

























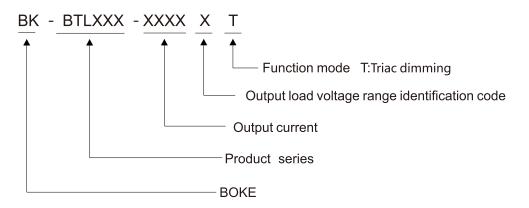




## **FEATURES**

- 1.180-264VAC input
- ${\tt 2.Class~II~driver, without~FG, flicker-free}$
- 3. Built in active PFC function, high PF, low THD
- 4. Stanby power consumption < 0.5W to turn off dimmable port
- 5. Built in Triac dimming function
- 6. Supporting multi-power supplys synchronous dimming connected in parallel
- 7. Suitable for indoor LED lighting applications
- 8. Cooling by free air convecation
- 9.5 years warranty

#### **MODEL CODE**



## **APPLICATION**

- 1.LED indoor lighting
- 2.LED office lighting
- 3.LED architectural lighting
- 4.LED panel lamp lighting

Р1

## **ELECTRICAL SPECIFICATION**

ELECTRICAL SPEC			Г		T					
MODEL	BK-BTL010-0250AT	BK-BTL018-0400AT	BK-BTL018-0420BT	BK-BTL018-0450CT						
OUTPUT					1					
DC current	0.25A	0.4A	0.42A	0.45A						
DC voltage range	30-42V	30-42V	30-40V	30-38V						
Rated power	10.5W Max	16.8W Max	16.8W Max	17. 1W Max						
Voltage ripple & noice (note.2)	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)						
Current ripple & noice	≤10mA(RMS)									
Constsnt current ADJ. range	180-250mA 260-400mA 405-420mA 425-450mA									
Constant current accuracy	±5% ±5% ±5% ±5%									
Line regulation	±5%									
Load regulation	±5%	±5%	±5%	±5%						
DIM port input current	N/A		-	ı	1					
Dimming function  Dimmable with trailing/leading-edge dimmers  Dimmable with trailing/leading-edge dimmers										
INPUT	<u> </u>									
Rated voltage	200-240VAC 200-240	VDC								
Input AC/DC voltage range	180-264VAC 180-264V	-								
Frequency range	47-63Hz									
Power factor		II load,PF>0.90 @ 230VA	C >50% load							
Total harmonic distortion		full load,THD<20% @ 230								
Efficiency (Typ.)	78%	80%	80%	80%						
		00%	00%	0070						
Standby power (note.3)	<0.5W @ 230Vac <0.2A @ 230Vac									
Input current Inrush current(Typ.)		s (50%-50%), cold start, 2	(30\/ac)							
	· ` `		.00 va0)							
Max. No. of PSUs on 16A circuit breaker  Turn on delay	·	@230Vac,B22:58 units,C16:72 units								
	<0.5s @ 230Vac									
PROTECTION  Chart singuist	Hiccur recovers autom									
Short circuit	Hiccup,recovers automatically after environment temperature declines									
Max output voltage	50V Hiccup,recovers automatically after fult condition is removed									
Over temperature	Hiccup,recovers autom	natically after full condition	n is removed							
ENVIROHMENT	20. 45%									
Operation temperature	-20-45°C									
Operation humidity	10-90% RH,non-condensing									
Storagr tempera-ture/humidity	-20-80°C,5-95% RH									
IP class	IP20									
Vibration	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes									
Tc (note.5)	Tc=85°C(Ta=45°C)									
MTBF	500000H,MIL-HDBK-217F(25°C)									
LIFE TIME	See lifetime curve map	details								
EMC emission (note 4)	EN66016 OD17742 EN	61000 3 3 Class C/\ E00/	load) EN61000 2 2							
EMC immunity		61000-3-2 Class C(≥50%	10au),⊏110 1000-3-3							
EMC immunity	EN61000-4-2,3,4,5,6,8,	11,EN0154/								
SAFETY	ENG4247.4/0.40									
Safety standards	EN61347-1/2-13									
Stroboscopic standard	IEEE1789									
Certificate	CE-SUD ENEC SAA R	СМ								
Withstand voltage	I/P-O/P:3750VAC									
Surge	DM 2KV									
Leakage current	<0.7mA @ 240Vac									
Isolation resis-tance	I/P-O/P:100MΩ/500Vdd	c/25°C/70% RH								
INTERFACE	T									
Environmental protection	RoHS									
Input connection	PCB connector/2PIN/orange+orange/0.75-1.5mm <sup>2</sup>									
Output connection	PCB connector/2PIN/gray+gray/0.5-1.5mm <sup>2</sup>									
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.Stand-by power consumption is measured at dimmable off condition. 4.The power supply 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 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.									

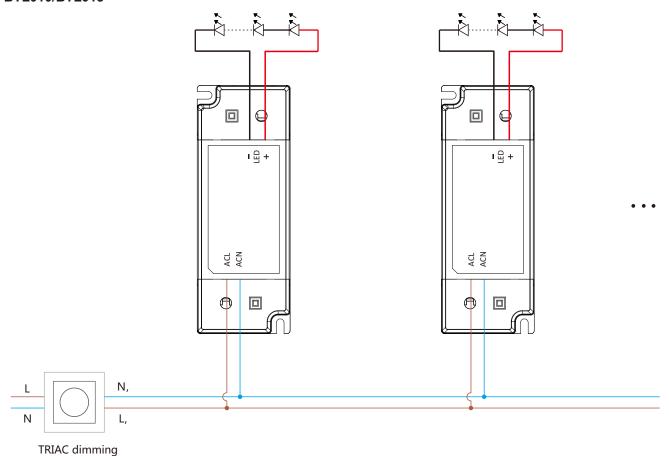
## **ELECTRICAL SPECIFICATION**

MODEL	BK-BTL028-0700AT	BK-BTL028-0750BT	BK-BTL044-1100AT	BK-BTL044-1150BT	BK-BTL044-1200CT				
OUTPUT									
DC current	0.7A	0.75A	1.1A	1.15A	1.2A				
DC voltage range	26-40V	26-38V	26-40V	26-38V	26-36V				
Rated power	28W Max	28.5W Max	44W Max	43.7W Max	43.2W Max				
Voltage ripple & noice (note.2)	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)	≤200mV(Vpp)				
Current ripple & noice	≤30mA(RMS)	≤30mA(RMS)	≤30mA(RMS)	≤30mA(RMS)	≤30mA(RMS)				
Constsnt current ADJ. range	450-700mA	710-750mA	800-1100mA	1100-1150mA	1160-1200mA				
Constant current accuracy	±5%	±5%	±5%	±5%	±5%				
Line regulation	±5%	±5%	±5%	±5%	±5%				
Load regulation	±5%	±5%	±5%	±5%	±5%				
DIM port input current	15%   15%								
Dimming function	Dimmable with trailing/le	ading-edge dimmers							
INPUT	Diffillable with trailing/le	ading-edge diffilliors							
Rated voltage	200-240VAC 200-240	VDC							
Input AC/DC voltage range	180-264VAC 180-264V								
		VDC							
Frequency range	47-63Hz								
Power factor		II load,PF>0.90 @ 230VA							
Total harmonic distortion	_	full load,THD<20% @ 230							
Efficiency (Typ.)	87%	87%	88%	87%	87%				
Standby power (note.3)	<0.5W @			<0.5W @ 230Vac					
Input current	<0.4A @	230Vac		<0.6A @ 230Vac					
Inrush current(Typ.)	30A peak (width=120u	30A peak (width=120us (50%-50%), cold start, 230Vac)							
Max. No. of PSUs on 16A circuit breaker	@230Vac,B22:25 units,C16:32 units								
Turn on delay	<0.5s @ 230Vac	<0.5s @ 230Vac							
PROTECTION									
Short circuit	Hiccup,recovers autom	Hiccup,recovers automatically after environment temperature declines							
Max output voltage	50V								
Over temperature	Hiccup,recovers autom	natically after fult condition	n is removed						
ENVIROHMENT									
Operation temperature	-20-45°C								
Operation humidity	10-90% RH,non-condensing								
Storagr tempera-ture/humidity	-20-80°C,5-95% RH								
IP class	IP20								
Vibration	10~500Hz.5G 12min./10	cycle.period for 72min. eac	h along X.Y.Z axes						
Tc (note.5)	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes  Tc=85°C(Ta=45°C)								
MTBF	· · · · · ·								
LIFETIME	500000H,MIL-HDBK-217F(25°C)  See lifetime curve map details								
EMC	1								
EMC emisson (note.4)	EN55015,GB17743,EN	61000-3-2 Class C(≥50%	load),EN61000-3-3						
EMC immunity	EN61000-4-2,3,4,5,6,8,	11,EN61547							
SAFETY									
Safety standards	EN61347-1/2-13								
Stroboscopic standard	IEEE1789								
Certificate	CE-SUD ENEC SAA R	CM							
Withstand voltage	I/P-O/P:3750VAC								
Surge	DM 2KV								
Leakage current									
Isolation resis-tance	<0.7mA @ 240Vac I/P-O/P:100MΩ/500Vdo	-/25°C /7∩% PH							
	1/F-0/F.1001012/500000	0120 C/ 1070 KM							
Environmental protection	Dalle								
Environmental protection	RoHS	2 2 4 5 2							
Input connection		ange+orange/0.75-1.5mm <sup>2</sup>							
Output connection	PCB connector/2PIN/gra								
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.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 mancfactures 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.								

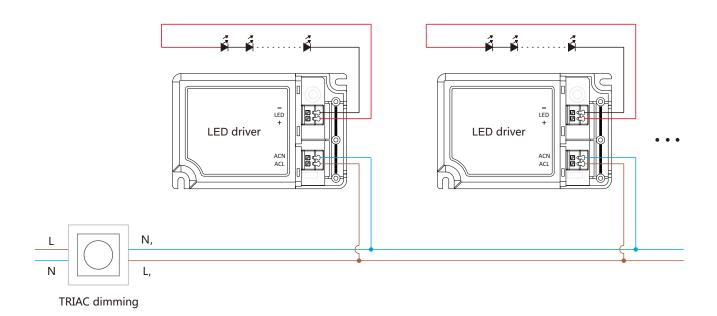
# **Triac dimming**

## Wiring diagram

## BTL010/BTL018



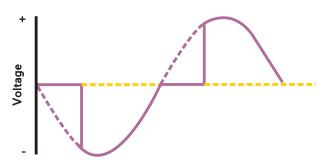
#### BTL028/BTL044



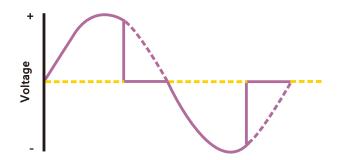
## **Phase Control dimmer compatible list**

No.	Brand	Model	Power (Reference)	Leading /Trailing	Installation	adj.min.	compatible	Note
а	GIRA (Germany)	2260 00	150W ( LED )	Trailing	Europe	Yes	Yes	Recommend
b	CLKO (Czech Republic)	315GLE	150W ( LED )	Trailing	Europe	Yes	Yes	Recommend
С	BOKE (China)	EU-P3	150W ( LED )	Trailing	Europe (China)	Yes	Yes	Recommend
d	BOKE (China)	AU-RD350VA	150W ( LED )	Trailing	Australia	NO	Yes	Recommend

# Forward-phase control dimmer (TRIAC)



# Reverse-phase control dimmer

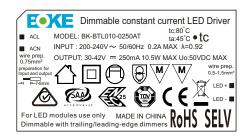


#### Note

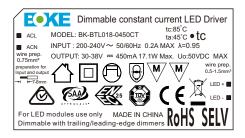
- 1. The above dimmers are the models we tested compatible with our drivers.
- 2.Please test the driver samples with your dimmers about the compatibility, whatever the dimmers you will use is on our list. Purchase batch order after sample test.
- 3.If the dimmers not included in the above list, any failure and risk caused by the compatible problem, we do not assume responsibility.
- 4. We accept batch order after sample confirm.
- 5.Our drivers compatible with leading edge dimmers and trailing edge dimmers, few of the dimmers may not compatible, it is normal, please confirm with us.
- 6. There will be some noise when use the drivers, it is normal, the noise will be smaller if use trailing edge dimmer.
- 7. From the dimming effect, stability, noise, etc, trailing edge dimmers are recommended.
- 8. Dimmers with rating power according to different load, please choose the right power which the dimmer need to load.
- 9.Dimmers will have minimum maintain power demand, when there is less than or critical to maintain power, could adjust the minimum brightness of the dimmer output(some of the dimmers without minimum brightness adjust function.

#### **LABEL**

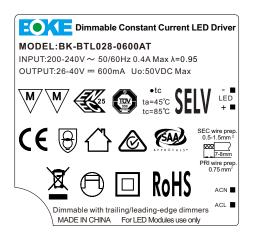
#### **BTL010**



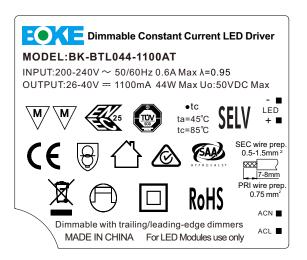
#### **BTL018**



#### **BTL028**

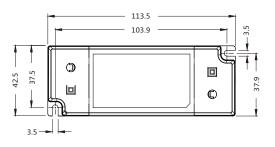


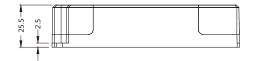
#### **BTL044**



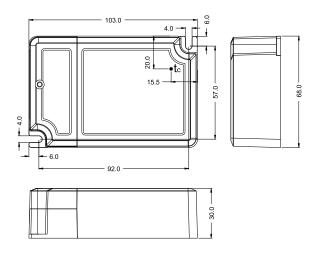
### **Mechanical Specification**

#### BTL010/BTL018

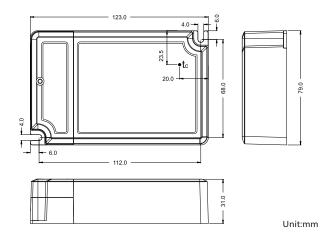




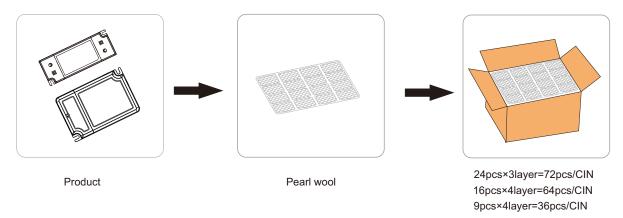
#### **BTL028**



#### **BTL044**



# **Product package**



Product	Product size	Weight	Pearl wool size	Flat card size	Carton size	Qty/carton	N.W	G.W
BTL010	L113.5*W42.5*H25.5mm	88g	L430*W340*H47mm	L435*W335mm	L450*W350*H180mm	72pcs	6. 4kg	7. 70kg
BTL018	L113.5*W42.5*H25.5mm	90g	L430*W340*H47mm	L435*W335mm	L450*W350*H180mm	72pcs	6. 5kg	7. 80kg
BTL028	L103*W68*H30mm	144g	L480*W330*H40mm	L480*W330mm	L490*W340*H165mm	64pcs	9.2kg	10. 5kg
BTL044	L123*W79*H31mm	229g	L435*W345*H40mm	L435*W335mm	L450*W350*H180mm	36pcs	8. 3kg	9.50kg



Product

Packing box size

24pcs×5layer=120pcs/CIN 24pcs×2layer=48pcs/CIN

Model	Product size	Weight	Packing box size	Carton size	Qty/carton	N.W	G.W
BTL010	L113.5*W42.5*H25.5mm	88g	L140*W35*H50mm	L440*W375*H222mm	120pcs	6. 4kg	9.50kg
BTL018	L113.5*W42.5*H25.5mm	90g	L140*W35*H50mm	L440*W375*H222mm	120pcs	6. 5kg	9.50kg
BTL028	L103*W68*H30mm	144g	L130*W38*H85mm	L415*W330*H190mm	48pcs	9.2kg	11.0kg
BTL044	L123*W79*H31mm	229g	L130*W38*H85mm	L415*W330*H190mm	48pcs	8. 3kg	10.0kg