Constant current linear dimmable driver
BHL Series suffix M(1-10V/10V PWM)

Features

- 1-10V/10V PWM dimming interface
- 10-level current output can be realized by DIP-switch
- Soft dimming and flicker-free at any brightness
- Using HPC patented technology at any dimming level, the brightness of the lamps is the same
- Standby power input<0.5W, meets the requirements of ErP certification
- High PF, high efficiency, low THD
- SELV and Class II design, suitable for use inside of the light
- Passed CE, ENEC, SAA, RCM and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h
- 5-year guarantee

Interfaces

- DIM(1-10V / 10V PWM)

Functions

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

Suitable for lights

- Suitable for linear lights,tri-proof lights,working lights and other linear or ultra-thin lights etc.

Typical applications

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

Model coding rules of BHL series

BK - BHLXXX - XXXX z M

- M: Function mode(M: 1-10V/10V PWM)
- z: Output load voltage range identification code (A: 3-42V)
- XXXX: Output current
- BHLXXX: Product series
- BK: BOKE

Function list

Model	Suffix	Wired dimming	
		DALI-2	1-10V 3in1
BK-BHL030 BK-BHL040 BK-BHL050 BK-BHL060 BK-BHL070	M		√
	D	√	

* The description in this specification is only applicable to the products with the suffix M and the model are BHL030,BHL040,BHL050,BHL060 and BHL070 .

Model list

Model	Input voltage	Output power	Output voltage	Output current	Dimension	Certifications
BK-BHL030-0750AM	200-240VAC	30W	3-40/42VDC	0.3-0.75A	L245*W30*H21mm	CE, ENEC, SAA, RCM
BK-BHL030-0750AD	200-240VAC	30W	3-40/42VDC	0.3-0.75A	L245*W30*H21mm	CE, ENEC, SAA, RCM, DALI-2
BK-BHL040-1000AM	200-240VAC	40W	3-40/42VDC	0.55-1A	L285*W30*H21mm	CE, ENEC, SAA, RCM
BK-BHL040-1000AD	200-240VAC	40W	3-40/42VDC	0.55-1A	L285*W30*H21mm	CE, ENEC, SAA, RCM, DALI-2
BK-BHL050-1250AM	200-240VAC	50W	3-40/41.5/42VDC	0.8-1.25A	L285*W30*H21mm	CE, ENEC, SAA, RCM
BK-BHL050-1250AD	200-240VAC	50W	3-40/41.5/42VDC	0.8-1.25A	L285*W30*H21mm	CE, ENEC, SAA, RCM, DALI-2
BK-BHL060-1650AM	200-240VAC	60W	3-36/37.5/38.5/40/41/42VDC	1.2-1.65A	L355*W30*H21mm	CE, ENEC, SAA, RCM
BK-BHL060-1650AD	200-240VAC	60W	3-36/37.5/38.5/40/41/42VDC	1.2-1.65A	L355*W30*H21mm	CE, ENEC, SAA, RCM, DALI-2
BK-BHL070-2000AM	200-240VAC	70W	3-35/37/39/41/42VDC	1.3-2A	L355*W36*H23mm	CE, ENEC, SAA, RCM
BK-BHL070-2000AD	200-240VAC	70W	3-35/37/39/41/42VDC	1.3-2A	L355*W36*H23mm	CE, ENEC, SAA, RCM, DALI-2

* The description in this specification is only applicable to the products with the suffix M and the model are BHL030,BHL040,BHL050,BHL060 and BHL070 .

Technical data

Product model	BK-BHL030-0750AM	
Output parameters		
Regulation method	Constant Current	
Rated output current	0.3-0.75A	
Rated output voltage	3V - 40V/42V	
Rated output power	30W Max	
Output current adjustment	DIP S.W(10 levels)	
Output current ripple LF	±2%	
Output current accuracy	±1%	
Linear regulation	±1%	
Load regulation	±1%	
No load output voltage	50V	
Flicker-free(typical)	Modulation depth =0.200% (100Hz), Pst LM = 0.000, SVM = 0.004,(The above parameters are obtained from testing the panel lights)	
Input parameters		
Rated input voltage	200-240VAC 200-240VDC	
Rated input voltage	180-264VAC 180-264VDC	
Input votage shock	<380 V AC, 1 h	
Input current	<0.25A (AC input)	
Input frequency	0/50/60Hz	
Input power factor	0.95 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	87% (230V AC & Full load)	
In-rush current	7.48A peak ,194us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pmax):30W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P:3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC.	
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV	
Leakage current	<0.7mA (230V AC & Full load)	
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	Dimming range: 0-10V, interface current consumption: 0.3mA	
Auxiliary power supply	N/A	
Dimming range	1%-100%	
Dimming drive mode	AM(amplitude modulation)	
Emergency support		
Central emergency system	Not supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°C	
Operating humidity	5-85% RH, not 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, Full load)	
Environmental protection	RoHS	
Certifications and standards		
Certified	CE, ENEC, SAA, RCM	
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	
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-BHL040-1000AM	
Output parameters		
Regulation method	Constant Current	
Rated output current	0.55-1A	
Rated output voltage	3V - 40V/42V	
Rated output power	40W Max	
Output current adjustment	DIP S.W(10 levels)	
Output current ripple LF	±2%	
Output current accuracy	±1%	
Linear regulation	±1%	
Load regulation	±1%	
No load output voltage	50V	
Flicker-free(typical)	Modulation depth =0.374% (100Hz), Pst LM = 0.006, SVM = 0.006,(The above parameters are obtained from testing the panel lights)	
Input parameters		
Rated input voltage	200-240VAC 200-240VDC	
Rated input voltage	180-264VAC 180-264VDC	
Input votage shock	<380 V AC, 1 h	
Input current	<0.3A (AC input)	
Input frequency	0/50/60Hz	
Input power factor	0.95 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	89% (230V AC & Full load)	
In-rush current	8.65A peak ,186us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pmax):40W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P:3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC.	
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV	
Leakage current	<0.7mA (230V AC & Full load)	
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	Dimming range: 0-10V, interface current consumption: 0.3mA	
Auxiliary power supply	N/A	
Dimming range	1%-100%	
Dimming drive mode	AM(amplitude modulation)	
Emergency support		
Central emergency system	Not supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°C	
Operating humidity	5-85% RH, not 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, Full load)	
Environmental protection	RoHS	
Certifications and standards		
Certified	CE, ENEC, SAA, RCM	
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	
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-BHL050-1250AM	
Output parameters		
Regulation method	Constant Current	
Rated output current	0.8-1.25A	
Rated output voltage	3V - 40V/41.5V/42V	
Rated output power	50W Max	
Output current adjustment	DIP S.W(10 levels)	
Output current ripple LF	±2%	
Output current accuracy	±1%	
Linear regulation	±1%	
Load regulation	±1%	
No load output voltage	50V	
Flicker-free(typical)	Modulation depth =0.275% (100Hz), Pst LM = 0.002, SVM = 0.006,(The above parameters are obtained from testing the panel lights)	
Input parameters		
Rated input voltage	200-240VAC 200-240VDC	
Rated input voltage	180-264VAC 180-264VDC	
Input votage shock	<380 V AC, 1 h	
Input current	<0.35A (AC input)	
Input frequency	0/50/60Hz	
Input power factor	0.95 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	90% (230V AC & Full load)	
In-rush current	8.31A peak ,201us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pmax):50W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P:3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC.	
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV	
Leakage current	<0.7mA (230V AC & Full load)	
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	Dimming range: 0-10V, interface current consumption: 0.3mA	
Auxiliary power supply	N/A	
Dimming range	1%-100%	
Dimming drive mode	AM(amplitude modulation)	
Emergency support		
Central emergency system	Not supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°C	
Operating humidity	5-85% RH, not 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, Full load)	
Environmental protection	RoHS	
Certifications and standards		
Certified	CE, ENEC, SAA, RCM	
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	
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-BHL060-1650AM	
Output parameters		
Regulation method	Constant Current	
Rated output current	1.2-1.65A	
Rated output voltage	3V - 36V/37.5V/38.5V/40V/41V/42V	
Rated output power	60W Max	
Output current adjustment	DIP S.W(10 levels)	
Output current ripple LF	±2%	
Output current accuracy	±1%	
Linear regulation	±1%	
Load regulation	±1%	
No load output voltage	50V	
Flicker-free(typical)	Modulation depth =0.241% (100Hz), Pst LM = 0.004, SVM = 0.006,(The above parameters are obtained from testing the panel lights)	
Input parameters		
Rated input voltage	200-240VAC 200-240VDC	
Rated input voltage	180-264VAC 180-264VDC	
Input votage shock	<380 V AC, 1 h	
Input current	<0.45A (AC input)	
Input frequency	0/50/60Hz	
Input power factor	0.95 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	90% (230V AC & Full load)	
In-rush current	8.23A peak ,196us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pmax):60W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P:3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC.	
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV	
Leakage current	<0.7mA (230V AC & Full load)	
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	Dimming range: 0-10V, interface current consumption: 0.3mA	
Auxiliary power supply	N/A	
Dimming range	1%-100%	
Dimming drive mode	AM(amplitude modulation)	
Emergency support		
Central emergency system	Not supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°C	
Operating humidity	5-85% RH, not 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, Full load)	
Environmental protection	RoHS	
Certifications and standards		
Certified	CE, ENEC, SAA, RCM	
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	
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-BHL070-2000AM	
Output parameters		
Regulation method	Constant Current	
Rated output current	1.3-2A	
Rated output voltage	3V - 35V/37V/39V/41V/42V	
Rated output power	70W Max	
Output current adjustment	DIP S.W(10 levels)	
Output current ripple LF	±2%	
Output current accuracy	±1%	
Linear regulation	±1%	
Load regulation	±1%	
No load output voltage	50V	
Flicker-free(typical)	Modulation depth =0.155% (100Hz), Pst LM = 0.002, SVM = 0.005,(The above parameters are obtained from testing the panel lights)	
Input parameters		
Rated input voltage	200-240VAC 200-240VDC	
Rated input voltage	180-264VAC 180-264VDC	
Input votage shock	<380 V AC, 1 h	
Input current	<0.5A (AC input)	
Input frequency	0/50/60Hz	
Input power factor	0.95 (230V AC & Full load)	
Input THD	10% (230V AC & Full load)	
Efficiency(typical)	90% (230V AC & Full load)	
In-rush current	8.54A peak ,214us duration(50 % Ipeak), see the description below for details	
Start/Switchover/Turn off	<0.6s(AC start),<0.6s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)	
Switching cycles	> 50,000 switching cycles	
Power consumption	Full load(Pmax):70W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P:3750VAC,I/P-FG:1750VAC,O/P-FG:500VAC.	
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV	
Leakage current	<0.7mA (230V AC & Full load)	
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH	
Control interface		
DALI dimming port	N/A	
pushDIM dimming port	N/A	
1-10V 3in1 dimming port	Dimming range: 0-10V, interface current consumption: 0.3mA	
Auxiliary power supply	N/A	
Dimming range	1%-100%	
Dimming drive mode	AM(amplitude modulation)	
Emergency support		
Central emergency system	Not supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-20-60°C	
Case temperature	Tc=90°C	
Operating humidity	5-85% RH, not 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, Full load)	
Environmental protection	RoHS	
Certifications and standards		
Certified	CE, ENEC, SAA, RCM	
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	
RF	N/A	

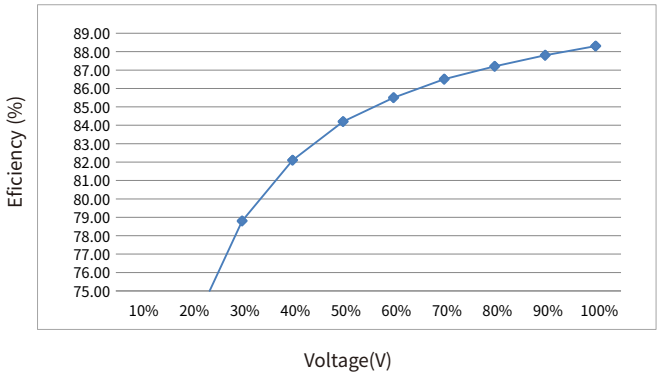
Remarks

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

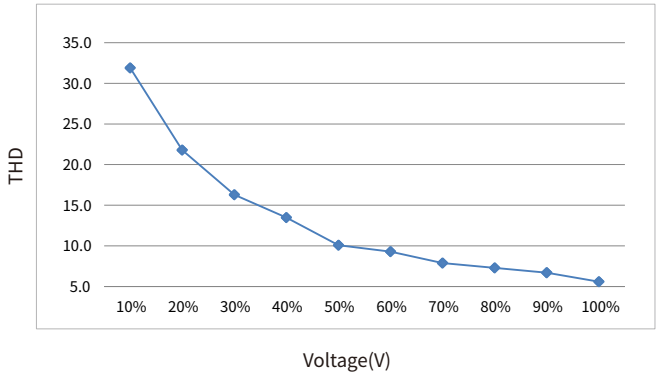
Electrical values

BK-BHL030-0750AM

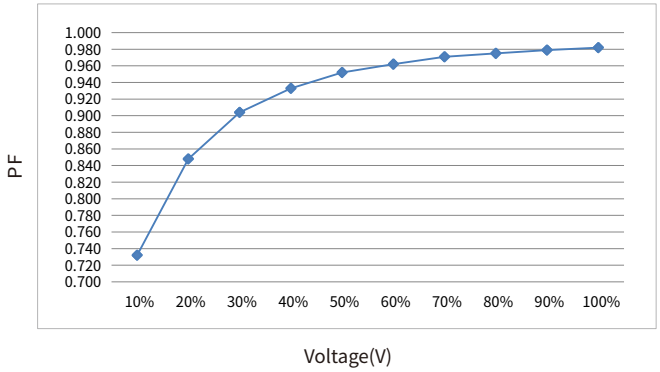
Efficiency vs voltage



THD vs. voltage

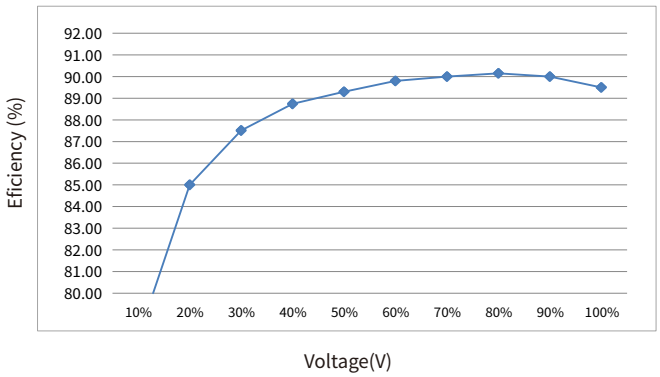


Power factor vs. voltage

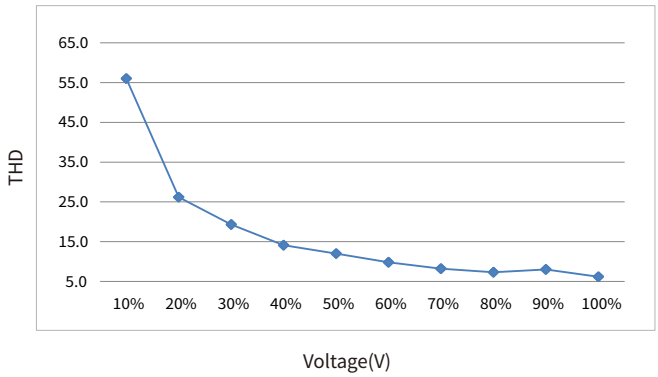


BK-BHL040-1000AM

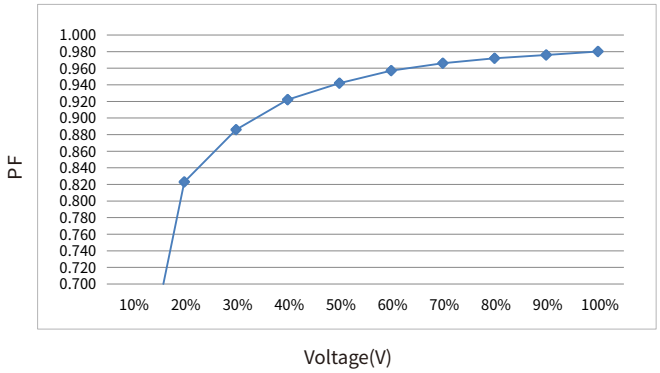
Efficiency vs voltage



THD vs. voltage



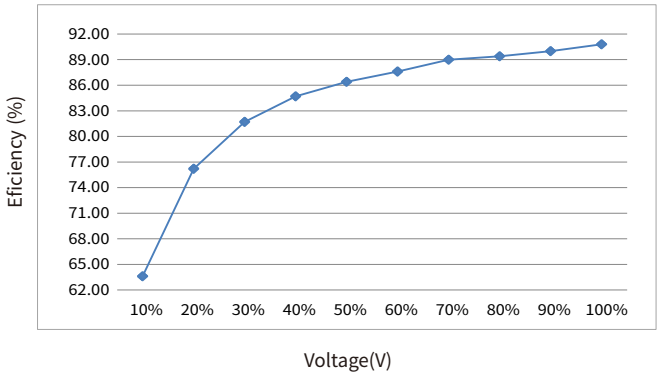
Power factor vs. voltage



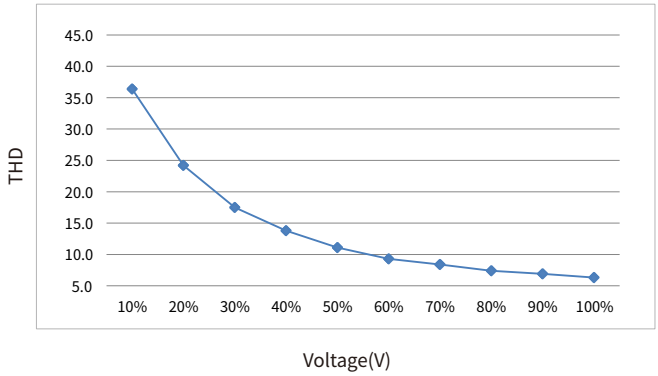
Electrical values

BK-BHL050-1250AM

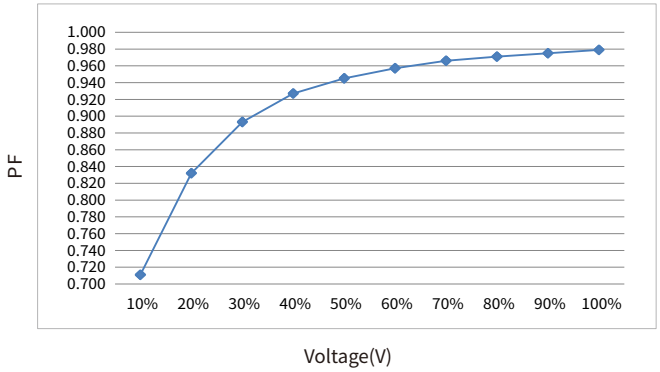
Efficiency vs voltage



THD vs. voltage

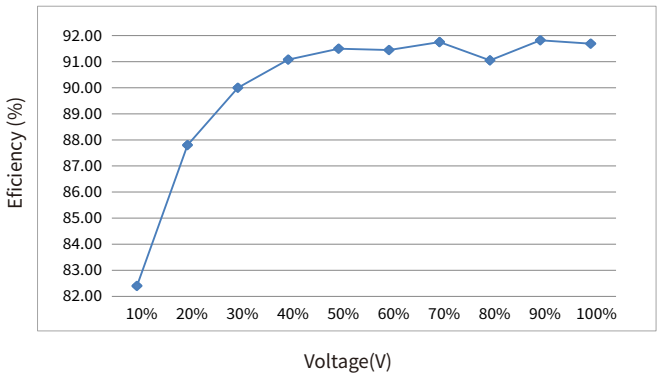


Power factor vs. voltage

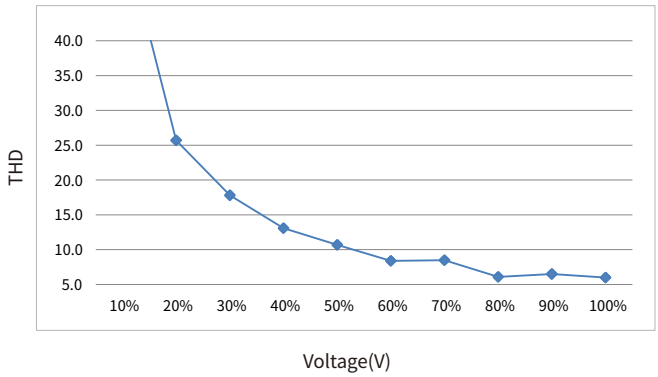


BK-BHL060-1650AM

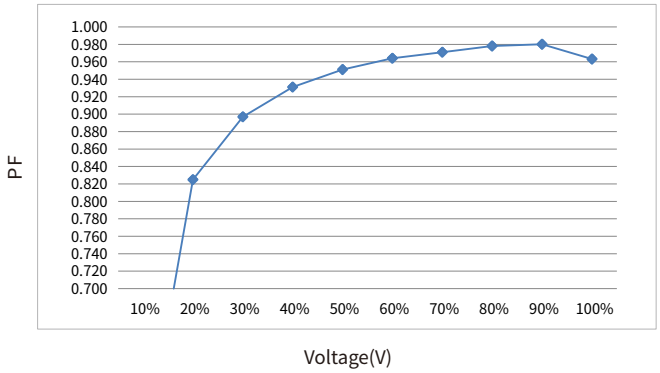
Efficiency vs voltage



THD vs. voltage



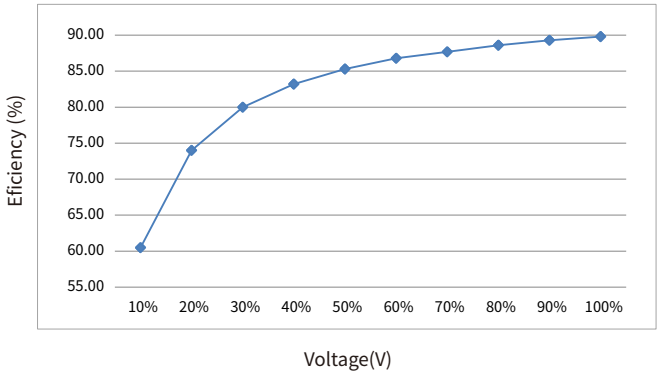
Power factor vs. voltage



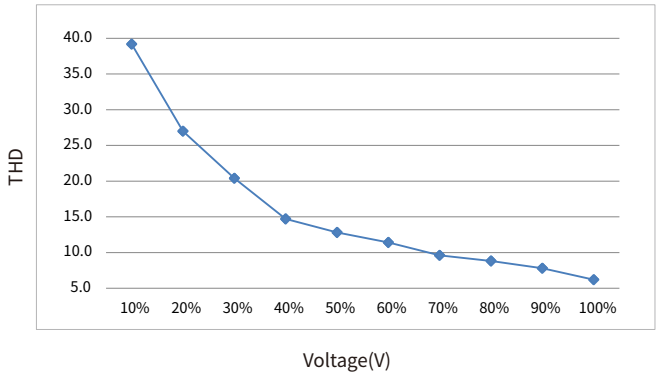
Electrical values

BK-BHL070-2000AM

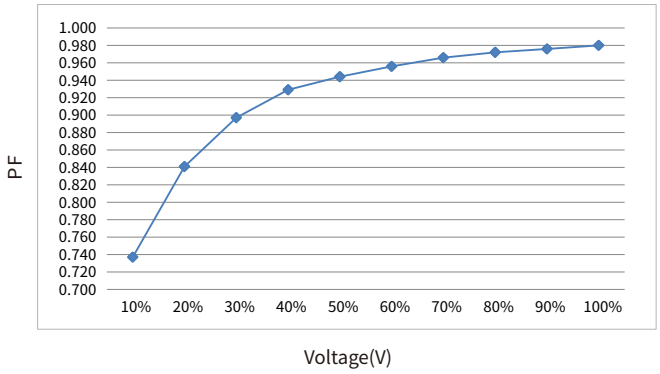
Efficiency vs voltage



THD vs. voltage



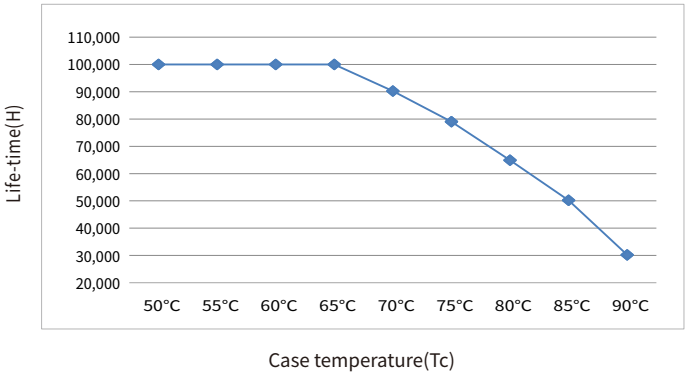
Power factor vs. voltage



Expected life-time

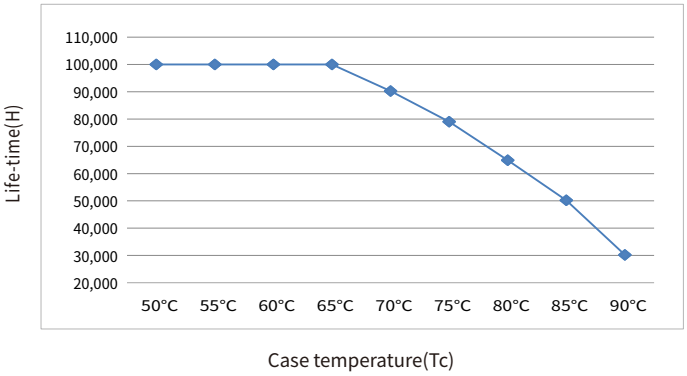
BK-BHL030-0750AM

Life-time vs. case temperature



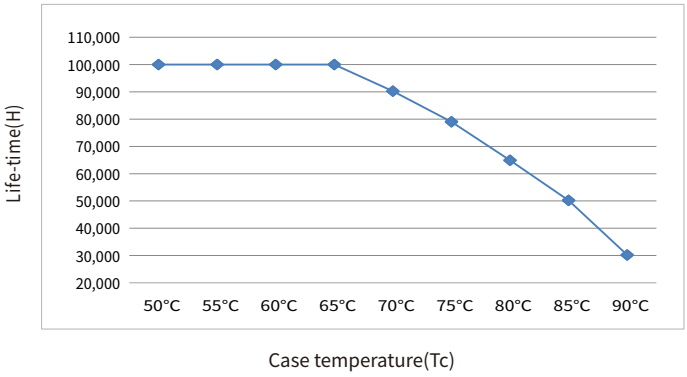
BK-BHL040-1000AM

Life-time vs. case temperature



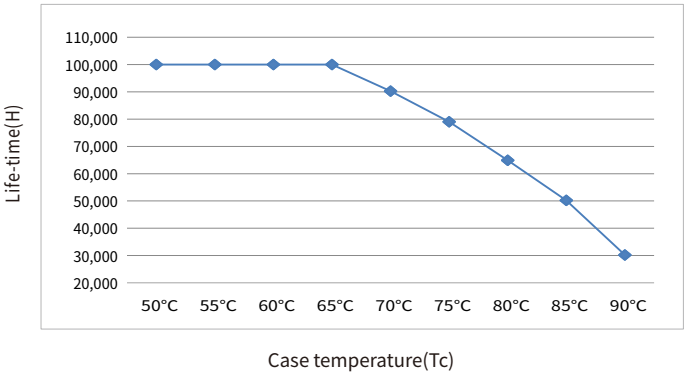
BK-BHL050-1250AM

Life-time vs. case temperature



BK-BHL060-1650AM

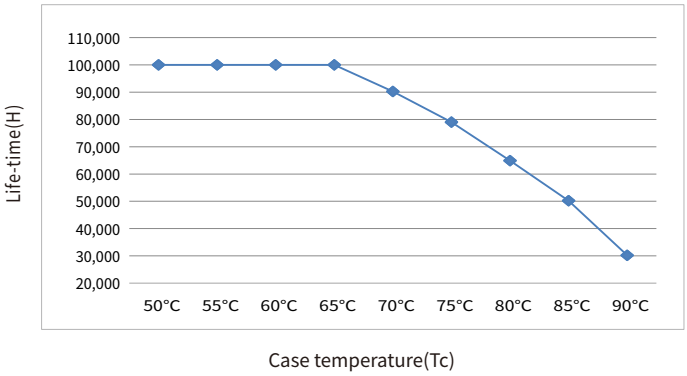
Life-time vs. case temperature



Expected life-time

BK-BHL070-2000AM

Life-time vs. case temperature

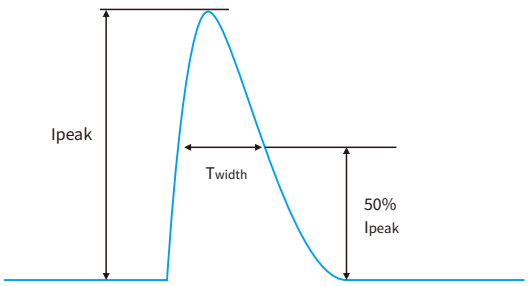


-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

Surge

Model	Ipeak	Twidth	Condition	Relative number of MCB														
				B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
BK-BHL030-0750AM	7.48A	194us	AC 230V,Full load, Cold start,Ta≤30°C, MCB is not installed side by side	43	55	68	85	107	45	59	73	91	113	45	59	73	91	113
BK-BHL040-1000AM	7.65A	186us		35	45	56	70	87	35	45	56	70	87	35	45	56	70	87
BK-BHL050-1250AM	8.31A	201us		28	36	45	56	70	28	36	45	56	70	28	36	45	56	70
BK-BHL060-1650AM	7.23A	196us		23	30	38	47	59	23	30	38	47	59	23	30	38	47	59
BK-BHL070-2000AM	8.54A	214us		20	26	32	40	50	20	26	32	40	50	20	26	32	40	50



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 protection

- Output short-circuit will not damage the driver.
- After removing the short-circuit fault point, the driver will automatically restore output.

Output no-load protection

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

DIP-switch & output current

BK-BHL030-0750AM

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
15.0	12.6	300	3-42	--	ON	ON	ON
17.0	14.7	350	3-42	ON	--	ON	ON
19.5	16.8	400	3-42	--	--	ON	ON
22.0	18.9	450	3-42	--	ON	--	ON
24.0	21.0	500	3-42	--	--	--	ON
26.5	23.1	550	3-42	ON	ON	ON	--
29.0	25.2	600	3-42	--	--	ON	--
31.0	27.3	650	3-42	--	ON	--	--
34.5	29.4	700	3-42	ON	--	--	--
34.5	30.0	750 ★	3-40	--	--	--	--

BK-BHL040-1000AM

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
27.0	23.1	550	3-42	--	ON	ON	ON
29.0	25.2	600	3-42	ON	--	ON	ON
31.5	27.3	650	3-42	--	--	ON	ON
33.5	29.4	700	3-42	--	ON	--	ON
36.0	31.5	750	3-42	--	--	--	ON
38.5	33.6	800	3-42	ON	ON	ON	--
41.0	35.7	850	3-42	--	--	ON	--
43.0	37.8	900	3-42	--	ON	--	--
46.0	39.9	950	3-42	ON	--	--	--
46.0	40.0	1000 ★	3-40	--	--	--	--

BK-BHL050-1250AM

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
38.0	33.6	800	3-42	--	ON	ON	ON
41.0	35.7	850	3-42	ON	--	ON	ON
43.0	37.8	900	3-42	--	--	ON	ON
46.0	39.9	950	3-42	--	ON	--	ON
48.0	42.0	1000	3-42	--	--	--	ON
50.0	44.1	1050	3-42	ON	ON	ON	--
53.0	46.2	1100	3-42	--	--	ON	--
55.0	48.3	1150	3-42	--	ON	--	--
57.0	49.8	1200	3-41.5	ON	--	--	--
57.0	50.0	1250 ★	3-40	--	--	--	--

BK-BHL060-1650AM

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
57.5	50.4	1200	3-42	--	ON	ON	ON
59.5	52.5	1250	3-42	ON	--	ON	ON
61.5	54.6	1300	3-42	--	--	ON	ON
64.0	56.7	1350	3-42	--	ON	--	ON
66.5	58.8	1400	3-42	--	--	--	ON
67.5	59.5	1450	3-41	ON	ON	ON	--
68.0	60.0	1500	3-40	--	--	ON	--
68.0	59.7	1550	3-38.5	--	ON	--	--
68.0	60.0	1600	3-37.5	ON	--	--	--
67.5	59.4	1650 ★	3-36	--	--	--	--

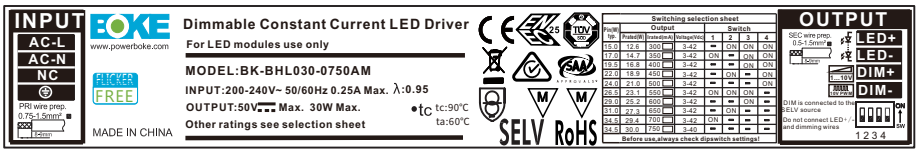
BK-BHL070-2000AM

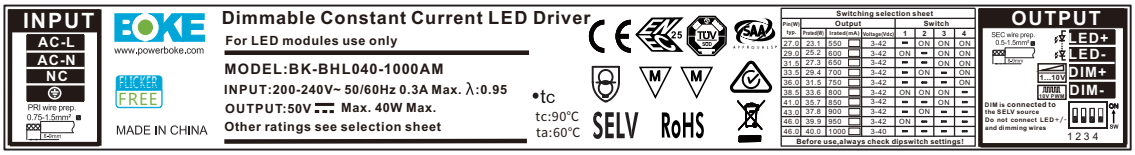
Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
63.0	54.6	1300	3-42	--	ON	ON	ON
68.0	58.8	1400	3-42	ON	--	ON	ON
70.0	60.9	1450	3-42	--	--	ON	ON
72.0	63.0	1500	3-42	--	ON	--	ON
74.0	65.1	1550	3-42	--	--	--	ON
79.0	69.3	1650	3-42	ON	ON	ON	--
79.0	69.7	1700	3-41	--	--	ON	--
80.0	70.2	1800	3-39	--	ON	--	--
80.0	70.3	1900	3-37	ON	--	--	--
80.0	70.0	2000 ★	3-35	--	--	--	--

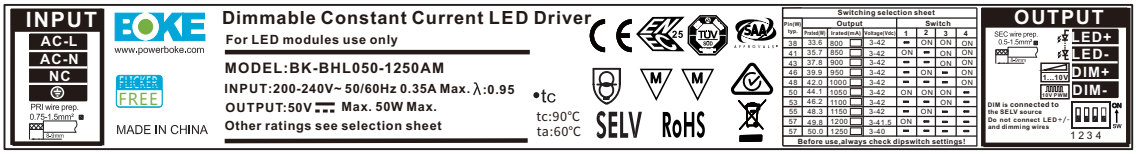
Remarks:

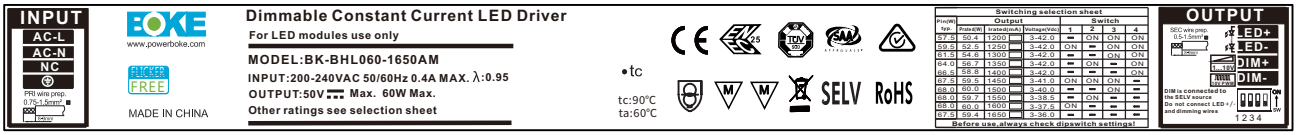
1. ★ It means that this item is the factory default current.
2. -- It means that this channel is OFF.

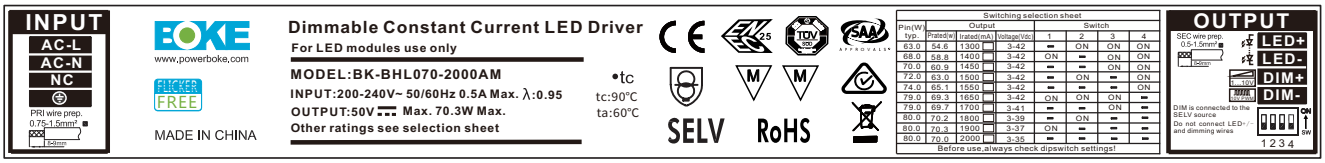
Label











1-10V/10V PWM dimming application

Wiring diagram

Please DO NOT connect "DIM-"to"LED-" or "DIM+"to"LED+".

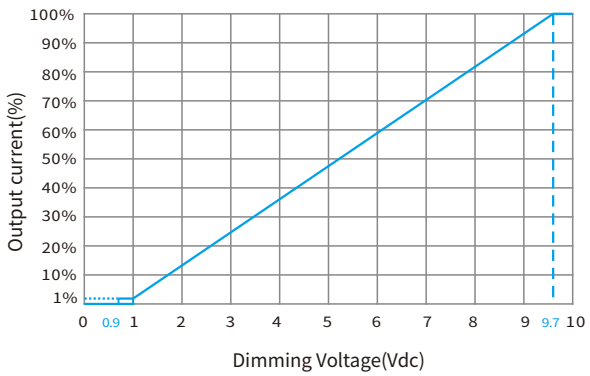
1.Supports isolated dimmers
2.Passive dimmers need to beevaluated for testing
3.Non-isolated dimmers are not supported

Remarks

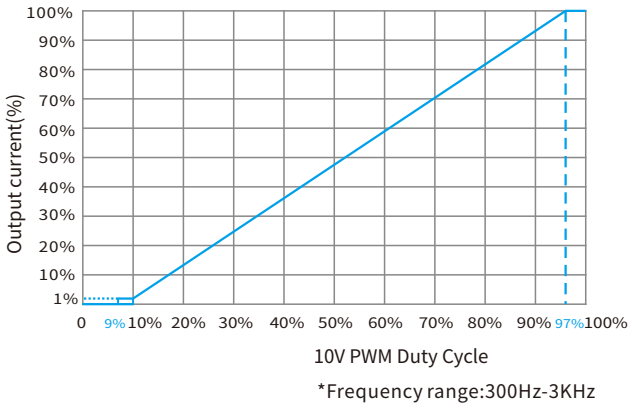
- Dimming interface characteristics: 0.9V and below are closed, 1V is the darkest, 10V is the brightest,1-10V is the dimming range.
- The dimming interface distinguishes between positive and negative, DIM+ is positive, DIM- is negative, please do not reverse.
- Dimming interface does not support voltage access higher than 20V, otherwise it will cause damage to the internal components.
- When the dimming interface is open, the driver outputs the maximum current. When the interface is short-circuited, the current output is closed.
- When multiple synchronous dimming is required, the positive poles of the dimming interface of each driver are connected together, and the negative poles are connected together.
- Support passive dimmer or isolated active dimmer dimming, does not support non-isolated active dimmer dimming.
- In general, it is recommended that the number of mounted drives does not exceed 30pcs, and the wiring length does not exceed 100m.
- It is recommended that the dimming wires should not be lower than the 22AWG wire.
- Do not put the dimming wires with high voltage or interference sources. If it is unavoidable, please use the shielded wires.
- If you need a drive with 0-10V dimming characteristics, please contact BOKE.

Dimming curve

Output current vs.Dimming Voltage

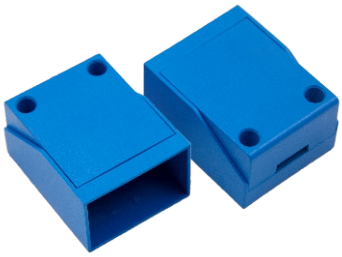


Output current vs.10V PWM Duty Cycle

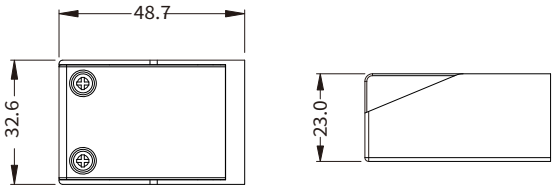


*Frequency range:300Hz-3KHz

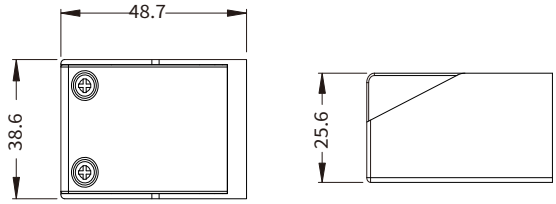
Optional accessories



(**Model:BK-BAS003A**)

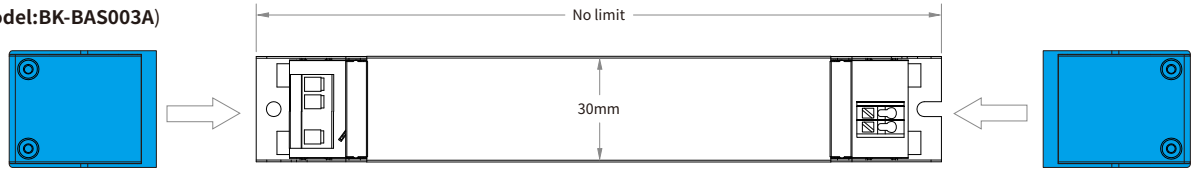


(**Model:BK-BAS003B**)

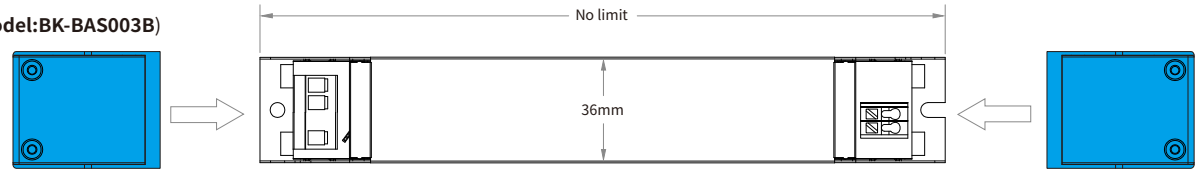


Installation diagram of accessories

(**Model:BK-BAS003A**)



(**Model:BK-BAS003B**)

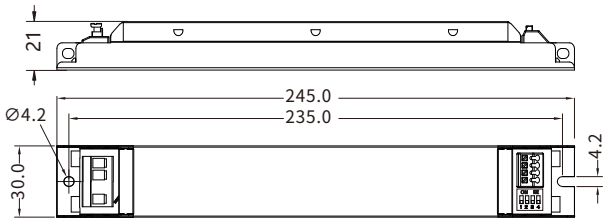


Installation

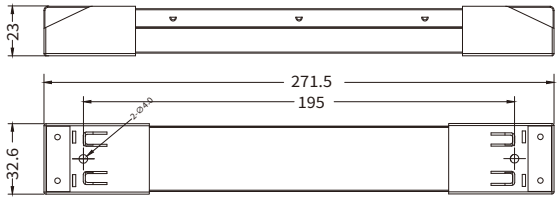
Mechanical dimensions

Unit:mm

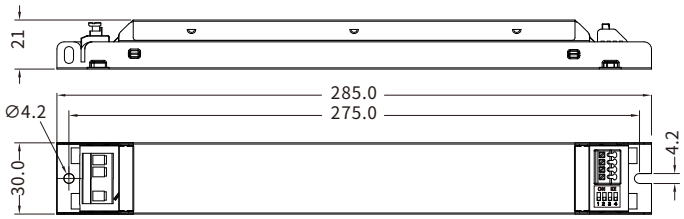
BHL030



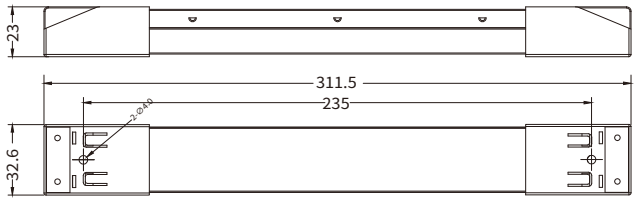
BHL030



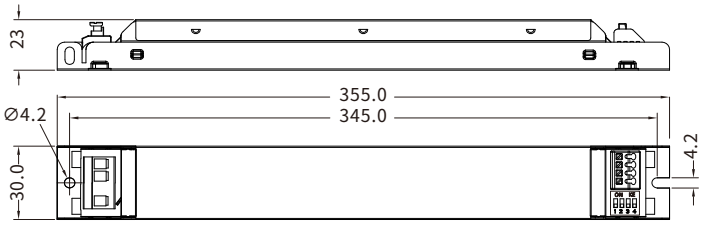
BHL040/BHL050



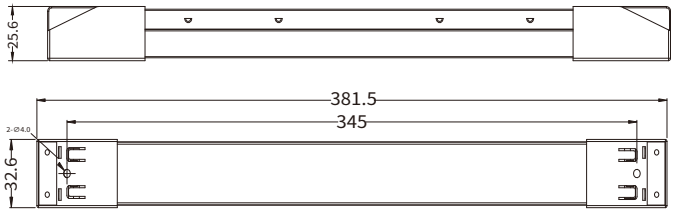
BHL040/BHL050



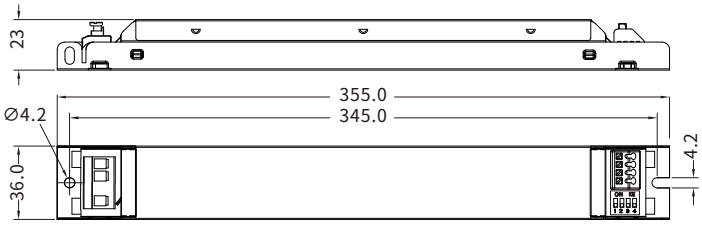
BHL060



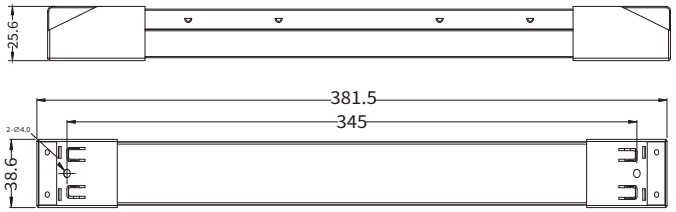
BHL060



BHL080



BHL080

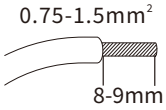


INPUT

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

Input wire

0.75-1.5mm²

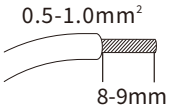


OUTPUT

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

Output wire

0.5-1.0mm²



Installation note

Hot plug-in

- Hot plug-in is not supported due to residual output voltage of > 0 V.
- If a LED load is connected the device has to be restarted.
- Restart can be achieved by re-powering the driver or executing a on/off command (action) through the control interface (1-10V)

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. lenght of output wires is 2 m.
- Incorrect wiring can damage LED modules.

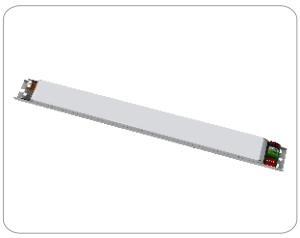
Mounting screw specifications and torque

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

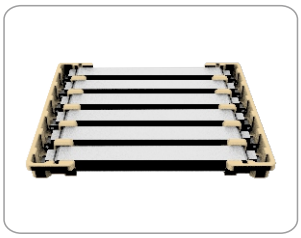
Replace LED module

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

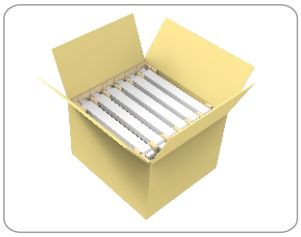
Packaging



Product



Paper tray



7pcs*6layer=42pcs/CIN
7pcs*5layer=35pcs/CIN
7pcs*4layer=28pcs/CIN
6pcs*4layer=24pcs/CIN

Model	Product size	Weight	Paper tray	Carton size	Qty/carton	N.W	G.W
BHL030	L245*W30*H21mm	171g	L340*W75*H29mm	L355*W285*H205mm	42pcs	7.18KG	8.48KG
BHL040	L285*W30*H21mm	206g	L340*W75*H29mm	L355*W325*H170mm	35pcs	7.21KG	8.51KG
BHL050	L285*W30*H21mm	229g	L340*W75*H29mm	L355*W325*H170mm	35pcs	8.02KG	9.32KG
BHL060	L355*W30*H21mm	293g	L340*W75*H29mm	L395*W355*H140mm	28pcs	8.21KG	9.40KG
BHL070	L355*W36*H23mm	381g	L340*W75*H33mm	L395*W355*H160mm	24pcs	9.15KG	10.3KG

Additional information

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