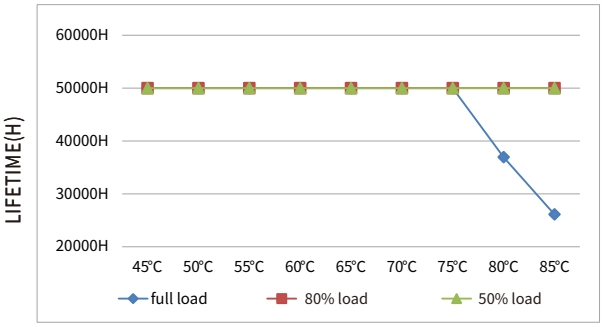
Power factor vs. Load



Efficiency vs. Load

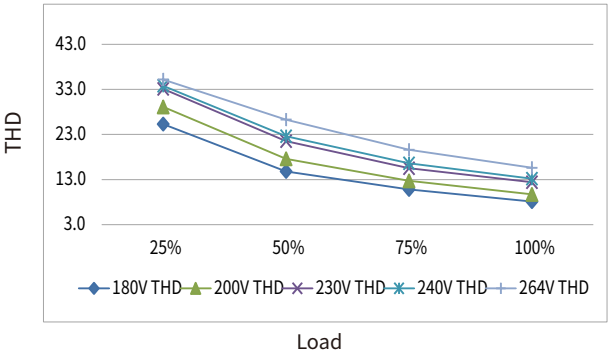


Lifetime vs. case temperature

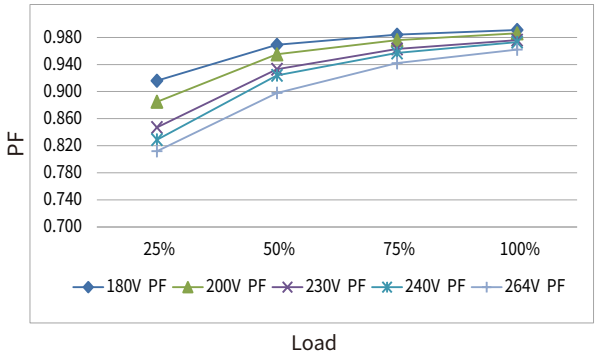


BK-LGV072-24V0 Electrical characteristics

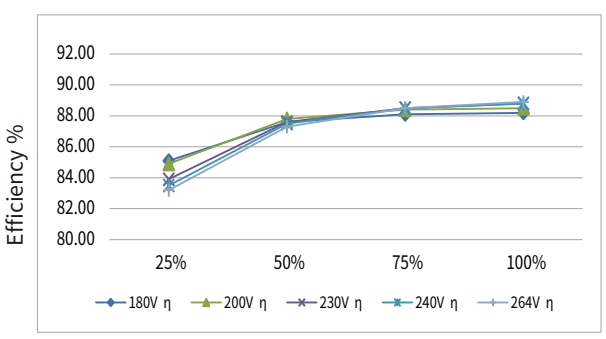
THD vs. Load



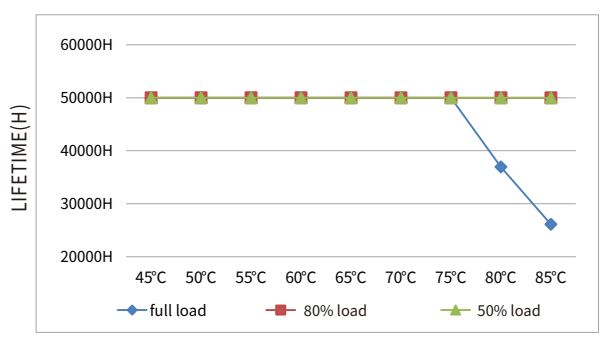
Power factor vs. Load



Efficiency vs. Load



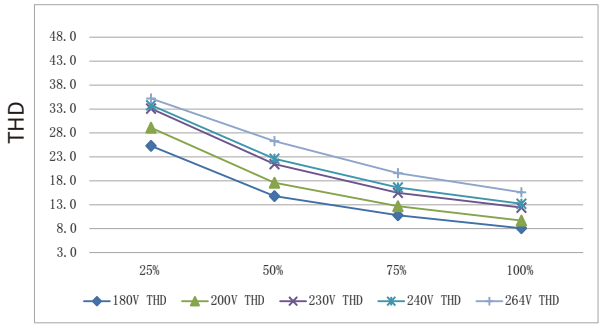
Lifetime vs. case temperature



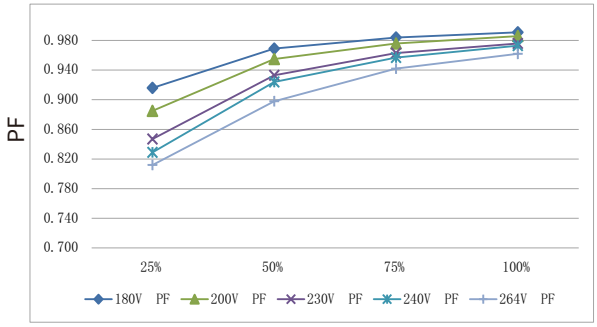
Electrical characteristics

BK-LGV100-12V0 Electrical characteristics

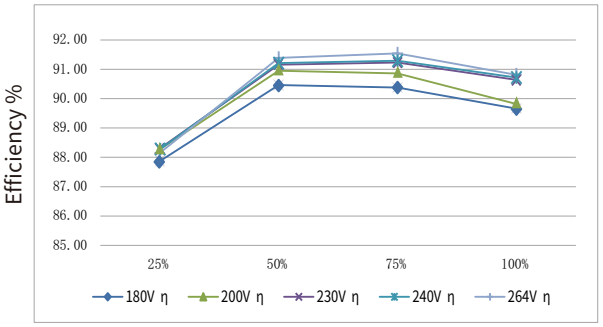
THD vs. Load



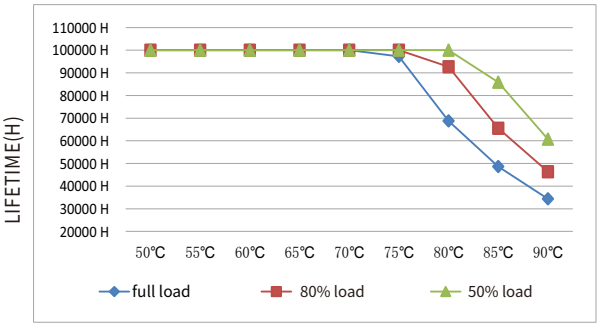
Power factor vs. Load



Efficiency vs. Load

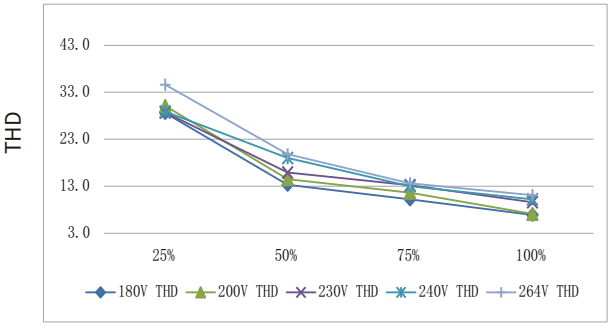


Lifetime vs. case temperature

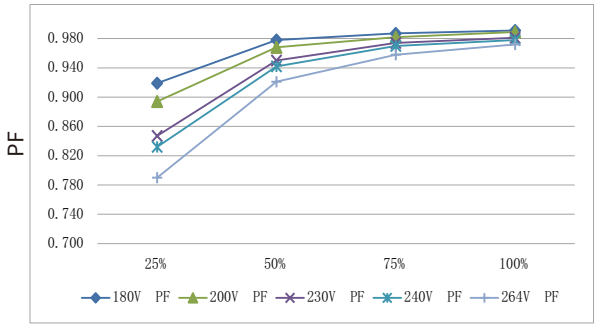


BK-LGV100-24V0 Electrical characteristics

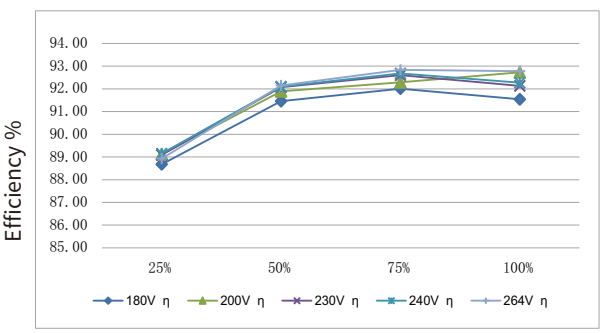
THD vs. Load



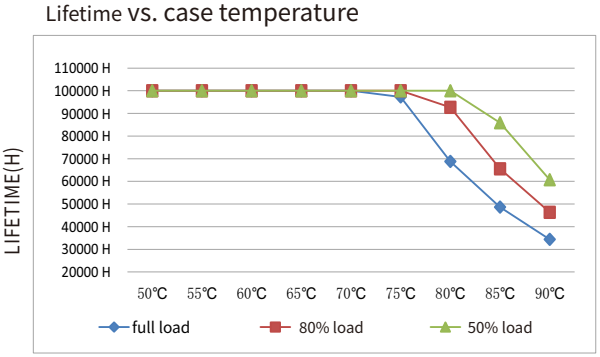
Power factor vs. Load



Efficiency vs. Load

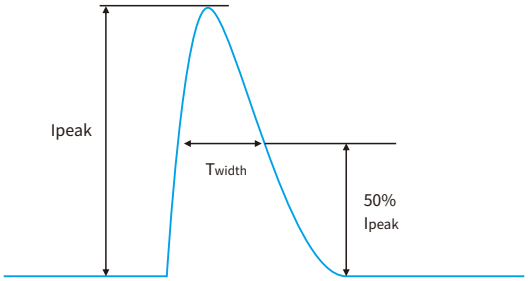


Lifetime vs. case temperature



Surge curve

Model	Ipeak	Twidth	Condition	Relative number of MCB														
				B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
BK-LGV036	33.35A	274us	AC 230V,Full load, Cold start,Ta≤30°C, MCB is not installed side by side	6	8	10	13	16	10	14	17	21	26	21	27	34	42	52
BK-LGV060	48.5A	340us		3	5	6	7	9	6	8	9	12	14	12	15	18	23	29
BK-LGV072	59.75A	320us		3	4	5	6	7	5	6	8	10	12	10	13	16	20	25
BK-LGV100	50.6A	350us		3	4	5	6	8	5	7	9	11	13	11	14	17	22	27

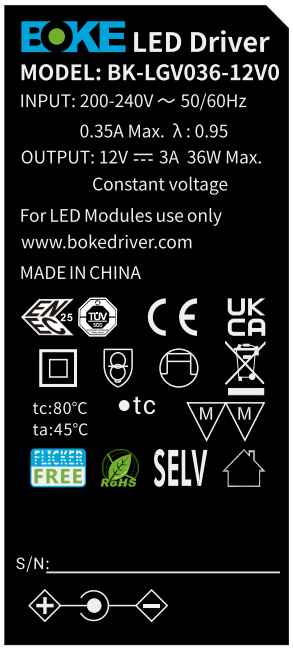


Remarks

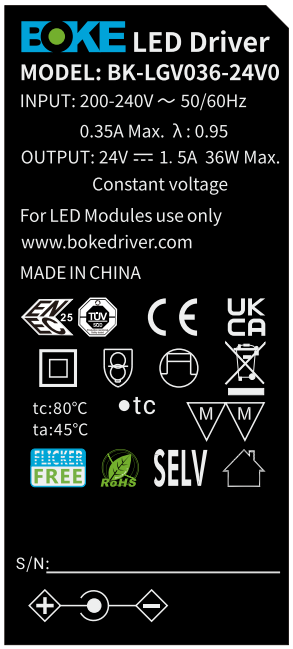
- The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- Calculation uses typical values from ABB series S200 as a reference.
- Different brands and models of miniature circuit breakers, the number of drives mounted 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.

Label

BK-LGV036-12V0



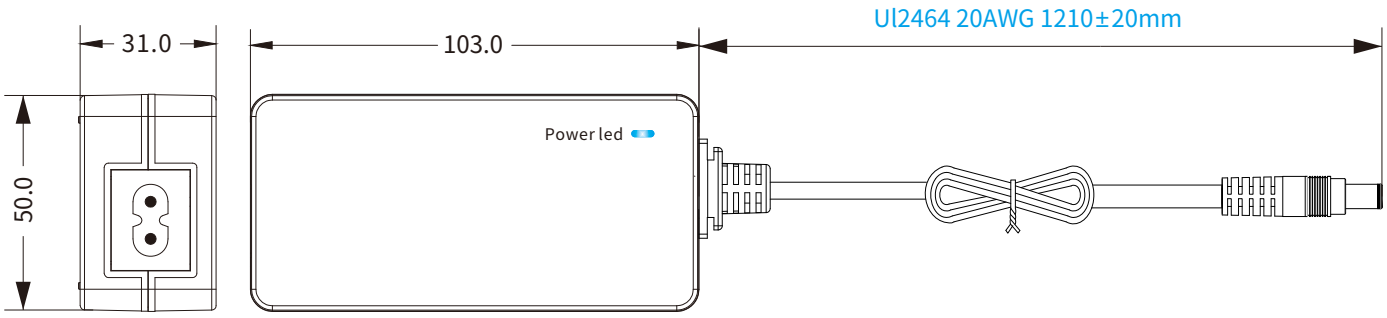
BK-LGV036-24V0



Mechanical Specification

BK-LGV036-12V0

BK-LGV036-24V0



AC input

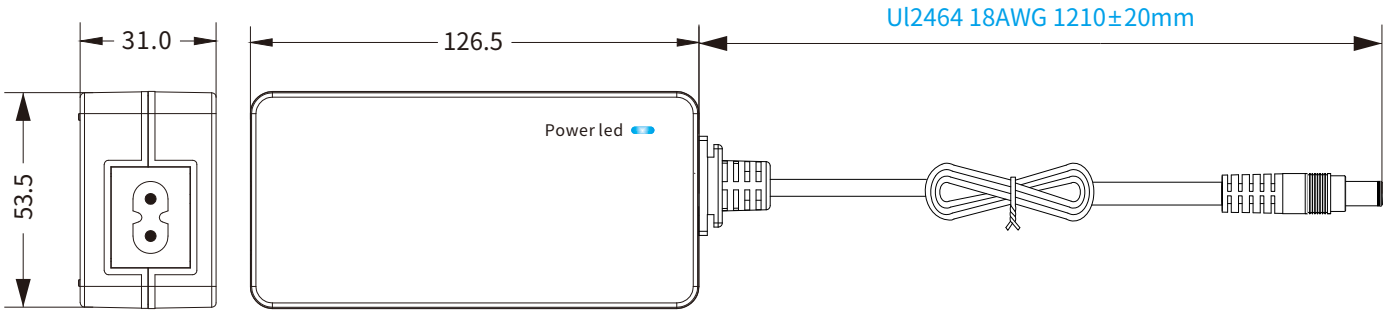
Label

BK-LGV060-12V0

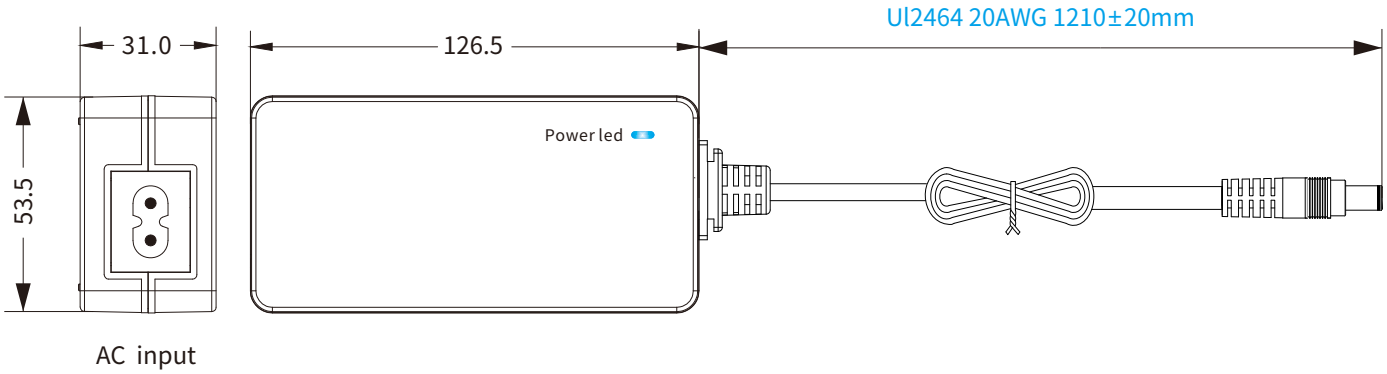
BK-LGV060-24V0

Mechanical Specification

BK-LGV060-12V0

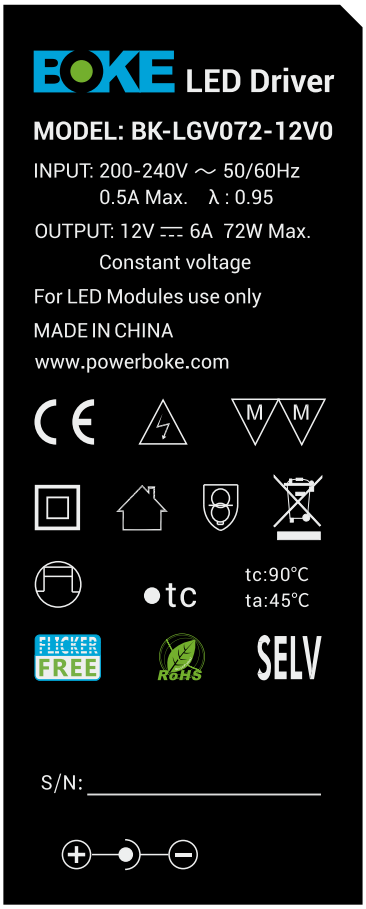


BK-LGV060-24V0

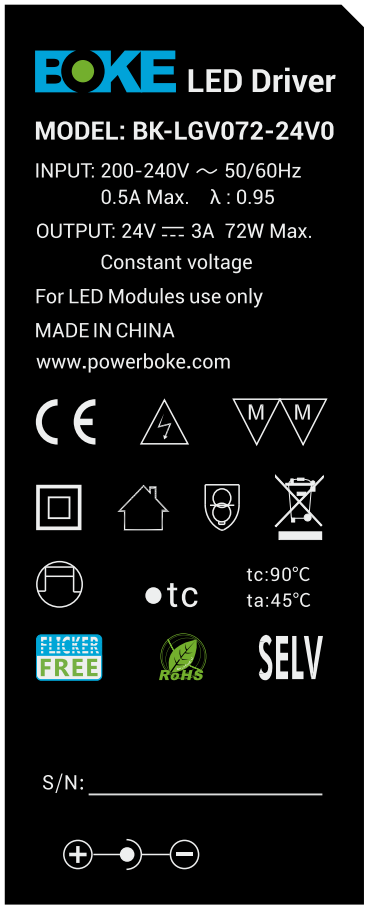


Label

BK-LGV072-12V0

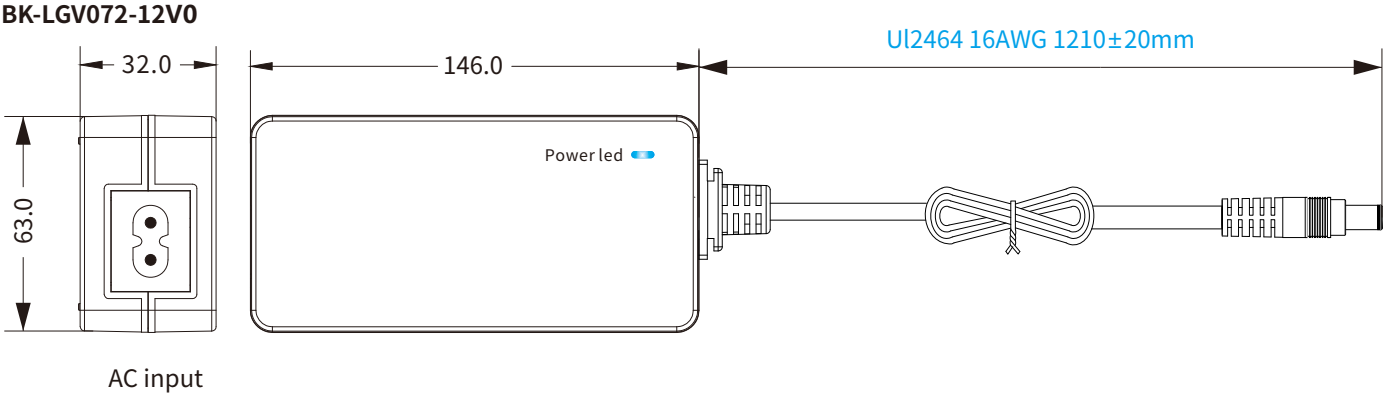


BK-LGV072-24V0

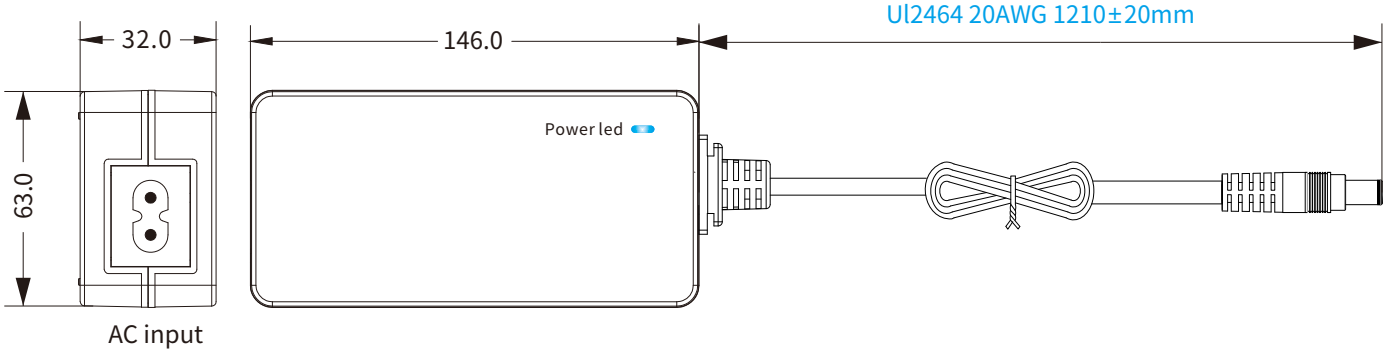


Mechanical Specification

BK-LGV072-12V0



BK-LGV072-24V0



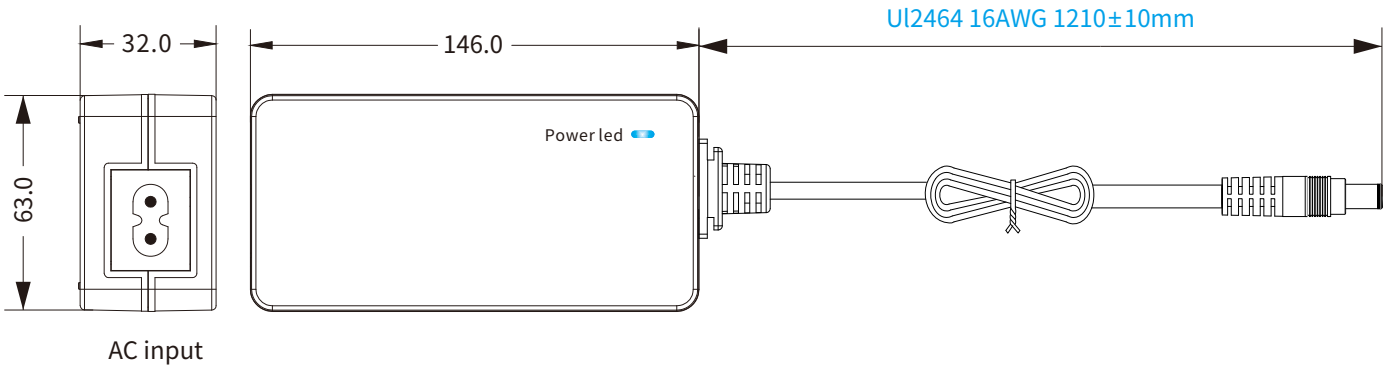
Label

BK-LGV100-12V0

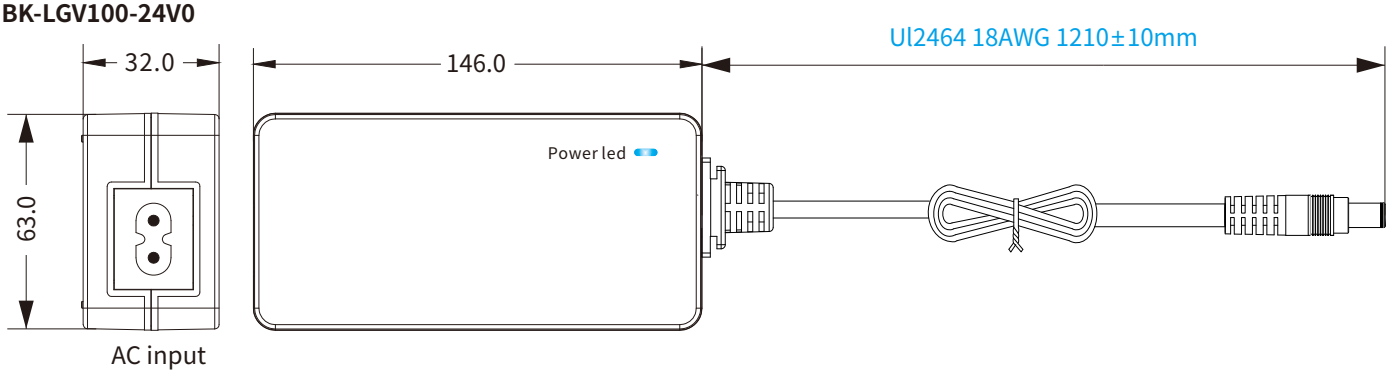
BK-LGV100-24V0

Mechanical Specification

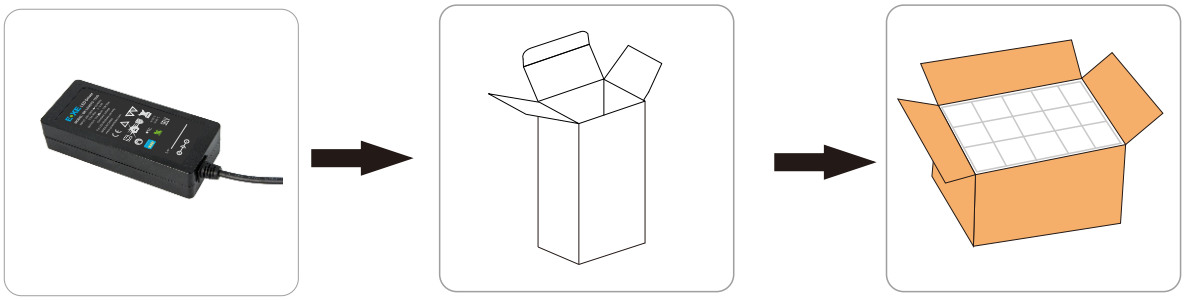
BK-LGV100-12V0



BK-LGV100-24V0



Product package



Product

Packaging

12pcs*3layer=36pcs/CIN
10pcs*3layer=30pcs/CIN

Mobel	Product size	Weight	Packaging size	Carton size	Qty/carton	N.W	G.W
LGV036	L103*W50*H31mm	160g	L170*W72*H72mm	L450*W360*H240mm	36pcs	5.80kg	7.90kg
LGV060	L126.5*W53.5*H31mm	230g	L170*W72*H72mm	L450*W360*H240mm	36pcs	8.30kg	10.5kg
LGV072	L146*W63*H32mm	335g	L190*W72*H72mm	L400*W380*H240mm	30pcs	10.2kg	12.5kg
LGV100	L146*W63*H32mm	340g	L190*W72*H72mm	L400*W380*H240mm	30pcs	10.3kg	12.6kg

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. If the drive has been turned on, there is no warranty.
3. For more information, please send an email to info@bokedriver.com.