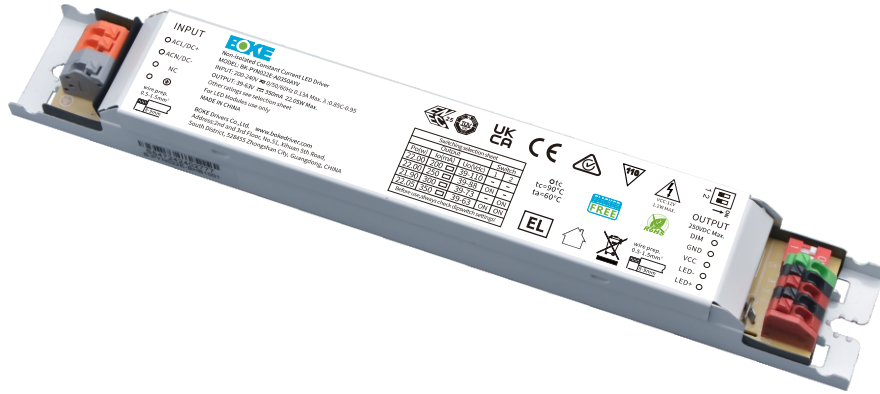


Non-isolated Constant current linear dimmable driver

PYN(E) Series suffix YV(3.3V/5V/10V PWM dimming+12V auxiliary power)



Features

- Input and output non-isolated
- Non-selv 12V power output
- Support 3.3V/5V/10V PWM dimming+12V auxiliary power
- Provide 12V 100mA auxiliary power supply to power control module or sensor
- Auxiliary 12V supports fast power-down feature, and the control module can be reset by AC switch
- 4/8-level current output can be realized by DIP-switch
- Soft dimming and flicker-free at any brightness
- High PF, high efficiency, low THD
- Suitable for built-in use of Class I lamps
- Passed CE, ENEC, UKCA, RCM, EL and other certifications
- Compliance with Zhaga Book 13 standards
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h
- 5-year guarantee

Typical applications

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

Interfaces

- PWM(3.3V/5V/10V PWM, support PWM 600-4000Hz push-pull/open-drain input)
- VCC Auxiliary power(12V,100mA)

Functions

- Support central emergency application (dimming normal in DC input)
- Support self-contained emergency application
- Protective features (short-circuit, overload protection)

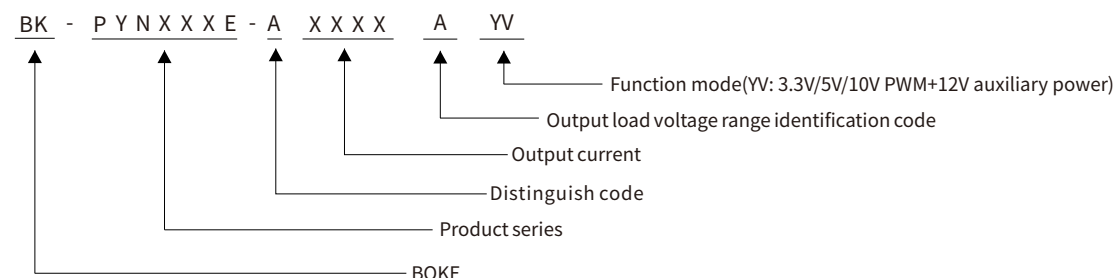
Suitable for lights

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

Notice

- When using PWM to turn off the LED, the LED may be **slightly light**, It can be solved in the following two ways:
 1. Some resistors are connected in parallel to the LED string .
 2. Disconnect the input live wire (L wire) of the driver through the switch.
- Because the output no-load voltage is high, pay attention to the following applications
 1. It is prohibited to plug and unplug LED loads under powered conditions
 2. It is prohibited to switch color temperature through sliding switches under powered conditions
 3. The dimming port is non-isolated and applies only to the control module or sensor

Model coding rules of PYN series



Function list

Model	Suffix	Wired dimming	Aux power
		3.3V/5V/10V PWM	12V/0.1A
BK-PYN022E-A BK-PYN042E-A BK-PYN060E-A BK-PYN080E-A	YV	√	√

Model list

Model	Input voltage	Output power	Output voltage	Output current	Dimension	Certifications
BK-PYN022E-A0350AYV	200-240VAC/DC	22.05W MAX.	39-110VDC	0.2-0.35A	L210*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-PYN042E-A0350AYV	200-240VAC/DC	42W MAX.	50-210VDC	0.2-0.35A	L210*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-PYN060E-A0350AYV	200-240VAC/DC	60.2W MAX.	50-216VDC	0.2-0.35A	L210*W30*H21mm	CE, ENEC, UKCA, RCM, EL
BK-PYN080E-A0550AYV	200-240VAC/DC	80.3W MAX.	50-216VDC	0.2-0.55A	L210*W30*H21mm	CE, ENEC, UKCA, RCM, EL

Technical data

Product model	BK-PYN022E-A0350AYV
Output parameters	
Regulation method	Constant Current
Rated output current range	0.2-0.35A, see the DIP-switch for details
Rated output voltage range	39-110VDC, see the DIP-switch for details
Rated output power	22.05W Max, see the DIP-switch for details
Output current adjustment	DIP S.W(4 levels)
Output current ripple LF	± 3%
Output current accuracy	± 5%
Linear regulation	± 5%
Load regulation	± 5%
No load output voltage	250VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=1.435%, Flicker index(IEEE 1789)=0.002, Pst LM = 0.026, SVM = 0.034, (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 voltage shock	<380 V AC
Input current	<0.13A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF: 0.96; DF: 0.97, see the electrical values below for details
Input THD	11%, see the electrical values below for details
Efficiency(Max)	90%, see the electrical values below for details
In-rush current	11A peak ,250us 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):24.5W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-FG:1750V AC
Mains surge capability	L-N:2KV, L-FG/N-FG:2KV(Performance criterion:B)
Leakage current	0.54mA (230V AC & Full load)
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	N/A
pushDIM dimming port	N/A
PWM dimming port	Frequency range: 600-4000HZ, interface voltage :3.3-10VDC(PWM)
Auxiliary power supply	12V ± 10% 100mA
Dimming range	3%-100% (minimum current: 10.5mA)
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported(dimming normal 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, non-condensing
Storage temp./humidity	-40-80°C, 5-85% RH, non-condensing
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	
Certification	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-PYN042E-A0350AYV
Output parameters	
Regulation method	Constant Current
Rated output current range	0.2-0.35A,see the DIP-switch for details
Rated output voltage range	50-210VDC,see the DIP-switch for details
Rated output power	42W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(4 levels)
Output current ripple LF	± 3%
Output current accuracy	± 5%
Linear regulation	± 5%
Load regulation	± 5%
No load output voltage	250VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.369%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.034, 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	<0.24A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF: 0.98; DF: 0.98,see the electrical values below for details
Input THD	9%, see the electrical values below for details
Efficiency(Max)	92%, see the electrical values below for details
In-rush current	16.5A peak ,270us 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):45.7W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-FG:1750V AC
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV(Performance criterion:B)
Leakage current	0.54mA (230V AC & Full load)
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	N/A
pushDIM dimming port	N/A
PWM dimming port	Frequency range: 600-4000HZ, interface voltage :3.3-10VDC(PWM)
Auxiliary power supply	12V ± 10% 100mA
Dimming range	3%-100% (minimum current: 10.5mA)
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported(dimming normal 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, non-condensing
Storage temp./humidity	-40-80°C, 5-85% RH, non-condensing
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	
Certification	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-PYN060E-A0350AYV
Output parameters	
Regulation method	Constant Current
Rated output current range	0.2-0.35A,see the DIP-switch for details
Rated output voltage range	50-216VDC,see the DIP-switch for details
Rated output power	60.2W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(4 levels)
Output current ripple LF	± 3%
Output current accuracy	± 5%
Linear regulation	± 5%
Load regulation	± 5%
No load output voltage	250VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.576%, Flicker index(IEEE 1789)=0.002, Pst LM = 0.023, 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	<0.34A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF: 0.98; DF: 0.98,see the electrical values below for details
Input THD	8.5%, see the electrical values below for details
Efficiency(Max)	93%, see the electrical values below for details
In-rush current	19.5 peak ,310us 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):64.7W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-FG:1750V AC
Mains surge capability	L-N:2KV,L-FG/N-FG:2KV(Performance criterion:B)
Leakage current	0.54mA (230V AC & Full load)
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	N/A
pushDIM dimming port	N/A
PWM dimming port	Frequency range: 600-4000HZ, interface voltage :3.3-10VDC(PWM)
Auxiliary power supply	12V ± 10% 100mA
Dimming range	3%-100% (minimum current: 10.5mA)
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported(dimming normal 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, non-condensing
Storage temp./humidity	-40-80°C, 5-85% RH, non-condensing
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	
Certification	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-PYN080E-A0550AYV
Output parameters	
Regulation method	Constant Current
Rated output current range	0.2-0.55A, see the DIP-switch for details
Rated output voltage range	50-216VDC, see the DIP-switch for details
Rated output power	80.3W Max, see the DIP-switch for details
Output current adjustment	DIP S.W(8 levels)
Output current ripple LF	± 3%
Output current accuracy	± 5%
Linear regulation	± 5%
Load regulation	± 5%
No load output voltage	250VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.638%, Flicker index(IEEE 1789)=0.001, Pst LM = 0.018, 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 voltage shock	<380 V AC
Input current	<0.43A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF: 0.98; DF: 0.98, see the electrical values below for details
Input THD	9.5%, see the electrical values below for details
Efficiency(Max)	94%, see the electrical values below for details
In-rush current	21.3 peak ,282us 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):85.4W, No load(Pno): N/A, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-FG:1750V AC
Mains surge capability	L-N:2KV, L-FG/N-FG:2KV(Performance criterion:B)
Leakage current	0.6mA (230V AC & Full load)
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	N/A
pushDIM dimming port	N/A
PWM dimming port	Frequency range: 600-4000HZ, interface voltage :3.3-10VDC(PWM)
Auxiliary power supply	12V ± 10% 100mA
Dimming range	3%-100% (minimum current: 16.5mA)
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported(dimming normal 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, non-condensing
Storage temp./humidity	-40-80°C, 5-85% RH, non-condensing
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	
Certification	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

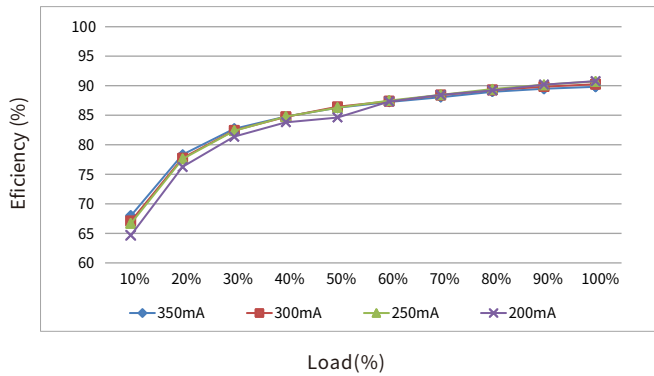
Remarks

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

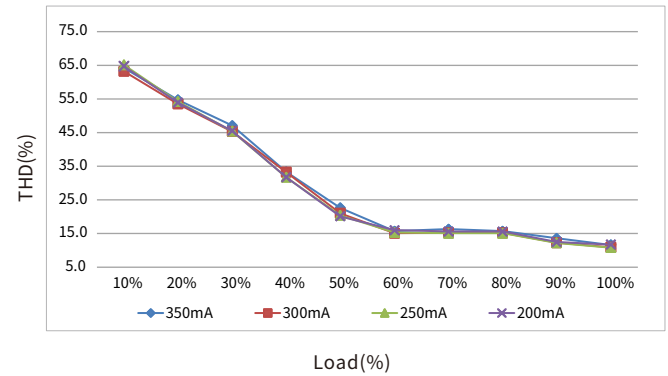
Electrical values

BK-PYN022E-A0350AYV

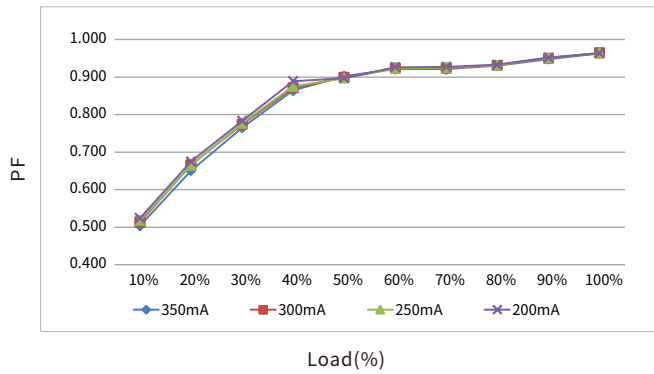
Efficiency vs Load



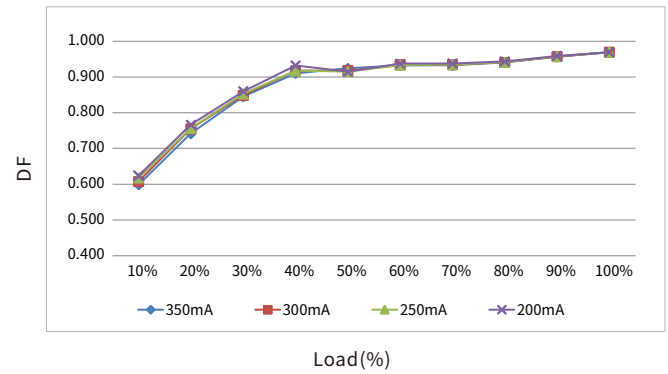
THD vs. Load



Power factor vs. Load

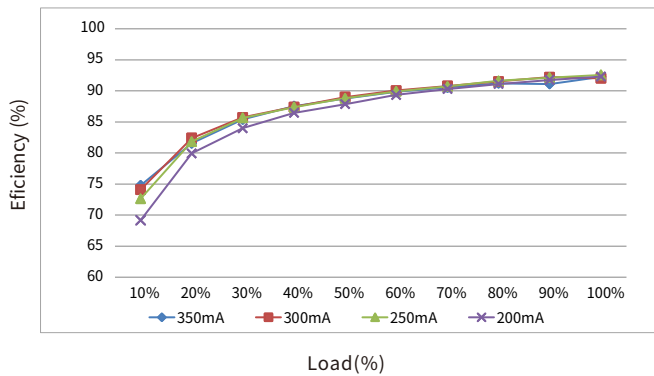


Displacement factor vs. Load

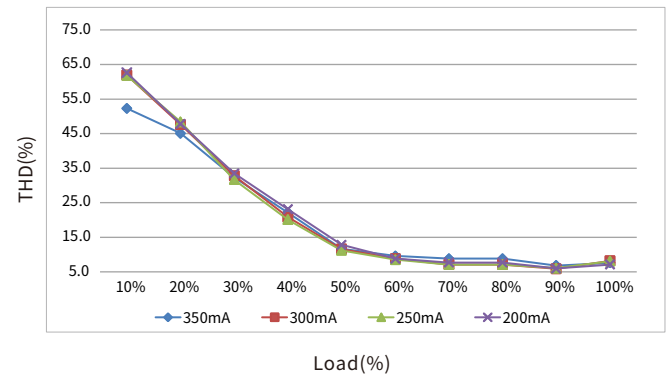


BK-PYN042E-A0350AYV

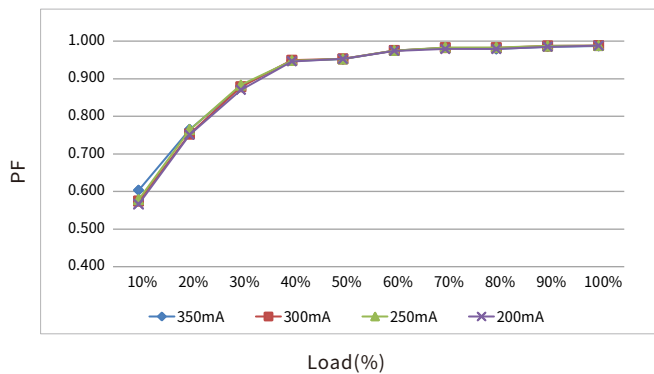
Efficiency vs Load



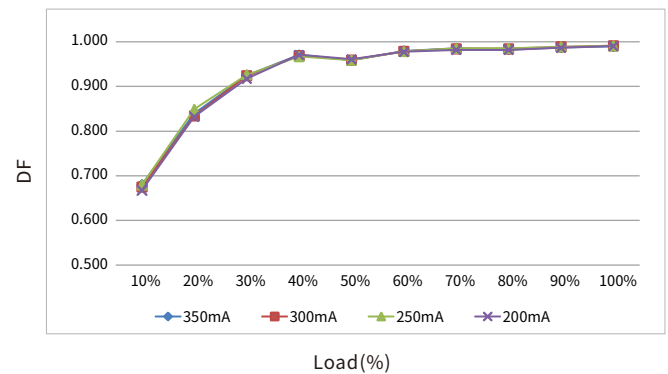
THD vs. Load



Power factor vs. Load



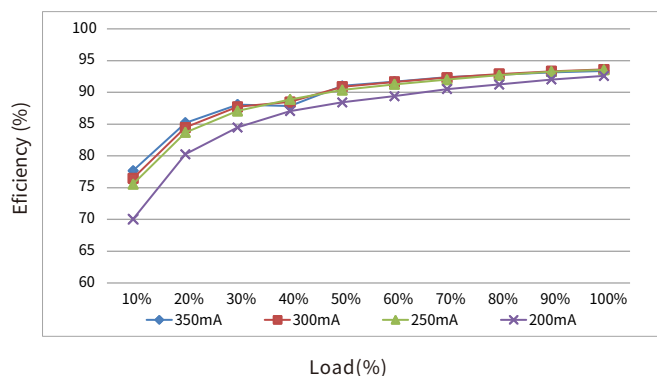
Displacement factor vs. Load



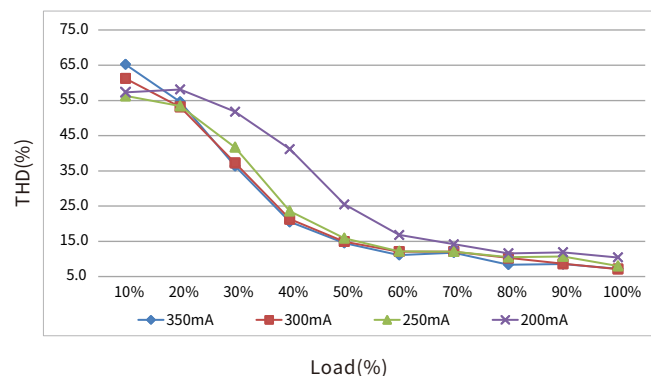
Electrical values

BK-PYN060E-A0350AYV

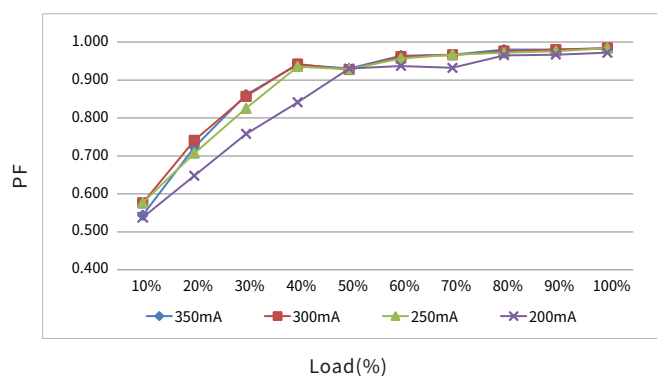
Efficiency vs Load



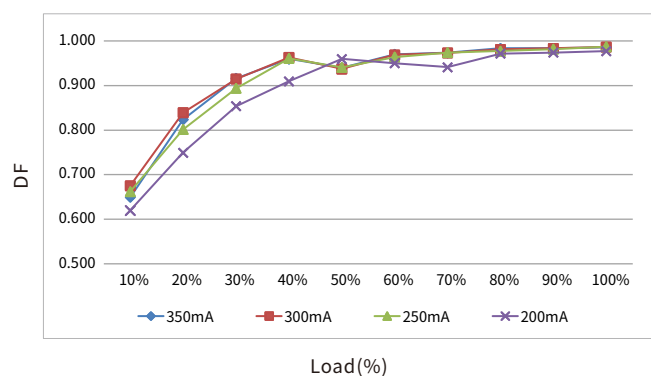
THD vs. Load



Power factor vs. Load

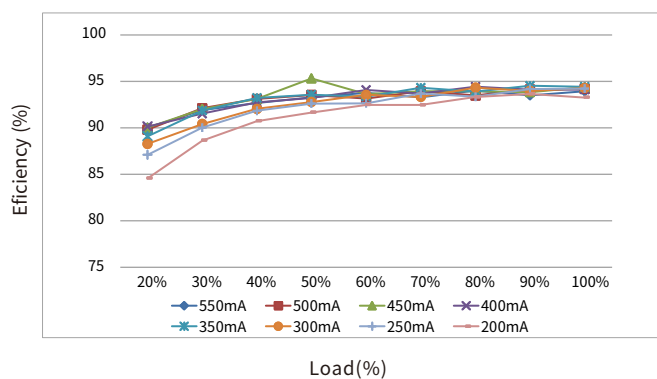


Displacement factor vs. Load

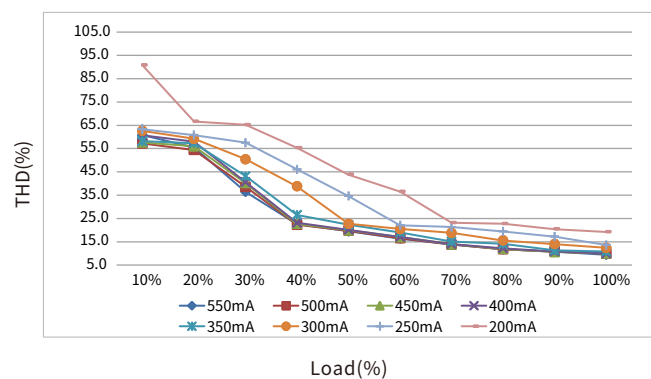


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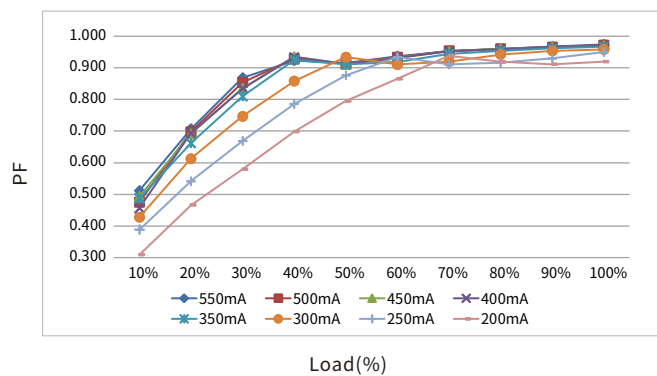
Efficiency vs Load



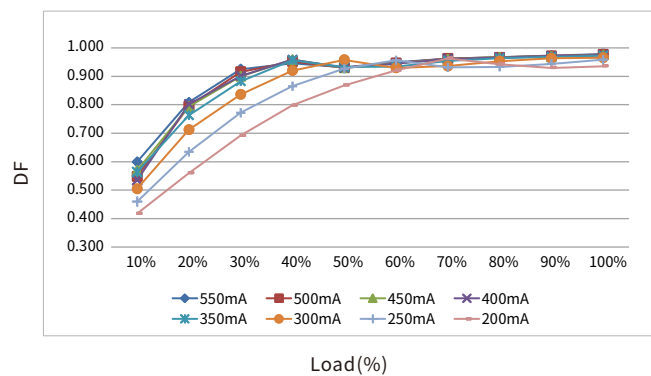
THD vs. Load



Power factor vs. Load



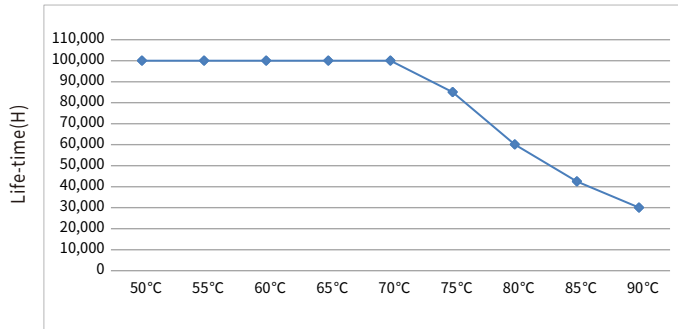
Displacement factor vs. Load



Expected life-time

BK-PYN022E-A0350AYV

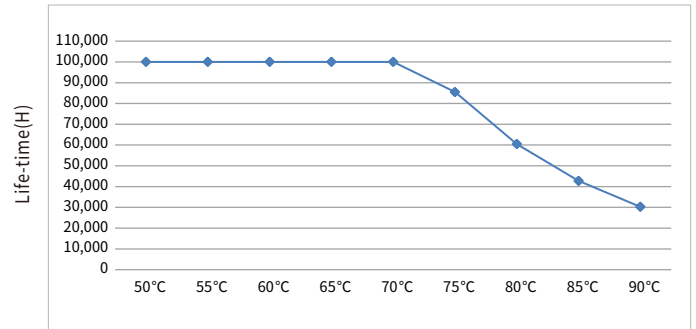
Life-time vs. case temperature



Case temperature(Tc)

BK-PYN042E-A0350AYV

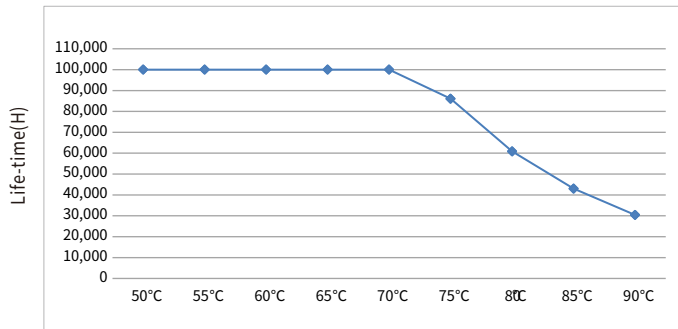
Life-time vs. case temperature



Case temperature(Tc)

BK-PYN060E-A0350AYV

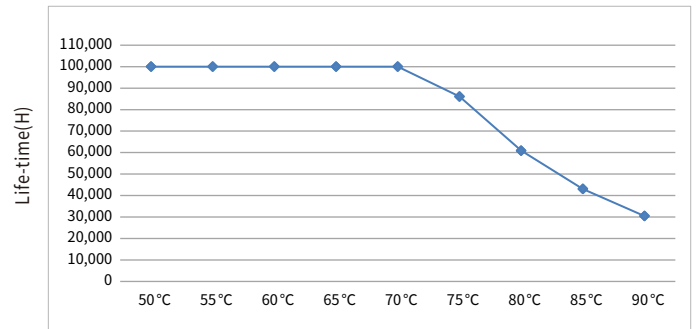
Life-time vs. case temperature



Case temperature(Tc)

BK-PYN080E-A0550AYV

Life-time vs. case temperature

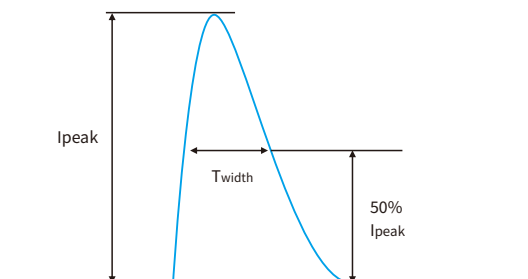


Case temperature(Tc)

- 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-PYN022E-A0350AYV	11A	250us	AC 230V,Full load, Cold start,Ta≤30°C, MCB is not installed side by side	26	33	41	51	64	43	56	69	86	107	73	95	117	146	182	
BK-PYN042E-A0350AYV	16.5A	270us		15	20	24	31	38	25	33	41	51	64	39	51	63	79	98	
BK-PYN060E-A0350AYV	19.5A	310us		11	14	17	22	27	18	24	29	37	46	28	36	44	55	69	
BK-PYN080E-A0550AYV	21.3A	282us		11	14	17	22	27	18	24	29	36	46	21	27	34	42	52	



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, the driver will automatically resume output.

Output no-load operation

- Output no-load will not damage the driver.

Please turn off the driver first if you need to connect the LED load.

Insulation between circuits

Isolation	Input	Output	Case	VCC	PWM
Input	-	-	Basic	-	-
Output	-	-	Basic	-	-
Case	Basic	Basic	-	Basic	Basic

Label

BK-PYN022E-A0350AYV

INPUT
☐ ACL/DC+
☐ ACN/DC-
☐ NC
☐
 wire prep.
 0.5-1.5mm²

BOKE
 Non-isolated Constant Current LED Driver
 MODEL: BK-PYN022E-A0350AYV
 INPUT: 200-240V $\approx$ 0/50/60Hz 0.13A Max. λ : 0.85C-0.95
 OUTPUT: 39-63V $\approx$ 350mA 22.05W Max.
 Other ratings see selection sheet
 For LED Modules use only
 MADE IN CHINA
 BOKE Drivers Co., Ltd. www.bokedriver.com
 Address: 2nd and 3rd Floor, No. 51, Xihuan 5th Road,
 South District, 528455 Zhongshan City, Guangdong, CHINA

Switching selection sheet

Po(w)	Io(mA)	Uo(Vdc)	Switch	
			1	2
22.00	200	39-110	--	--
22.00	250	39-88	ON	--
21.90	300	39-73	--	ON
22.05	350	39-63	ON	ON

 Before use, always check dipswitch settings!

otc
 tc=90°C
 ta=60°C
OUTPUT
 250VDC Max.
 DIM ☐
 GND ☐
 VCC ☐
 LED- ☐
 LED+ ☐

BK-PYN042E-A0350AYV

INPUT
☐ ACL/DC+
☐ ACN/DC-
☐ NC
☐
 wire prep.
 0.5-1.5mm²

BOKE
 Non-isolated Constant Current LED Driver
 MODEL: BK-PYN042E-A0350AYV
 INPUT: 200-240V $\approx$ 0/50/60Hz 0.24A Max. λ : 0.75C-0.95
 OUTPUT: 50-120V $\approx$ 350mA 42W Max.
 Other ratings see selection sheet
 For LED Modules use only
 MADE IN CHINA
 BOKE Drivers Co., Ltd. www.bokedriver.com
 Address: 2nd and 3rd Floor, No. 51, Xihuan 5th Road,
 South District, 528455 Zhongshan City, Guangdong, CHINA

Switching selection sheet

Po(w)	Io(mA)	Uo(Vdc)	Switch	
			1	2
42.00	200	50-210	--	--
42.00	250	50-168	ON	--
42.00	300	50-140	--	ON
42.00	350	50-120	ON	ON

 Before use, always check dipswitch settings!

otc
 tc=90°C
 ta=60°C
OUTPUT
 250VDC Max.
 DIM ☐
 GND ☐
 VCC ☐
 LED- ☐
 LED+ ☐

BK-PYN060E-A0350AYV

INPUT
☐ ACL/DC+
☐ ACN/DC-
☐ NC
☐
 wire prep.
 0.5-1.5mm²

BOKE
 Non-isolated Constant Current LED Driver
 MODEL: BK-PYN060E-A0350AYV
 INPUT: 200-240V $\approx$ 0/50/60Hz 0.34A Max. λ : 0.65C-0.95
 OUTPUT: 50-172V $\approx$ 350mA 60.2W Max.
 Other ratings see selection sheet
 For LED Modules use only
 MADE IN CHINA
 BOKE Drivers Co., Ltd. www.bokedriver.com
 Address: 2nd and 3rd Floor, No. 51, Xihuan 5th Road,
 South District, 528455 Zhongshan City, Guangdong, CHINA

Switching selection sheet

Po(w)	Io(mA)	Uo(Vdc)	Switch	
			1	2
43.20	200	50-216	--	--
54.00	250	50-216	ON	--
60.00	300	50-200	--	ON
60.20	350	50-172	ON	ON

 Before use, always check dipswitch settings!

otc
 tc=90°C
 ta=60°C
OUTPUT
 250VDC Max.
 DIM ☐
 GND ☐
 VCC ☐
 LED- ☐
 LED+ ☐

BK-PYN080E-A0550AYV

INPUT
☐ ACL/DC+
☐ ACN/DC-
☐ NC
☐
 wire prep.
 0.5-1.5mm²

BOKE
 Non-isolated Constant Current LED Driver
 MODEL: BK-PYN080E-A0550AYV
 INPUT: 200-240V $\approx$ 0/50/60Hz 0.43A Max. λ : 0.5C-0.95
 OUTPUT: 50-146V $\approx$ 550mA 80.3W Max.
 Other ratings see selection sheet
 For LED Modules use only
 MADE IN CHINA
 BOKE Drivers Co., Ltd. www.bokedriver.com
 Address: 2nd and 3rd Floor, No. 51, Xihuan 5th Road,
 South District, 528455 Zhongshan City, Guangdong, CHINA

Switching selection sheet

Po(w)	Io(mA)	Uo(Vdc)	Switch			
			1	2	3	4
43.20	200	50-216	--	ON	ON	ON
54.00	250	50-216	--	--	ON	ON
64.80	300	50-216	--	ON	ON	--
75.60	350	50-216	--	--	ON	ON
80.00	400	50-200	--	--	ON	--
79.65	450	50-177	--	ON	--	--
80.00	500	50-160	ON	--	--	--
80.30	550	50-146	--	--	--	ON

 Before use, always check dipswitch settings!

otc
 tc=90°C
 ta=60°C
OUTPUT
 250VDC Max.
 DIM ☐
 GND ☐
 VCC ☐
 LED- ☐
 LED+ ☐

DIP-switch & output current

BK-PYN022E-A0350AYV

Output			1	2
Prated(W)	Irated(mA)	Voltage(Vdc)		
22.00	200	39-110	--	--
22.00	250	39-88	ON	--
21.90	300	39-73	--	ON
22.05	350 ★	39-63	ON	ON

BK-PYN042E-A0350AYV

Output			1	2
Prated(W)	Irated(mA)	Voltage(Vdc)		
42.00	200	50-210	--	--
42.00	250	50-168	ON	--
42.00	300	50-140	--	ON
42.00	350 ★	50-120	ON	ON

BK-PYN060E-A0350AYV

Output			1	2
Prated(W)	Irated(mA)	Voltage(Vdc)		
43.20	200	50-216	--	--
54.00	250	50-216	ON	--
60.00	300	50-200	--	ON
60.20	350 ★	50-172	ON	ON

BK-PYN080E-A0550AYV

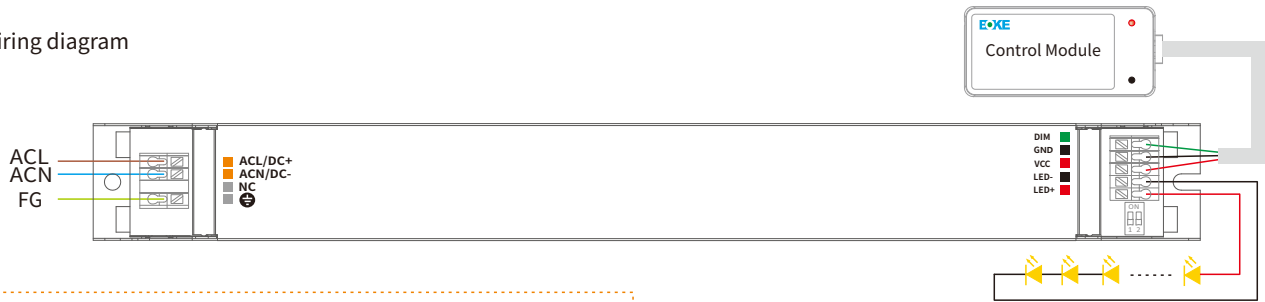
Output			1	2	3	4
Prated(W)	Irated(mA)	Voltage(Vdc)				
43.20	200	50-216	--	ON	ON	ON
54.00	250	50-216	--	--	ON	ON
64.80	300	50-216	--	ON	ON	--
75.60	350	50-216	--	--	--	ON
80.00	400	50-200	--	--	ON	--
79.65	450	50-177	--	ON	--	--
80.00	500	50-160	ON	--	--	--
80.30	550 ★	50-146	--	--	--	--

Remarks:

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

PWM+12V application

Wiring diagram



Remarks

VCC/GND: +12VDC $\pm$ 10%,100mA MAX.

DIM/GND:

PWM Voltage: 3.3V/5V/10V

Frequency range: 600-4000Hz

Duty cycle: 0%(OFF),3% is the darkest,100% is the brightest
dimming range 3-100%.

Typical applications

Aux supply 12V

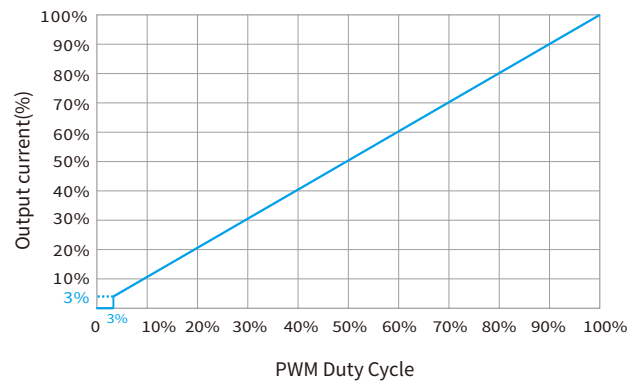
Diming 0-10V

GND

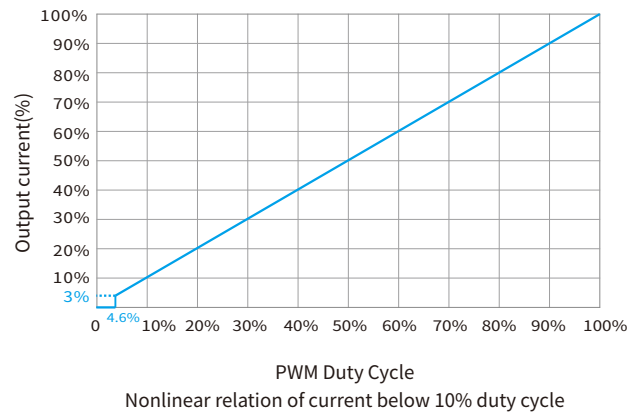
Bluetooth module
Zigbee module
WiFi module
LoRa module
4G/5G module
NB-IoT module
Daylight Sensor
PIR Sensor
Microwave Sensor
IR Sensor
RF module
.....

Dimming curve

PYN022E/PYN042E/PYN060E PWM dimming curve



PYN080E PWM dimming curve

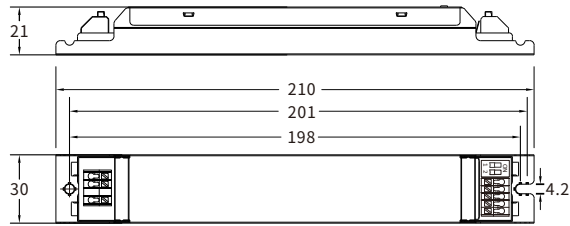


Mechanical Specification

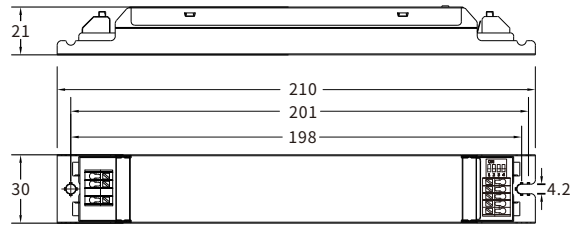
Size

Unit:mm

PYN022E-A/PYN042E-A/PYN060E-A



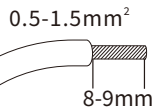
PYN080E-A



INPUT

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

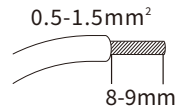
Input wire



OUTPUT

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

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 lamp radiator).
- If the driver is used externally (it needs to be used with the plug fitting), the installation of the driver should also meet the following conditions:
 - 1.The driver should be a certain distance between the drives, as shown in Figure 1.
 - 2.The driver keeps a certain distance from surrounding objects, as shown in Figure 2.

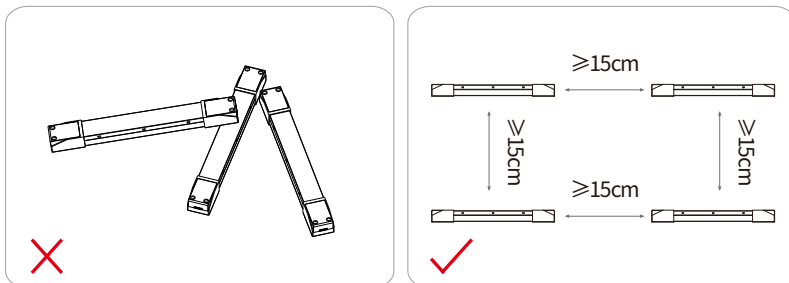


Figure 1

Mounting screw specifications and torque

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

Replace LED module

1. Mains off
2. Wait more than 5 seconds
3. Remove LED module
4. Connect LED module again
5. Non-SELV dimmer interface, external dimmer can be used, active dimmer is not recommended

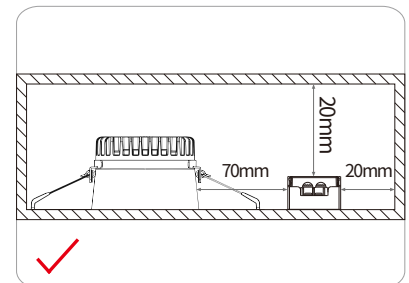


Figure 2

Packaging



Model	Product size	Weight	Paper tray	Carton size	Qty/carton	N.W	G.W
PYN022E-A	L210*W30*H21mm	127g	L340*W75*H29mm	L355*W250*H205mm	42pcs	5.33KG	6.95KG
PYN042E-A	L210*W30*H21mm	134g	L340*W75*H29mm	L355*W250*H205mm	42pcs	5.63KG	7.25KG
PYN060E-A	L210*W30*H21mm	139g	L340*W75*H29mm	L355*W250*H205mm	42pcs	5.84KG	7.45KG
PYN080E-A	L210*W30*H21mm	152g	L340*W75*H29mm	L355*W250*H205mm	42pcs	6.38KG	7.95KG

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.
3. No slightly light treatment is done, the lamps need to be isolated and warned, and the quality department is involved in control.