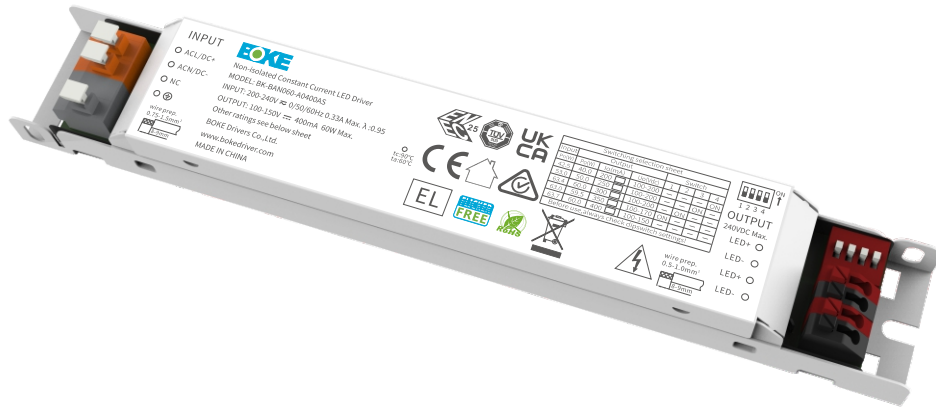


Non-isolated constant current linear driver BAN Series suffix S



Features

- Input and output non-isolated
- 5(10)-level current output can be realized by DIP-switch
- Output flick-free, meets the new requirements of ErP certification
- Built in active PFC function, high PF, low THD
- Dual-stage circuit design, work stable
- Withstand 380VAC high voltage short-time shock
- Suitable for built-in use of Class I lamps
- Passed CE, ENEC, UKCA, RCM, EL and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h
- 5-year guarantee

Functions

- Support central emergency application (100% output in DC input)
- Support self-contained emergency application
- Protective features (short-circuit, no-load protection)

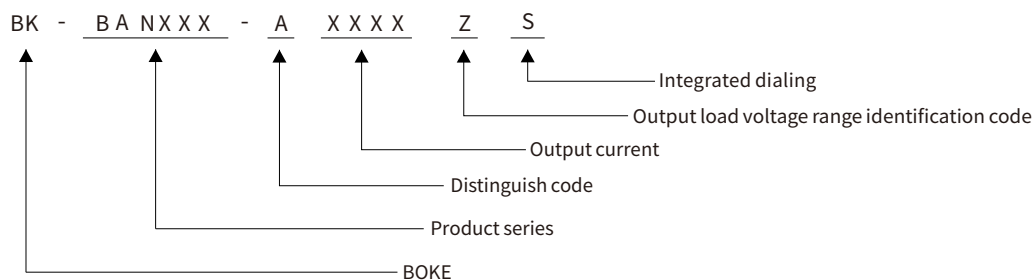
Suitable for lights

- Suitable for linear lights, tri-proof lights, working lights and other linear or ultra-thin lights etc.
- Not suitable for lights with external drivers

Typical applications

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

Model coding rules of BAN series



Function list

Model	Mode	Function
BK-BAN022-A BK-BAN040-A BK-BAN060-A BK-BAN075-A BK-BAN100-A BK-BAN150-A	S	Integrated dialing
	R	External dialing

* The description in this specification is only applicable to the products with the suffix S and the model are BAN022-A, BAN040-A, BAN060-A, BAN075-A, BAN100-A and BAN150-A.

Model list

Model	Input voltage	Output power	Output voltage	Output current	Dimension	Certifications
BK-BAN022-A0400AS	200-240VAC/DC	22.8W MAX.	39-57/63/72VDC	0.2-0.4A	L158*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN022-A0400AR	200-240VAC/DC	22.8W MAX.	39-57/63/72VDC	0.2-0.4A	L158*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN040-A0400AS	200-240VAC/DC	40W MAX.	54-100/114VDC	0.2-0.4A	L158*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN040-A0400AR	200-240VAC/DC	40W MAX.	54-100/114VDC	0.2-0.4A	L158*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN060-A0400AS	200-240VAC/DC	60W MAX.	100-150/170/200VDC	0.2-0.4A	L195*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN060-A0400AR	200-240VAC/DC	60W MAX.	100-150/170/200VDC	0.2-0.4A	L195*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN075-A0400AS	200-240VAC/DC	75.2W MAX.	100-188/200VDC	0.2-0.4A	L245*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN075-A0400AR	200-240VAC/DC	75.2W MAX.	100-188/200VDC	0.2-0.4A	L245*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN100-A0600AS	200-240VAC/DC	99W MAX.	100-165/188/200VDC	0.3-0.6A	L285*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN100-A0600AR	200-240VAC/DC	99W MAX.	100-165/188/200VDC	0.3-0.6A	L285*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN100-A0800BS	200-240VAC/DC	100W MAX.	80-125/140/165/170VDC	0.5-0.8A	L285*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN100-A0800BR	200-240VAC/DC	100W MAX.	80-125/140/165/170VDC	0.5-0.8A	L285*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-BAN150-A1000AS	200-240VAC/DC	150.1W MAX.	54-150/158/166/176/187/200/230/240VDC	0.35-1A	L355*W36*H23mm	CE, ENEC, UKCA, RCM, EL
BK-BAN150-A1000AR	200-240VAC/DC	150.1W MAX.	54-150/158/166/176/187/200/230/240VDC	0.35-1A	L355*W36*H23mm	CE, ENEC, UKCA, RCM, EL

* The description in this specification is only applicable to the products with the suffix S and the model are BAN022-A, BAN040-A, BAN060-A, BAN075-A, BAN100-A and BAN150-A.

Technical data

Product model	BK-BAN022-A0400AS	
Output parameters		
Regulation method	Constant Current	
Rated output current range	0.2-0.4A	
Rated output voltage range	39-57/63/72VDC	
Rated output power	22.8W Max	
Output current adjustment	DIP S.W(5 levels)	
Output current ripple LF	±2%	
Output current accuracy	±5%	
Linear regulation	±3%	
Load regulation	±3%	
No load output voltage	150VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.510%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.005, 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 180-264VDC	
Input vottage shock	<380 V AC	
Input current	<0.135A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.97 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	87.5% (230V AC & Full load)	
In-rush current	9.65A peak ,184us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pin):25.62W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-FG:1750VAC	
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:A)	
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported(100% output in DC input)	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°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		
Certified	CE, ENEC, UKCA, RCM, EL	
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	N/A	
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 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-BAN040-A0400AS	
Output parameters		
Regulation method	Constant Current	
Rated output current range	0.2-0.4A	
Rated output voltage range	54 - 100/114VDC	
Rated output power	40W Max	
Output current adjustment	DIP S.W(5 levels)	
Output current ripple LF	±2%	
Output current accuracy	±5%	
Linear regulation	±3%	
Load regulation	±3%	
No load output voltage	150VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.494%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.000, SVM = 0.003, (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 180-264VDC	
Input vottage shock	<380 V AC	
Input current	<0.22A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.97 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	92.5% (230V AC & Full load)	
In-rush current	16.5A peak ,236us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pin):42.8W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-FG:1750VAC	
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:A)	
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported(100% output in DC input)	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°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		
Certified	CE, ENEC, UKCA, RCM, EL	
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	N/A	
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 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-BAN060-A0400AS	
Output parameters		
Regulation method	Constant Current	
Rated output current range	0.2-0.4A	
Rated output voltage range	100 - 150/170/200VDC	
Rated output power	60W Max	
Output current adjustment	DIP S.W(5 levels)	
Output current ripple LF	±2%	
Output current accuracy	±5%	
Linear regulation	±3%	
Load regulation	±3%	
No load output voltage	240VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=1.012%, Flicker index(IEEE 1789)=0.003, Pst LM = 0.000, 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 180-264VDC	
Input votage shock	<380 V AC	
Input current	<0.33A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.98 (230V AC & Full load)	
Input THD	9% (230V AC & Full load)	
Efficiency(typical)	93% (230V AC & Full load)	
In-rush current	21A peak ,272us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pin):63.7W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-FG:1750VAC	
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:A)	
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported(100% output in DC input)	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°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		
Certified	CE, ENEC, UKCA, RCM, EL	
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	N/A	
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 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-BAN075-A0400AS	
Output parameters		
Regulation method	Constant Current	
Rated output current range	0.2-0.4A	
Rated output voltage range	100 - 188/200VDC	
Rated output power	75.2W Max	
Output current adjustment	DIP S.W(5 levels)	
Output current ripple LF	±2%	
Output current accuracy	±5%	
Linear regulation	±3%	
Load regulation	±3%	
No load output voltage	240VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.745%, Flicker index(IEEE 1789)=0.002, 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 180-264VDC	
Input votage shock	<380 V AC	
Input current	<0.4A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.98 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	93.5% (230V AC & Full load)	
In-rush current	25.5A peak ,302us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pin):75.2W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-FG:1750VAC	
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:B)	
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported(100% output in DC input)	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°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		
Certified	CE, ENEC, UKCA, RCM, EL	
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	N/A	
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 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-BAN100-A0600AS	
Output parameters		
Regulation method	Constant Current	
Rated output current range	0.3-0.6A	
Rated output voltage range	100 - 165/180/200VDC	
Rated output power	99W Max	
Output current adjustment	DIP S.W(5 levels)	
Output current ripple LF	±2%	
Output current accuracy	±5%	
Linear regulation	±3%	
Load regulation	±3%	
No load output voltage	240VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.211%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.011, 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 180-264VDC	
Input votage shock	<380 V AC	
Input current	<0.53A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.98 (230V AC & Full load)	
Input THD	9% (230V AC & Full load)	
Efficiency(typical)	93.5% (230V AC & Full load)	
In-rush current	25.46A peak ,395us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pin):105W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-FG:1750VAC	
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:B)	
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported(100% output in DC input)	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°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		
Certified	CE, ENEC, UKCA, RCM, EL	
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	N/A	
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 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-BAN100-A0800BS	
Output parameters		
Regulation method	Constant Current	
Rated output current range	0.5-0.8A	
Rated output voltage range	80 - 125/140/165/170VDC	
Rated output power	100W Max	
Output current adjustment	DIP S.W(5 levels)	
Output current ripple LF	±3%	
Output current accuracy	±5%	
Linear regulation	±5%	
Load regulation	±5%	
No load output voltage	240VDC	
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.365%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.027, SVM = 0.004, (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 180-264VDC	
Input vottage shock	<380 V AC	
Input current	<0.53A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.98 (230V AC & Full load)	
Input THD	9% (230V AC & Full load)	
Efficiency(typical)	93.5% (230V AC & Full load)	
In-rush current	25.46A peak ,395us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pin):107.5W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-FG:1750VAC	
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:B)	
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported(100% output in DC input)	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°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		
Certified	CE, ENEC, UKCA, RCM, EL	
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	N/A	
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 230VAC input, full load and 25°C of ambient temperature.

Technical data

Product model	BK-BAN150-A1000AS
Output parameters	
Regulation method	Constant Current
Rated output current range	0.35-1A
Rated output voltage range	54-150/158/166/176/187/200/230/240VDC
Rated output power	150.1W Max
Output current adjustment	DIP S.W(10 levels)
Output current ripple LF	±3%
Output current accuracy	±5%
Linear regulation	±5%
Load regulation	±5%
No load output voltage	300VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.196%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.016, 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 180-264VDC
Input votage shock	<380 V AC
Input current	<0.8A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF>0.95 (230V AC & Full load),DF>0.98 (230V AC & Full load)
Input THD	7% (230V AC & Full load)
Efficiency(typical)	93.5% (230V AC & Full load)
In-rush current	23.67A peak ,390us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.5s(AC start),<0.5s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 50,000 switching cycles
Power consumption	Full load(Pin):159.6W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-FG:1750VAC
Mains surge capability	L-N:2.5KV,L-FG/N-FG:2.5KV(Performance criterion:B)
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	N/A
pushDIM dimming port	N/A
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	N/A
Dimming drive mode	N/A
Emergency support	
Central emergency system	Supported(100% output in DC input)
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-60°C
Case temperature	Tc=90°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	
Certified	CE, ENEC, UKCA, RCM, EL
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	N/A
EL	Compatible IEC 61347-2- 13 Annex J , compatible with EN 60598-2-22 and EN 50172
RF	N/A

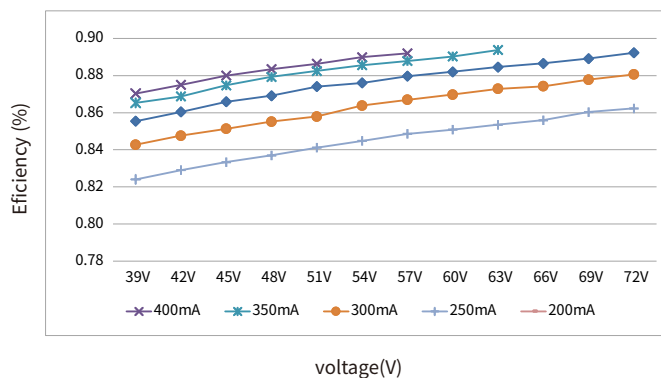
Remarks

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

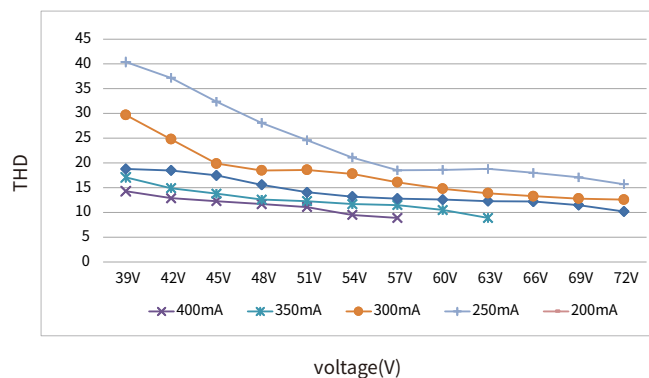
Electrical values

BK-BAN022-A0400AS

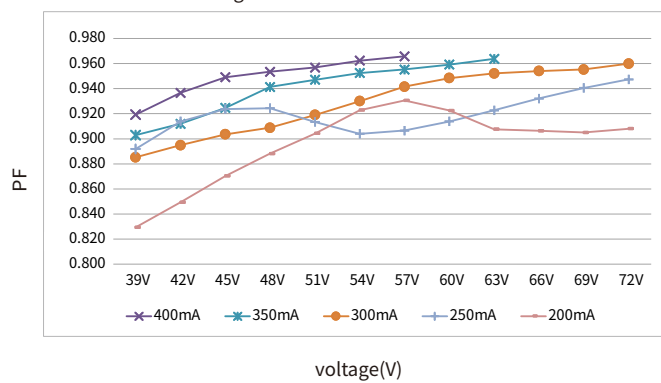
Efficiency vs. voltage



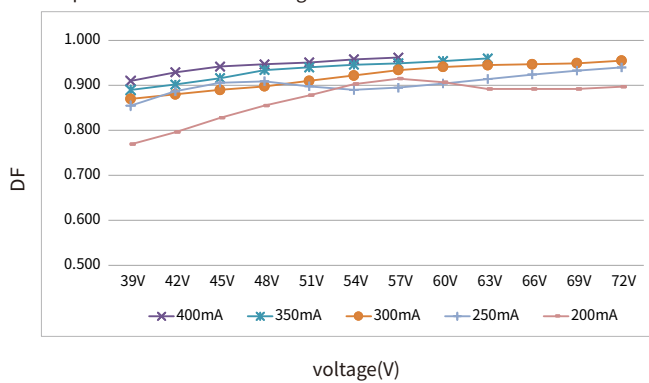
THD vs. voltage



Power factor vs. voltage

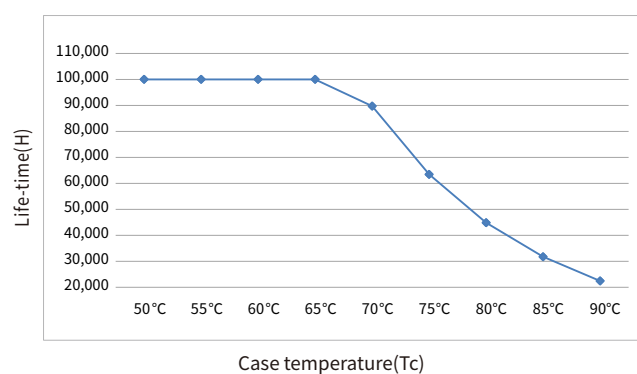


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature



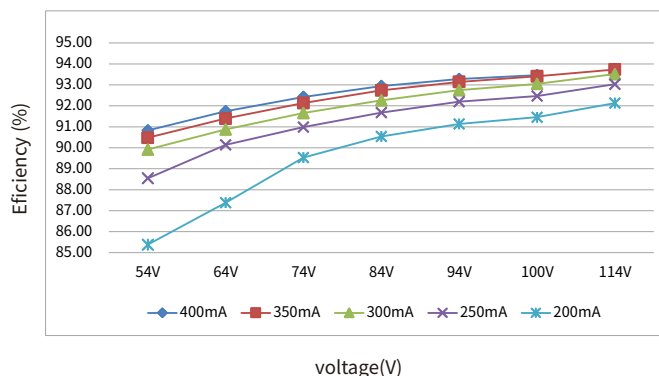
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

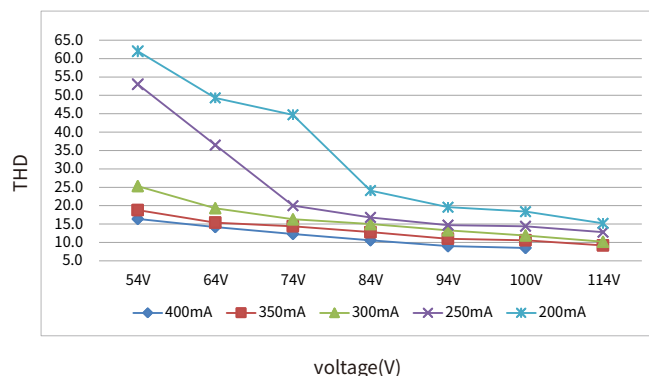
Electrical values

BK-BAN040-A0400AS

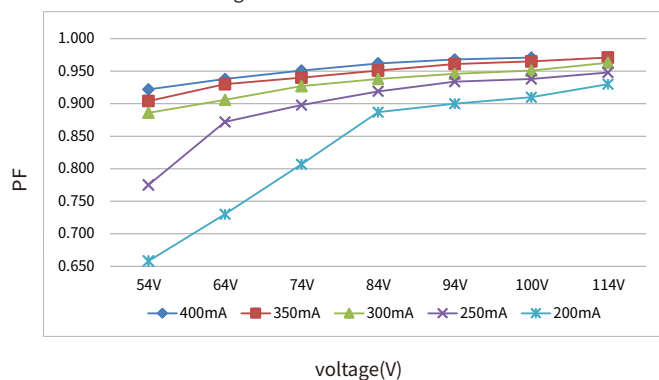
Efficiency vs voltage



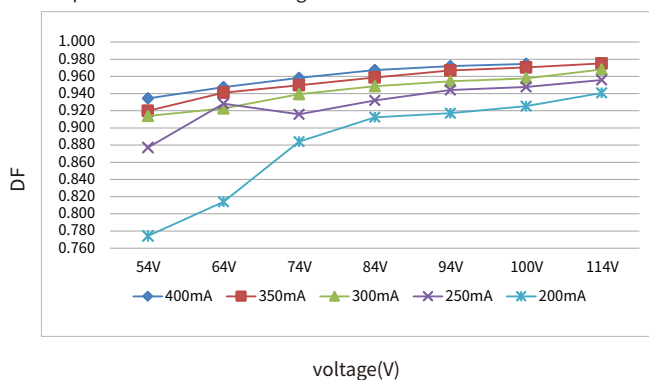
THD vs. voltage



Power factor vs. voltage

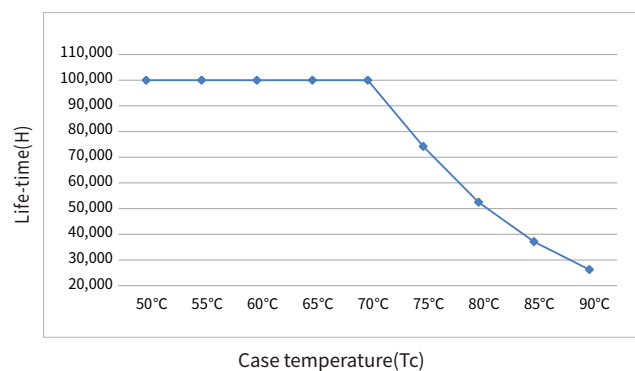


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature



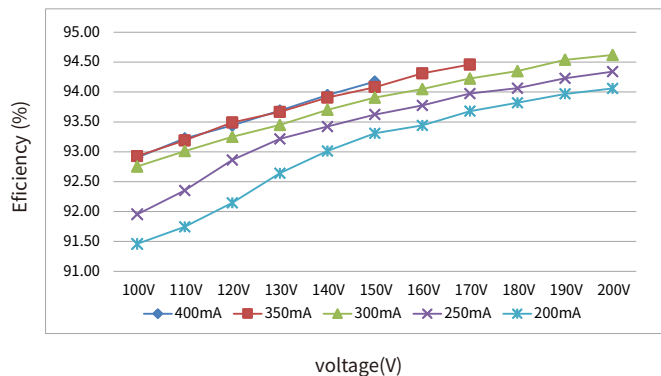
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

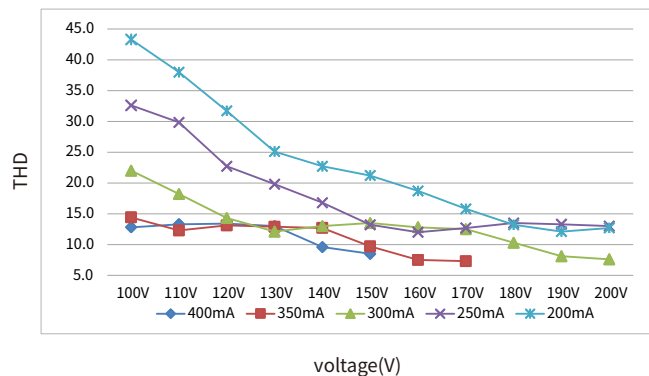
Electrical values

BK-BAN060-A0400AS

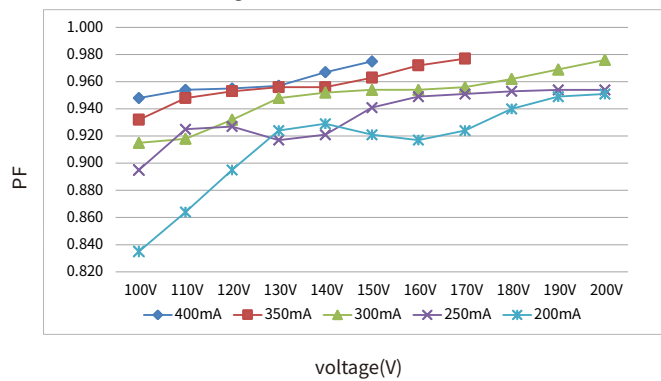
Efficiency vs voltage



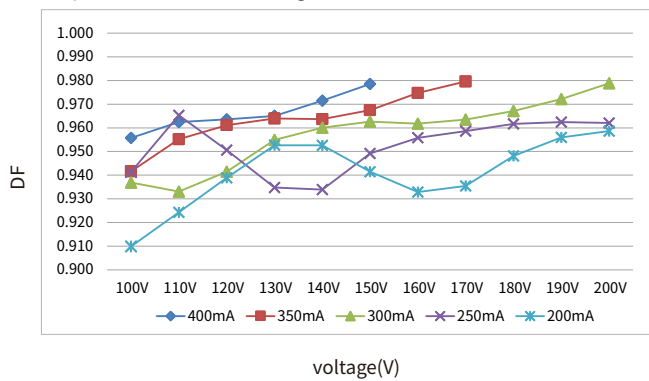
THD vs. voltage



Power factor vs. voltage

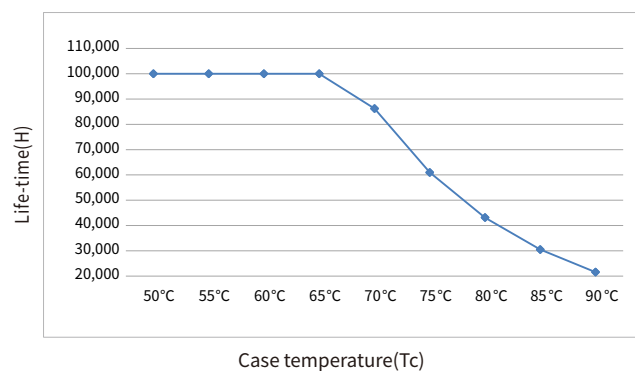


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature



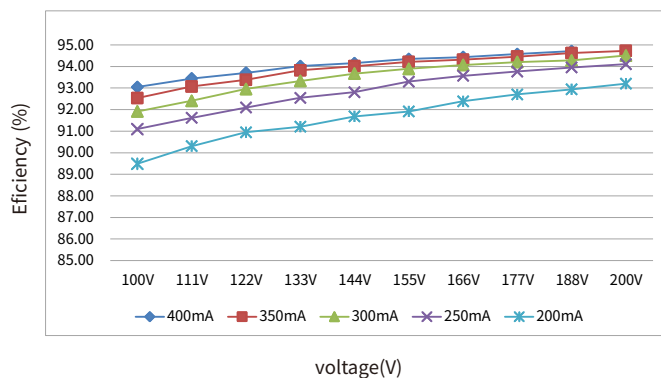
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

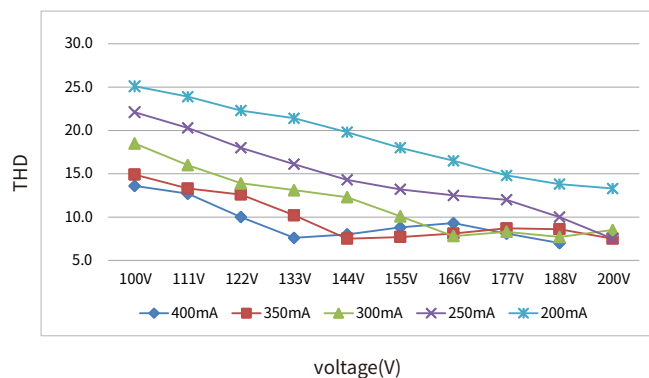
Electrical values

BK-BAN075-A0400AS

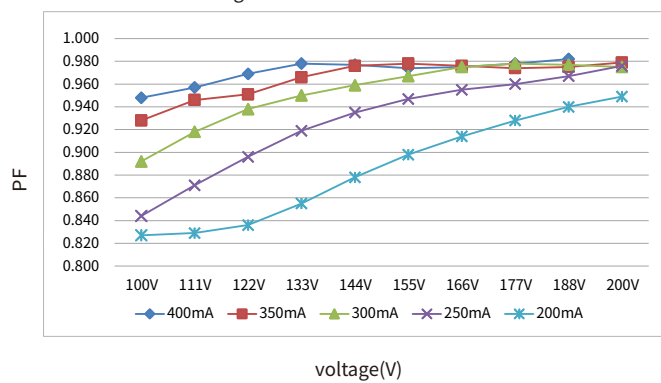
Efficiency vs. voltage



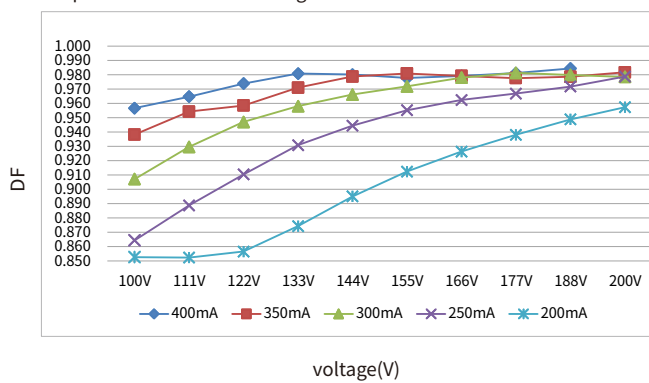
THD vs. voltage



Power factor vs. voltage

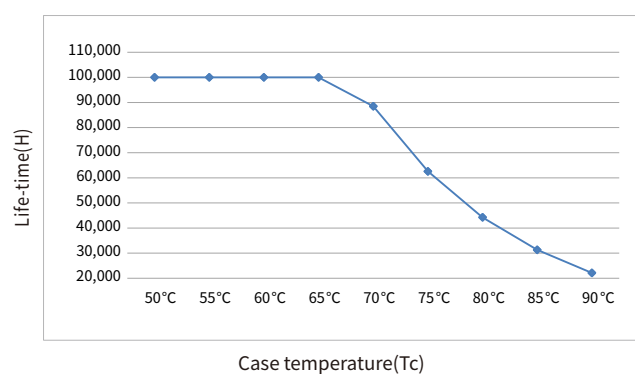


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature



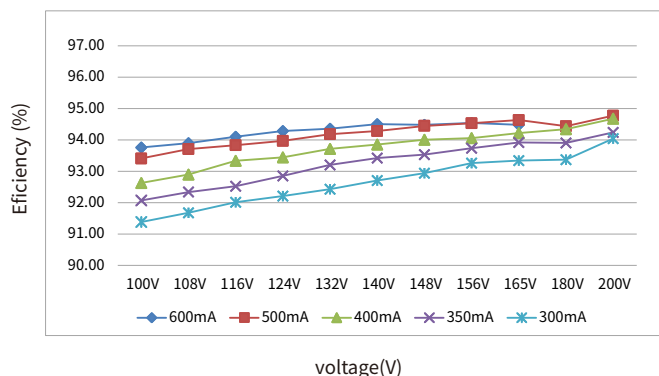
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

- The relation of t_c to t_a temperature depends also on the luminaire design.

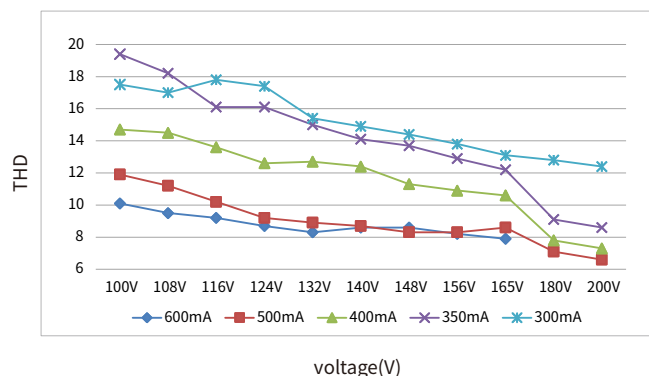
Electrical values

BK-BAN100-A0600AS

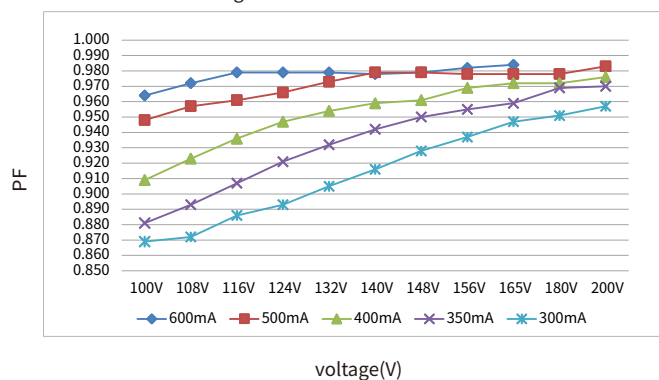
Efficiency vs voltage



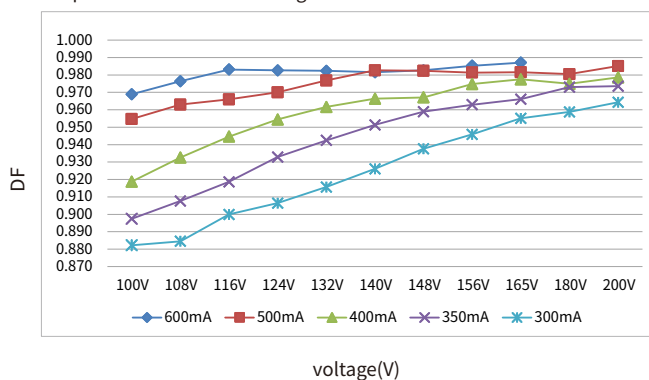
THD vs. voltage



Power factor vs. voltage

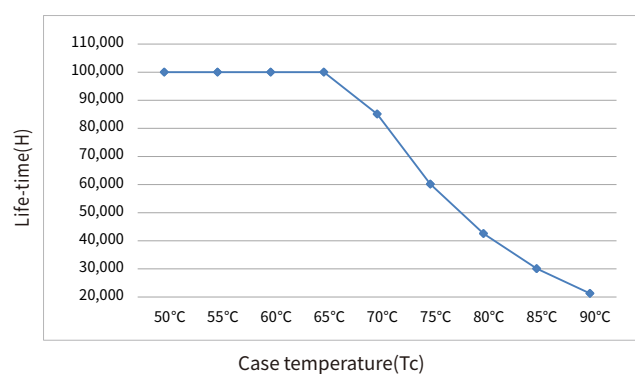


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature



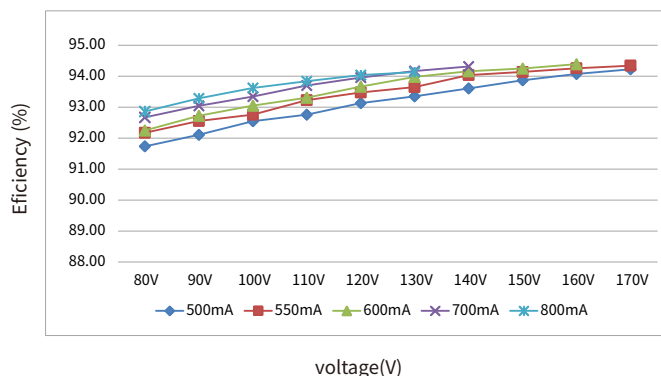
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

- The relation of t_c to t_a temperature depends also on the luminaire design.

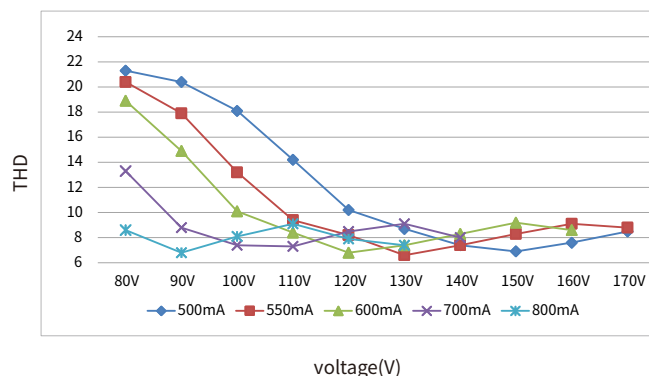
Electrical values

BK-BAN100-A0800BS

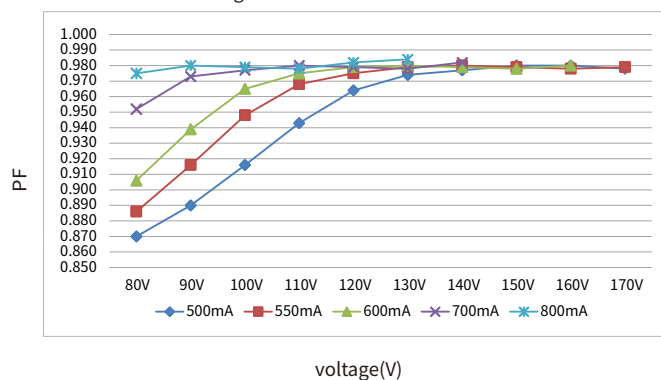
Efficiency vs. voltage



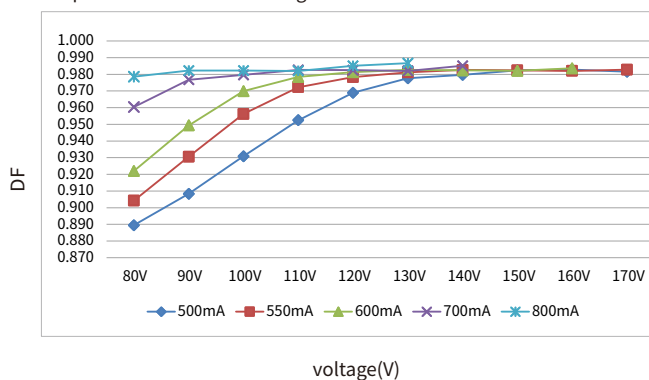
THD vs. voltage



Power factor vs. voltage

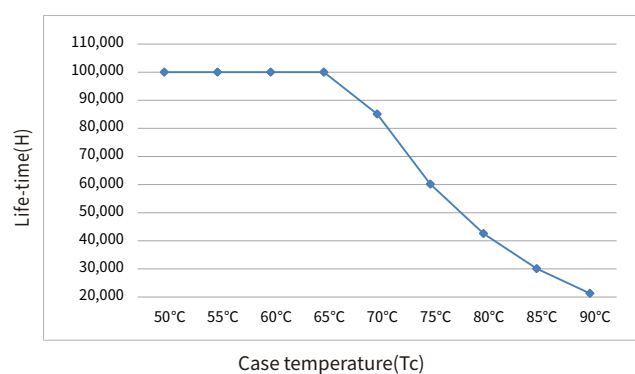


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature



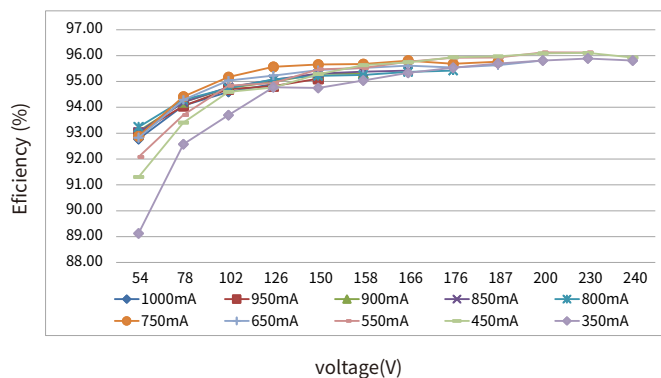
-The life-time of the LED driver is shown in the figure above
(calculated based on the 90% survival rate).

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

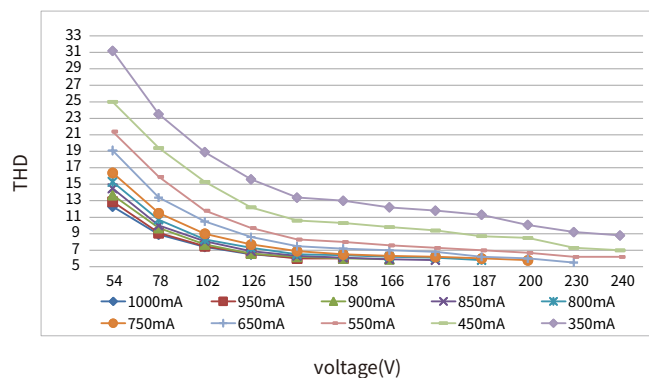
Electrical values

BK-BAN150-A1000AS

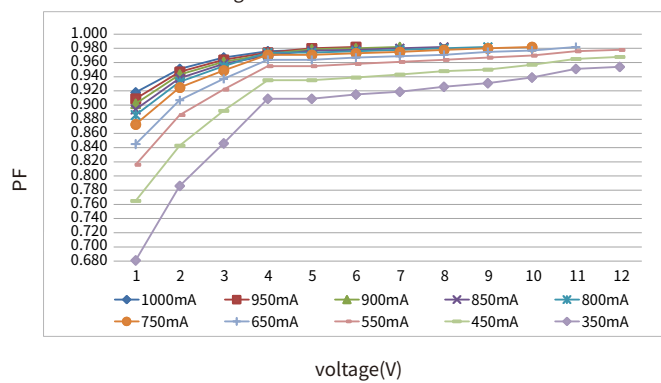
Efficiency vs. voltage



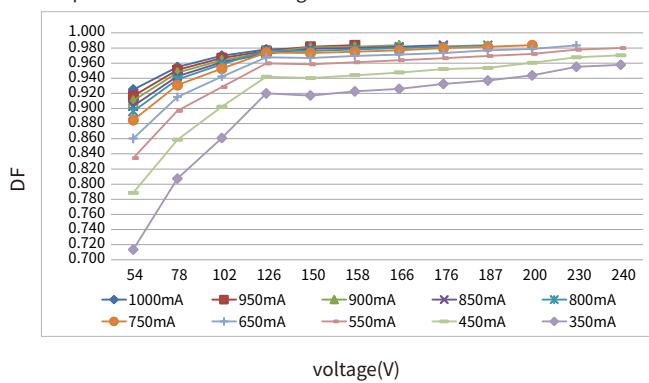
THD vs. voltage



Power factor vs. voltage

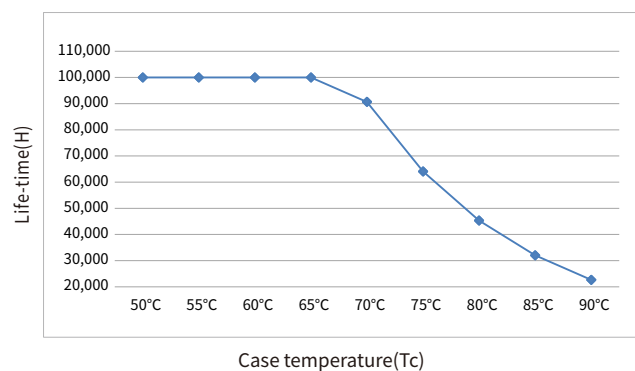


Displacement factor vs. voltage



Expected life-time

Life-time vs. case temperature

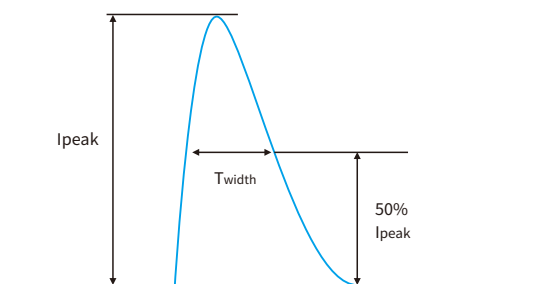


-The life-time of the LED driver is shown in the figure above
(calculated based on the 90% survival rate).

- The relation of t_c to t_a temperature depends also on the luminaire design.

Surge

Model	I _{peak}	T _{width}	Condition	Relative number of MCB															Unit: pcs
				B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25	
BK-BAN022-A0400AS	9.65A	184us	AC 230V, Full load, Cold start, T _a ≤ 30°C, MCB is not installed side by side	35	46	57	71	89	59	77	95	118	148	61	79	97	122	452	
BK-BAN040-A0400AS	16.5A	236us		16	21	25	32	40	27	34	42	53	66	36	47	58	73	91	
BK-BAN060-A0400AS	21A	272us		10	13	16	20	26	17	22	27	34	43	24	32	39	49	61	
BK-BAN075-A0400AS	25.5A	302us		7	10	12	15	19	12	16	20	25	31	20	25	31	39	49	
BK-BAN100-A0600AS	25.46A	395us		6	7	9	11	14	9	12	15	18	23	15	19	24	30	37	
BK-BAN100-A0800BS	25.46A	395us		6	7	9	11	14	9	12	15	18	23	15	19	24	30	37	
BK-BAN150-A1000AS	23.67A	390us		6	8	10	12	15	10	13	16	20	24	10	13	16	20	24	



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 point, the driver will automatically restore output.

Output no-load operation

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

Insulation between circuits

Isolation	Input	Output	Case
Input	-	-	Basic
Output	-	-	Basic
Case	Basic	Basic	-

Label

BAN022

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN022-A0400AS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.33A Max. λ : 0.95
- NC OUTPUT: 29.57V $\pm$ 400mA 22.8W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

150VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

BAN040

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN040-A0400AS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.33A Max. λ : 0.95
- NC OUTPUT: 54.10V $\pm$ 400mA 40W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

150VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

BAN060

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN060-A0400AS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.33A Max. λ : 0.95
- NC OUTPUT: 100-150V $\approx$ 400mA 60W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

240VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

BAN075

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN075-A0400AS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.4A Max. λ : 0.95
- NC OUTPUT: 100-180V $\approx$ 400mA 75.2W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

240VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

BAN100

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN100-A0600AS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.53A Max. λ : 0.95
- NC OUTPUT: 100-165V $\approx$ 600mA 99W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

240VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN100-A0800BS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.53A Max. λ : 0.95
- NC OUTPUT: 80-125V $\approx$ 800mA 100W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

240VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

BAN150

INPUT

- AC/L/DC+ Non-isolated Constant Current LED Driver
- MODEL: BK-BAN150-A1000AS
- INPUT: 200-240V $\approx$ 0/50/60Hz 0.8A Max. λ : 0.95
- NC OUTPUT: 54-150V $\approx$ 1000mA 150W Max.
- Other ratings see below sheet

BOKE Drivers Co., Ltd.
www.bokedriver.com
MADE IN CHINA

OUTPUT

300VDC Max.
LED+
LED-
LED+
LED-
LED+

wire prep. 0.75-1.5mm²

CE UK CA EL FREE RoHS

0 to 90°C ta: 60°C

wire prep. 0.5-1.0mm²

DIP-switch & output current

BK-BAN022-A0400AS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
16.18	14.40	200	39-72	--	--	--	ON
20.22	18.00	250	39-72	--	--	ON	--
24.27	21.60	300	39-72	--	ON	--	--
24.78	22.05	350	39-63	ON	--	--	--
25.62	22.80	400 ★	39-57	--	--	--	--

BK-BAN040-A0400AS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
24.75	22.8	200	54-114	--	--	--	ON
30.63	28.5	250	54-114	--	--	ON	--
36.57	34.2	300	54-114	--	ON	--	--
42.57	39.9	350	54-114	ON	--	--	--
42.80	40.0	400 ★	54-100	--	--	--	--

BK-BAN060-A0400AS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
42.5	40.0	200	100-200	--	--	--	ON
53.0	50.0	250	100-200	--	--	ON	--
63.4	60.0	300	100-200	--	ON	--	--
63.0	59.5	350	100-170	ON	--	--	--
63.7	60.0	400 ★	100-150	--	--	--	--

BK-BAN075-A0400AS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
42.92	40.0	200	100-200	--	--	--	ON
53.13	50.0	250	100-200	--	--	ON	--
63.49	60.0	300	100-200	--	ON	--	--
73.90	70.0	350	100-200	ON	--	--	--
79.40	75.2	400 ★	100-188	--	--	--	--

BK-BAN100-A0600AS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
63.63	60.0	300	100-200	--	--	--	ON
74.23	70.0	350	100-200	--	--	ON	--
84.84	80.0	400	100-200	--	ON	--	--
95.44	90.0	500	100-180	ON	--	--	--
105.0	99.0	600 ★	100-165	--	--	--	--

BK-BAN100-A0800BS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
91.90	85.0	500	80-170	--	--	--	ON
100.5	93.5	550	80-170	--	--	ON	--
106.5	99.0	600	80-165	--	ON	--	--
105.4	98.0	700	80-140	ON	--	--	--
107.5	100	800 ★	80-125	--	--	--	--

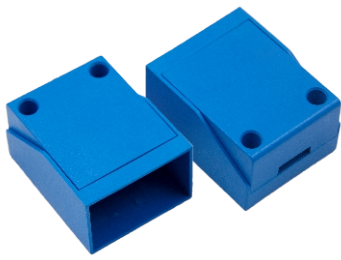
BK-BAN150-A1000AS

Pin(W) typ.	Output			1	2	3	4
	Prated(W)	Irated(mA)	Voltage(Vdc)				
89.40	84.00	350	54-240	--	ON	ON	ON
114.9	108.0	450	54-240	ON	--	ON	ON
140.4	132.0	550	54-240	--	--	ON	ON
159.0	149.5	650	54-230	--	ON	--	ON
159.6	150.0	750	54-200	--	--	--	ON
159.1	149.6	800	54-187	ON	ON	ON	--
159.1	149.6	850	54-176	--	--	ON	--
158.9	149.4	900	54-166	--	ON	--	--
159.7	150.1	950	54-158	ON	--	--	--
159.6	150.0	1000 ★	54-150	--	--	--	--

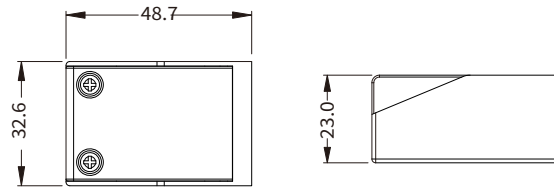
Remarks:

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

Optional accessories

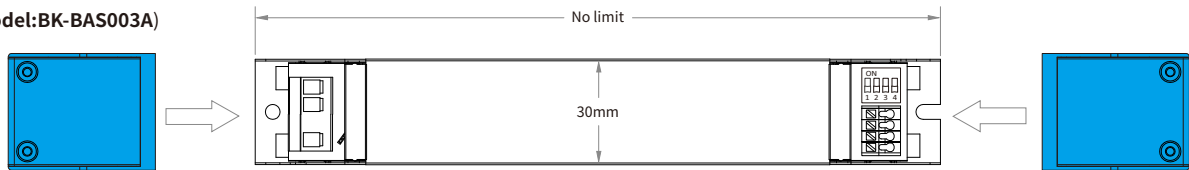


(Model: BK-BAS003A)



Installation diagram of accessories

(Model: BK-BAS003A)

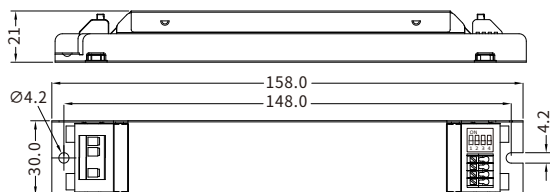


Mechanical Specification

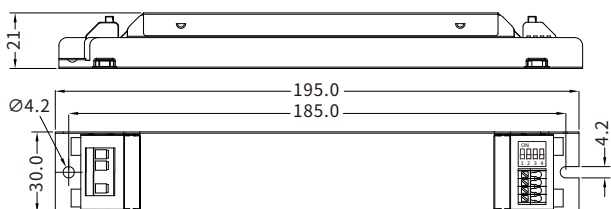
Size(Excluding accessories)

Unit:mm

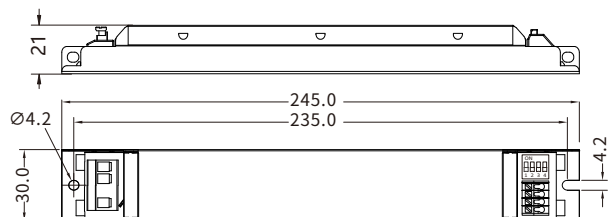
BAN022-A\BAN040-A



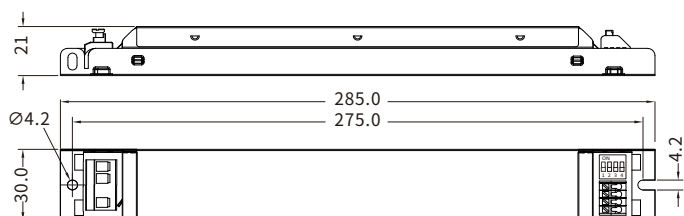
BAN060-A



BAN075-A



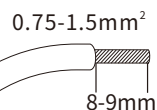
BAN100-A



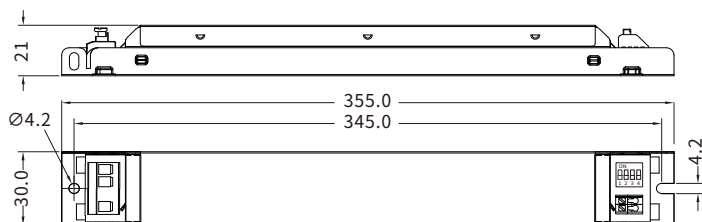
INPUT

Numbering	function	colour
1	ACL/DC+	orange
2	ACN/DC-	orange
3	NC	gray
4	FG	gray

Input wire



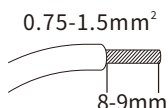
BAN150-A



INPUT

Numbering	function	colour
1	ACL/DC+	orange
2	ACN/DC-	orange
3	NC	gray
4	FG	gray

Input wire

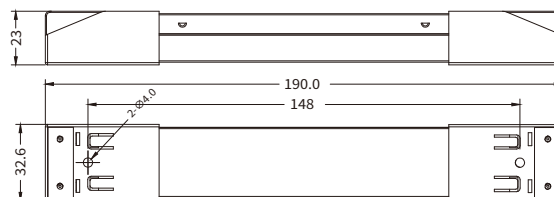


Mechanical Specification

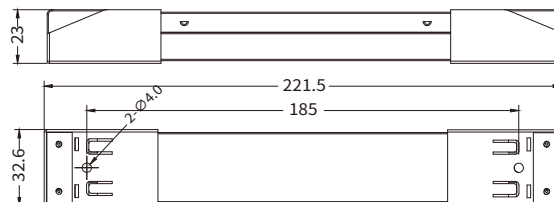
Size(Include accessories)

Unit:mm

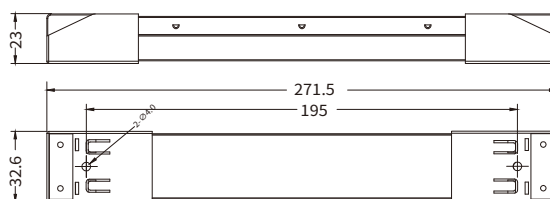
BAN022-A\BAN040-A



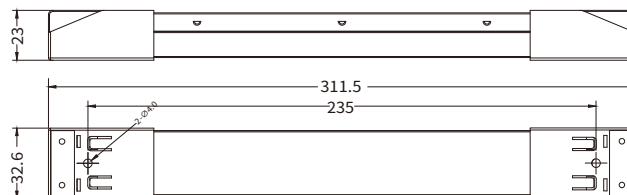
BAN060-A



BAN075-A



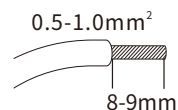
BAN100-A



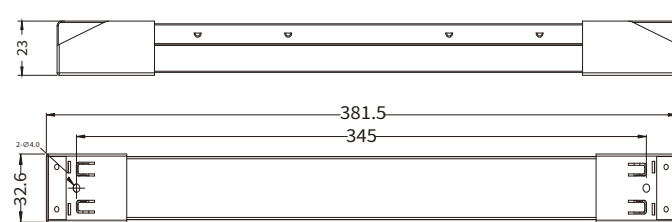
OUTPUT

Numbering	function	colour
1	LED+	red
2	LED-	black
3	LED+	red
4	LED-	black

Output wire



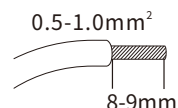
BAN150-A



OUTPUT

Numbering	function	colour
1	LED+	red
2	LED-	black

Output wire



Installation note

Hot plug-in

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

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 temperature of the mounting surface of the driver should be lower than 40°C
- 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.

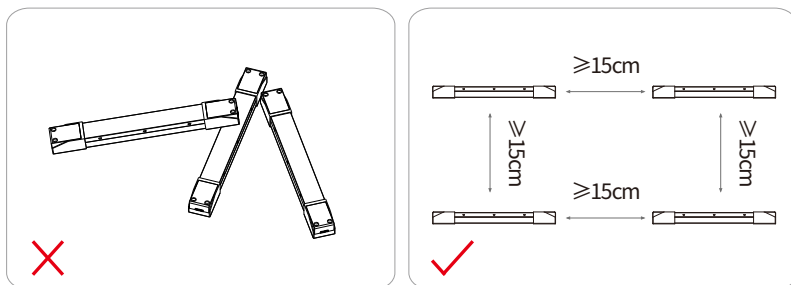


Figure 1

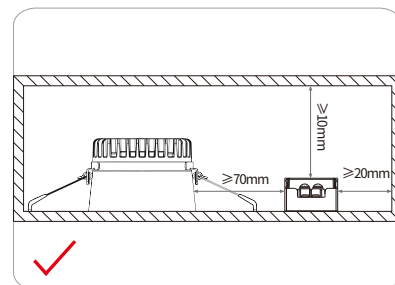
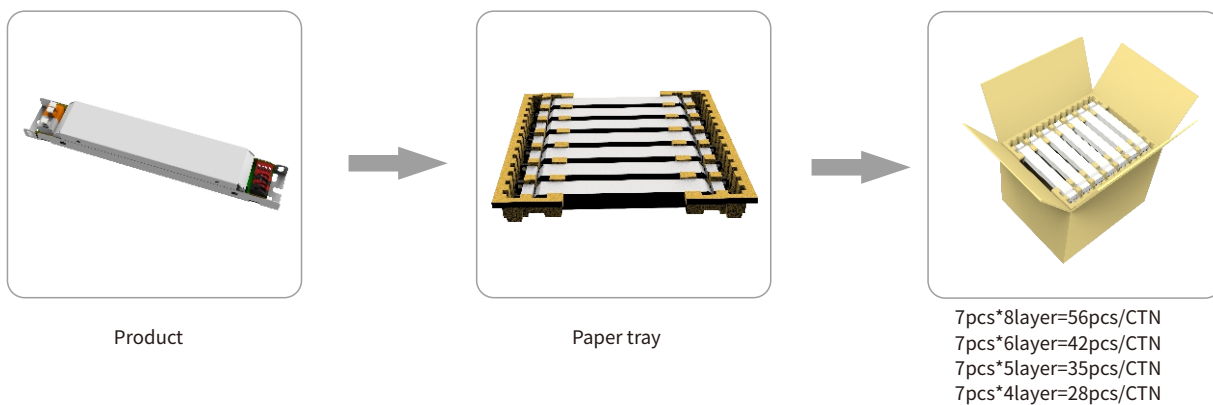


Figure 2

Packaging



Model	Product size	Weight	Paper tray	Carton size	Packing	N.W	G.W
BAN022-A	L158*W30*H21mm	98g	L345*W75*H29mm	L355*W200*H270mm	56pcs	5.49kg	6.59kg
BAN040-A	L158*W30*H21mm	109g	L345*W75*H29mm	L355*W200*H270mm	56pcs	6.11kg	7.21kg
BAN060-A	L195*W30*H21mm	156g	L345*W75*H29mm	L355*W235*H205mm	42pcs	6.55kg	7.55kg
BAN075-A	L245*W30*H21mm	185g	L345*W75*H29mm	L355*W285*H205mm	42pcs	7.77kg	8.77kg
BAN100-A	L285*W30*H21mm	225g	L345*W75*H29mm	L355*W325*H170mm	35pcs	7.88kg	8.85kg
BAN150-A	L355*W30*H21mm	268g	L345*W75*H29mm	L395*W355*H140mm	28pcs	7.50kg	8.65kg

Additional information

1. The life and MTBF of the product are for reference only, and do not represent a warranty statement.
2. For more information, please send an email to info@bokedriver.com.