

**FEATURES**

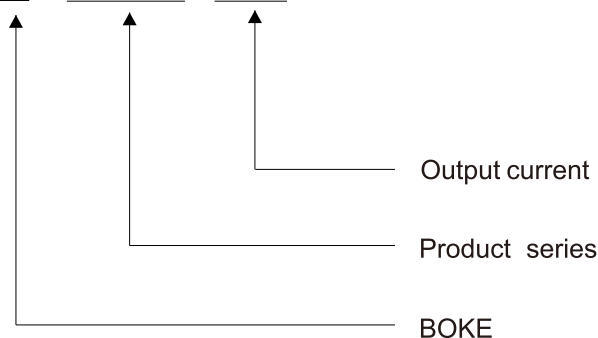
- 1.220-264VAC input
- 2.Class II driver,without FG,flicker free
- 3.Built in active PFC function,high PF,low THD
- 4.Products using energy efficient chips, conversion efficiency up to 91%
- 5.Very Low output current ripple(less than 5%)
- 6.Input and output screw free fastening design
- 7.Compact design
- 8.Cooling by free air convection
- 9.Suitable for indoor LED lighting applications
- 10.5 years warranty

**APPLICATION**

- 1.LED indoor lighting
- 2.LED office lighting
- 3.LED architectural lighting
- 4.LED commercial lighting

**MODEL CODE**

BK - BELXXX- XXXX



**ELECTRICAL SPECIFICATION**

MODEL	BK-BEL030-0600	BK-BEL030-0700	BK-BEL030-0750
<b>OUTPUT</b>			
DC current	0.6A	0.7A	0.75A
DC voltage range	30-42V	30-42V	30-40V
Rated power	25.2W Max	29.4W Max	30W Max
Voltage ripple & noise note.2	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)
Current ripple & noise	≤20mA(RMS)	≤20mA(RMS)	≤20mA(RMS)
Constnt current ADJ. range	0.5-0.6A	0.65-0.7A	0.75A
Constant current accuracy	±5%	±5%	±5%
Line regulation	±5%	±5%	±5%
Load regulation	±5%	±5%	±5%
Dimming port output current	N/A		
External PWM interface	N/A		
<b>INPUT</b>			
Rated voltage	220-240VAC		
Input AC voltage range	200-264VAC		
Input DC voltage range	200-264VDC		
Frequency range	47-63Hz		
Power factor	PF>0.95 @ 230VAC/full load,PF>0.90 @ 230VAC/>70% load		
Total harmonic distortion	THD<15% @ 230VAC/full load,THD<20% @ 230VAC/>70% load		
Efficiency (Typ.)	89%	90%	91%
Standby power note.3	N/A		
Input current	<0.18A @ 230Vac		
Inrush current(Typ.)	Cold start <40A(Twidth=120us measured at 50% Ipeak) @ 230Vac.		
Max. No. of PSUs on 16A circuit breaker	15 units(circuit breaker of type B)/20 units(circuit breaker of type C);at 230VAC.		
Turn on delay	<0.5s @ 230Vac		
<b>PROTECTION</b>			
Short circuit	Hiccup,recovers automatically after environment temperature declines		
Max output voltage	60V		
Over temperature	Hiccup,recovers automatically after fult condition is removed		
<b>ENVIRO-HMENT</b>			
Operation temperature	-20-50°C		
Operation humidity	10-90% RH non-condensing		
Storagr tempera-ure/humidity	-40-80°C 5-95% RH		
IP class	IP20		
Vibration	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes		
Tc	Tc=80°C(Ta=50°C)		
MTBF	500000H,MIL-HDBK-217F(25°C)		
LIFETIME	See life curve for details		
<b>EMC</b>			
EMC emisson Note.4	Compliance to EN55015,GB17743,EN61000-3-2 Class C(≥30% load),EN61000-3-3		
EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,1,EN61547		
<b>SAFETY</b>			
Safety standards	EN61347-1/2-13,GB19510.1/14,EN62384,IEEE1789		
Dali standards	N/A		
Certificate	CE-SUD ENEC CCC SAA RCM		
Withstand voltage	I/P-O/P:3750VAC		
Leakage current	<0.7mA @ 240Vac		
Isolation resis-tance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH		
<b>INTERFACE</b>			
Environmental protection	RoHS		
Input connection	PCB connector/2PIN/orange+orange/0.75-1.5mm^2		
Output connection	PCB connector/2PIN/black+red/0.5-0.75mm^2		
<b>NOTE:</b>	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 paralld capacitor. 3.Stand-by power consumption is measured at dimmable off condition. 4.The power supply is considers as a compent that will be operated in combination with final equipment.Since EMC performance will be affected by the complete installation the final equipment manufactures must re-quality EMC directive on the complete installation again. 5.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 rated working tempreture.		

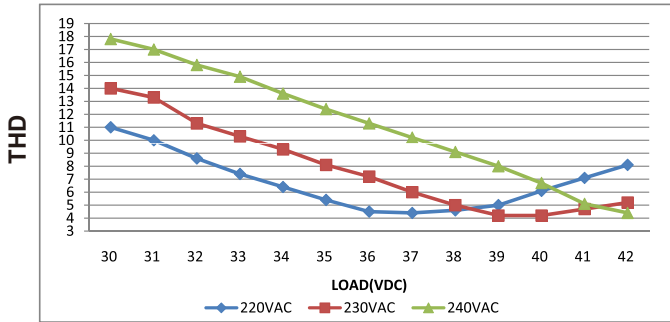
<b>ELECTRICAL SPECIFICATION</b>				
<b>MODEL</b>	BK-BEL042-0900	BK-BEL042-1000	BK-BEL042-1050	
<b>OUTPUT</b>				
DC current	0.9A	1A	1.05A	
DC voltage range	30-42V	30-42V	30-40V	
Rated power	37.8W Max	42W Max	42W Max	
Voltage ripple & noise note.2	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)	
Current ripple & noise	≤20mA(RMS)	≤20mA(RMS)	≤20mA(RMS)	
Constnt current ADJ. range	0.8-0.9A	0.9-1A	1.05A	
Constant current accuracy	±5%	±5%	±5%	
Line regulation	±5%	±5%	±5%	
Load regulation	±5%	±5%	±5%	
Dimming port output current	N/A			
External PWM interface	N/A			
<b>INPUT</b>				
Rated voltage	220-240VAC			
Input AC voltage range	200-264VAC			
Input DC voltage range	200-264VDC			
Frequency range	47-63Hz			
Power factor	PF>0.95 @ 230VAC/full load,PF>0.90 @ 230VAC/>70% load			
Total harmonic distortion	THD<15% @ 230VAC/full load,THD<20% @ 230VAC/>70% load			
Efficiency (Typ.)	90%	91%	91%	
Standby power note.3	N/A			
Input current	<0.24A @ 230Vac			
Inrush current(Typ.)	Cold start <40A(Twidth=120us measured at 50% Ipeak) @ 230Vac.			
Max. No. of PSUs on 16A circuit breaker	15 units(circuit breaker of type B)/20 units(circuit breaker of type C);at 230VAC.			
Turn on delay	<0.5s @ 230Vac			
<b>PROTECTION</b>				
Short circuit	Hiccup,recovers automatically after environment temperature declines			
Max output voltage	60V			
Over temperature	Hiccup,recovers automatically after fult condition is removed			
<b>ENVIRO-HMENT</b>				
Operation temperature	-20-45°C			
Operation humidity	10-90% RH non-condensing			
Storagr tempera-ture/humidity	-40-80°C 5-95% RH			
IP class	IP20			
Vibration	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes			
Tc	Tc=80°C(Ta=45°C)			
MTBF	500000H,MIL-HDBK-217F(25°C)			
LIFETIME	See life curve for details			
<b>EMC</b>				
EMC emisson Note.4	Compliance to EN55015,GB17743,EN61000-3-2 Class C(≥30% load),EN61000-3-3			
EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,1,EN61547			
<b>SAFETY</b>				
Safety standards	EN61347-1/2-13,GB19510.1/14,EN62384,IEEE1789			
Dali standards	N/A			
Certificate	CE-SUD ENEC CCC SAA RCM			
Withstand voltage	I/P-O/P:3750VAC			
Leakage current	<0.7mA @ 240Vac			
Isolation resis-tance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH			
<b>INTERFACE</b>				
Environmental protection	RoHS			
Input connection	PCB connector/2PIN/orange+orange/0.75-1.5mm <sup>2</sup>			
Output connection	PCB connector/2PIN/black+red/0.5-0.75mm <sup>2</sup>			
<b>NOTE:</b>	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 paralld capacitor. 3.Stand-by power consumption is measured at dimmable off condition. 4.The power supply is considers as a compent that will be operated in combination with final equipment.Since EMC performance will be affected by the complete installation the final equipment manufactures must re-quality EMC directive on the complete installation again. 5.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 rated working tempreture.			

<b>ELECTRICAL SPECIFICATION</b>	
<b>MODEL</b>	BK-BEL050-1250
<b>OUTPUT</b>	
DC current	1.25A
DC voltage range	30-42V
Rated power	52.5W Max
Voltage ripple & noise note.2	≤300mV(Vpp)
Current ripple & noise	≤30mA(RMS)
Constnt current ADJ. range	1.05-1.25A
Constant current accuracy	±5%
Line regulation	±5%
Load regulation	±5%
Dimming port output current	N/A
External PWM interface	N/A
<b>INPUT</b>	
Rated voltage	220-240VAC
Input AC voltage range	200-264VAC
Input DC voltage range	200-264VDC
Frequency range	47-63Hz
Power factor	PF>0.95 @ 230VAC/full load,PF>0.90 @ 230VAC/>70% load
Total harmonic distortion	THD<15% @ 230VAC/full load,THD<20% @ 230VAC/>70% load
Efficiency (Typ.)	91%
Standby power note.3	N/A
Input current	<0.35A @ 230Vac
Inrush current(Typ.)	Cold start <30A(Twidth=450us measured at 50% Ipeak) @ 230Vac.
Max. No. of PSUs on 16A circuit breaker	15 units(circuit breaker of type B)/20 units(circuit breaker of type C);at 230VAC.
Turn on delay	<0.5s @ 230Vac
<b>PROTECTION</b>	
Short circuit	Hiccup,recovers automatically after environment temperature declines
Max output voltage	60V
Over temperature	Hiccup,recovers automatically after fult condition is removed
<b>ENVIRO-HMENT</b>	
Operation temperature	-20-45°C
Operation humidity	10-90% RH non-condensing
Storagr tempera-ture/humidity	-40-80°C 5-95% RH
IP class	IP20
Vibration	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Tc	Tc=90°C(Ta=45°C)
MTBF	500000H,MIL-HDBK-217F(25°C)
LIFETIME	See life curve for details
<b>EMC</b>	
EMC emisson Note.4	Compliance to EN55015,GB17743,EN61000-3-2 Class C(≥30% load),EN61000-3-3
EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,1,EN61547
<b>SAFETY</b>	
Safety standards	EN61347-1/2-13,GB19510.1/14,EN62384,IEEE1789
Dali standards	N/A
Certificate	CE-SUD ENEC CCC SAA RCM
Withstand voltage	I/P-O/P:3750VAC
Leakage current	<0.7mA @ 240Vac
Isolation resis-tance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
<b>INTERFACE</b>	
Environmental protection	RoHS
Input connection	PCB connector/2PIN/orange+orange/0.75-1.5mm <sup>2</sup>
Output connection	PCB connector/2PIN/black+red/0.5-0.75mm <sup>2</sup>
<b>NOTE:</b>	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 paralld capacitor. 3.Stand-by power consumption is measured at dimmable off condition. 4.The power supply is considers as a compent that will be operated in combination with final equipment.Since EMC performance will be affected by the complete installation the final equipment manufactures must re-quality EMC directive on the complete installation again. 5.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 rated working tempreture.

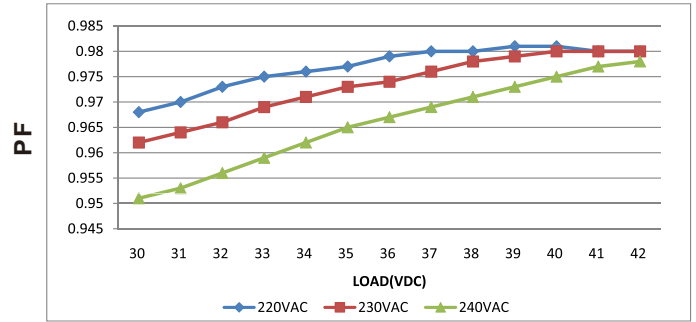
**Electrical characteristics**

**BK-BEL030-0750 Electrical characteristics(@230VAC 25°C)**

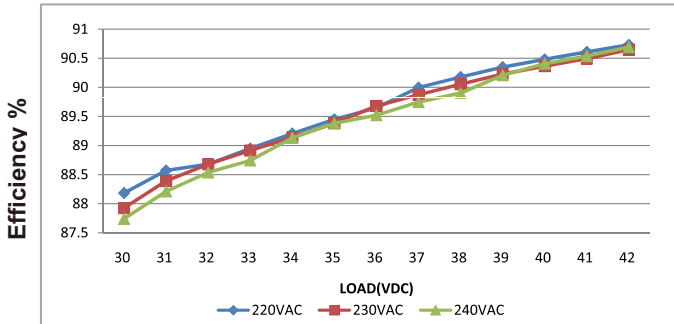
**THD vs. Load**



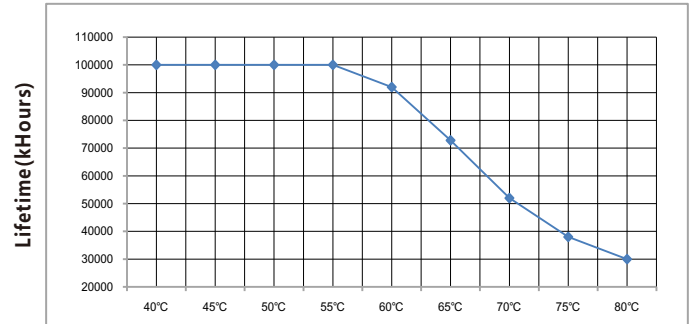
**Power factor vs. load**



**Efficiency vs. Load**

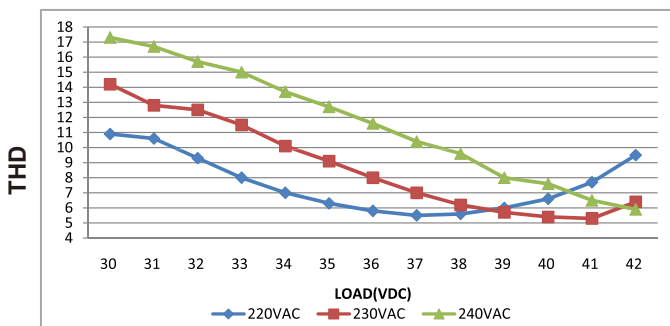


**Lifetime vs. case temperature**

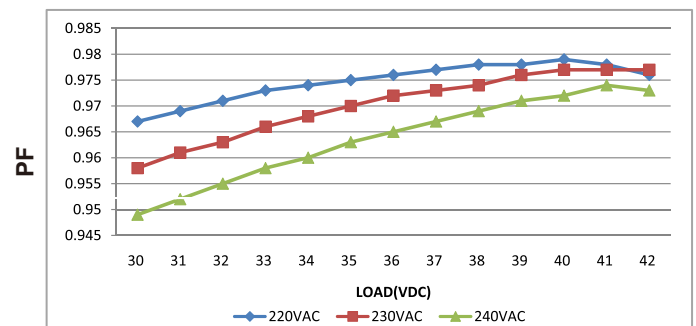


**BK-BEL042-1000 Electrical characteristics(@230VAC 25°C)**

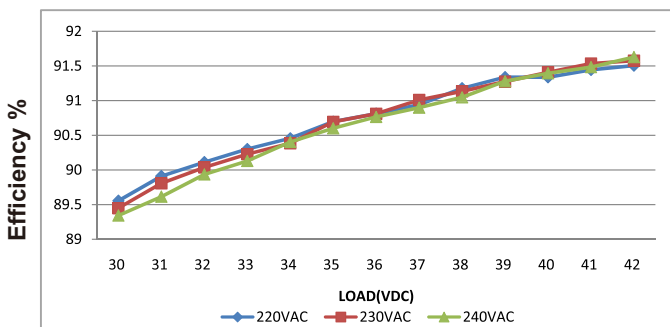
**THD vs. Load**



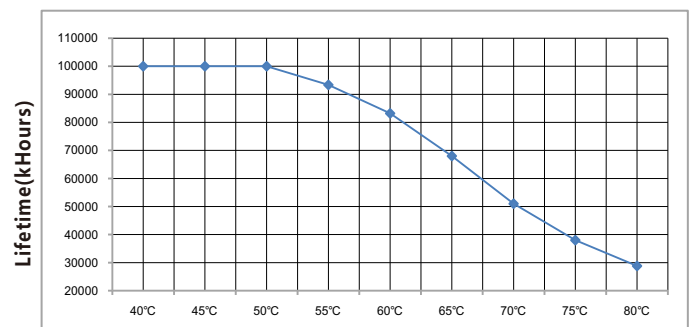
**Power factor vs. load**



**Efficiency vs. Load**



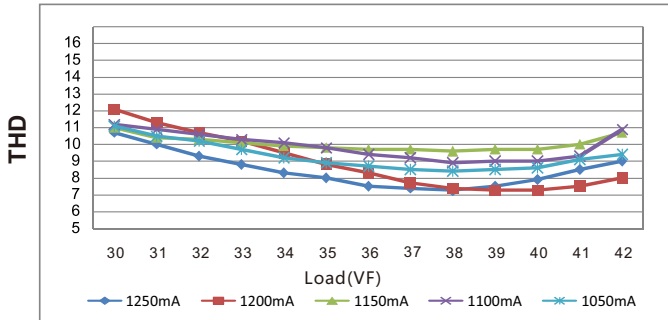
**Lifetime vs. case temperature**



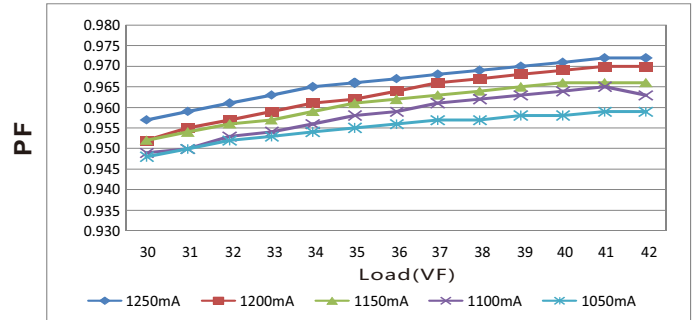
## Electrical characteristics

### BK-BEL050-1250 Electrical characteristics(@ 230VAC 25°C)

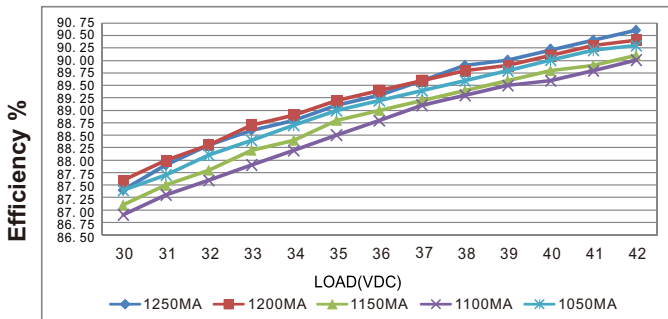
THD vs. Load



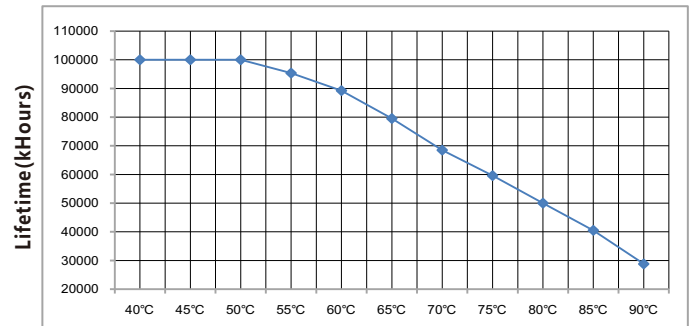
Power factor vs. load



Efficiency vs. Load



Lifetime vs. case temperature



## Label reference

BK-BEL030-0700

**BOKE Constant Current LED Driver**  
**MODEL: BK-BEL030-0700** •tc tc=80°C ta=50°C  
 INPUT: 220-240V~ 50/60Hz 0.18A Max λ=0.95  
 OUTPUT: 30-42V = 700mA 29.4W Max Uo: 60VDC Max  
 SELV  
 wire prep. 0.75mm<sup>2</sup>  
 7-8mm  
 RoHS MADE IN CHINA For LED Modules use only

BK-BEL042-1000

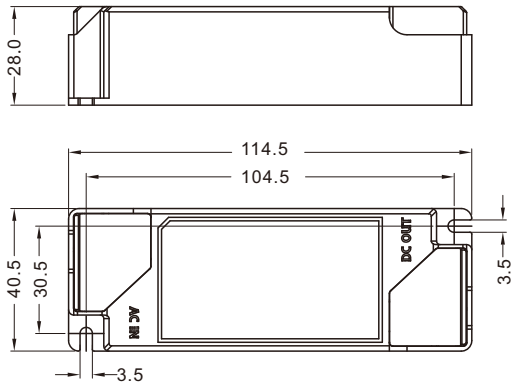
**BOKE Constant Current LED Driver**  
**MODEL: BK-BEL042-1000** •tc tc=80°C ta=45°C  
 INPUT: 220-240V~ 50/60Hz 0.24A Max λ=0.95  
 OUTPUT: 30-42V = 1000mA 42W Max Uo: 60VDC Max  
 SELV  
 wire prep. 0.75mm<sup>2</sup>  
 7-8mm  
 RoHS MADE IN CHINA For LED Modules use only

BK-BEL050-1250

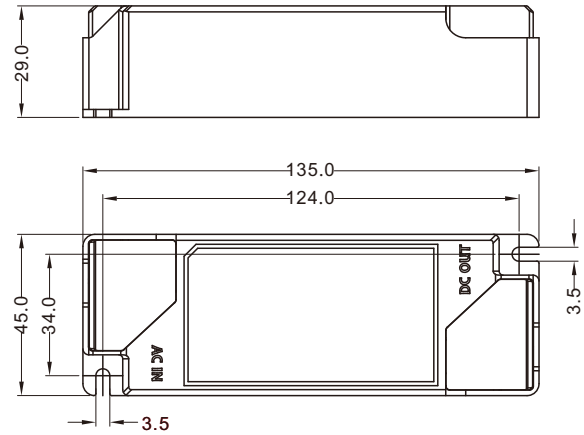
**BOKE Constant Current LED Driver**  
**MODEL: BK-BEL050-1250** •tc tc=90°C ta=45°C  
 INPUT: 220-240V~ 50/60Hz 0.35A Max λ=0.95  
 OUTPUT: 30-42V = 1250mA 50W Max Uo: 60VDC Max  
 SELV  
 wire prep. 0.75mm<sup>2</sup>  
 7-8mm  
 RoHS MADE IN CHINA For LED Modules use only

### Mechanical Specification

BK-BEL030/BEL042

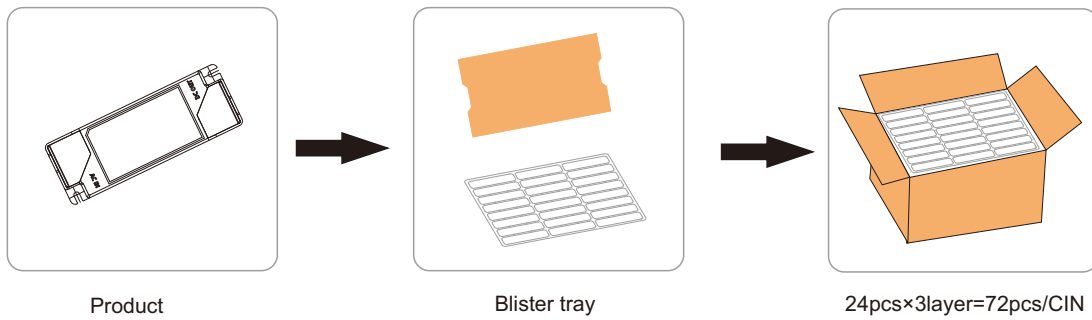


BK-BEL050



单位：mm

### Product package



Product	Product size	Weight	Carton size	N.W	G.W	Blister tray size	Flat card size	Packing
BEL030	L114.5*W40.5*H28mm	83.7g	L450*W350*H180mm	6kg	7.25kg	L430*W340*H47mm	L435*W335mm	72pcs
BEL042	L114.5*W40.5*H28mm	101.5g	L450*W350*H180mm	7.3kg	8.55kg	L430*W340*H47mm	L435*W335mm	72pcs
BEL050	L135*W45*H29mm	143.7g	L450*W350*H180mm	10.4kg	11.7kg	L430*W340*H47mm	L435*W335mm	72pcs