

Constant voltage independent driver PGV Series(Ultra-thin)



Features

- Ultra-thin shell design
- Flicker-free output, which meets the requirement of ErP standard
- Two-stage isolation design, safe and reliable
- High PF, high efficiency, low THD
- SELV and Class II design, suitable for use outside of the light
- Compliance with 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, overload protection)

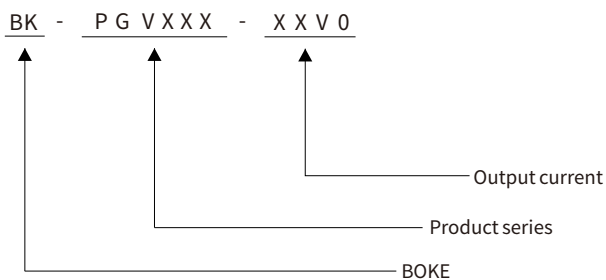
Suitable for lights

- Suitable for CV strip lights etc

Typical applications

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

Model coding rules of PGV series



Model list

Model	Input voltage	Output power	Output voltage	Output current	Dimension	Certification
BK-PGV020-24V0	200-240VAC/DC	20W MAX.	24VDC	0.83A	L129*W50*H13.5mm	CE,ENEC,UKCA,RCM,EL
BK-PGV024-12V0	200-240VAC/DC	24W MAX.	12VDC	2A	L129*W50*H13.5mm	CE,ENEC,UKCA,RCM,EL
BK-PGV024-24V0	200-240VAC/DC	24W MAX.	24VDC	1A	L129*W50*H13.5mm	CE,ENEC,UKCA,RCM,EL
BK-PGV030-24V0	200-240VAC/DC	30W MAX.	24VDC	1.25A	L155*W50*H16mm	CE,ENEC,UKCA,RCM,EL
BK-PGV036-24V0	200-240VAC/DC	36W MAX.	24VDC	1.5A	L155*W50*H16mm	CE,ENEC,UKCA,RCM,EL
BK-PGV048-24V0	200-240VAC/DC	48W MAX.	24VDC	2A	L160*W57.5*H18mm	CE,ENEC,UKCA,RCM,EL
BK-PGV060-12V0	200-240VAC/DC	60W MAX.	12VDC	5A	L160*W57.5*H18mm	CE,ENEC,UKCA,RCM,EL
BK-PGV060-24V0	200-240VAC/DC	60W MAX.	24VDC	2.5A	L160*W57.5*H18mm	CE,ENEC,UKCA,RCM,EL
BK-PGV072-24V0	200-240VAC/DC	72W MAX.	24VDC	3A	L185*W63.5*H22mm	CE,ENEC,UKCA,RCM,EL
BK-PGV100-12V0	200-240VAC/DC	100W MAX.	12VDC	8.4A	L185*W63.5*H22mm	CE,ENEC,UKCA,RCM,EL
BK-PGV100-24V0	200-240VAC/DC	100W MAX.	24VDC	4.2A	L185*W63.5*H22mm	CE,ENEC,UKCA,RCM,EL

Technical data

Product model	BK-PGV020-24V0
Output parameters	
Regulation method	Constant voltage
Rated output current	0.83A
Rated output voltage	24V
Rated output power	20W Max
Output voltage adjustment	Fixed output
Output current ripple LF	±2%
Voltage accuracy	±5%
Linear regulation	±5%
Load regulation	±5%
Flicker-free	Pst LM = 0.000, SVM = 0.023, (The above parameters are obtained by testing with constant voltage light strip)
Input parameters	
Rated input voltage range	200-240VAC 200-240VAC
Input voltage range	180-264VAC 200-264VAC
Input voltage shock	<380 V AC
Input current	<0.2A (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)	84.5%, see the electrical values below for details
In-rush current	11.438A peak, 232us 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): 23.7W, No load (Pno): <0.5W, On stand-by (Psb): N/A, Network stand-by (Pnet): N/A
Safety	
Withstand voltage	I/P-O/P(LED): 3750VAC
Mains surge capability	L-N: 2KV (Performance criterion: A)
Leakage current	0.2mA (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	N/A
Auxiliary power supply	N/A
Dimming range	N/A
Dimming drive mode	N/A
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta = -25-45°C
Case temperature	Tc = 85°C
Operating humidity	5-85% RH, not condensing
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV024-12V0	BK-PGV024-24V0	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	2A	1A	
Rated output voltage	12V	24V	
Rated output power	24W Max	24W Max	
Output voltage adjustment	Fixed output	Fixed output	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±5%	±5%	
Load regulation	±5%	±5%	
Flicker-free	Pst LM = 0.001, SVM = 0.002 ,(The above parameters are obtained by testing with constant voltage light strip)		
Input parameters			
Rated input voltage range	200-240VAC 200-240VAC		
Input voltage range	180-264VAC 200-264VAC		
Input votage shock	<380 V AC		
Input current	<0.2A (Rated input voltage)		
Input frequency	0/50/60Hz		
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details		
Input THD	7.5%,see the electrical values below for details		
Efficiency(Max)	85% ,see the electrical values below for details		
In-rush current	13.9A peak ,194us 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):28.2W, No load(Pno): <0.5W, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC		
Mains surge capability	L-N:2KV(Performance criterion:A)		
Leakage current	0.15mA (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	N/A		
Auxiliary power supply	N/A		
Dimming range	N/A		
Dimming drive mode	N/A		
Emergency support			
Central emergency system	Supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-25-45°C		
Case temperature	Tc=85°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV030-24V0
Output parameters	
Regulation method	Constant voltage
Rated output current	1.25A
Rated output voltage	24V
Rated output power	30W Max
Output voltage adjustment	Fixed output
Output current ripple LF	±2%
Voltage accuracy	±5%
Linear regulation	±5%
Load regulation	±5%
Flicker-free	Pst LM = 0.000, SVM = 0.004, (The above parameters are obtained by testing with constant voltage light strip)
Input parameters	
Rated input voltage range	200-240VAC 200-240VAC
Input voltage range	180-264VAC 200-264VAC
Input voltage shock	<380 V AC
Input current	<0.25A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details
Input THD	8.5%,see the electrical values below for details
Efficiency(Max)	88%,see the electrical values below for details
In-rush current	12.75A peak ,290us 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):34.1W, No load(Pno): <0.5W, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P(LED):3750VAC
Mains surge capability	L-N:2KV(Performance criterion:A)
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	N/A
Auxiliary power supply	N/A
Dimming range	N/A
Dimming drive mode	N/A
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-25-45°C
Case temperature	Tc=85°C
Operating humidity	5-85% RH, not condensing
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV036-24V0
Output parameters	
Regulation method	Constant voltage
Rated output current	1.5A
Rated output voltage	24V
Rated output power	36W Max
Output voltage adjustment	Fixed output
Output current ripple LF	±2%
Voltage accuracy	±5%
Linear regulation	±5%
Load regulation	±5%
Flicker-free	Pst LM = 0.002, SVM = 0.004, (The above parameters are obtained by testing with constant voltage light strip)
Input parameters	
Rated input voltage range	200-240VAC 200-240VAC
Input voltage range	180-264VAC 200-264VAC
Input voltage shock	<380 V AC
Input current	<0.25A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details
Input THD	8.5%,see the electrical values below for details
Efficiency(Max)	88%,see the electrical values below for details
In-rush current	12.4A peak,290us 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):40.9W, No load(Pno): <0.5W, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P(LED):3750VAC
Mains surge capability	L-N:2KV(Performance criterion:A)
Leakage current	0.2mA (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	N/A
Auxiliary power supply	N/A
Dimming range	N/A
Dimming drive mode	N/A
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-25-45°C
Case temperature	Tc=85°C
Operating humidity	5-85% RH, not condensing
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV048-24V0	
Output parameters		
Regulation method	Constant voltage	
Rated output current	2A	
Rated output voltage	24V	
Rated output power	48W Max	
Output voltage adjustment	Fixed output	
Output current ripple LF	±2%	
Voltage accuracy	±5%	
Linear regulation	±5%	
Load regulation	±5%	
Flicker-free	Pst LM = 0.000, SVM = 0.002 ,(The above parameters are obtained by testing with constant voltage light strip)	
Input parameters		
Rated input voltage range	200-240VAC 200-240VAC	
Input voltage range	180-264VAC 200-264VAC	
Input votage shock	<380 V AC	
Input current	<0.4A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details	
Input THD	6%,see the electrical values below for details	
Efficiency(Max)	88% ,see the electrical values below for details	
In-rush current	16.8A peak ,280us 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):54.5W, No load(Pno): <0.5W, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P(LED):3750VAC	
Mains surge capability	L-N:2KV(Performance criterion:A)	
Leakage current	0.26mA (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	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-25-45°C	
Case temperature	Tc=85°C	
Operating humidity	5-85% RH, not condensing	
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV060-12V0	BK-PGV060-24V0	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	5A	2.5A	
Rated output voltage	12VDC	24VDC	
Rated output power	60W Max	60W Max	
Output voltage adjustment	Fixed output	Fixed output	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±5%	±5%	
Load regulation	±5%	±5%	
Flicker-free	Pst LM = 0.003, SVM = 0.001 ,(The above parameters are obtained by testing with constant voltage light strip)		
Input parameters			
Rated input voltage range	200-240VAC 200-240VAC		
Input voltage range	180-264VAC 200-264VAC		
Input votage shock	<380 V AC		
Input current	<0.5A (Rated input voltage)		
Input frequency	0/50/60Hz		
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details		
Input THD	5.5%,see the electrical values below for details		
Efficiency(Max)	87% ,see the electrical values below for details		
In-rush current	19.2A peak ,360us 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):69W, No load (Pno): <0.5W, On stand-by (Psb) : N/A, Network stand-by (Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC		
Mains surge capability	L-N:2KV(Performance criterion:A)		
Leakage current	0.18mA (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	N/A		
Auxiliary power supply	N/A		
Dimming range	N/A		
Dimming drive mode	N/A		
Emergency support			
Central emergency system	Supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-25-45°C		
Case temperature	Tc=85°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV072-24V0	
Output parameters		
Regulation method	Constant voltage	
Rated output current	3A	
Rated output voltage	24VDC	
Rated output power	72W Max	
Output voltage adjustment	Fixed output	
Output current ripple LF	±2%	
Voltage accuracy	±5%	
Linear regulation	±5%	
Load regulation	±5%	
Flicker-free	Pst LM = 0.072, SVM = 0.002 ,(The above parameters are obtained by testing with constant voltage light strip)	
Input parameters		
Rated input voltage range	200-240VAC 200-240VAC	
Input voltage range	180-264VAC 200-264VAC	
Input vorage shock	<380 V AC	
Input current	<0.65A (Rated input voltage)	
Input frequency	0/50/60Hz	
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details	
Input THD	5%,see the electrical values below for details	
Efficiency(Max)	89% ,see the electrical values below for details	
In-rush current	21.2A peak ,362us 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):80.9W, No load(Pno): <0.5W, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A	
Safety		
Withstand voltage	I/P-O/P(LED):3750VAC	
Mains surge capability	L-N:2KV(Performance criterion:A)	
Leakage current	0.28mA (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	N/A	
Auxiliary power supply	N/A	
Dimming range	N/A	
Dimming drive mode	N/A	
Emergency support		
Central emergency system	Supported	
Self-contained emergency	Supported	
Environment & Life time		
Operating temperature	Ta=-25-45°C	
Case temperature	Tc=90°C	
Operating humidity	5-85% RH, not condensing	
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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-PGV100-12V0	BK-PGV100-24V0	
Output parameters			
Regulation method	Constant voltage	Constant voltage	
Rated output current	8.4A	4.2A	
Rated output voltage	12VDC	24VDC	
Rated output power	100W Max	100W Max	
Output voltage adjustment	Fixed output	Fixed output	
Output current ripple LF	±2%	±2%	
Voltage accuracy	±5%	±5%	
Linear regulation	±5%	±5%	
Load regulation	±5%	±5%	
Flicker-free	Pst LM = 0.011, SVM = 0.009 ,(The above parameters are obtained by testing with constant voltage light strip)		
Input parameters			
Rated input voltage range	200-240VAC 200-240VAC		
Input voltage range	180-264VAC 200-264VAC		
Input votage shock	<380 V AC		
Input current	<0.78A (Rated input voltage)		
Input frequency	0/50/60Hz		
Input PF/Input DF	PF: 0.99,DF: 0.99,see the electrical values below for details		
Input THD	6%,see the electrical values below for details		
Efficiency(Max)	92.5%,see the electrical values below for details		
In-rush current	34.6A peak ,334us 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):108.1W, No load(Pno): <0.5W, On stand-by(Psb) : N/A, Network stand-by(Pnet) : N/A		
Safety			
Withstand voltage	I/P-O/P(LED):3750VAC		
Mains surge capability	L-N:2KV(Performance criterion:A)		
Leakage current	0.2mA (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	N/A		
Auxiliary power supply	N/A		
Dimming range	N/A		
Dimming drive mode	N/A		
Emergency support			
Central emergency system	Supported		
Self-contained emergency	Supported		
Environment & Life time			
Operating temperature	Ta=-25-45°C		
Case temperature	Tc=90°C		
Operating humidity	5-85% RH, not condensing		
Storage temp./humidity	-40-80°C, 5-85% RH, not 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, CCC, 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		

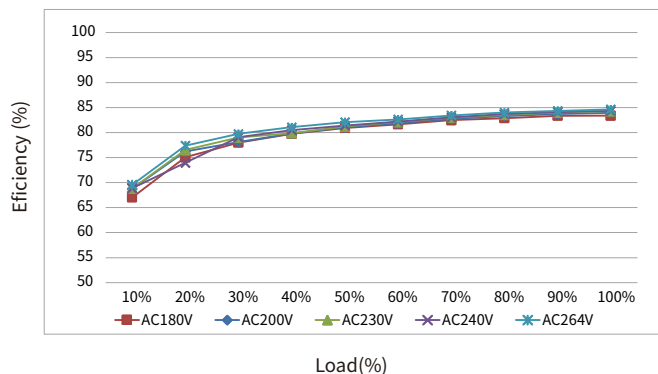
Remarks

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

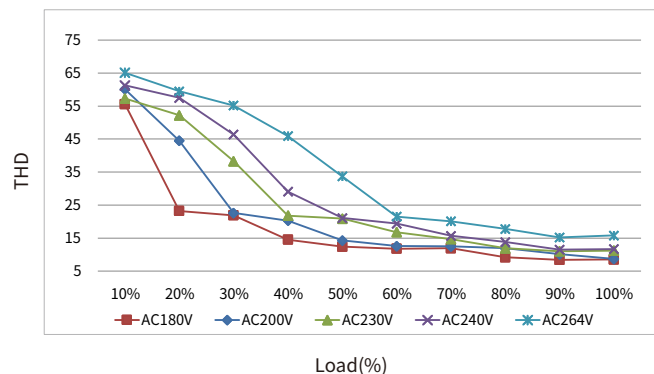
Electrical values

BK-PGV020

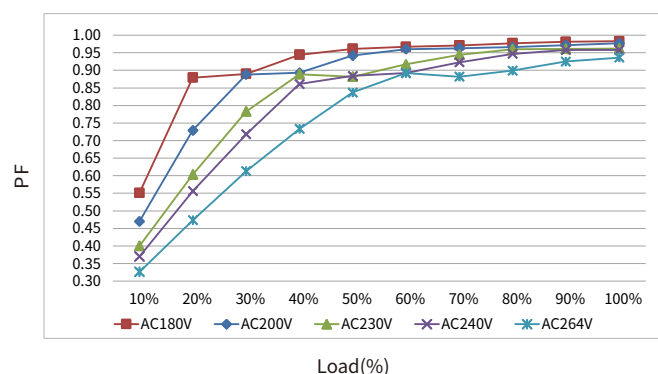
Efficiency vs load



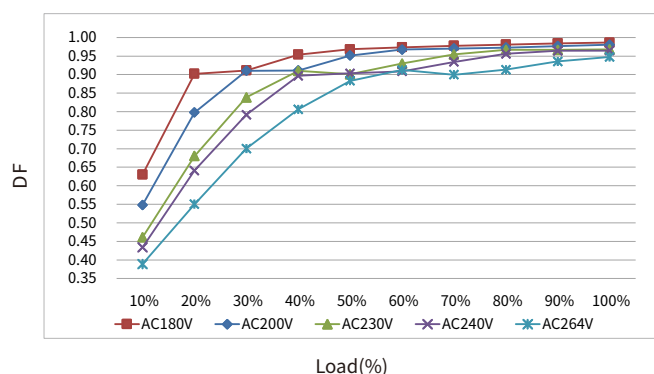
THD vs. Load



Power factor vs. Load

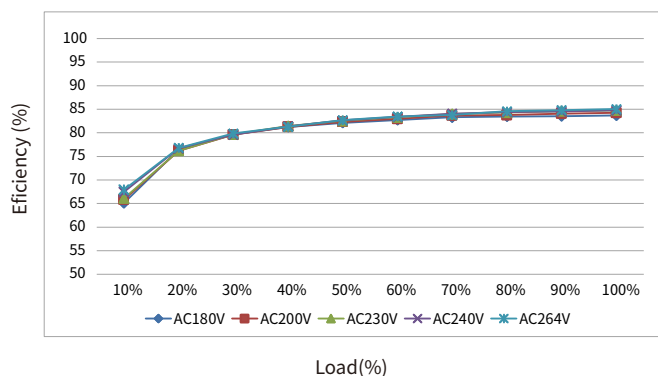


Displacement power vs. Load

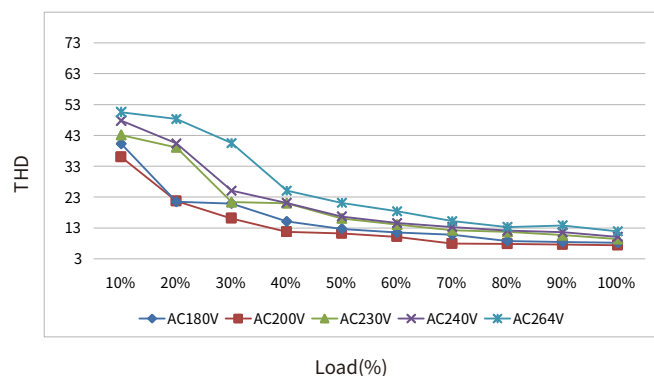


BK-PGV024

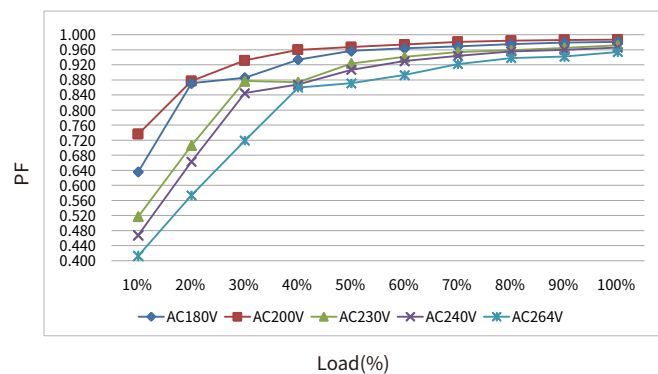
Efficiency vs load



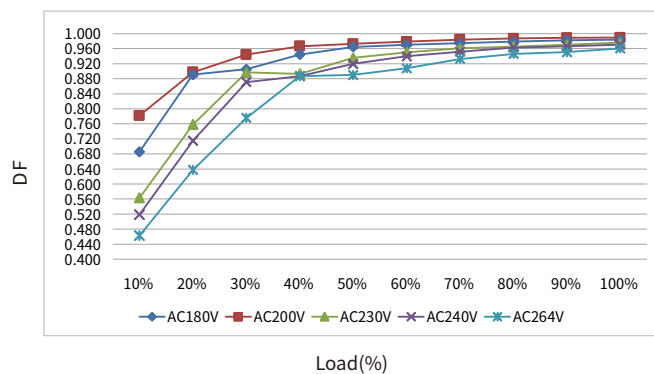
THD vs. Load



Power factor vs. Load



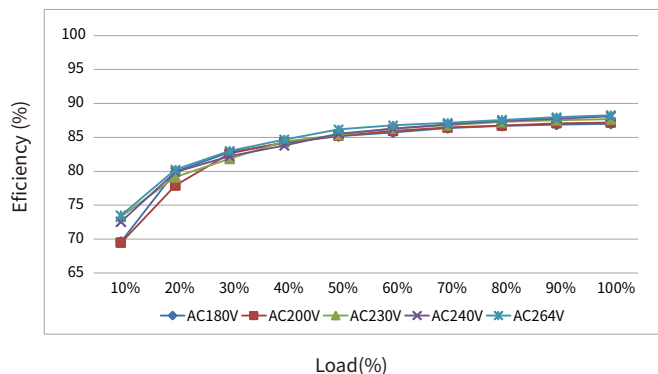
Displacement power vs. Load



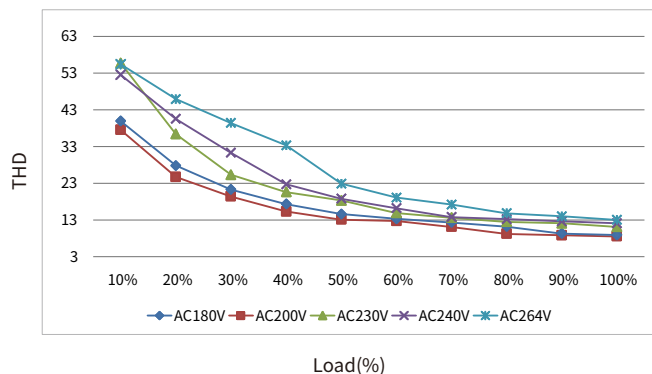
Electrical values

BK-PGV030

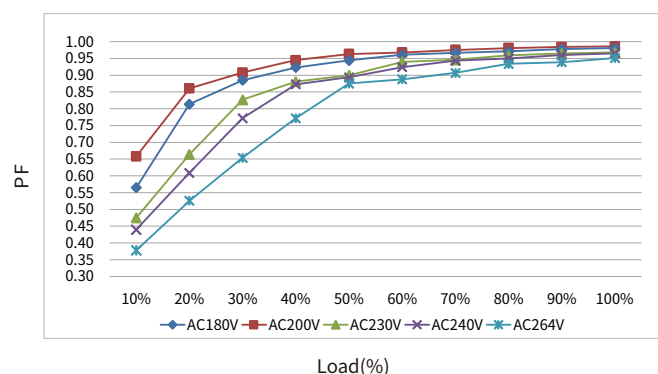
Efficiency vs load



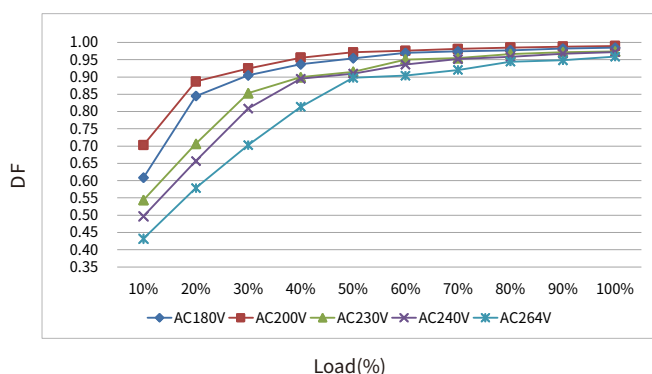
THD vs. Load



Power factor vs. Load

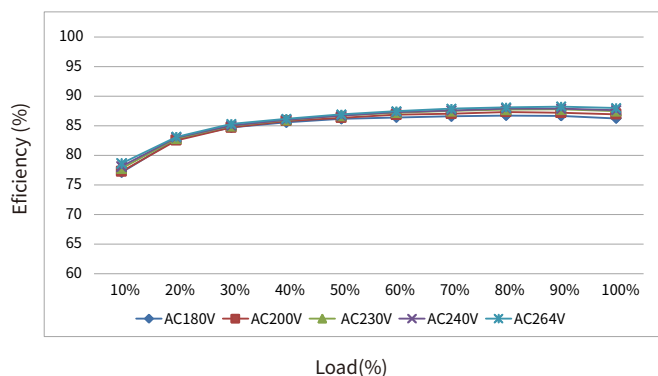


Displacement power vs. Load

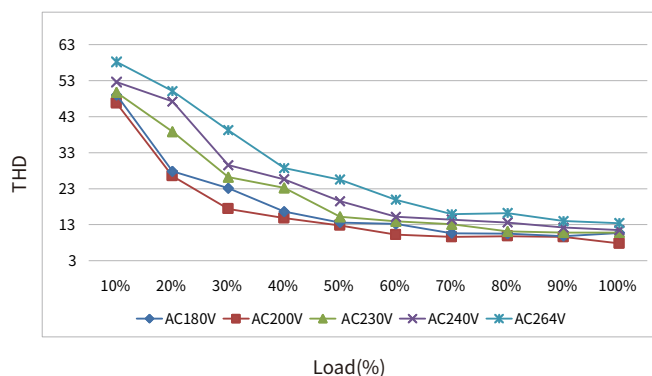


BK-PGV036

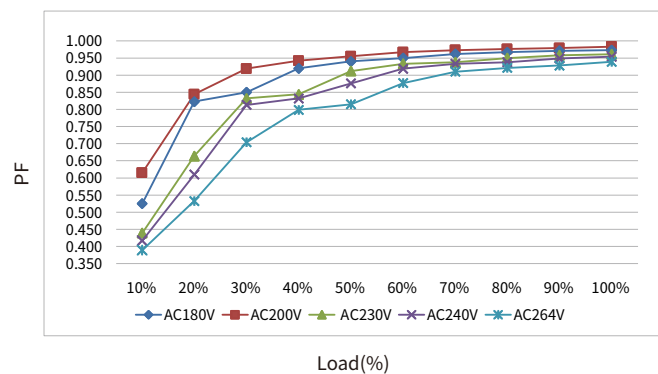
Efficiency vs load



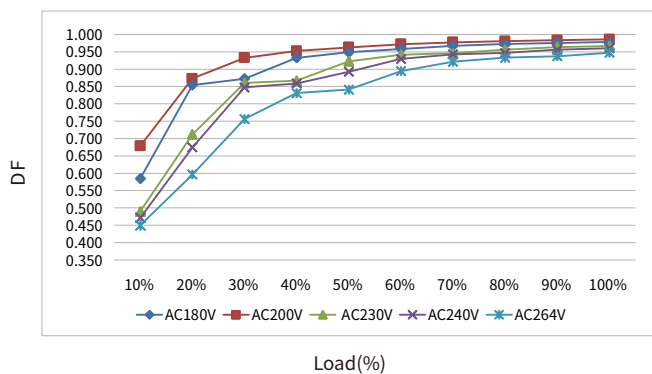
THD vs. Load



Power factor vs. Load



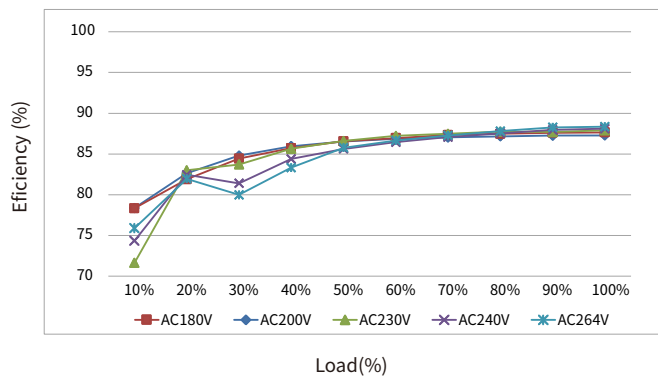
Displacement power vs. Load



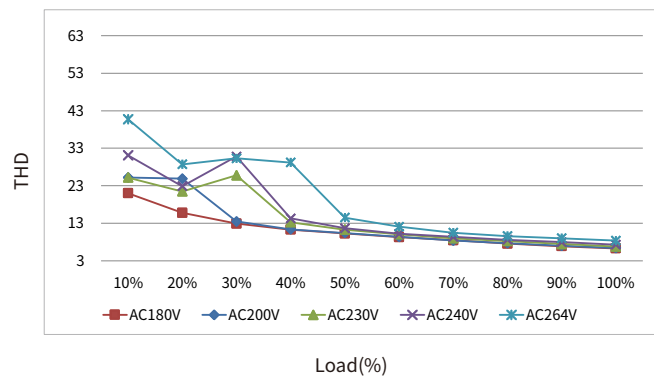
Electrical values

BK-PGV048

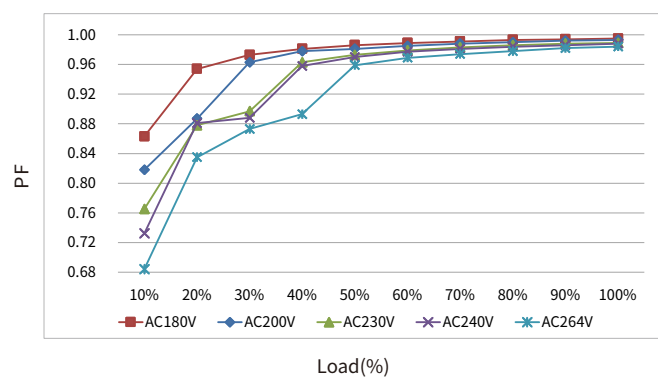
Efficiency vs load



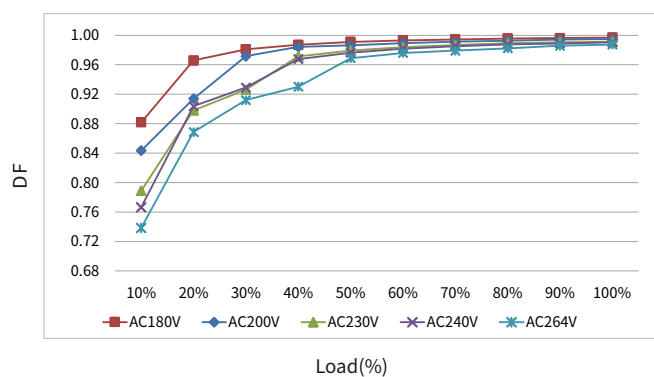
THD vs. Load



Power factor vs. Load

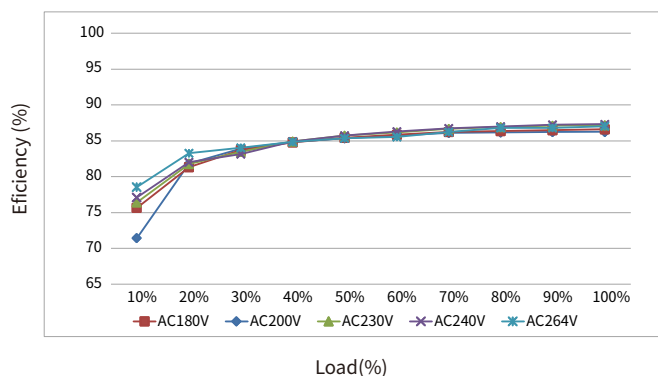


Displacement power vs. Load

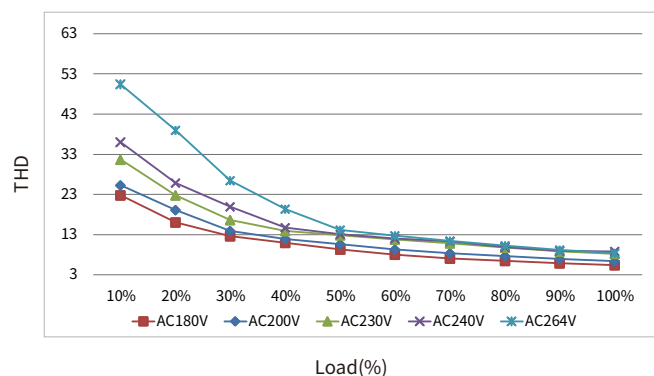


BK-PGV060

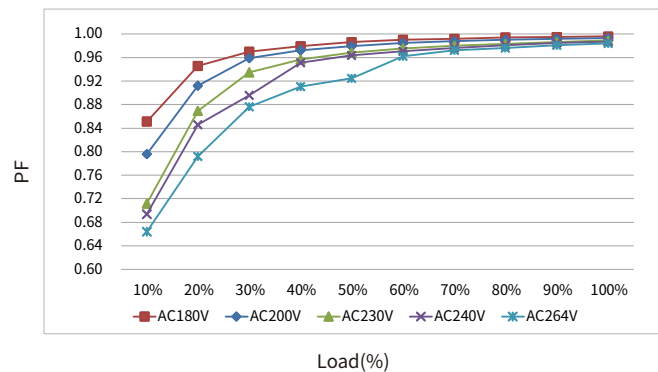
Efficiency vs load



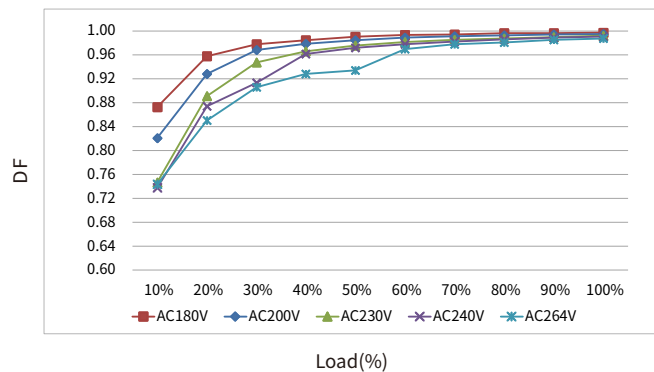
THD vs. Load



Power factor vs. Load



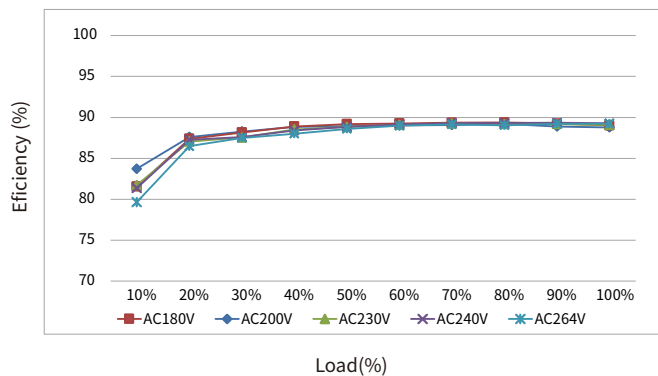
Displacement power vs. Load



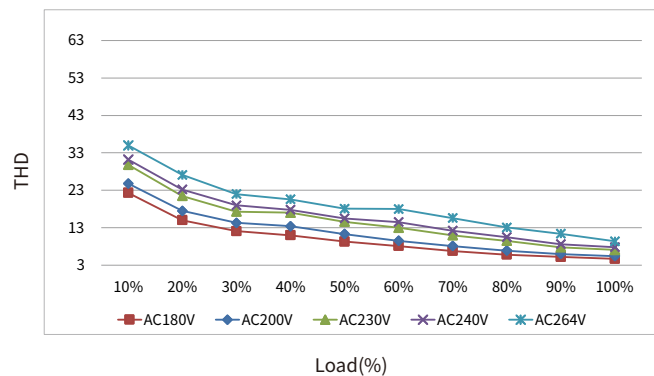
Electrical values

BK-PGV072

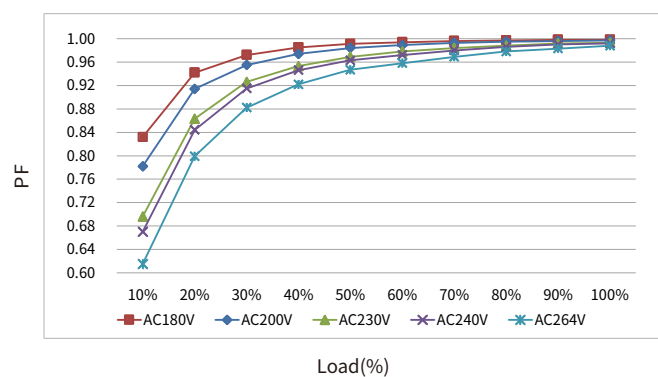
Efficiency vs load



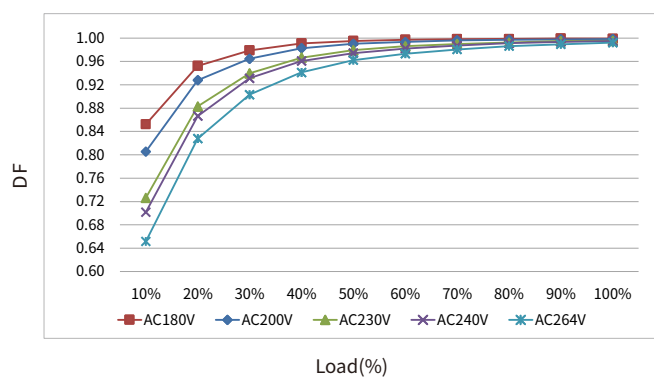
THD vs. Load



Power factor vs. Load

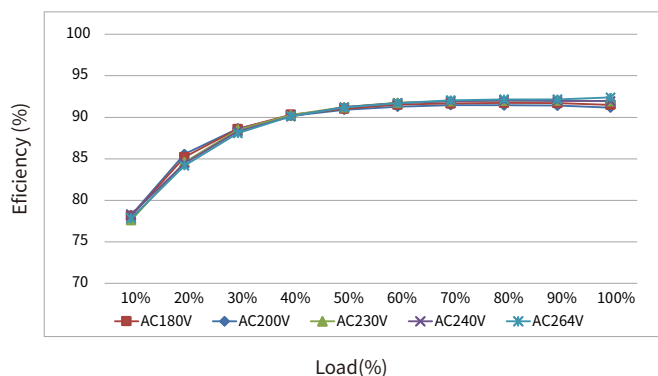


Displacement power vs. Load

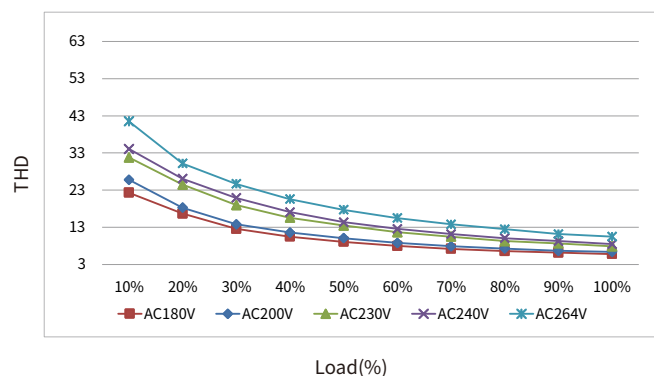


BK-PGV100

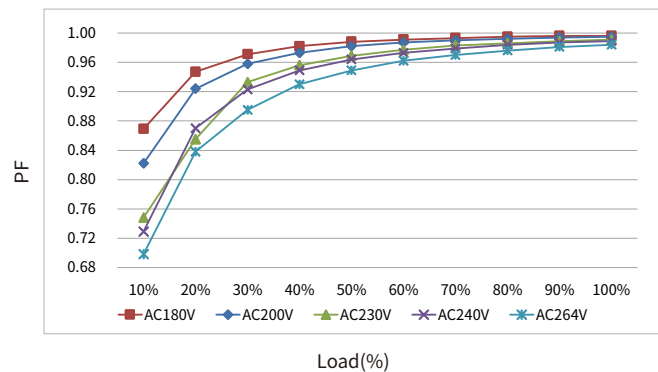
Efficiency vs load



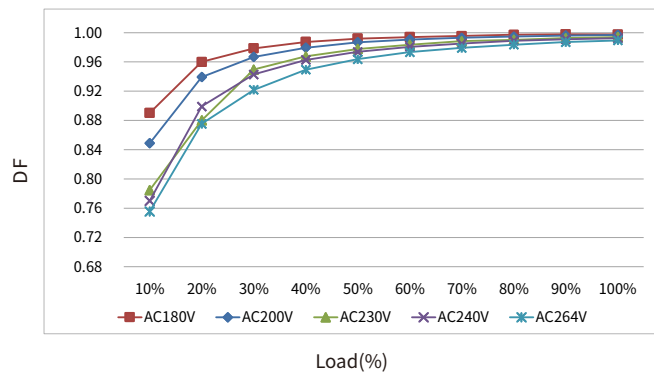
THD vs. Load



Power factor vs. Load



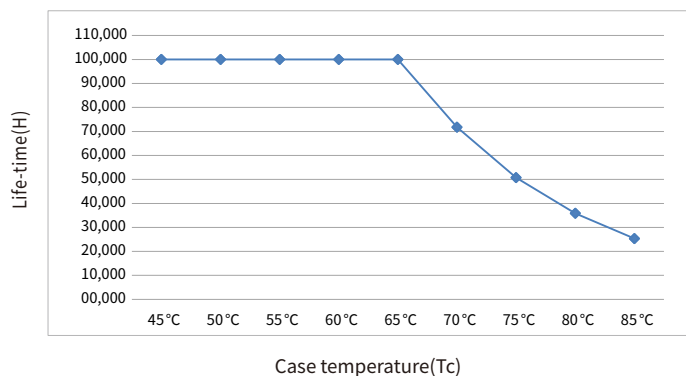
Displacement power vs. Load



Expected life-time

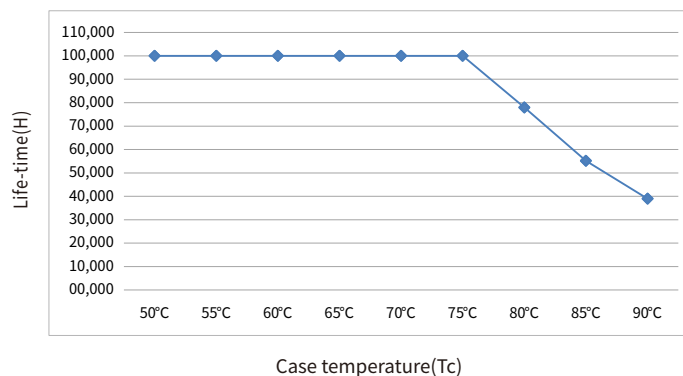
BK-PGV020

Life-time vs. case temperature



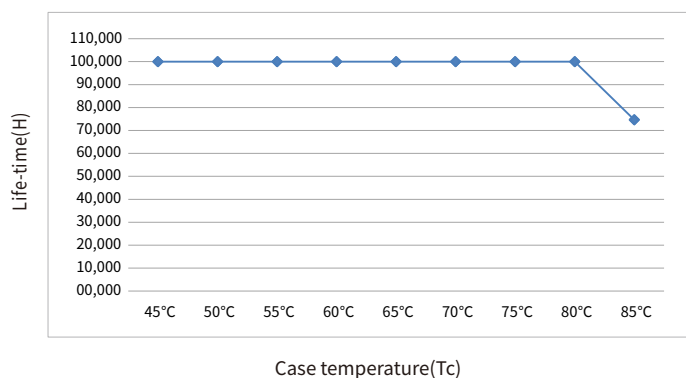
BK-PGV024

Life-time vs. case temperature



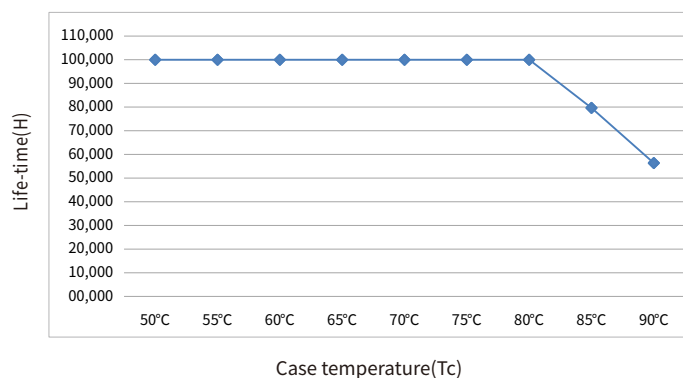
BK-PGV030

Life-time vs. case temperature



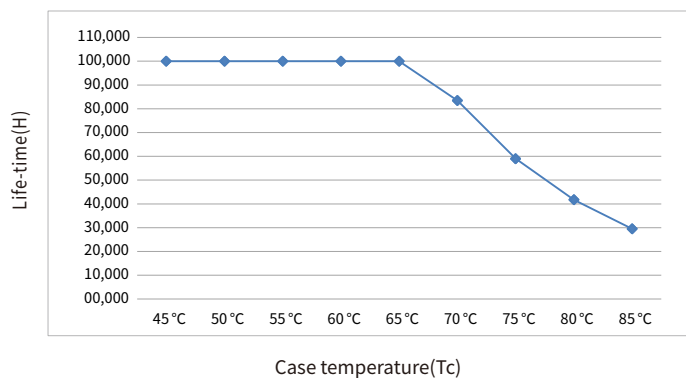
BK-PGV036

Life-time vs. case temperature



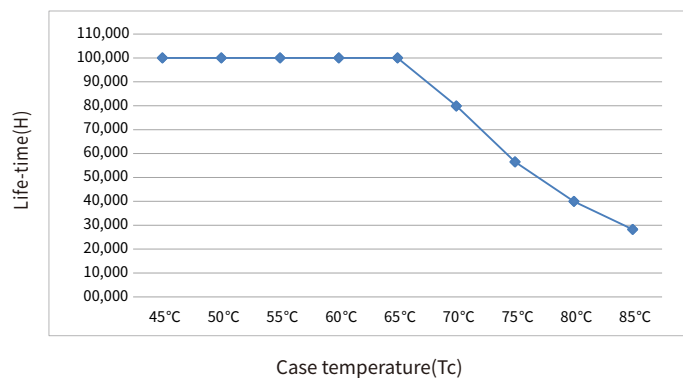
BK-PGV048

Life-time vs. case temperature



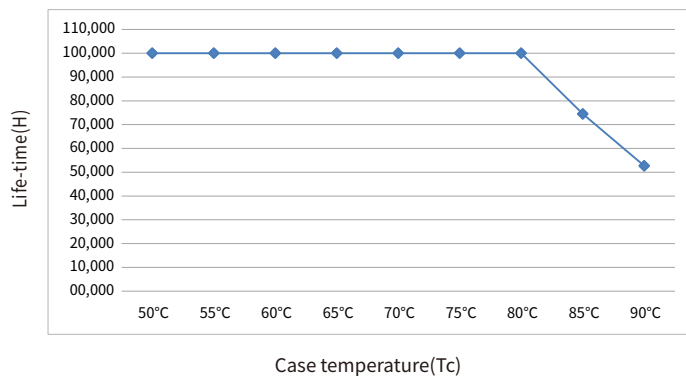
BK-PGV060

Life-time vs. case temperature



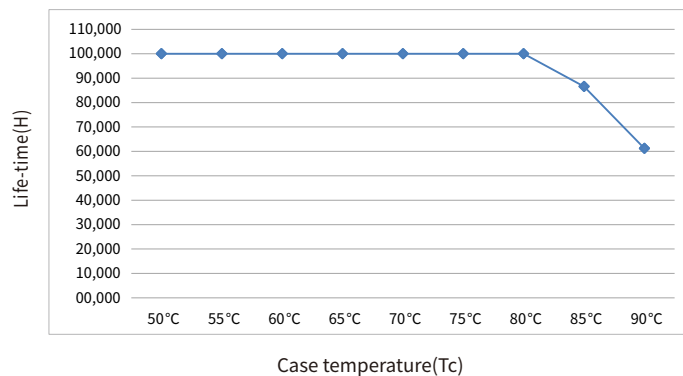
BK-PGV072

Life-time vs. case temperature



BK-PGV100

Life-time vs. case temperature

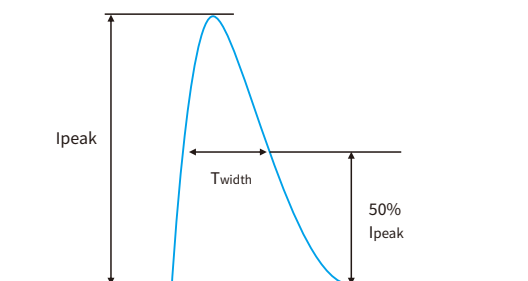


-The life-time of the LED driver is shown in the figure above
(calculated based on the 90% survival rate).

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

Surge

Model	Ipeak	Twidth	Condition	Relative number of MCB/pcs														
				B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
BK-PGV020	11.438A	232us	AC 230V,Full load, Cold start,Ta≤30℃, MCB is not installed side by side	27	35	43	53	67	44	58	71	89	111	75	97	120	150	187
BK-PGV024	13.9A	194us		26	34	42	52	66	44	57	70	87	109	63	82	101	127	158
BK-PGV030	12.75A	290us		18	23	29	36	45	30	39	48	60	75	51	66	82	102	128
BK-PGV036	12.4A	290us		18	24	29	37	46	31	40	49	61	77	44	57	70	87	109
BK-PGV048	16.8A	280us		14	18	22	28	35	23	30	37	47	58	32	42	52	65	81
BK-PGV060	19.2A	360us		9	12	15	19	23	16	20	25	31	39	27	35	43	54	67
BK-PGV072	21.2A	362us		8	11	14	17	21	14	18	23	28	35	22	28	35	44	55
BK-PGV100	34.6A	334us		6	7	9	11	14	9	12	15	19	23	17	22	27	34	42



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

- When the output of the driver is short-circuited, the driver will enter the protection state, disconnect the AC for more than 1 minute, and the output will return to normal.

Output overload protection

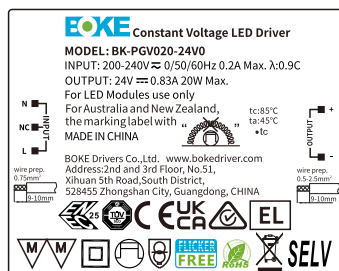
- When the load connected to the driver exceeds the rated power, the driver will enter a hiccup state. After reducing the load power, the driver will resume normal output.

Insulation between circuits

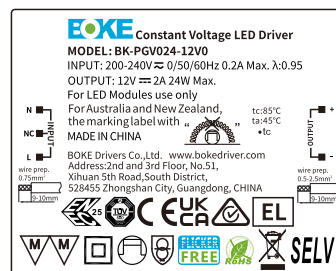
Isolation	Input	Output	Case
Input	-	Double	Double
Output	Double	-	Basic
Case	Double	Basic	-

Label

BK-PGV020-24V0

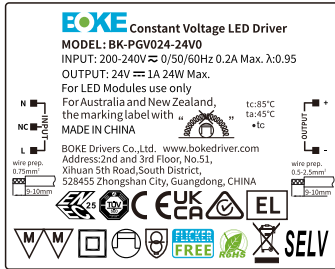


BK-PGV024-12V0

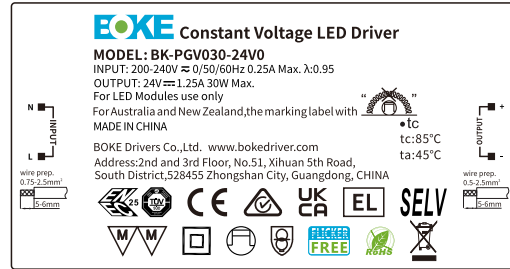


Label

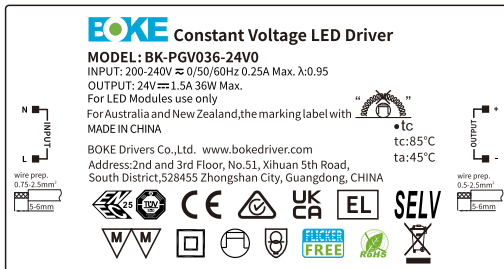
BK-PGV024-24V0



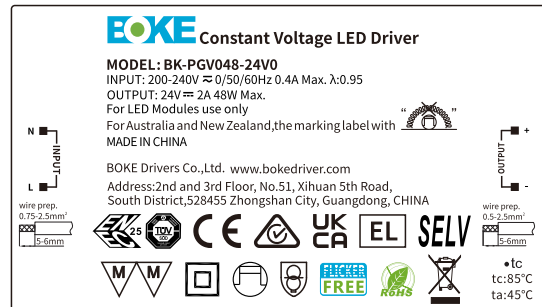
BK-PGV030-24V0



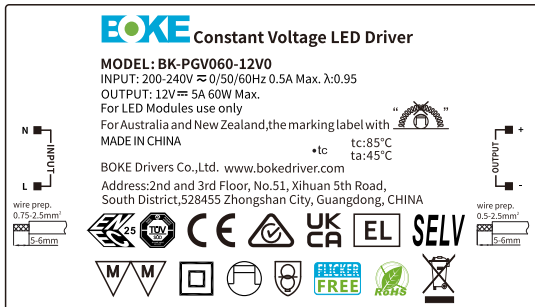
BK-PGV036-24V0



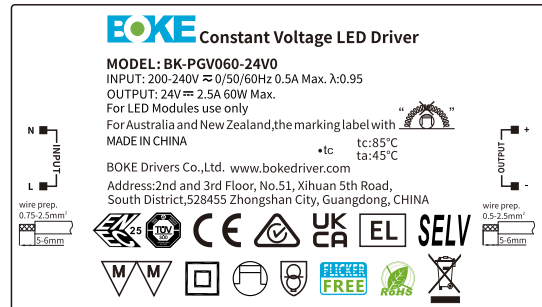
BK-PGV048-24V0



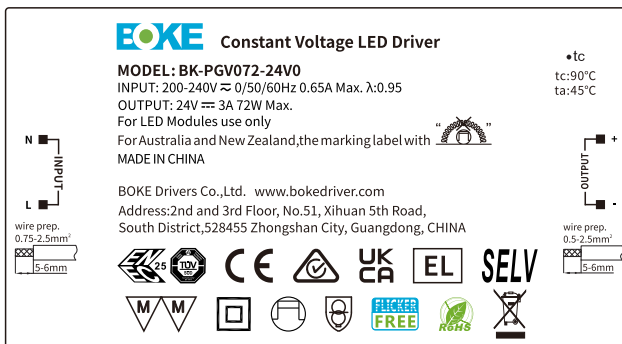
BK-PGV060-12V0



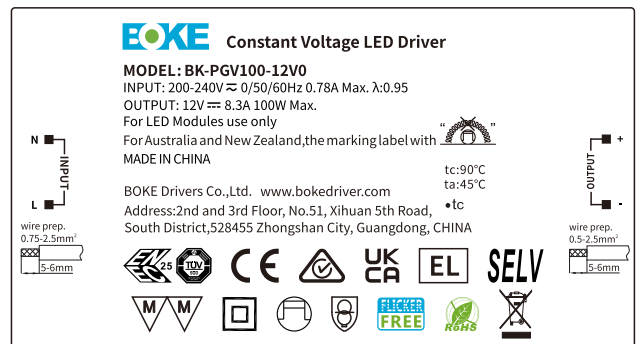
BK-PGV060-24V0



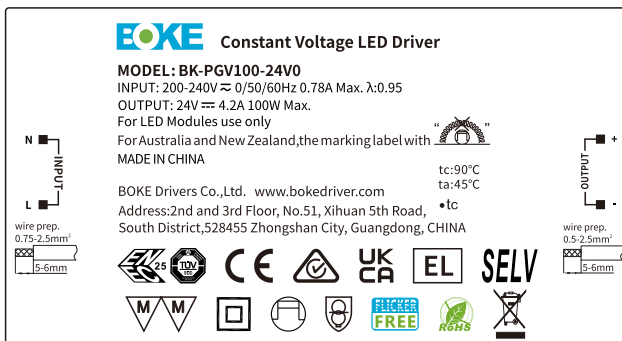
BK-PGV072-24V0



BK-PGV100-12V0



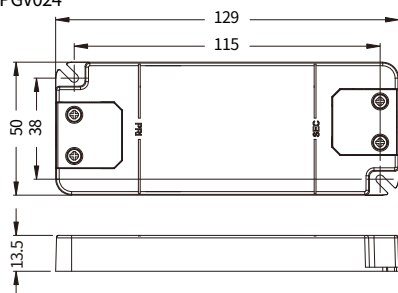
BK-PGV100-24V0



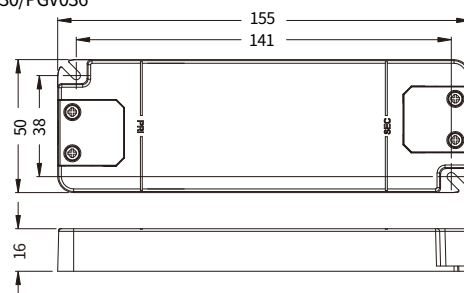
Mechanical Specification

Unit:mm

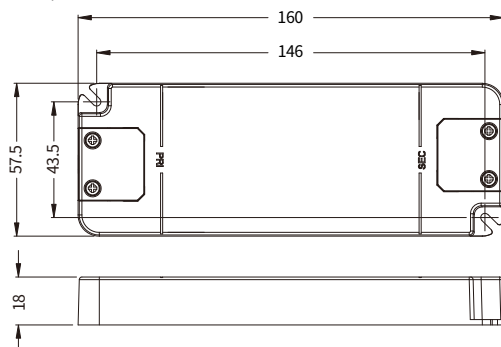
PGV020/PGV024



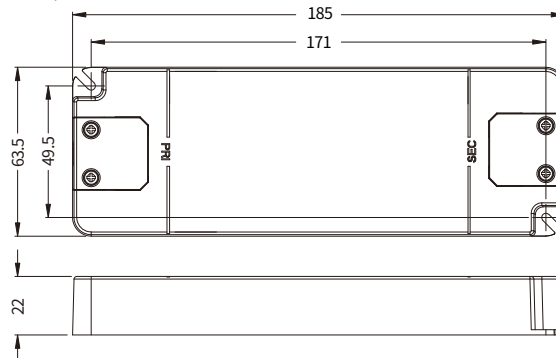
PGV030/PGV036



PGV048/PGV060



PGV072/PGV100

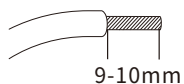


INPUT

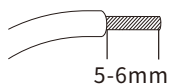
Numbering	function	colour
1	ACL/DC+	green
2	ACN/DC-	green

Input wire

020/024:
0.75mm²



030/036/048/060/072/100:
0.75-2.5mm²

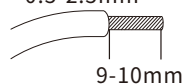


OUTPUT

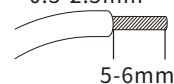
Numbering	function	colour
1	V+	green
2	V-	green

Output wire

020/024:
0.5-2.5mm²



030/036/048/060/072/100:
0.5-2.5mm²



Installation note

Hot plug-in

- Hot plug-in is not supported due to residual output voltage of $> 0\text{ V}$.

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 T_a 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.
 3. Two power outputs cannot be connected in parallel.

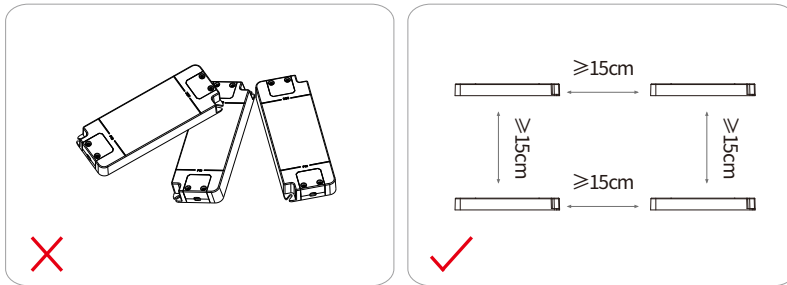


Figure 1

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

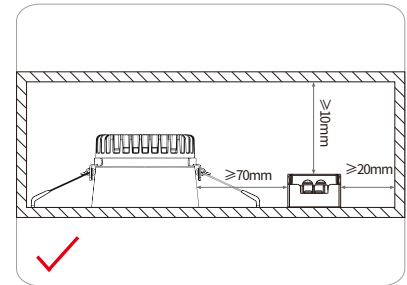
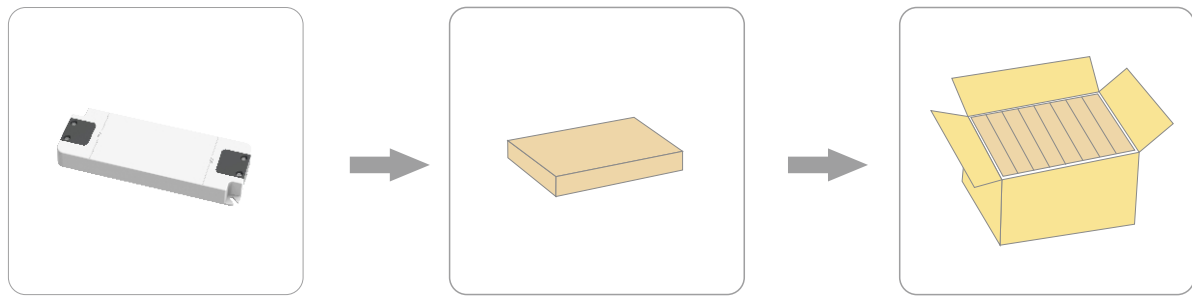


Figure 2

Packaging



Product

Packaging

8pcs*11layer=88pcs/CIN
 16pcs*5layer=80pcs/CIN
 20pcs*3layer=60pcs/CIN
 8pcs*5layer=40pcs/CIN

Model	Product size	Weight	Packaging size	Carton size	Qty/carton	N.W	G.W
PGV020	L129*W50*H13.5mm	81g	L140*W19*H54mm	L305*W240*H230mm	88pcs	7.13kg	8.62kg
PGV024	L129*W50*H13.5mm	108g	L140*W19*H54mm	L305*W240*H230mm	88pcs	9.50kg	10.7kg
PGV030	L155*W50*H16mm	107g	L165*W21*H54mm	L450*W350*H130mm	80pcs	8.56kg	9.86kg
PGV036	L155*W50*H16mm	160g	L165*W21*H54mm	L350*W230*H185mm	60pcs	9.60kg	10.9kg
PGV048	L160*W57.5*H18mm	180g	L170*W23*H62mm	L360*W270*H140mm	40pcs	7.20kg	8.50kg
PGV060	L160*W57.5*H18mm	240g	L170*W23*H62mm	L360*W270*H140mm	40pcs	9.60kg	10.9kg
PGV072	L185*W63.5*H22mm	232g	L195*W27*H67mm	L410*W285*H155mm	40pcs	9.28kg	10.7kg
PGV100	L185*W63.5*H22mm	240g	L195*W27*H67mm	L410*W285*H155mm	40pcs	9.60kg	10.9kg

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.