# Approval of Specification

Customer <u>:</u>		Product:	LED DRIVER				
Customer <u>Code:</u>		Product M <u>odel:</u>	BK-PUL042A-1100z				
Customer <u>P/N:</u>		Product N <u>o.:</u>					
Sample Date:	Sample Date:						
Specificat <u>ion:</u>							
Customer:							
Dear customer:							
		ory product and serve	Please return the sample and the product.				
R/D	SQE	PUR					
			Stamp service				
Supplier:		1					
Engineering	R/D	Quality					
			Stamp service				
A dalaa aa Daddaa a II III	la a a la diretsial Day	l. Maitana Cananannit	· Hera alla a a Tarra				

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Website: http://www.powerboke.com Zip Code: 523763

Na	Change record		ge record				
No.	REV.	Before	After	Date	Drafter	Check	Approval
1							
2							
3							







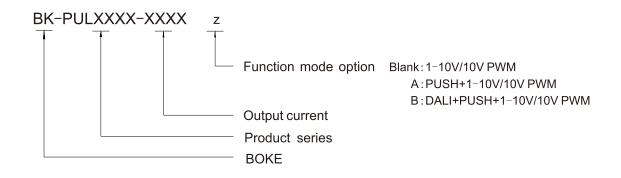
#### ■ FEATURES

- 1.180-264VAC input
- 2.Built in active PFC function, high PF, low THD
- 3.Stanby power consumption < 0.5W to turn off dimmable port.
- 4. Optional dimming methods
- 5.Constant current mode output with mulitiple levels selectable by DIP.switch
- 6. Supporting multi-power supplys synchronous dimming connected in parallel
- 7. Cooling by free air convecation
- 8. Suitable for indoor LED lighting applications
- 9.Built in DALI/PUSH/1-10V&10V PWM dimming function
- 10.5 years warranty

#### APPLICATION

- 1.LED indoor lighting
- 2.LED office lighting
- 3.LED architectural lighting
- 4.LED panel lamp lighting

### ■ MODEL CODE



# **BK-PUL** series dimmable LED driver

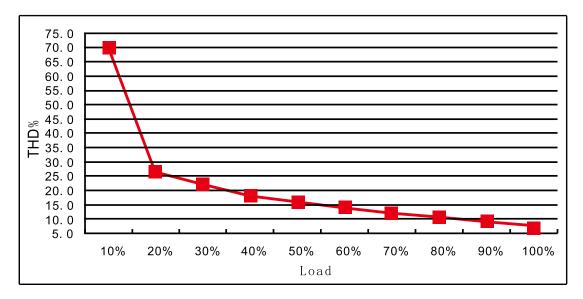


■ ELE	CTRINICAL SPE	CIFICATIO	N									
MODEL		BK-PUL042A-1100z										
	DC CURRENT	0.6-1.1A										
	DC VOLTAGE RANGE	3-42V										
	RATED POWER	42W Max										
	RIPPLE & NOICE Note.2	200mV										
	CONSTSNT CURRENT ADJ. RANGE	DIP S.W										
OUTPUT	CONSTANT CURRENT ACCURACY	±5%										
	LINE REGULATION	±5%										
	LOAD REGULATION	±5%										
	External PWM interface	N/A	l	l .	l		L					
	RATED VOLTAGE	200-240VAC										
	INPUT AC VOLTAGE											
	RANGE INPUT DC VOLTAGE	180-264VAC										
	RANGE	180-264VDC										
	FREQUENCY RANGE	47-63Hz										
	POWER FACTOR	PF>0.95 @ 230V	AC/full load,PF>0.	90 @ 230VAC/>50	% load							
INPUT	TOTAL HARMONIC DISTORTION	THD<15% @ 230	VAC/full load,THD	<20% @ 230VAC/	>50% load							
	EFFICIENCY (Typ.)	88%										
	STANDBY POWER Note.3	<0.5W @ 230Vac										
	INPUT CURRENT	<0.3A @ 230Vac										
	INRUSH CURRENT	Cold start <30A@	230Vac									
	LEAKAGE CURRENT	<0.7mA @ 230Vac										
	TURN ON DELAY	<0.5S @ 230Vac										
	SHOTR CIRCUIT	Hiccup,recovers	automatically after	fult condition is re	moved							
PROTE-	OVER VOLTAGE	50V										
CTION	OVER TEMPERATURE	Constant current	limiting,recovers a	automatically after	fult condition is re	moved						
	OPERATION TEMPERATURE	'_ 2045°C										
	OPERATION HUMIDITY	1090% RH non-condensing										
ENVIRO-	STORAGR TEMPERA- TURE/HUMIDITY	'_4080°C' 5-	95% RH									
HMENT	IP CLASS	IP20										
	VIBRATION	10~500Hz,5G 12m	nin./1cycle,period for	72min. each along >	(,Y,Z axes							
	Тс	Tc=80℃ (Ta=45℃)	ı									
	MTBF	50000H min.,MIL-H	HDBK-217F(45℃)									
EMC	EMC EMISSON	Compliance to EN	55015,GB17743,EN	61000-3-2 Class C(	≥50% load),EN6100	0-3-3						
EMC	EMC IMMUNITY Note.4	Compliance to EN	61000-4-2,3,4,5,6,8,	1, EN61547, surge:	CM 2KV							
	SAFETY STANDARDS	EN61347-1/2-13,G	B19510.1/14 EN62	384								
	DALI STANDARDS	IEC62386-101,102	2,207									
SAFETY	CERTIFICATE	Conform to CE-SU	ID, SAA,RCM									
0/11 2 1 1	WITHSTAND VOLTAGE	I/P-O/P:3750V										
	ISOLATION RESISTANCE	I/P-O/P:100MΩ/50	0Vdc/25℃/70% RH									
	DIMENSION	L103*W68*H30mm										
	Carton	L415*W330*H190mm										
	SINGLE WEIGHT	0.15KG										
	PACKING	48PCS/CTN										
PACKAGE	NET WEIGHT	7.2KG/CTN										
	GROSS WEIGHT	8.7KG/CTN										
	Environmental protection	RoHS										
	INPUT CONNECTION			nge*2+blue*2/0.7								
	OUTPUT CONNECTION			-gray+red+black/0								
	1.All parameter are meas	<u>`</u>		· · · · · · · · · · · · · · · · · · ·								
	2.Ripple & Noise are mea			•	erminated with a 0.1	uF & 47uF paralled	capacitor.					
NOTE	3.Stand-by power consu	•										
	4. The power supply is con by the complete installa	nsiders as a compen ition the final equipm	it that wil be operated ent mancfactures m	d in combination with ust re-quality EMC d	tinal equipment.Sin irective on the comp	ce EMC performanc lete installation again	e will be affected า.					
		- 1- F		· · · · · ·		3						

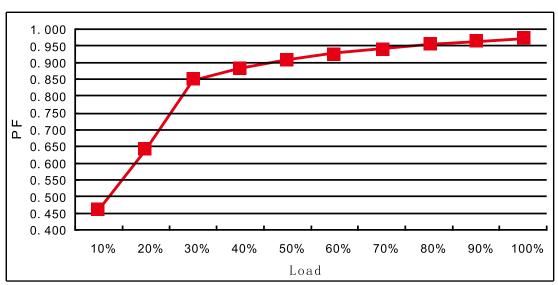


### ₱ BK-PUL042A-1100z Electrical characteristics

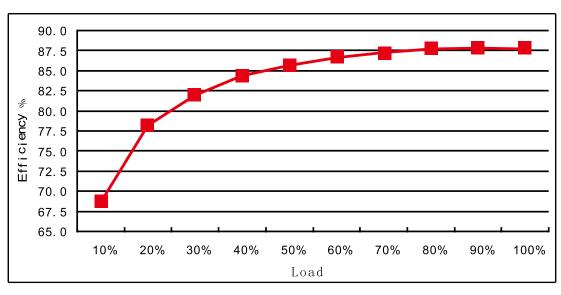
■ Total Harmonic Distortion vs LOAD Characteristic curve



■ Power Factor vs LOAD Characteristic curve



■ EFFICIENCY vs LOAD Characteristic curve





### **DIP S.W Select output current table**

#### ■ BK-PUL042A-1100z

PIN	Irated	Urated	1	2	3	4
29W	600mA	42VDC	-	ON	ON	ON
34W	700mA	42VDC	ON	-	ON	ON
36W	750mA	42VDC	-	_	ON	ON
39W	800mA	42VDC	-	ON	1	ON
41W	850mA	42VDC	-	-	-	ON
43W	900mA	42VDC	ON	ON	ON	-
46W	950mA	42VDC	-		ON	-
48W	1000mA	42VDC	-	ON	1	-
48W	1050mA	40VDC	ON	_	-	-
48W	1100mA (Factory default)	38VDC	-	-		-

Remark: "-" this channel is off.

### Dimming function

### ■ 1~10VDC / 10V PWM signal dimming

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

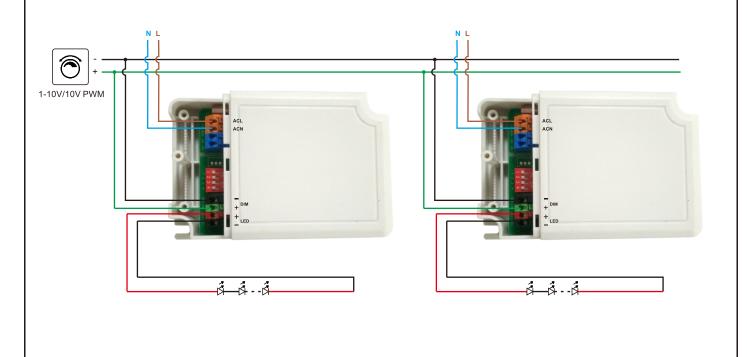
1-10VDC dimming funcition for output current adjustment (Typical)

Dimming value	0-1V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%- 100%	±5%

#### 1–10VDC signal for output current adjustment (Typical)

#### \*Frequency range:100Hz-3KHz

Duty value	0–10%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%- 100%	±5%



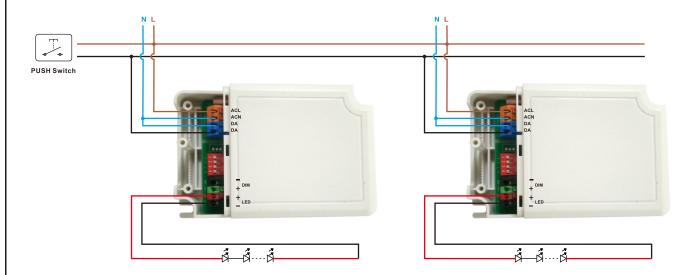


### Dimming function

#### ■ PUSH dimming

Turn on the driver or turn it into standby mode by pressing the switch for 0.1-1s(Short press). Change the brightness level by pressing the switch for 1-5s(Long press).

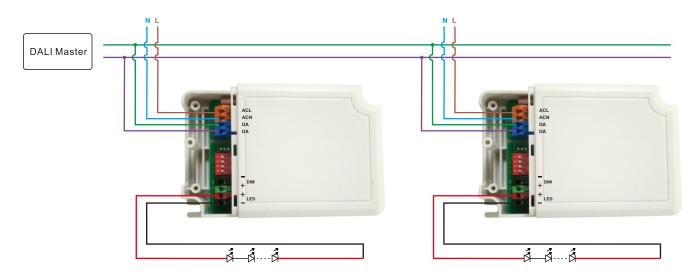
If the PUSH function to open the AC power supply, the initial state for the standby, the need to short press PUSH switch boot.



#### DALI dimming

DALI protocol comprises 16 groups and 64 addresses.

DALI INPUT	MIN	TYP	MAX
high level	9.5V	16V	22.5V
low level	-6.5V	0V	6.5V



#### ■ Multi machine parallel synchronous dimming

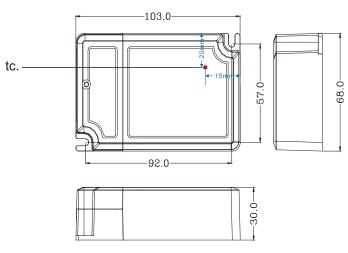
Synchronization up to 16 drivers.

Maximum cable length between each units: 20 meters.



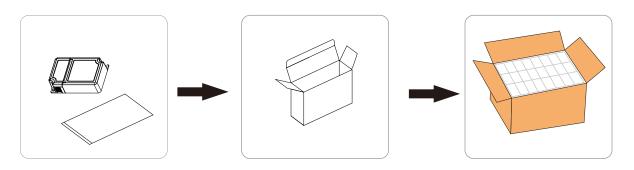
# Mechanical Specification

#### PUL042A



Unit:mm

# Product package



Product +PE bag

Packaging

Carton (8row\*3column\*2layer=48pcs/box)

Product size	PE bag size	Packaging size	Weight/pcs	Carton size	Weight/box
L103×W67×H30mm	L250×W150	L130×W38×H85mm	0.15kg	L415×W330×H190mm	8.7kg