



# Transformers & LED Drivers

INNOVATIVE  
LIGHTING

LED DRIVERS



- Ideal for BL LEDs
- Compact Design
- Constant Voltage
- Regulated Power

Model	Voltage	Wattage	Dimensions
SBMG1020-xx	12/24V	20W	1-3/4x 3-3/4x 1-
SBMG1040-xx	12/24V	40W	2-3/4x 3-3/4x 1-1/4
SBMG1060-xx	12/24V	60W	2-1/4x 11-1/2x 1-1/2
SBMG1090-xx	24V	90W	2-1/4x 11-1/2x 1-1/2
SBLT1025-xx	12/24V	25W	1-1/4x1-5/8x5-1/4
SBLT1060-xx	12/24V	60W	1-5/8x1-5/8x7-7/8
SBLT1100-xx	24V	100W	1-5/8x1-5/8x8-1/4

MAGNETIC



- Internal Breakers
- 3R Housing
- 10 Year Warranty
- Fully Dimmable
- Virtually Silent
- Made in USA

Model	Voltage	Wattage	Dimensions
SB1022-xx	12V/24V	100W	4-7/8x 4-5/8x 6-3/4
SB1023-xx	12V/24V	150W	4-7/8x 4-5/8x 6-3/4
SB1024-xx	12V/24V	250W	4-7/8x 4-5/8x 6-3/4
SB1101-xx	12V/24V	300W	4-7/8x 4-5/8x 6-3/4
SB1025-xx	12V/24V	500W	5-5/8x 5-1/4x 8-1/4
SB1102-xx	12V/24V	600W	5-5/8x 5-1/4x 8-1/4
SB1026-xx	12V/24V	750W	4-7/8x 4-5/8x 8-1/4
SB1103-xx	12V/24V	900W	5-5/8x 5-1/4x 10-1/4
SB1027-xx	12V/24V	1000W	5-5/8x 5-1/4x 10-1/4

MAGNETIC



- Wiring Cabinet
- 1 Year Warranty
- Fully Dimmable
- Made in Canada
- External Breakers
- Economical

Model	Voltage	Wattage	Dimensions
CE50-xx	12V/24V	50W	3- x 3- x 3-1/2
CE100-xx	12V/24V	100W	3- x 6- x 3-1/2
CE150-xx	12V/24V	150W	3-1/2 x 6-5/8 x 4-1/4
CE200-xx	12V/24V	200W	3-1/2 x 5-5/8 x 4-1/4
CE250-xx	12V/24V	250W	3-1/2 x 6-5/8 x 4-1/4
CE350-xx	12V/24V	350W	4-1/8 x 6-5/8 x 5-
CE500-xx	12V/24V	500W	4-1/8 x 6-5/8 x 5-
CE750-xx	12V/24V	750W	4-7/8 x 7- x 5-5/8
CE1000-xx	12V/24V	1000W	4-7/8 x 7- x 5-5/8

ELECTRONIC



- Slim Design
- 2 Year Warranty
- Dimmable with 40W
- 10W Min. Load
- Silent

Model	Voltage	Wattage	Dimensions
CE75-12V-E	12V	75W	3-3/4 x 1-3/8 x 0-5/8
CE75-24V-E	24V	75W	3-3/4 x 1-3/8 x 0-5/8
CE150-12V-E	12V	150W	4-1/2 x 2- x 1-1/8
CE150-24V-E	24V	150W	4-1/2 x 2-0 x 1-1/8



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LIGHTING

## 1. Determine the Voltage

Verify the voltage, 120V, 24V, 12V. Determine if it is AC or DC and if it requires regulated power or not. This can be done by checking the catalogue, the product itself or contacting BL customer service.

DC power can be made by either using the LED Driver or a 24V transformer with an inline rectifier. BL recommends that all LED products use the LED Drivers for their regulated output.

## 2. Calculate the Load (Wattage)

Verify the wattage of each lamp or luminaire, multiply it by the total number of lamps or luminaires. For strip lighting, multiply the number of lamps per foot by the total footage.

## 3. Check the Ampacity (Current)

Divide the total wattage by the voltage to calculate the current. Each product will have a maximum current and it is critical not to exceed it.

$$A = W / V$$

In many cases it may be necessary to have more than one run of lighting come from a single transformer or driver. In this case, each run must not exceed the maximum current individually and the combined draw or wattage must not exceed the capacity of the transformer or driver.

## 4. Determine Minimum Wire Gauge

Wire Size	#18	#16	#14	#12	#10
Max Current	5A	10A	15A	20A	30A

## 5. Evaluate Distance for Voltage Drop

Calculate the total distance from the load to the transformer, check the chart for the maximum distance before voltage drops 5%. The table below is for reference only; use the formal formula found in electrical guidebooks to determine actual drop. Measurement are in feet.

	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A	16A	17A	18A	19A	
12V	#14	110	50	37	28	23	19	16	14	12	11									
	#12	175	86	58	43	35	29	25	22	19	18	16	15	13	12	12	11	10	10	9
	#10	285	142	95	71	57	47	41	36	32	29	26	24	22	20	19	18	17	16	15
24V	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A	16A	17A	18A	19A	
	#14	220	100	74	56	46	38	32	28	24	22	20	19	17	16	15				
	#12	350	172	116	86	70	58	50	44	38	36	31	29	27	25	23	22	20	20	18
#10	570	284	190	142	114	94	82	72	64	58	52	48	44	41	38	36	34	32	30	

Consult an electrician or electrical engineer to determine if this will meet the needs of the project. By no means are these estimates to supersede or be substitute for building or electrical codes, good judgment or laws of physics and nature.

*As part of BL's dedication to ongoing and continuous research and development, BL reserves the right to change or withdraw specifications at any time without notice.*

