Document order number: L1300008 16.04

Philips Emergency Lighting
236 Mt. Pleasant Rd.
Collierville, TN 38017
Sales 800.223.5728
www.philips.com/bodine

PHILIPS
bodine

Emergency Drivers

OEM
Selection Guide

Designed for the perfect fit

Innovative solutions for emergency LED lighting applications

Specification Guide

Start

with these easy steps to select the proper Emergency LED driver for your fixture.

Identify the fixture being utilized and record the specification data:

1. Make and model _____
2. Load Voltage of LED array(s) _____ Vf
3. LED Load rated power _____ Watts
4. Output current of the AC LED driver into LED Load as applied _____ Amps

Load Voltage

Identify the LED's load voltage (Vf)

This is the total forward voltage (Vf or stacked voltage) of the luminaire's LED array(s). This information can be found on the product spec sheet, labeling, or on the LED array(s).

 = Total Vf

Locate your fixture's (LED array) total load voltage at the top of the chart – ***Approximate Load Voltage*** – and find the available EM LED drivers for this voltage in the selected column. The type of luminaire and application/location will help determine which EM driver to use.

Wattage (W)

Verify maximum power of LED load

The LED load's rated power must be greater than or equal to the output of the selected EM LED driver.

LED load (W) ≥ to EM driver power output (W)

Designated as ***Power (W)*** for each EM LED driver on the chart.

Use the chart to ensure the LED load's rated power (W), is greater than or equal to the EM Driver power output (W).

Current (from AC driver)

Maximum current into EM driver

See the emergency LED current limit in the column ***Max. AC Driver Output*** on the chart.

The maximum current from the AC driver must be less than or equal to the current the EM driver can accept. Use the chart to find the ***Max. AC Driver Output*** to confirm the maximum acceptable current for each EM driver.

Lumens

Verify emergency lumen output

Find the approximate emergency lumen output for each EM driver on the chart or calculate.

Lumens = lm/w _____ X _____ (W)

Emergency illumination (lumens) can be calculated by multiplying the efficacy of the LED load (measured in lm/w) by the output power of the emergency driver (W).

Emergency LED Driver	Class Rating	Max. AC Driver Output (A)	Specs	Approximate Load Voltage (LED Array Vf) 3 V	6 V	10 V	12 V	15 V	18 V	20 V	24 V	28 V	30 V	33 V	36 V	39 V	42 V	45 V	48 V	50 V	52 V	Listing*			Typical Fixture Type	Location/Application
BSL23C BSL23	LVLE	1.5A	Power (W) ~ Lumens	0.7 90	1.4 170	2.0 230	2.5 290	3.0 350	3.4 400													●			Recessed downlight, Surface, Pendant	Indoor, Damp
BSL26C BSL26	LVLE	1.5A	Power (W) ~ Lumens	0.8 100	1.6 190	2.3 270	2.9 340	3.5 410	4.0 460	4.4 510	4.7 550	4.9 560	4.8 560									●			Recessed downlight, Surface, Pendant	Indoor, Damp
BSL36 BSL36LP	Class 2	2.5A	Power (W) ~ Lumens					6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	●			Recessed downlight, Slim/Low-profile	Indoor, Damp
BSL17C-C2 BSL17-C2	Class 2	1.5A	Power (W) ~ Lumens					7.2 840	7.2 840	7.3 840	7.3 840	7.3 840	7.3 840	7.3 840	7.2 840	7.2 840	7.1 830	7.2 830	7.1 820	7.1 820		●	Pending	●	Recessed downlight, Surface, Pendant	Indoor, Damp
BSL17C-C2ST Self-testing	Class 2	1.5A	Power (W) ~ Lumens					7.2 840	7.2 840	7.3 840	7.3 840	7.3 840	7.3 840	7.3 840	7.2 840	7.2 840	7.1 830	7.2 830	7.1 820	7.1 820		●	Pending	●	Recessed downlight, Surface, Pendant	Indoor, Damp
BSL310 Red poly case	Class 2	3.0A	Power (W) ~ Lumens			4.4 510	5.7 660	7.0 810	8.3 960	9.5 1,100	10.6 1,230	11.7 1,350	9.6 1,100	10.2 1,180	10.8 1,250	11.3 1,300	11.4 1,320	11.0 1,270	10.3 1,180	9.8 1,130		●	●		Linear strip, Recessed, Surface, Pendant	Indoor, Damp
BSL310M (C or C-DF)	Class 2	3.0A	Power (W) ~ Lumens			4.4 510	5.7 660	7.0 810	8.3 960	9.5 1,100	10.6 1,230	11.7 1,350	9.6 1,100	10.2 1,180	10.8 1,250	11.3 1,300	11.4 1,320	11.0 1,270	10.3 1,180	9.8 1,130		●	●	●	Linear strip, Recessed, Surface, Pendant	Indoor, Damp
BSL310LP BSL310LPST	Class 2	3.0A	Power (W) ~ Lumens					9.9 1,140	10.3 1,190	10.5 1,210	10.4 1,200	10.4 1,200	10.3 1,190	10.3 1,180	10.2 1,180	10.5 1,220	10.4 1,200	10.4 1,200	10.2 1,180	10.2 1,180	10.1 1,170	●	Pending		Linear strip, Slim/Low-profile Recessed, Surface, Pendant	Indoor, Damp
BSL310SB Small case, Separate battery	Class 2	3.0A	Power (W) ~ Lumens			4.4 510	5.7 660	7.0 810	8.3 960	9.5 1,100	10.6 1,230	11.7 1,350	9.6 1,100	10.2 1,180	10.8 1,250	11.3 1,300	11.4 1,320	11.0 1,270	10.3 1,180	9.8 1,130		●	●		Linear strip, Slim/Low-profile Recessed, Surface, Pendant	Indoor, Damp
BSL20LV	Class 2	5.0A	Power (W) ~ Lumens							21.3 2,450	21.4 2,470	21.5 2,480	21.5 2,480	21.6 2,490	21.5 2,480	21.5 2,480	21.4 2,470	21.4 2,470	21.4 2,470	21.3 2,450		●		●	High output / High bay, Linear, Surface	Indoor, Damp
BSL36 Cold-Pak -20ºC to 55ºC	Class 2	2.5A	Power (W) ~ Lumens					6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	6.0 690	●	●		Recessed downlight, Surface, Bollards	Indoor, Damp, Covered exteriors, Extreme temperatures
BSL10 Cold-Pak -20ºC to 55ºC	Class 2	1.25	Power (W) ~ Lumens							14.6 1,690	14.6 1,690	14.6 1,690	14.6 1,690	14.6 1,680	14.5 1,670	14.5 1,670	14.3 1,650	14.7 1,690	14.6 1,680	14.5 1,680	14.4 1,660	●		●	Recessed downlight, Surface, Bollards	Indoor, Damp, Covered exteriors, Extreme temperatures
BSL722 BSL722 Cold-Pak	Obsolete in 2016	NA	Power (W) ~ Lumens									20.2 2,320	22.2 2,550	23.1 2,660								●			Recessed downlight, Surface, Bollards	Indoor, Damp, Covered exteriors, Extreme temperatures
BSL718 (Ext. Temps) -20ºC to 60ºC	Class 2	2.0A	Power (W) ~ Lumens							18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070	18.0 2,070		●	●		Recessed downlight, Surface, Bollards	Indoor, Damp, Covered exteriors, Extreme temperatures
BSL310Haz Suitable - Class 1, Div. 2 fixtures	Class 2	3.0A	Power (W) ~ Lumens			4.4 510	5.7 660	7.0 810	8.3 960	9.5 1,100	10.6 1,230	11.7 1,350	9.6 1,100	10.2 1,180	10.8 1,250	11.3 1,300	11.4 1,320	11.0 1,270	10.3 1,180	9.8 1,130		●			Hazardous location	Indoor, Damp, Hazardous location

Emergency LED Driver	Class Rating	Max. AC Driver Output (A)	Specs	Approximate Load Voltage (LED Array Vf) 45V	48V	50V	54V	60V	66V	72V	78V	84V	90V	96V	102V	108V	114V	120V	126V	130V	Listing*			Typical Fixture Type	Location/Application
BSL17 BSL17C	non Class 2	1.5A	Power (W) ~ Lumens	7.3 850	7.3 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.4 850	7.3 850	7.3 850	●		●	Recessed downlight, Surface, Pendant	Indoor, Damp
BSL20MV	non Class 2	5.0A	Power (W) ~ Lumens			21.1 2,430	21.2 2,440	21.2 2,450	21.3 2,460	21.4 2,460	21.4 2,470	21.4 2,460	21.5 2,470	21.5 2,470	21.4 2,470	21.5 2,470	21.5 2,470	21.4 2,470	21.5 2,470	21.5 2,480	●		●	High output / High bay, Linear, Surface	Indoor, Damp

Emergency LED Driver	Class Rating	Max. AC Driver Output (A)	Specs	Approximate Load Voltage (LED Array Vf) 125V	129V	132V	138V	144V	150V	156V	162V	168V	174V	180V	186V	192V	198V	200V	205V	210V	Listing*			Typical Fixture Type	Location/Application
BSL20HV	non Class 2	5.0A	Power (W) ~ Lumens	21.7 2,500	21.7 2,500	21.8 2,510	21.8 2,510	21.7 2,500	21.8 2,510	21.7 2,500	21.8 2,510	21.9 2,520	21.9 2,520	21.9 2,520	21.9 2,520	21.9 2,520	21.9 2,530	21.9 2,530			●		●	High output / High bay, Linear, Surface	Indoor, Damp

Note: Lumens indicated on this chart are calculated based on a typical LED fixture lumen output of 115 lumens per Watt Load. In many cases the lumen output in emergency mode will be greater due to the actual efficacy of the LED Load being utilized. Use the formula below to calculate actual lumens in emergency mode.

Lumens In Emergency Mode = *Lumens per Watt of Fixture* X *Output Power of Chosen EM Driver*

_____ = _____ *(Lm/W)* X _____ *(W)*

* Check individual product specification sheets for Listing details regarding US and Canada, and other product details including specifications, dimensions, and installation options such as conduit, stud-mount, and test switches.

UL Component Recognized for factory installation only

UL Classified for field installation with DLC Classified LED Loads

ETL Listed for field or factory installation with rated LED loads