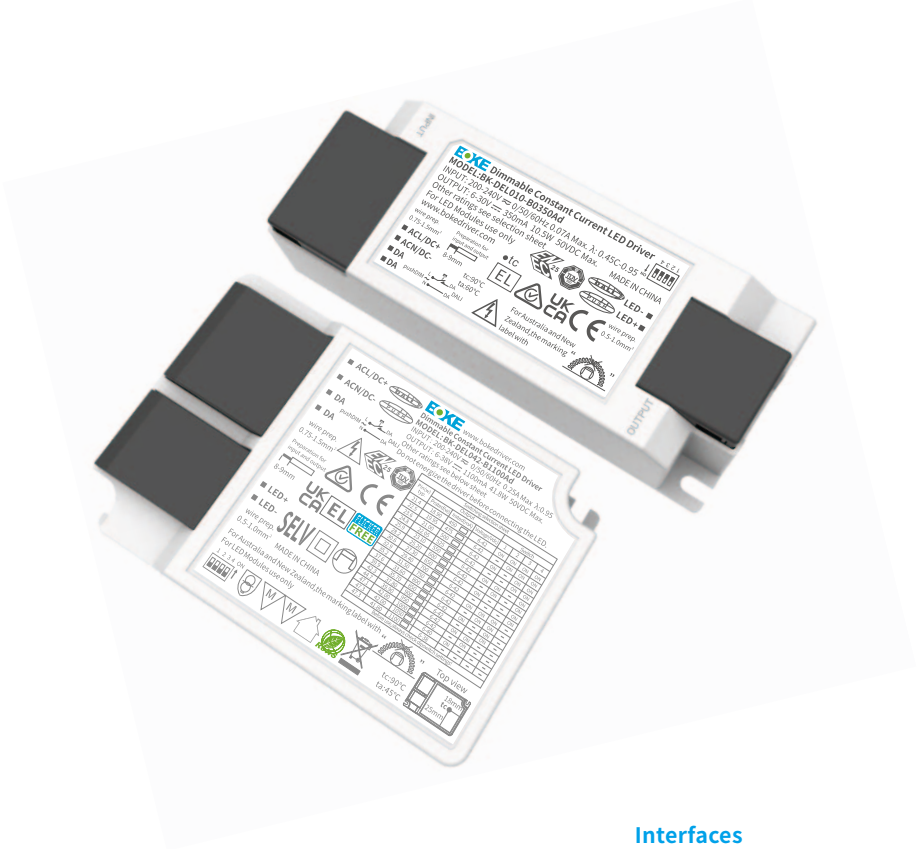
Constant current independent dimmable driver
DEL Series suffix d(DALI-2+pushDIM)



Features

- Support DALI-2+pushDIM dimming mode
- Multi-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 lights is the same
- Dimming range 1~100%, output current accuracy 2%
- Standby power input<0.5W, meets the requirements of ErP certification
- High PF, high efficiency, low THD
- Screw-free and pressing type strain relief, supports thicker cables and is easier to install
- Independent input and output strain relief, stronger wiring
- Intelligent LED hot-plug protection function
- SELV and Class II design, suitable for use outside of the luminaires
- Compliance with CE,ENEC,UKCA,RCM,CCC,DALI-2 and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h
- 5.5-year guarantee

Interfaces

- DALI-2(DALI-2 DT6)
- PUSH(pushDIM)

Functions

- Support central emergency application (dimming normal in DC input)
- Support self-contained emergency application
- Protective features (short-circuit, overload,no-load, hot plug-in protection)

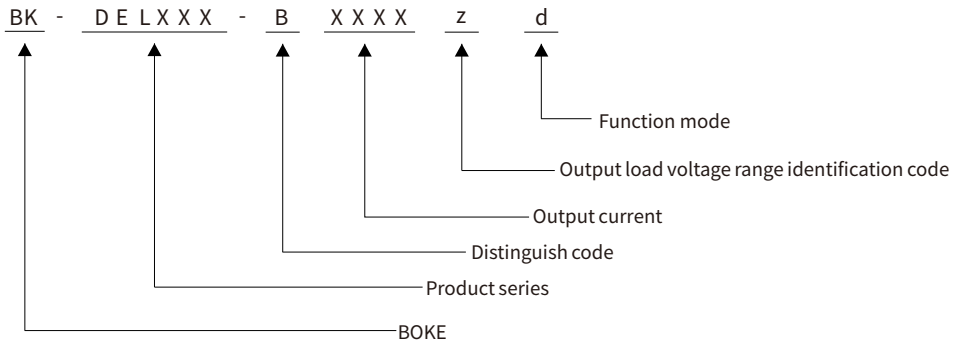
Suitable for lights

- Suitable for lights with independent drivers such as downlights, spotlights, panel lights, etc

Typical applications

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

Model coding rules of DEL series



Function list

Model	suffix	Wired dimming		Connection cable
		DALI-2	pushDIM	
BK-DEL010-B BK-DEL022-B BK-DEL028-B BK-DEL030-B BK-DEL042-B BK-DEL060-B	**d**	√	√	
	DL	√	√	1.5mm²×4 or 1.5mm²×2+1.5mm²×2 input wires

* The description in this specification is only applicable to the products with the suffix d and the model are DEL010-B,DEL022-B,DEL028-B,DEL030-B,DEL042-B and DEL060-B .

Model list

Model	Input voltage	Output power	Output voltage	Output current	Dimension
BK-DEL010-B0350Ad	200-240VAC/DC	11W MAX.	6-42VDC	0.1-0.35A	L117*W45.5*H24mm
BK-DEL010-B0350ADL	200-240VAC/DC	11W MAX.	6-42VDC	0.1-0.35A	L145*W45.5*H29mm
BK-DEL022-B0600Ad	200-240VAC/DC	23.1W MAX.	6-42VDC	0.225-0.6A	L117*W45.5*H29mm
BK-DEL022-B0600ADL	200-240VAC/DC	23.1W MAX.	6-42VDC	0.225-0.6A	L145*W45.5*H29mm
BK-DEL028-B0750Ad	200-240VAC/DC	28.5W MAX.	6-42VDC	0.3-0.75A	L117*W45.5*H29mm
BK-DEL028-B0750ADL	200-240VAC/DC	28.5W MAX.	6-42VDC	0.3-0.75A	L145*W45.5*H29mm
BK-DEL030-B0800Ad	200-240VAC/DC	30.4W MAX.	6-42VDC	0.25-0.8A	L103*W68.5*H30.5mm
BK-DEL030-B0800ADL	200-240VAC/DC	30.4W MAX.	6-42VDC	0.25-0.8A	L140*W71*H30mm
BK-DEL042-B0800Bd	200-240VAC/DC	38.4W MAX.	6-48VDC	0.25-0.8A	L103*W68.5*H30.5mm
BK-DEL042-B0800BDL	200-240VAC/DC	38.4W MAX.	6-48VDC	0.25-0.8A	L140*W71*H30mm
BK-DEL042-B1100Ad	200-240VAC/DC	42W MAX.	6-42VDC	0.45-1.1A	L103*W68.5*H30.5mm
BK-DEL042-B1100ADL	200-240VAC/DC	42W MAX.	6-42VDC	0.45-1.1A	L140*W71*H30mm
BK-DEL060-B2000Ad	200-240VAC/DC	61.2W MAX.	6-42VDC	0.8-2A	L123.5*W79.5*H31mm
BK-DEL060-B2000ADL	200-240VAC/DC	61.2W MAX.	6-42VDC	0.8-2A	L160*W80.8*H30mm

* The description in this specification is only applicable to the products with the suffix d and the model are DEL010-B,DEL022-B,DEL028-B,DEL030-B,DEL042-B and DEL060-B .

Technical data

Product model	BK-DEL010-B0350Ad
Output parameters	
Regulation method	Constant Current
Rated output current range	0.1-0.35A,see the DIP-switch for details
Rated output voltage range	6-42VDC,see the DIP-switch for details
Rated output power	11W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(10 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.193%(100Hz), Flicker index(IEEE 1789)=0.001(100Hz), Pst LM = 0.000, SVM = 0.004, (The above parameters are obtained from testing the panel lights)
Input parameters	
Rated input voltage range	200-240VAC 200-240VDC
Input voltage range	180-264VAC 180-264VDC
Input votage shock	<380 V AC
Input current	<0.07A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.96, DF: 0.96 ,see the electrical values below for details
Input THD(typical)	9% ,see the electrical values below for details
Efficiency(typical)	85% ,see the electrical values below for details
In-rush current(typical)	3.79A peak ,170us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):12.9W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P(LED):3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.31mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	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, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
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, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DEL022-B0600Ad
Output parameters	
Regulation method	Constant Current
Rated output current range	0.225-0.6A,see the DIP-switch for details
Rated output voltage range	6-42VDC,see the DIP-switch for details
Rated output power	23.1W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(10 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.184%(100Hz), Flicker index(IEEE 1789)=0.003(100Hz), Pst LM = 0.000, SVM = 0.004, (The above parameters are obtained from testing the panel lights)
Input parameters	
Rated input voltage range	200-240VAC 200-240VDC
Input voltage range	180-264VAC 180-264VDC
Input votage shock	<380 V AC
Input current	<0.14A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.98, DF: 0.98 ,see the electrical values below for details
Input THD(typical)	8% ,see the electrical values below for details
Efficiency(typical)	86% ,see the electrical values below for details
In-rush current(typical)	6.28A peak ,206us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):26.9W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P(LED):3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.34mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-50°C
Case temperature	Tc=90°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
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, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DEL028-B0750Ad
Output parameters	
Regulation method	Constant Current
Rated output current range	0.3-0.75A,see the DIP-switch for details
Rated output voltage range	6-42VDC,see the DIP-switch for details
Rated output power	28.5W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(10 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.232%(100Hz), Flicker index(IEEE 1789)=0.003(100Hz), Pst LM = 0.02, SVM = 0.006, (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	<0.18A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.97, DF: 0.98 ,see the electrical values below for details
Input THD(typical)	6% ,see the electrical values below for details
Efficiency(typical)	85.5% ,see the electrical values below for details
In-rush current(typical)	6.25A peak ,212us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):33.3W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P(LED):3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.33mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-45°C
Case temperature	Tc=90°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
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, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DEL030-B0800Ad
Output parameters	
Regulation method	Constant Current
Rated output current range	0.25-0.8A,see the DIP-switch for details
Rated output voltage range	6-42VDC,see the DIP-switch for details
Rated output power	30.4W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(16 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.757%(100Hz), Flicker index(IEEE 1789)=0.002(100Hz), Pst LM = 0.002, SVM = 0.003, (The above parameters are obtained from testing the panel lights)
Input parameters	
Rated input voltage range	200-240VAC 200-240VDC
Input voltage range	180-264VAC 180-264VDC
Input votage shock	<380 V AC
Input current	<0.18A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.97, DF: 0.98 ,see the electrical values below for details
Input THD(typical)	5% ,see the electrical values below for details
Efficiency(typical)	89% ,see the electrical values below for details
In-rush current(typical)	3.95A peak ,180us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):34.2W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P:3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.36mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1%-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-45°C
Case temperature	Tc=90°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
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, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DEL042-B0800Bd
Output parameters	
Regulation method	Constant Current
Rated output current range	0.25-0.8A,see the DIP-switch for details
Rated output voltage range	6-48VDC,see the DIP-switch for details
Rated output power	38.4W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(16 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	60VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.339%(100Hz), Flicker index(IEEE 1789)=0.001(100Hz), Pst LM = 0.000, SVM = 0.001, (The above parameters are obtained from testing the panel lights)
Input parameters	
Rated input voltage range	200-240VAC 200-240VDC
Input voltage range	180-264VAC 180-264VDC
Input votage shock	<380 V AC
Input current	<0.22A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.97, DF: 0.97 ,see the electrical values below for details
Input THD(typical)	6% ,see the electrical values below for details
Efficiency(typical)	89% ,see the electrical values below for details
In-rush current(typical)	7.9A peak ,180us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):41.3W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P:3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.41mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1%-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-45°C
Case temperature	Tc=90°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
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, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DEL042-B1100Ad
Output parameters	
Regulation method	Constant Current
Rated output current range	0.45-1.1A,see the DIP-switch for details
Rated output voltage range	6-42VDC,see the DIP-switch for details
Rated output power	42W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(16 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.177%(100Hz), Flicker index(IEEE 1789)=0.001(100Hz), Pst LM = 0.032, SVM = 0.005, (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	<0.25A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.97, DF: 0.98 ,see the electrical values below for details
Input THD(typical)	7.5% ,see the electrical values below for details
Efficiency(typical)	89% ,see the electrical values below for details
In-rush current(typical)	7.9A peak ,176us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):47.2W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P:3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.41mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1%-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-45°C
Case temperature	Tc=90°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
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, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

Technical data

Product model	BK-DEL060-B2000Ad
Output parameters	
Regulation method	Constant Current
Rated output current range	0.8-2.0A,see the DIP-switch for details
Rated output voltage range	6-42VDC,see the DIP-switch for details
Rated output power	61.2W Max,see the DIP-switch for details
Output current adjustment	DIP S.W(16 levels)
Output current ripple LF	±2%
Output current accuracy	±2%
Linear regulation	±1%
Load regulation	±1%
No load output voltage	50VDC
Flicker-free(typical)	Flickering percent(IEEE 1789)=0.203%(100Hz), Flicker index(IEEE 1789)=0.000(100Hz), Pst LM = 0.004, SVM = 0.005, (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	<0.36A (Rated input voltage)
Input frequency	0/50/60Hz
Input PF/Input DF(typical)	PF: 0.97, DF: 0.98 ,see the electrical values below for details
Input THD(typical)	5% ,see the electrical values below for details
Efficiency(typical)	89% ,see the electrical values below for details
In-rush current(typical)	9.1A peak ,174us duration(50 % Ipeak), see the description below for details
Start/Switchover/Turn off	<0.7s(AC start),<0.7s(DC start),<0.3s(AC/DC switchover),<0.5s(Turn off)
Switching cycles	> 100,000 switching cycles
Power consumption(typical)	Full load(Pin):68.8W, No load(Pno): N/A, On stand-by(Psb) : <0.5W, Network stand-by(Pnet) : N/A
Safety	
Withstand voltage	I/P-O/P:3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 1500V AC.
Mains surge capability	L-N:2KV(90°/270°, 5 times each with an interval of 60s)(Performance criterion:A)
Leakage current(typical)	0.38mA
Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control interface	
DALI dimming port	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
pushDIM dimming port	Voltage range: 180-264V 47/63Hz
1-10V 3in1 dimming port	N/A
Auxiliary power supply	N/A
Dimming range	1%-100%
Dimming drive mode	AM(amplitude modulation)
Emergency support	
Central emergency system	Supported
Self-contained emergency	Supported
Environment & Life time	
Operating temperature	Ta=-20-45°C
Case temperature	Tc=90°C
Operating humidity	5-85% RH, not condensed
Storage temp./humidity	-40-80°C, 5-85% RH, not condensed
IP grade	IP20
MTBF	500,000H,MIL-HDBK-217F(25°C)
Life-time	Nominal life-time up to 100,000 h, see the description below for details
Vibration resistant	10~500Hz,5G 12min./1cycle,period for 72min. each along X,Y,Z axes
Acoustic Noise	<25dB(30cm, Normal operation)
Environmental protection	RoHS
Certifications and standards	
Compliance certification	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
Safety	GB/T 19510.1, GB/T 19510.213, EN61347-1, EN61347-2-13, EN62384
EMC	GB/T 17743 , GB17625.1, EN55015, EN61000-3-2 , EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
EL	Compatible IEC 61347-2- 13 Annex J , compatible with EN 60598-2-22 and EN 50172
RF	N/A

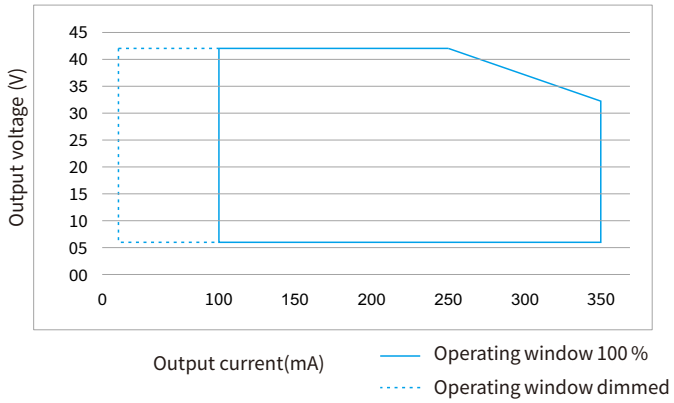
Remarks

1.By default, all parameter are measured at 230VAC input, 50Hz, full load and 25°C of ambient temperature.
2.The driver can not be installed inside the light. when the driver is used with the light, the EMC of the whole light needs to be tested.

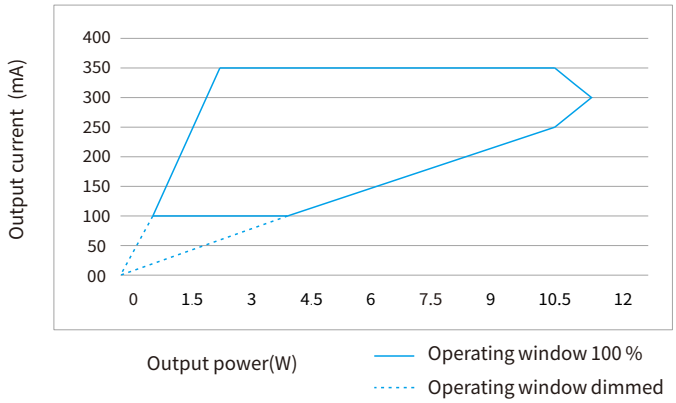
Electrical values

BK-DEL010-B0350Ad

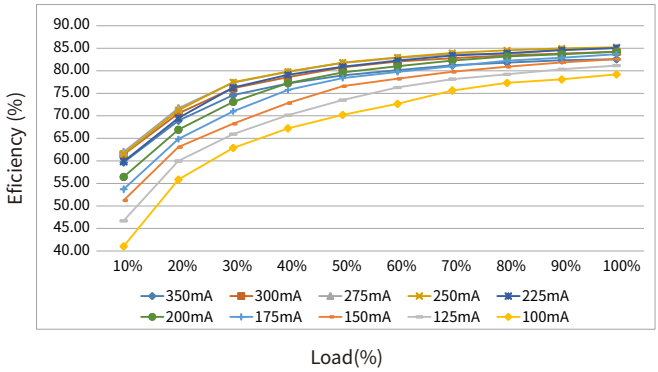
Operating window



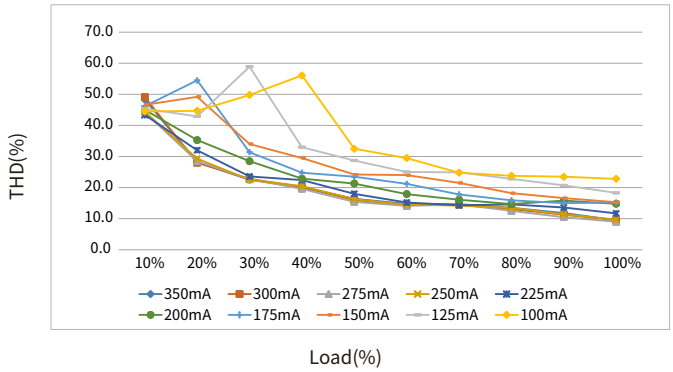
Operating window



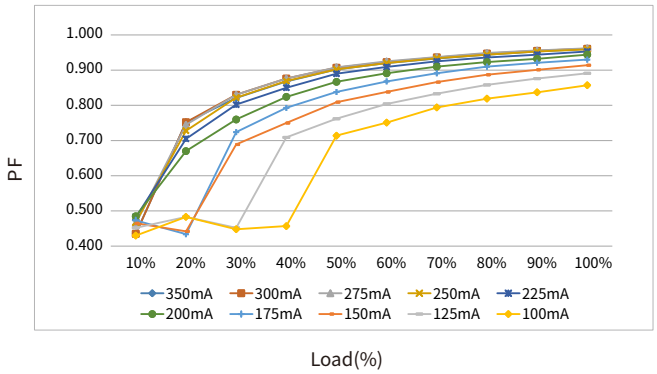
Efficiency vs load



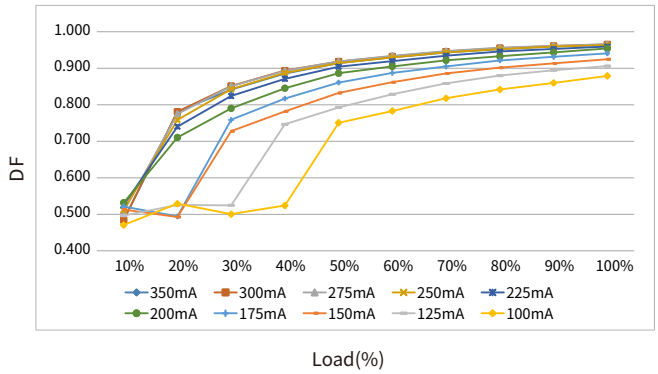
THD vs. Load



Power factor vs. Load

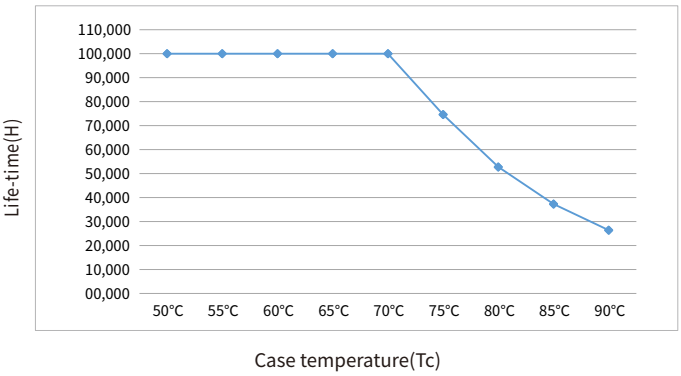


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature



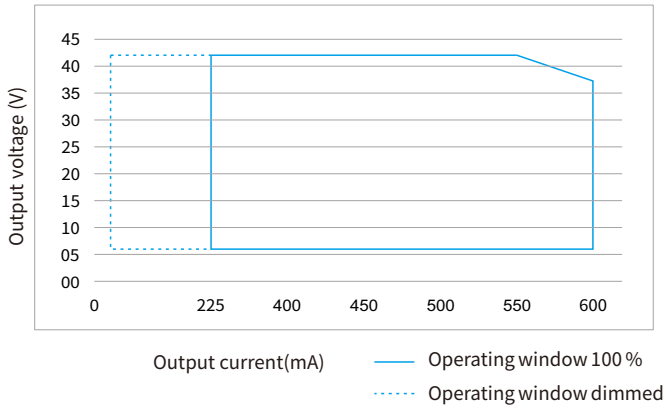
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

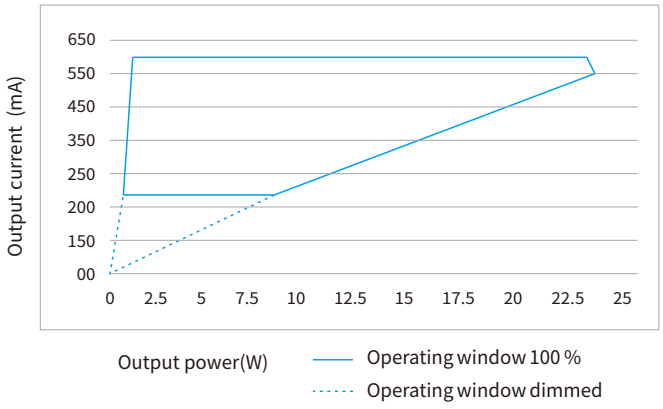
Electrical values

BK-DEL022-B0600Ad

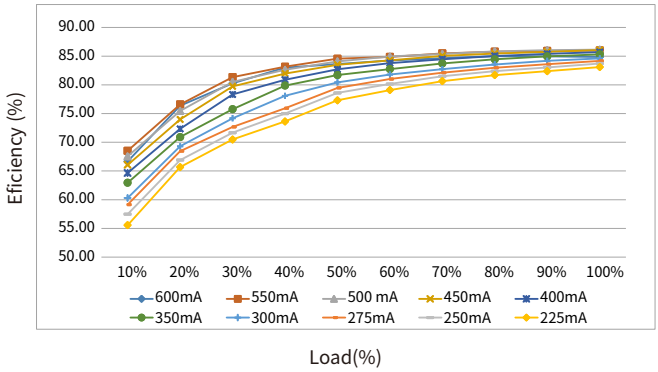
Operating window



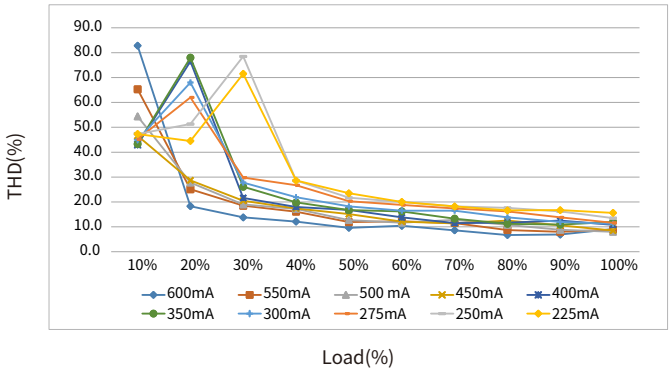
Operating window



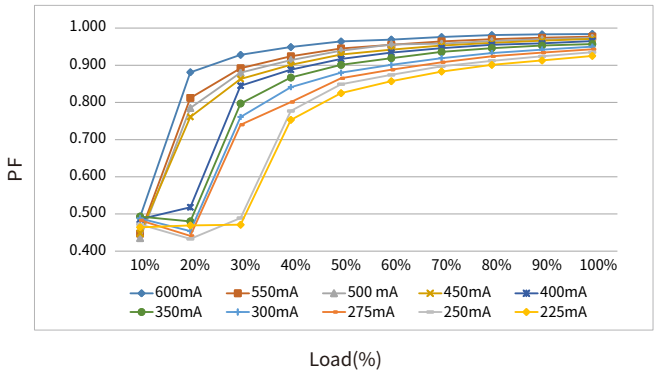
Efficiency vs load



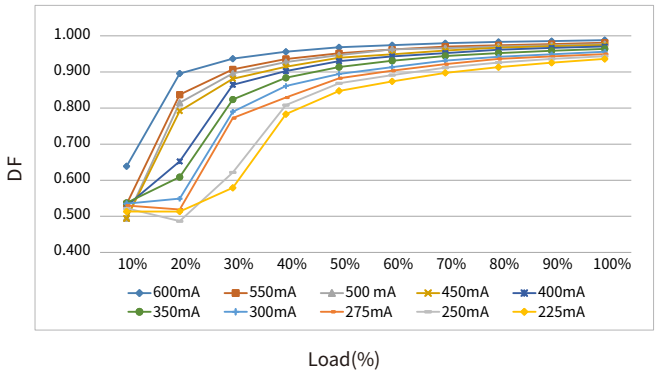
THD vs. Load



Power factor vs. Load

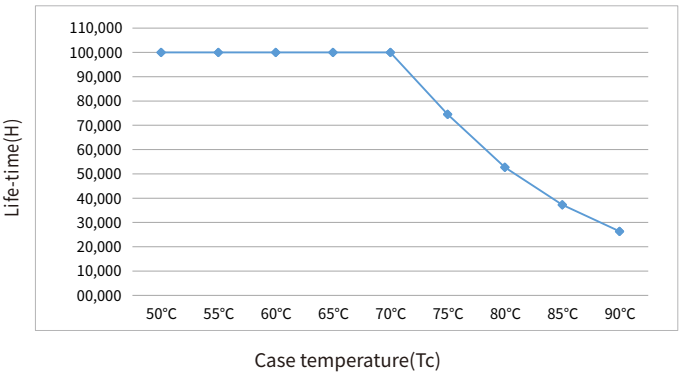


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature



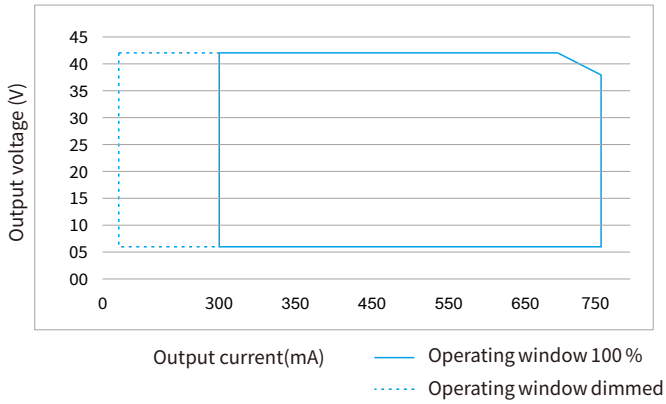
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

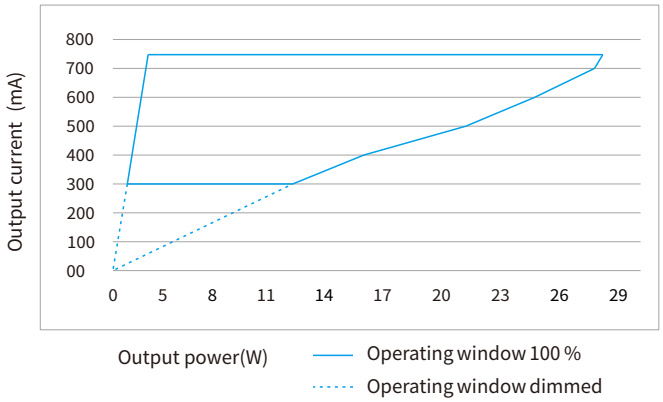
Electrical values

BK-DEL028-B0750Ad

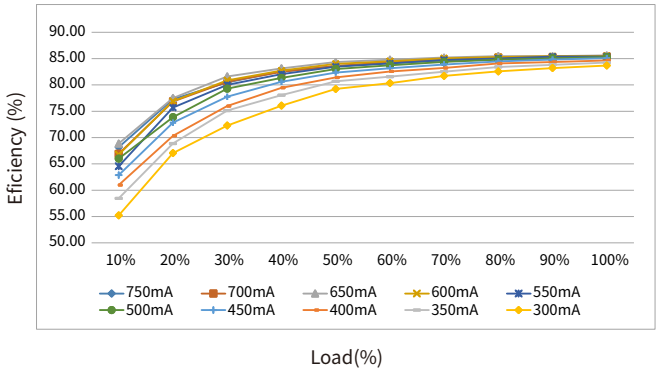
Operating window



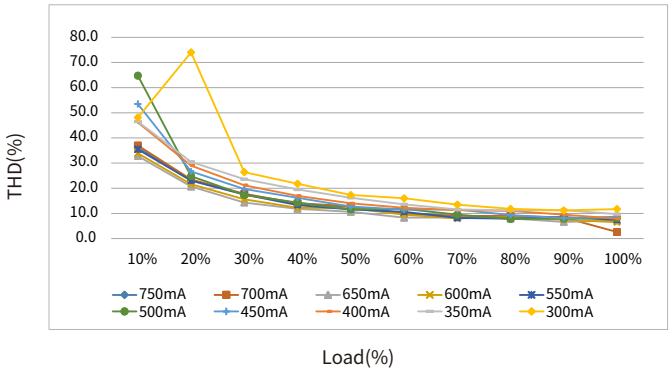
Operating window



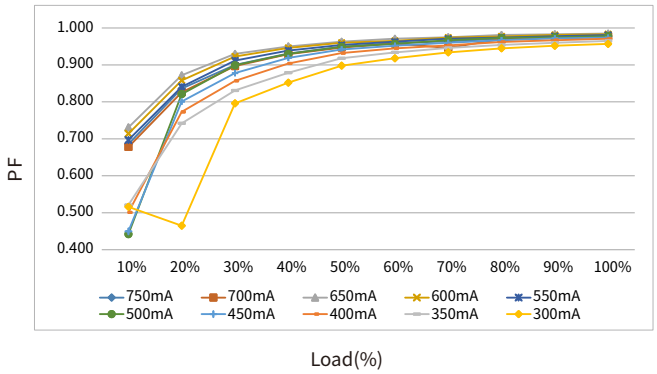
Efficiency vs load



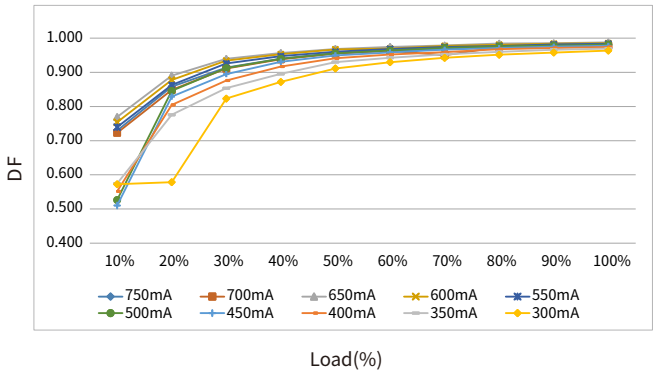
THD vs. Load



Power factor vs. Load

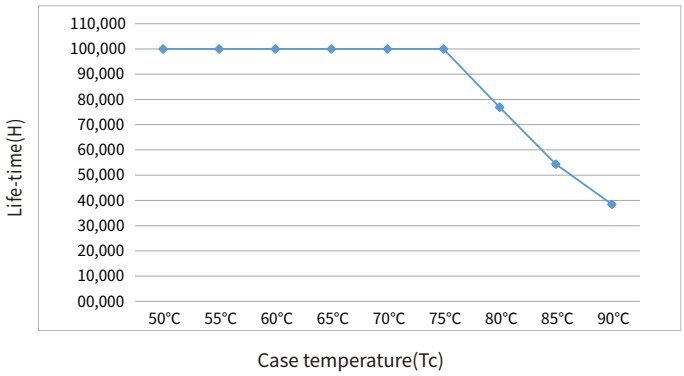


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature



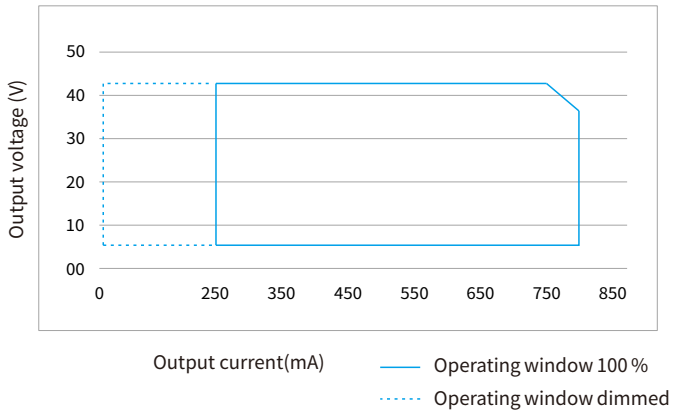
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

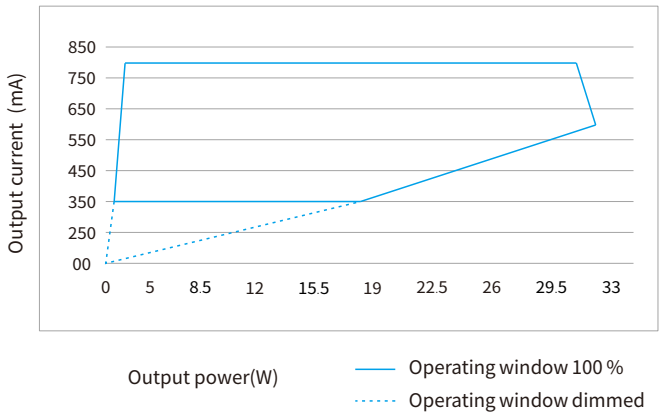
Electrical values

BK-DEL030-B0800Ad

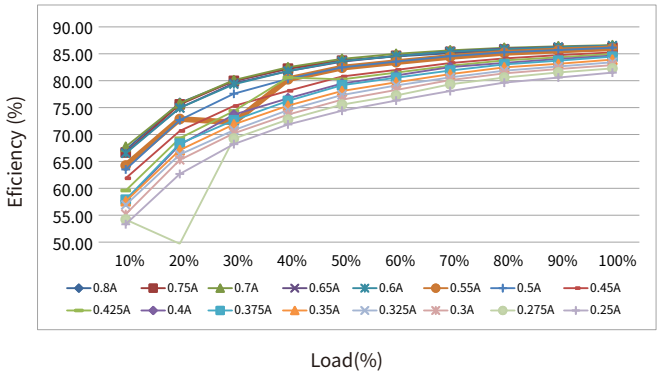
Operating window



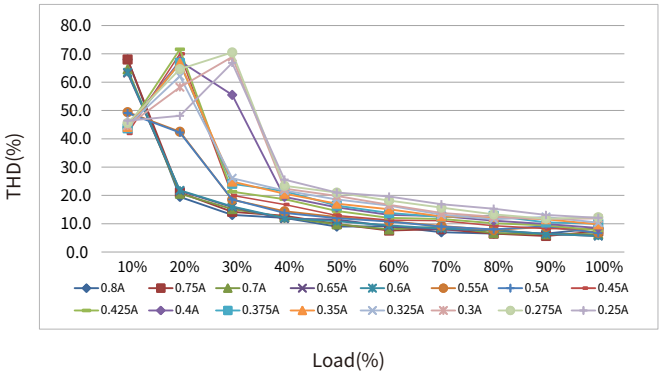
Operating window



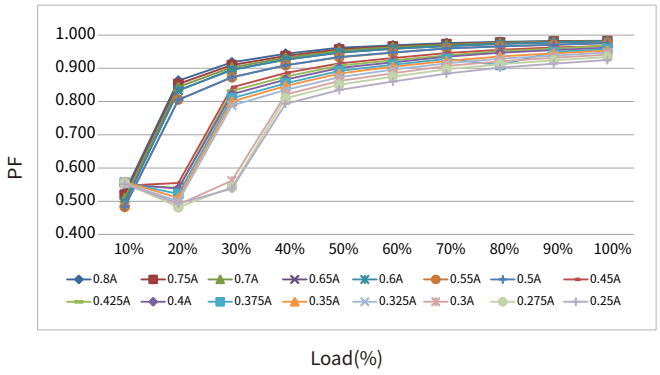
Efficiency vs load



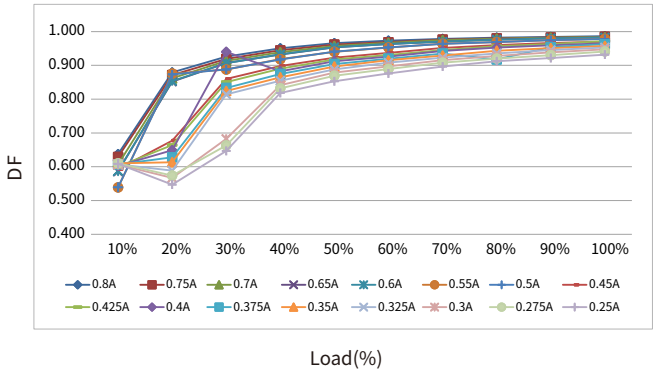
THD vs. Load



Power factor vs. Load

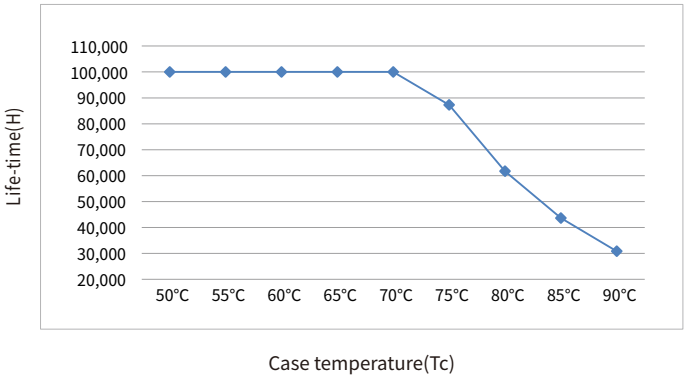


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature



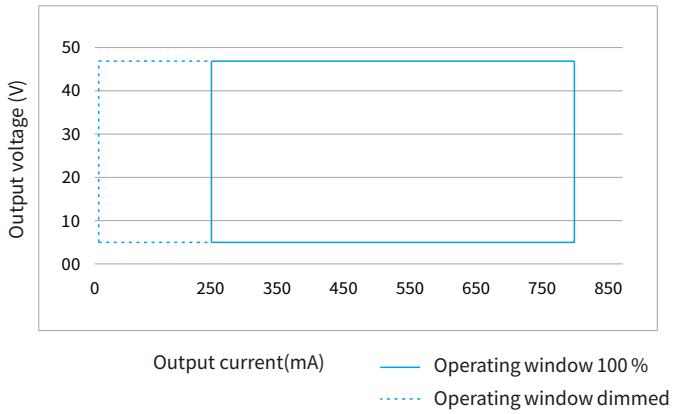
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

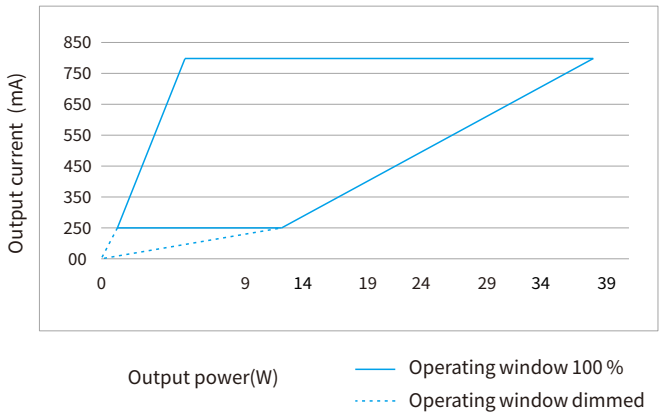
Electrical values

BK-DEL042-B0800Ad

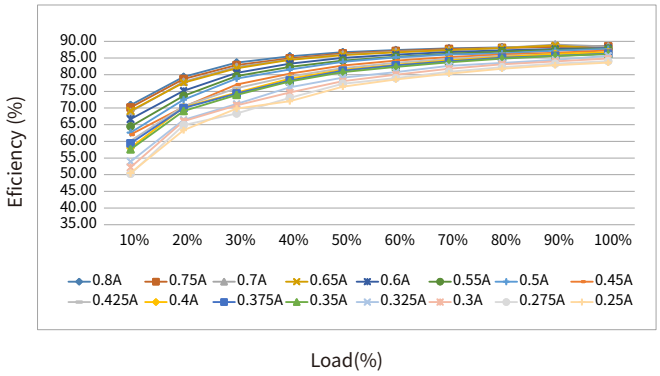
Operating window



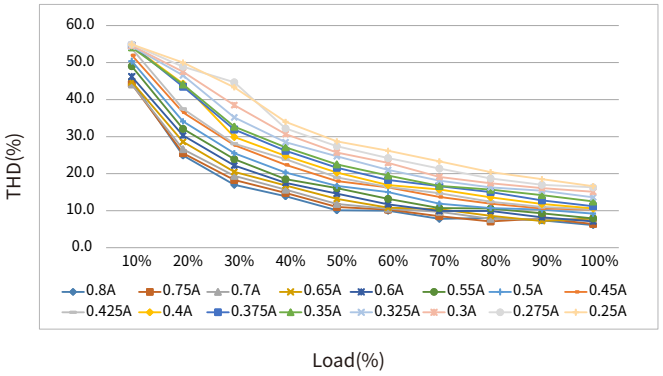
Operating window



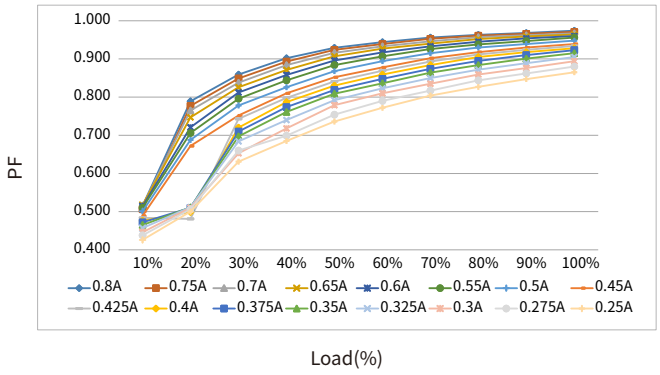
Efficiency vs load



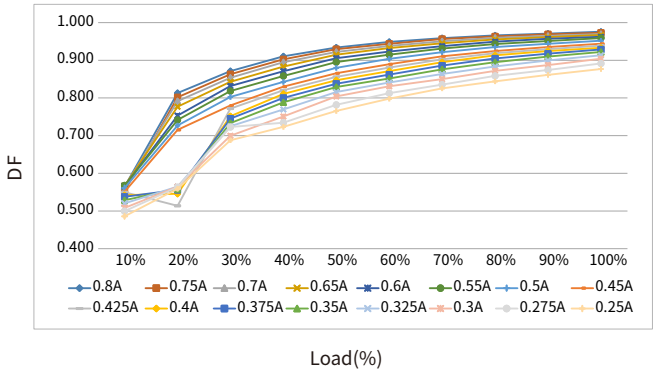
THD vs. Load



Power factor vs. Load

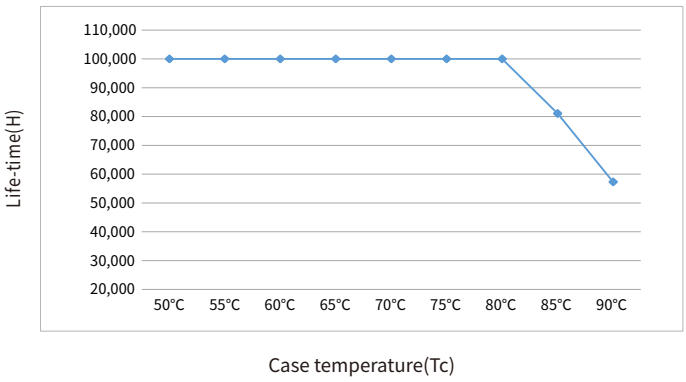


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature



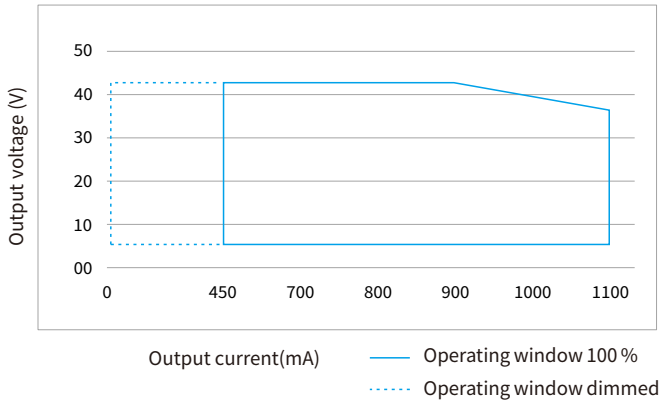
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

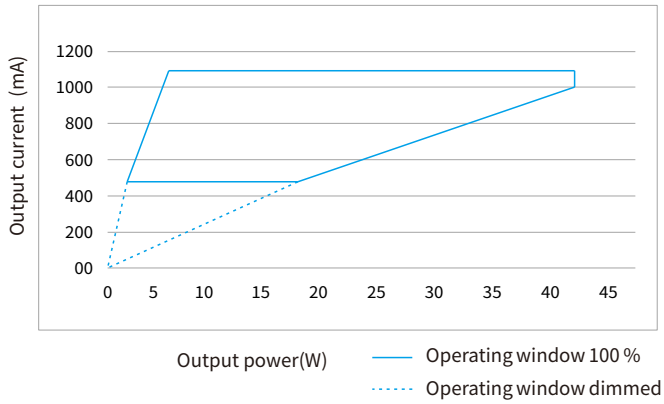
Electrical values

BK-DEL042-B1100Ad

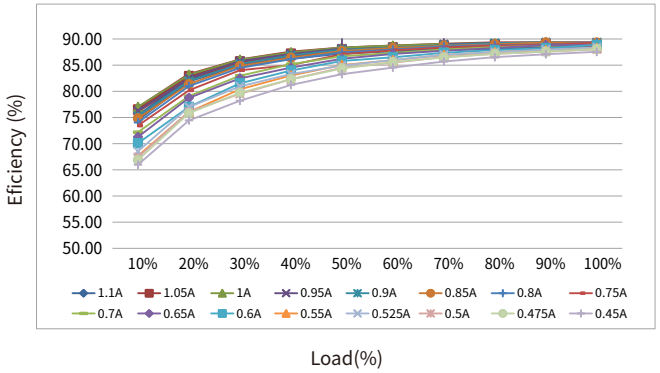
Operating window



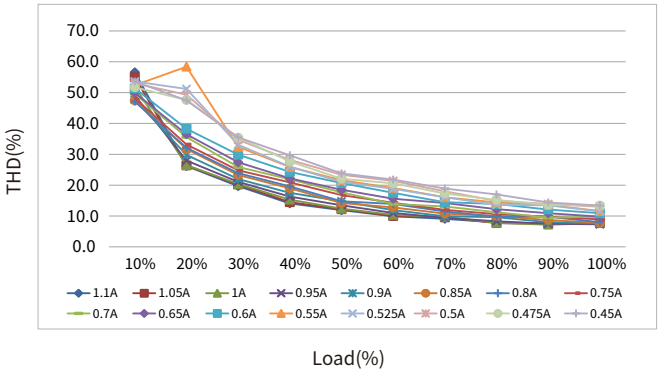
Operating window



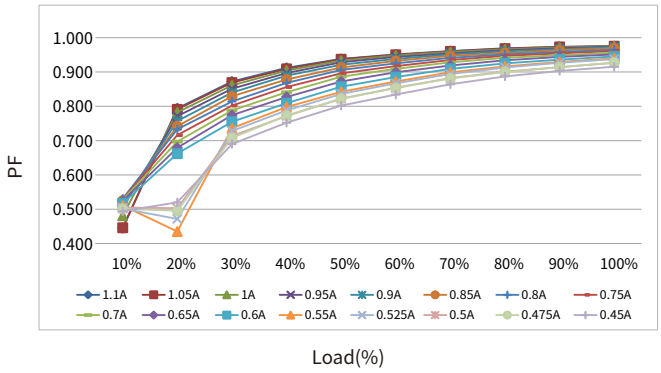
Efficiency vs load



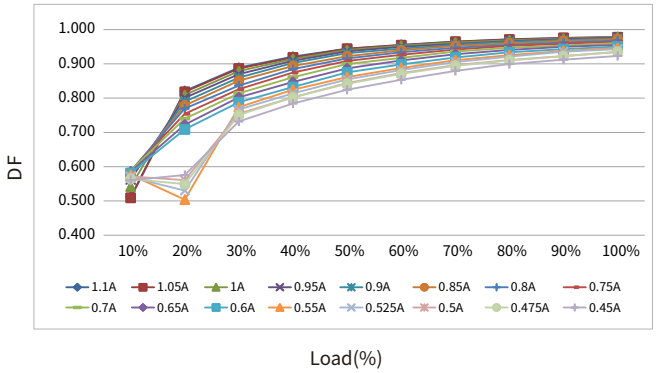
THD vs. Load



Power factor vs. Load

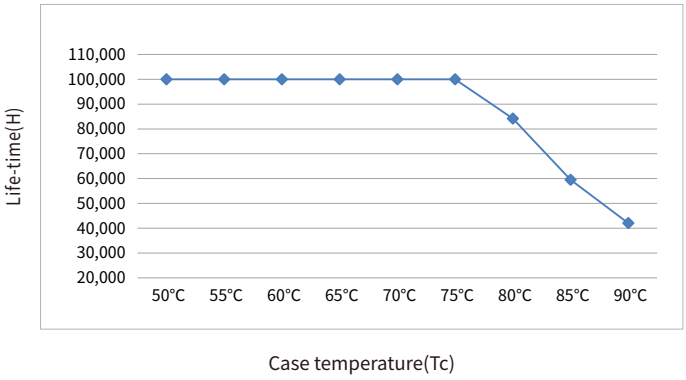


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature



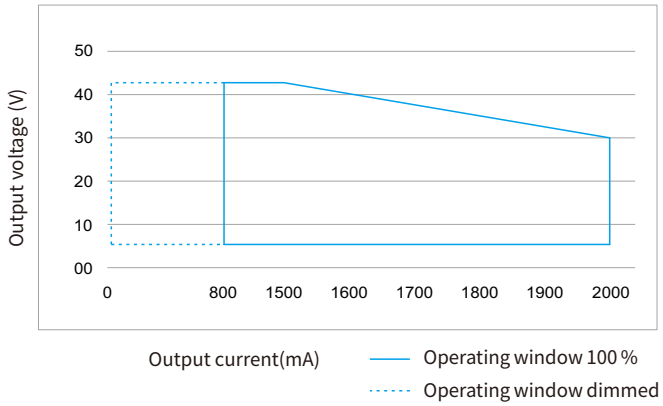
-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

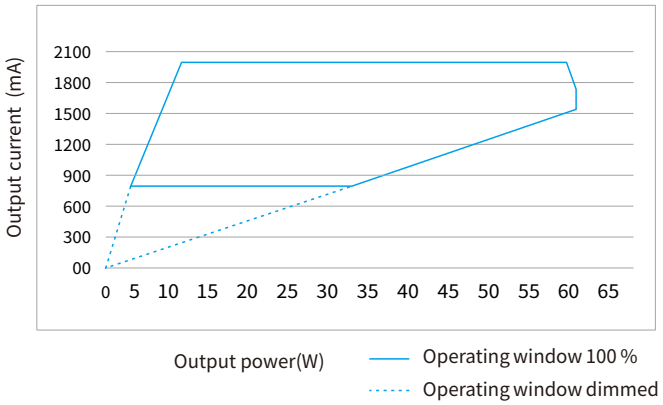
Electrical values

BK-DEL060-B2000Ad

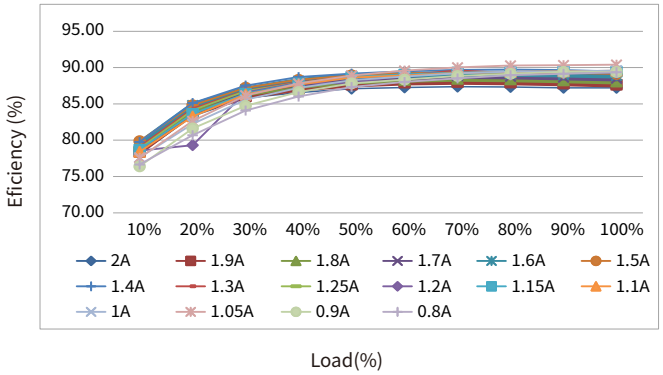
Operating window



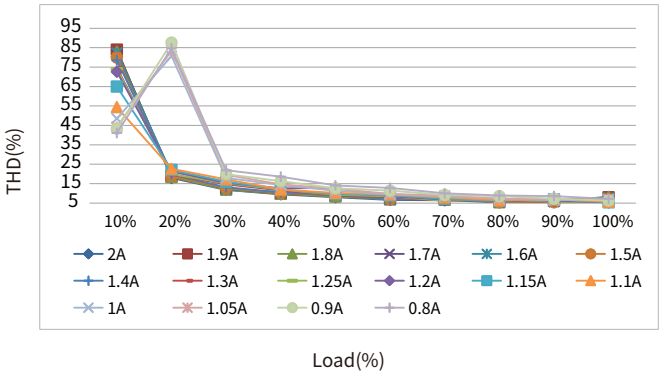
Operating window



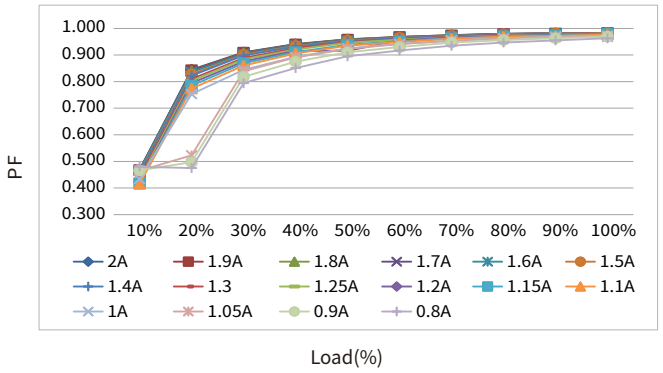
Efficiency vs load



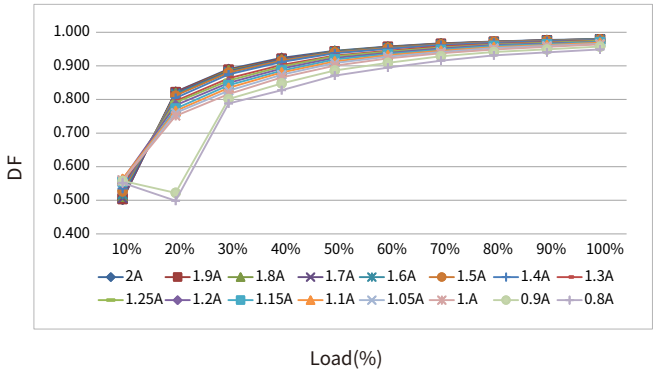
THD vs. Load



Power factor vs. Load

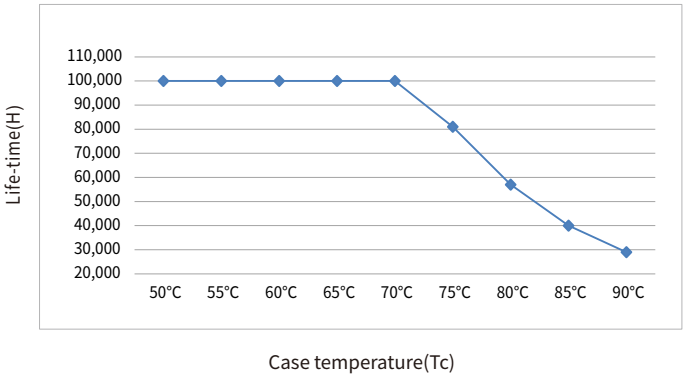


Displacement factor vs. Load



Expected life-time

Life-time vs. case temperature

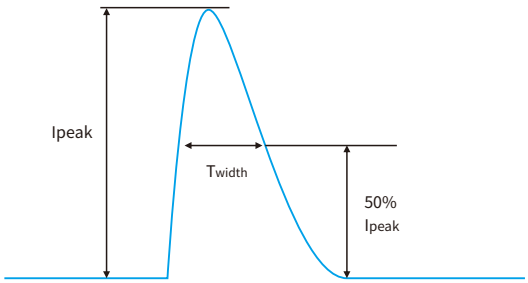


-The life-time of the LED driver is shown in the figure above (calculated based on the 90% survival rate).

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

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-DEL010-B0350Ad	3.79A	170us	AC 230V,Full load, Cold start,Ta≤30°C, MCB is not installed side by side	98	127	157	196	245	119	154	190	237	296	119	154	190	237	296
BK-DEL022-B0600Ad	6.28A	206us		48	62	77	96	120	57	74	91	113	142	57	74	91	113	142
BK-DEL028-B0750Ad	6.25A	212us		45	59	73	91	113	45	59	73	91	113	45	59	73	91	113
BK-DEL030-B0800Ad	3.95A	180us		46	60	73	92	114	46	60	73	92	114	46	60	73	92	114
BK-DEL042-B0800Bd	7.9A	180us		36	47	58	73	91	36	47	58	73	91	36	47	58	73	91
BK-DEL042-B1100Ad	7.9A	176us		33	42	52	65	81	33	42	52	65	81	33	42	52	65	81
BK-DEL060-B2000Ad	9.1A	174us		23	29	36	45	57	23	29	36	45	57	23	29	36	45	57



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 hot plug-in protection

- This function is used to prevent LED light that are far below the driver's no-load voltage burnout when hot plugged into a powered driver output.
- This product comes with a default hot plug protection function at the factory and cannot be turned off.

- Note:

Due to the hot plug-in protection function of the driver, the following applications may not achieve the expected effect:

1. When the output of the driver is connected to the color temperature switch:
   When the switch is used to change the color temperature, the hot plug-in protection of the driver will be triggered, and the LED will not be lit.
2. When the LED driver is used in conjunction with a self-contained (independent) emergency control device:
   Use the self-check test switch of the emergency control device to test the emergency function and when exiting the emergency mode, the driver's hot plug-in protection will be triggered and the LED will not be lit.

The above two applications should use drivers without hot plug-in protection function to achieve the expected working effect.
It is recommended to choose our company's drivers without hot plug-in protection function or those that support configurable closing of hot plug-in function.

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.

Output overload protection

- The LED driver turns off the output if the output voltage range is exceeded.
  The output will be activated again after restart the LED driver .

Driver restart method

There are two ways to restart the driver:

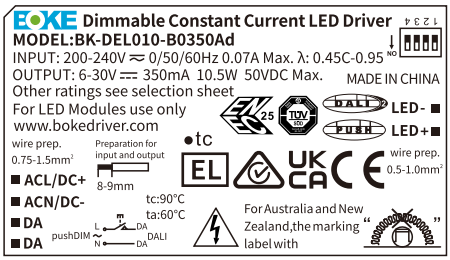
- Through the AC input:disconnect the AC of the driver and power it again.
- Through dimming interface.
  DALI:send “OFF” command first,then send “MAX” command.
  pushDIM:short press pushbutton two times,then long press pushbutton.

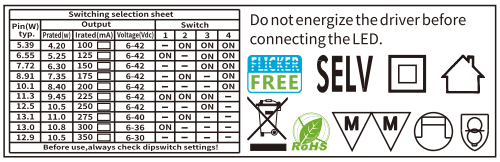
Insulation between circuits

Isolation	Input	Output	Case	DALI	PUSH
Input	-	Double	Double	Basic	-
Output	Double	-	Basic	Double	Double
Case	Double	Basic	-	Double	Double

Label

BK-DEL010-B0350Ad





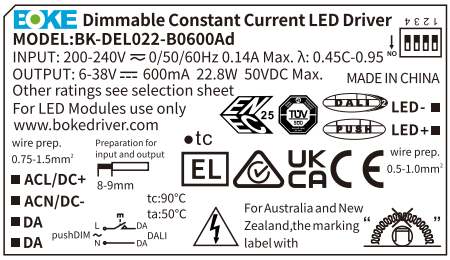
Switching selection sheet

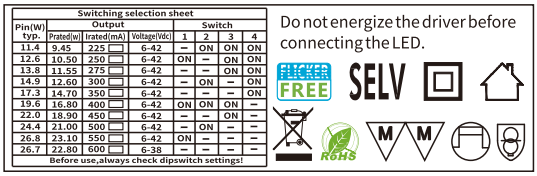
Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	Switch 1	Switch 2	Switch 3	Switch 4
5.39	4.20	100	6-42	--	ON	ON	ON
6.55	5.25	125	6-42	ON	--	ON	ON
7.72	6.30	150	6-42	--	--	ON	ON
8.91	7.35	175	6-42	--	ON	--	ON
10.1	8.40	200	6-42	--	--	--	ON
11.3	9.45	225	6-42	ON	ON	ON	--
12.5	10.5	250	6-42	--	--	ON	--
13.1	11.0	275	6-40	--	ON	--	--
13.0	10.8	300	6-36	ON	--	--	--
12.9	10.5	350	6-30	--	--	--	--

Before use,always check dipswitch settings!

Do not energize the driver before connecting the LED.

BK-DEL022-B0600Ad





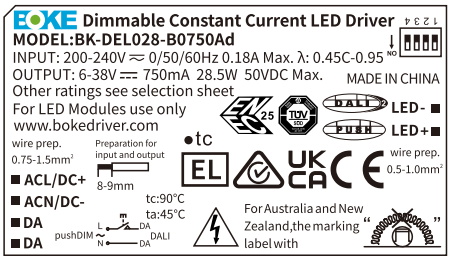
Switching selection sheet

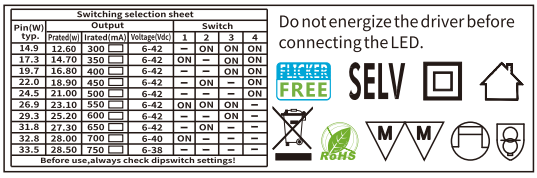
Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	Switch 1	Switch 2	Switch 3	Switch 4
11.4	9.45	225	6-42	--	ON	ON	ON
12.6	10.50	250	6-42	ON	--	ON	ON
13.8	11.55	275	6-42	--	--	ON	ON
14.9	12.60	300	6-42	--	ON	--	ON
17.3	14.70	350	6-42	--	--	--	ON
19.6	16.80	400	6-42	ON	ON	ON	--
22.0	18.90	450	6-42	--	--	ON	--
24.4	21.00	500	6-42	--	ON	--	--
26.8	23.10	550	6-42	ON	--	--	--
26.7	22.80	600	6-38	--	--	--	--

Before use,always check dipswitch settings!

Do not energize the driver before connecting the LED.

BK-DEL028-B0750Ad





Switching selection sheet

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	Switch 1	Switch 2	Switch 3	Switch 4
14.9	12.60	300	6-42	--	ON	ON	ON
17.3	14.70	350	6-42	ON	--	ON	ON
19.7	16.80	400	6-42	--	--	ON	ON
22.0	18.90	450	6-42	--	ON	--	ON
24.5	21.00	500	6-42	--	--	--	ON
26.9	23.10	550	6-42	ON	ON	ON	--
29.3	25.20	600	6-42	--	--	ON	--
31.8	27.30	650	6-42	--	ON	--	--
32.8	28.00	700	6-40	ON	--	--	--
33.5	28.50	750	6-38	--	--	--	--

Before use,always check dipswitch settings!

Do not energize the driver before connecting the LED.

DIP-switch & output current

BK-DEL010-B0350Ad

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
5.39	4.20	100	6-42	--	ON	ON	ON
6.55	5.25	125	6-42	ON	--	ON	ON
7.72	6.30	150	6-42	--	--	ON	ON
8.91	7.35	175	6-42	--	ON	--	ON
10.1	8.40	200	6-42	--	--	--	ON
11.3	9.45	225	6-42	ON	ON	ON	--
12.5	10.5	250	6-42	--	--	ON	--
13.1	11.0	275	6-40	--	ON	--	--
13.0	10.8	300	6-36	ON	--	--	--
12.9	10.5	350 ★	6-30	--	--	--	--

BK-DEL022-B0600Ad

Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
11.4	9.45	225	6-42	--	ON	ON	ON
12.6	10.50	250	6-42	ON	--	ON	ON
13.8	11.55	275	6-42	--	--	ON	ON
14.9	12.60	300	6-42	--	ON	--	ON
17.3	14.70	350	6-42	--	--	--	ON
19.6	16.80	400	6-42	ON	ON	ON	--
22.0	18.90	450	6-42	--	--	ON	--
24.4	21.00	500	6-42	--	ON	--	--
26.8	23.10	550	6-42	ON	--	--	--
26.7	22.80	600 ★	6-38	--	--	--	--

BK-DEL028-B0750Ad

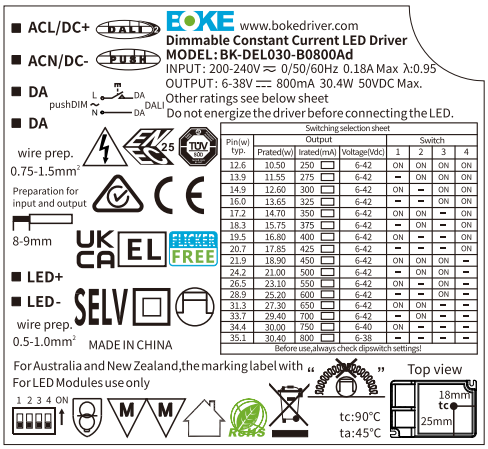
Pin(W) typ.	Output Prated(w)	Output Irated(mA)	Output Voltage(Vdc)	1	2	3	4
14.9	12.60	300	6-42	--	ON	ON	ON
17.3	14.70	350	6-42	ON	--	ON	ON
19.7	16.80	400	6-42	--	--	ON	ON
22.0	18.90	450	6-42	--	ON	--	ON
24.5	21.00	500	6-42	--	--	--	ON
26.9	23.10	550	6-42	ON	ON	ON	--
29.3	25.20	600	6-42	--	--	ON	--
31.8	27.30	650	6-42	--	ON	--	--
32.8	28.00	700	6-40	ON	--	--	--
33.5	28.50	750 ★	6-38	--	--	--	--

Remarks:

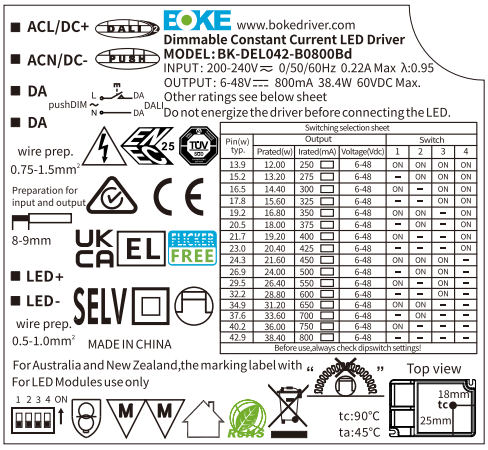
1.★ It means that this item is the factory default current.
2. -- It means that this channel is OFF.

Label

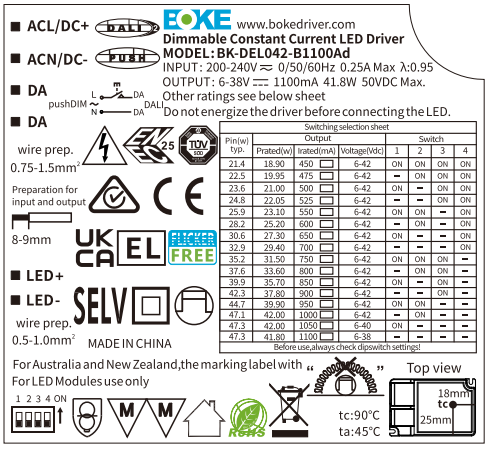
BK-DEL030-B0800Ad



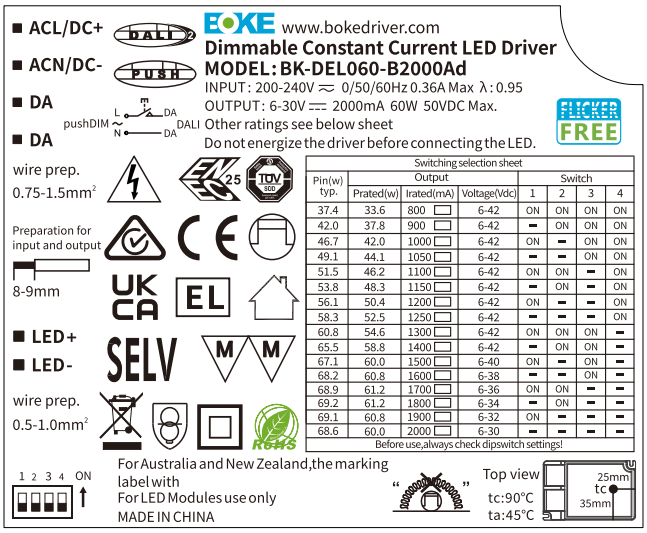
BK-DEL042-B0800Bd



BK-DEL042-B1100Ad



BK-DEL060-B2000Ad



DIP-switch & output current

BK-DEL030-B0800Ad

Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
12.6	10.50	250	6-42	ON	ON	ON	ON
13.9	11.55	275	6-42	--	ON	ON	ON
14.9	12.60	300	6-42	ON	--	ON	ON
16.0	13.65	325	6-42	--	--	ON	ON
17.2	14.70	350	6-42	ON	ON	--	ON
18.3	15.75	375	6-42	--	ON	--	ON
19.5	16.80	400	6-42	ON	--	--	ON
20.7	17.85	425	6-42	--	--	--	ON
21.9	18.90	450	6-42	ON	ON	ON	--
24.2	21.00	500	6-42	--	ON	ON	--
26.5	23.10	550	6-42	ON	--	ON	--
28.9	25.20	600	6-42	--	--	ON	--
31.3	27.30	650	6-42	ON	ON	--	--
33.7	29.40	700	6-42	--	ON	--	--
34.4	30.00	750	6-40	ON	--	--	--
35.1	30.40	800 ★	6-38	--	--	--	--

BK-DEL042-B0800Bd

Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
13.9	12.00	250	6-48	ON	ON	ON	ON
15.2	13.20	275	6-48	--	ON	ON	ON
16.5	14.40	300	6-48	ON	--	ON	ON
17.8	15.60	325	6-48	--	--	ON	ON
19.2	16.80	350	6-48	ON	ON	--	ON
20.5	18.00	375	6-48	--	ON	--	ON
21.7	19.20	400	6-48	ON	--	--	ON
23.0	20.40	425	6-48	--	--	--	ON
24.3	21.60	450	6-48	ON	ON	ON	--
26.9	24.00	500	6-48	--	ON	ON	--
29.5	26.40	550	6-48	ON	--	ON	--
32.2	28.80	600	6-48	--	--	ON	--
34.9	31.20	650	6-48	ON	ON	--	--
37.6	33.60	700	6-48	--	ON	--	--
40.2	36.00	750	6-48	ON	--	--	--
42.9	38.40	800 ★	6-48	--	--	--	--

BK-DEL042-B1100Ad

Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
21.4	18.90	450	6-42	ON	ON	ON	ON
22.5	19.95	475	6-42	--	ON	ON	ON
23.6	21.00	500	6-42	ON	--	ON	ON
24.8	22.05	525	6-42	--	--	ON	ON
25.9	23.10	550	6-42	ON	ON	--	ON
28.2	25.20	600	6-42	--	ON	--	ON
30.6	27.30	650	6-42	ON	--	--	ON
32.9	29.40	700	6-42	--	--	--	ON
35.2	31.50	750	6-42	ON	ON	ON	--
37.6	33.60	800	6-42	--	ON	ON	--
39.9	35.70	850	6-42	ON	--	ON	--
42.3	37.80	900	6-42	--	--	ON	--
44.7	39.90	950	6-42	ON	ON	--	--
47.1	42.00	1000	6-42	--	ON	--	--
47.3	42.00	1050	6-40	ON	--	--	--
47.3	41.80	1100 ★	6-38	--	--	--	--

BK-DEL060-B2000Ad

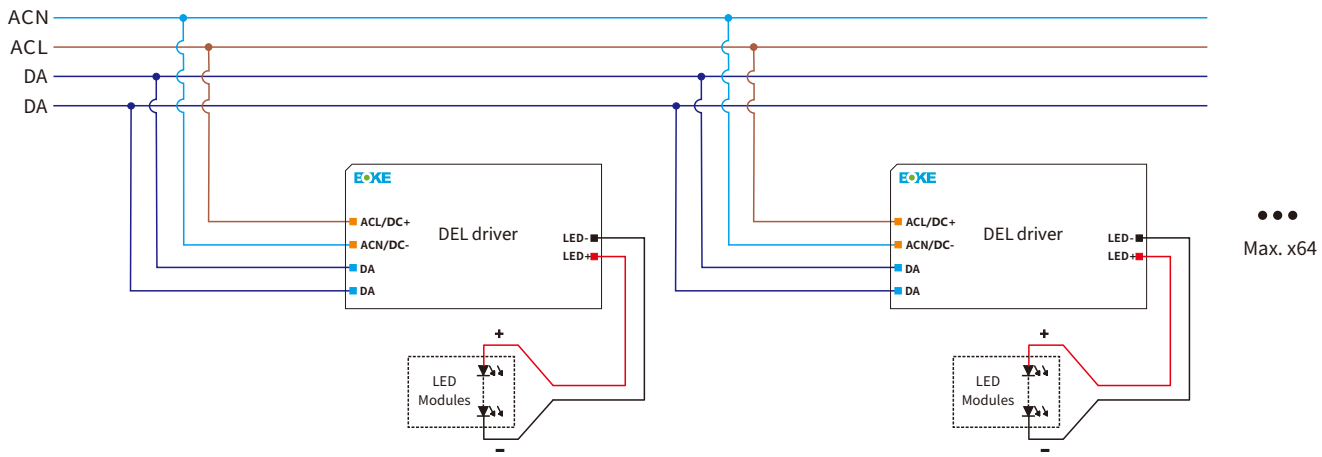
Pin(W) typ.	Output			1	2	3	4
	Prated(w)	Irated(mA)	Voltage(Vdc)				
37.4	33.6	800	6-42	ON	ON	ON	ON
42.0	37.8	900	6-42	--	ON	ON	ON
46.7	42.0	1000	6-42	ON	--	ON	ON
49.1	44.1	1050	6-42	--	--	ON	ON
51.5	46.2	1100	6-42	ON	ON	--	ON
53.8	48.3	1150	6-42	--	ON	--	ON
56.1	50.4	1200	6-42	ON	--	--	ON
58.3	52.5	1250	6-42	--	--	--	ON
60.8	54.6	1300	6-42	ON	ON	ON	--
65.5	58.8	1400	6-42	--	ON	ON	--
67.1	60.0	1500	6-40	ON	--	ON	--
68.2	60.8	1600	6-38	--	--	ON	--
68.9	61.2	1700	6-36	ON	ON	--	--
69.2	61.2	1800	6-34	--	ON	--	--
69.1	60.8	1900	6-32	ON	--	--	--
68.6	60.0	2000 ★	6-30	--	--	--	--

Remarks:

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

DALI dimming application

Wiring diagram



Switch to the DALI dimming mode

- After installation according to the wiring diagram of DALI dimming application,the driver will automatically switch to the DALI control mode after receiving any DALI command.

Remarks:

- Standard DALI control line voltage range:9.5V to 22.5V ,type 16V.
- The two DALI control lines polarity-reversible.
- Max. 64 DALI drivers per DALI control line.
- The maximum distance length of the DALI control line is 300m at 2×1.5mm^2.
- DALI bus can be wired together with any mains voltage cables, but separate wiring is recommended.
- The configuration parameters of the driver can be set through the DALI configuration tool or DALI application controller during installation, such as setting device address, group address, power-on level, bus-failure level, scene level, fade time, dimming curve, etc.

Please refer to the table below

Cable size	Distance
2×0.50mm^2	max.100m
2×0.75mm^2	max.150m
2×1.00mm^2	max.200m
⩾2×1.50mm^2	max.300m

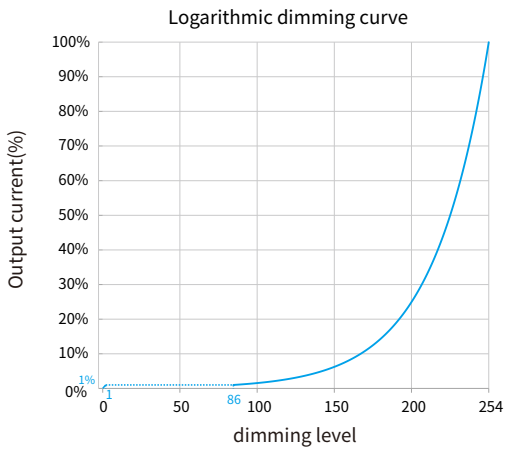
Power-on level :

When the driver is in DALI-2 dimming mode, the factory default level after each power-on is the brightest.

The power-on level can be set through the DALI configuration tool or DALI application controller during installation, and can be set to memory or fixed any brightness (such as off, darkest, 50%, etc.).

Note: The recommended setting for the default factory power-on level of the DALI-2 driver is the brightest in the DALI-2 standard.

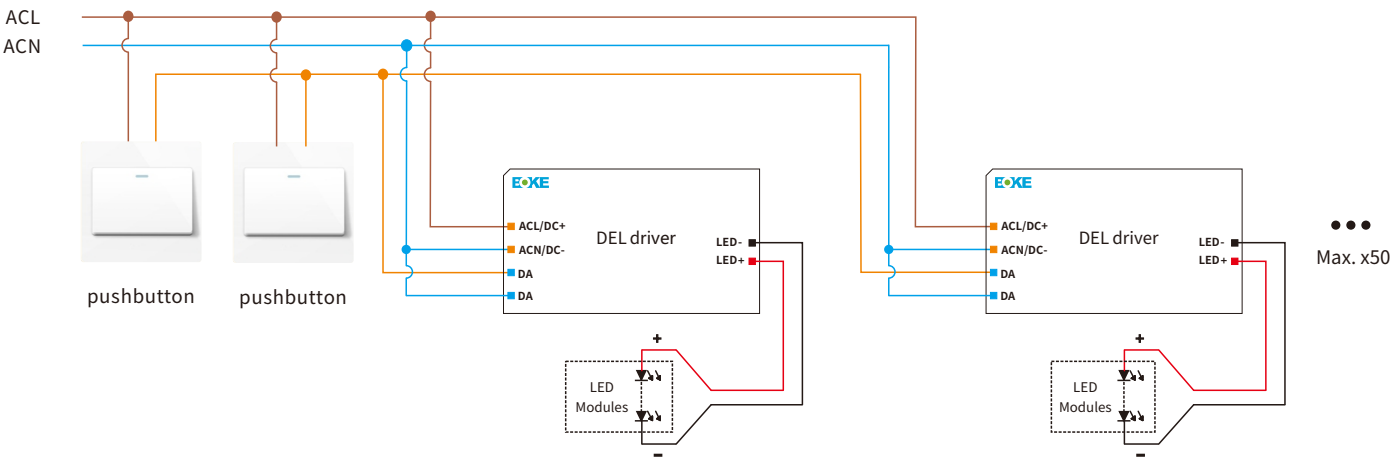
Dimming curve



Remarks: The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.

pushDIM dimming application

Wiring diagram



Switch to the pushDIM dimming mode

- After installation according to the wiring diagram of pushDIM dimming application, short press the pushbutton 1 times or short press the pushbutton 5 times quickly within 3s , the driver will automatically switch to the pushDIM dimming mode.

Remarks:

Max. 50 drivers per pushDIM control line.

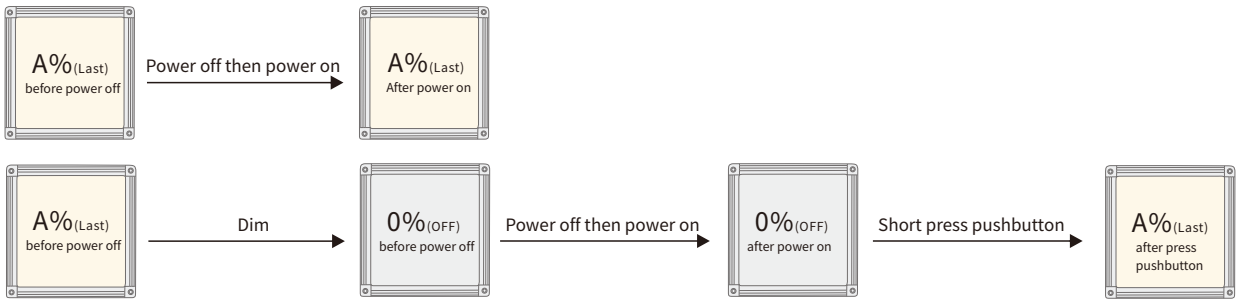
Turn on or turn off:short press pushbutton for 0.2-1s.

Dimming: long press pushbutton for 1-5s.

Power on status: after power on,the light state will be the same as the lighting on state.

If the light is on before power on,the light will be on after power on again,brightness will be the same as the last lighting on brightness.

If the light is off before power off,the light will be off after power on again,short press the pushbutton,then the light will be on,the brightness will be the same as the last brightness.



Multiple lights synchronize control operation

method 1:

Step 1:long press the pushbutton,confirm each light is on.

Step 2:short press the pushbutton,confirm each light is off.

Step 3:long press the pushbutton,confirm each light is from darkest to brightest and all the lights are synchronous.

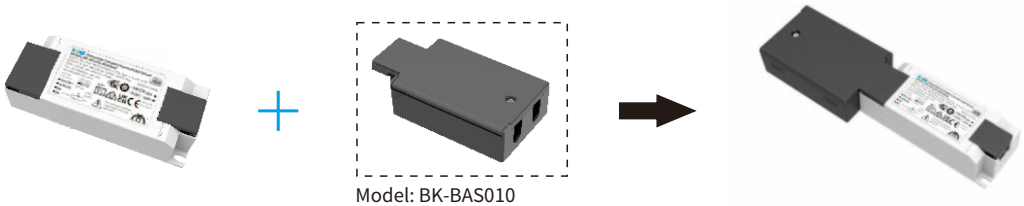
method 2:

- Long press the pushbutton 15s,all lights output to the brightest state.

Optional accessories (See the parts specification for details)

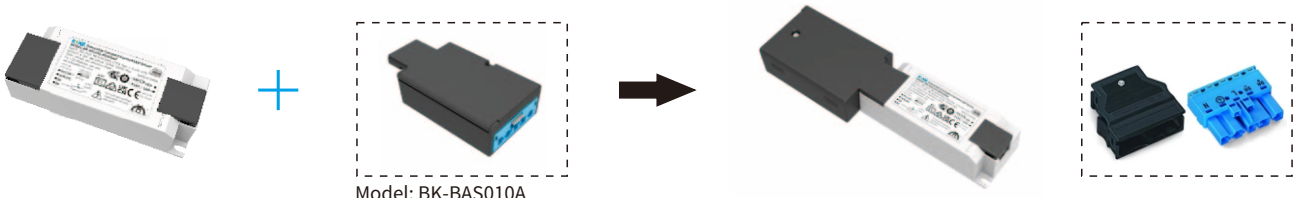
DEL010,DEL022,DEL028(DEL010 should be replaced with DEL022 shell when using the junction box):

Optional 1：Wiring type



Model: BK-BAS010
Wiring type：
Loop-in and loop-out

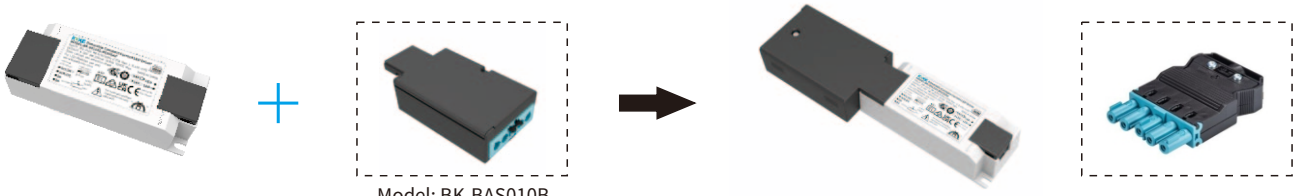
Optional2：Pluggable connector type,5Pole(WAGO)



Model: BK-BAS010A
Pluggable connector type:
WAGO P/N:770-2115/007-000

Pluggable connector other side:
WAGO P/N:770-1105/022-000

Optional3：Pluggable connector type,5Pole(Wieland)

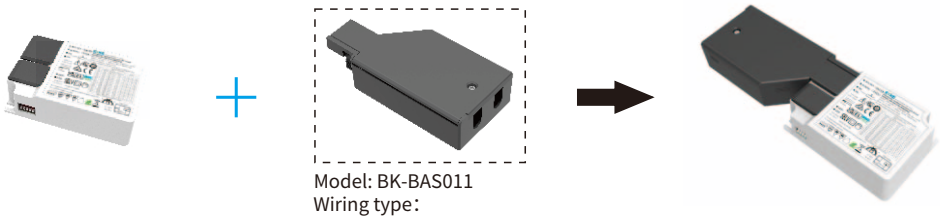


Model: BK-BAS010B
Pluggable connector type：
Wieland P/N:92.052.8658.0

Pluggable connector other side：
Wieland P/N:92.953.5453.0

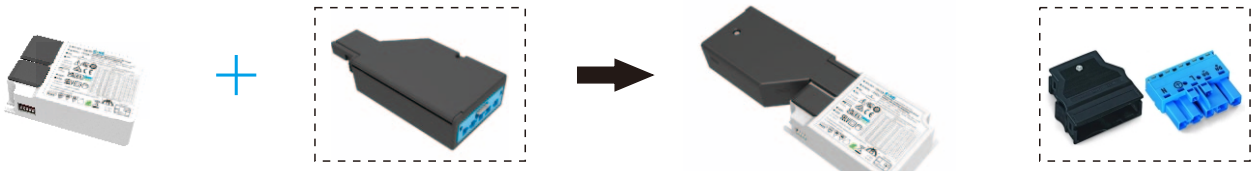
DEL030,DEL042,DEL060:

Optional 1：Wiring type



Model: BK-BAS011
Wiring type：
Loop-in and loop-out

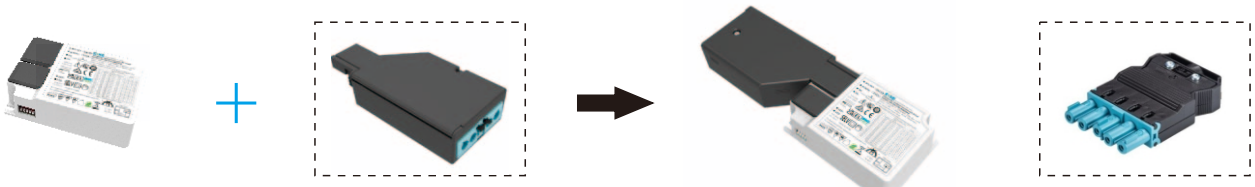
Optional2：Pluggable connector type,5Pole(WAGO)



Model: BK-BAS011A
Pluggable connector type:
WAGO P/N:770-2115/007-000

Pluggable connector other side:
WAGO P/N:770-1105/022-000

Optional3：Pluggable connector type,5Pole(Wieland)



Model: BK-BAS011B
Pluggable connector type：
Wieland P/N:92.052.8658.0

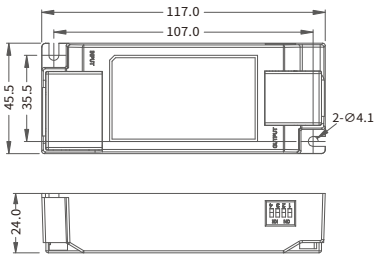
Pluggable connector other side：
Wieland P/N:92.953.5453.0

Mechanical Specification

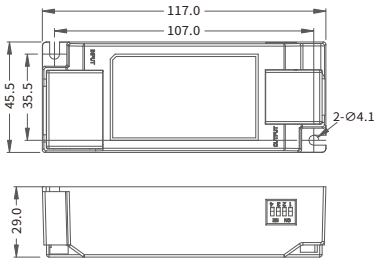
Size(Excluding accessories)

Unit:mm

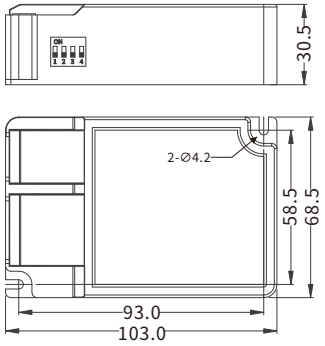
DEL010



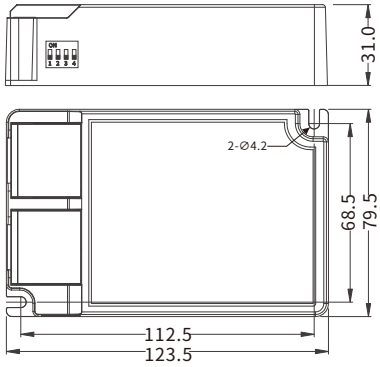
DEL022/DEL028



DEL030-B/DEL042-B



DEL060-B

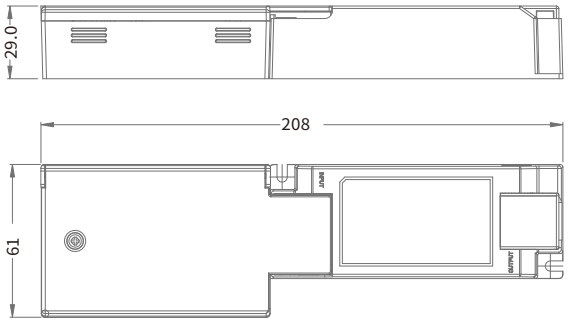


Mechanical Specification

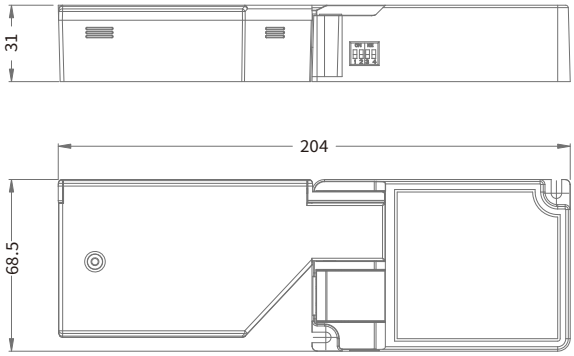
Size(Include accessories)

Unit:mm

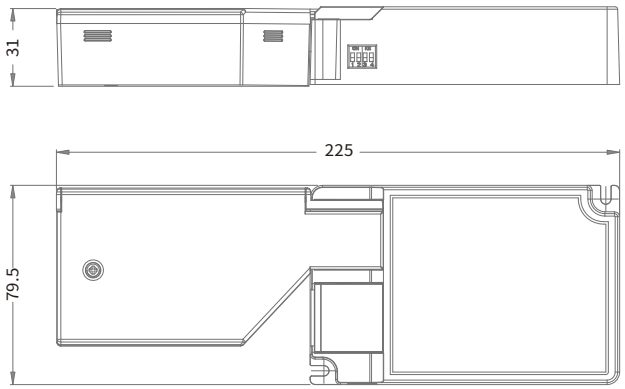
DEL010/DEL022/DEL028



DEL030-B/DEL042-B



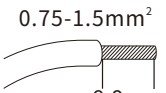
DEL060-B



INPUT

Numbering	function	colour
1	ACL/DC+	orange
2	ACN/DC-	orange
3	DA	blue
4	DA	blue

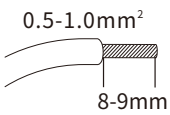
Input wire



OUTPUT

Numbering	function	colour
1	LED-	black
2	LED+	red

Output wire



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.

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.

Replace LED module

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

Installation requirements

- The driver should be installed in a dry, acid-free, oil-free, fat-free environment.
- The installation ambient temperature of the driver shall not exceed the value of Ta at any time.
- The temperature of the mounting surface of the driver should be lower than the temperature of Ta.
- 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.

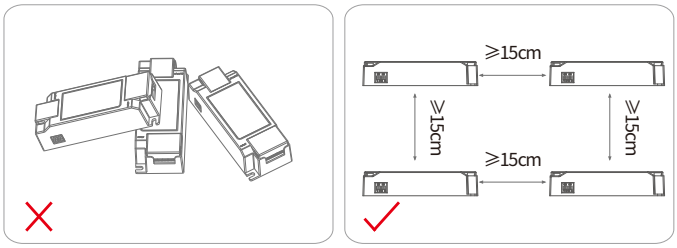


Figure 1

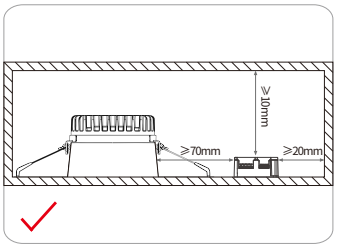
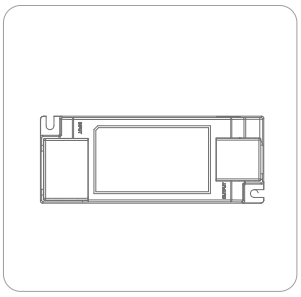


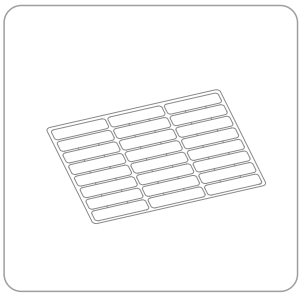
Figure 2

Packaging

Optional 1: factory default



Product

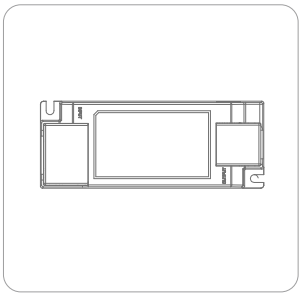


Blister

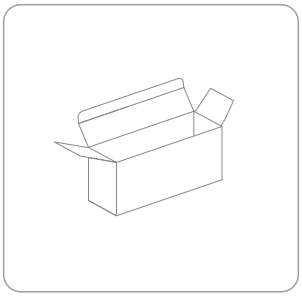
24pcs×3layer=72pcs/CTN
16pcs×4layer=64pcs/CTN
24pcs×2layer=48pcs/CTN
9pcs×4layer=36pcs/CTN

Model	Product size	Weight	Blister size	Carton size	Qty/carton	N.W	G.W
DEL010-B	L117*W45.5*H24mm	83g	L430*W340*H47mm	L450*W350*H180mm	72pcs	5.98kg	7.00kg
DEL022-B	L117*W45.5*H29mm	108g	L430*W340*H47mm	L450*W350*H130mm	48pcs	5.18kg	6.22kg
DEL028-B	L117*W45.5*H29mm	167g	L430*W340*H47mm	L450*W350*H130mm	48pcs	8.01kg	9.11kg
DEL030-B	L103*W68.5*H30.5mm	138g	L480*W330*H40mm	L490*W340*H165mm	64pcs	8.83kg	9.98kg
DEL042-B	L103*W68.5*H30.5mm	167g	L480*W330*H40mm	L490*W340*H165mm	64pcs	10.7kg	11.8kg
DEL060-B	L123*W78.5*H31mm	248g	L435*W345*H40mm	L450*W350*H180mm	36pcs	8.93kg	10.0kg

Optional 2:



Product



Packaging

18pcs×3layer=54pcs/CTN
24pcs×2layer=48pcs/CTN
18pcs×2layer=36pcs/CTN

Model	Product size	Weight	Packaging size	Carton size	Qty/carton	N.W	G.W
DEL010-B	L117*W45.5*H24mm	83g	L140*W35*H50mm	L345*W310*H170mm	54pcs	4.48kg	5.60kg
DEL022-B	L117*W45.5*H29mm	108g	L140*W35*H50mm	L345*W310*H170mm	54pcs	5.83kg	6.93kg
DEL028-B	L117*W45.5*H29mm	167g	L140*W35*H50mm	L345*W310*H170mm	54pcs	9.02kg	10.5kg
DEL030-B	L103*W68.5*H30.5mm	138g	L130*W38*H85mm	L415*W330*H190mm	48pcs	6.62kg	7.72kg
DEL042-B	L103*W68.5*H30.5mm	167g	L130*W38*H85mm	L415*W330*H190mm	48pcs	8.00kg	9.11kg
DEL060-B	L123*W79.5*H31mm	248g	L140*W40*H100mm	L380*W295*H220mm	36pcs	8.93kg	10.0kg

Additional information

1. This product can only be used outside the light body, Can not be used inside of the light, and it must be used within the specified working environment.
2. The life and MTBF of the product are for reference only, and do not represent a warranty statement.
3. For more information, please send an email to info@bokedriver.com.