

## Luminus LED Ballast

### 60W Single Output LED Ballast

### LB-060-15-3A20-01-N

#### Features

Luminus LED Ballasts are ideal turn key solutions for high power LED lighting applications. The features, size and performance make them suitable for commercial lighting utilizing multiple Luminus SST-90 devices or a single CSM-360 device for both indoor and outdoor installations.

- Designed for Luminus SST-90 and CSM-360
- Capable of driving 1 CSM-360 or 4 SST-90 LED's in series at 3.2A
- Universal AC Input
- Built-in active PFC function
- Isolated plastic case with IP64 ingress protection
- Protections: Short circuit / Overload / Over voltage / Over temperature
- UL1310 Class 2 power supply
- Cooling by free air convection
- RoHS Compliant

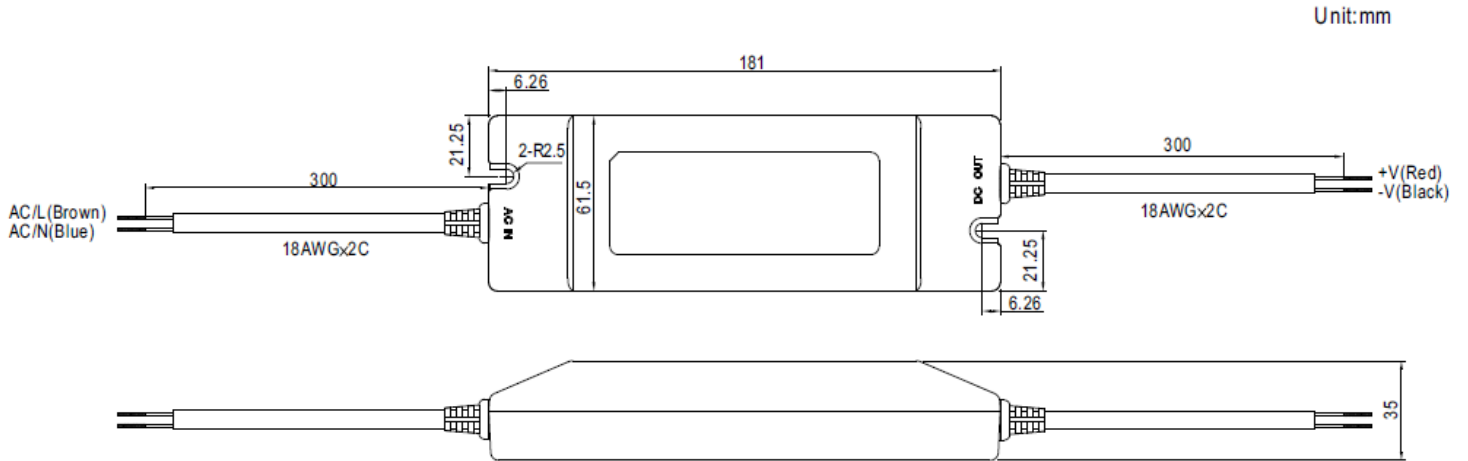


IP64

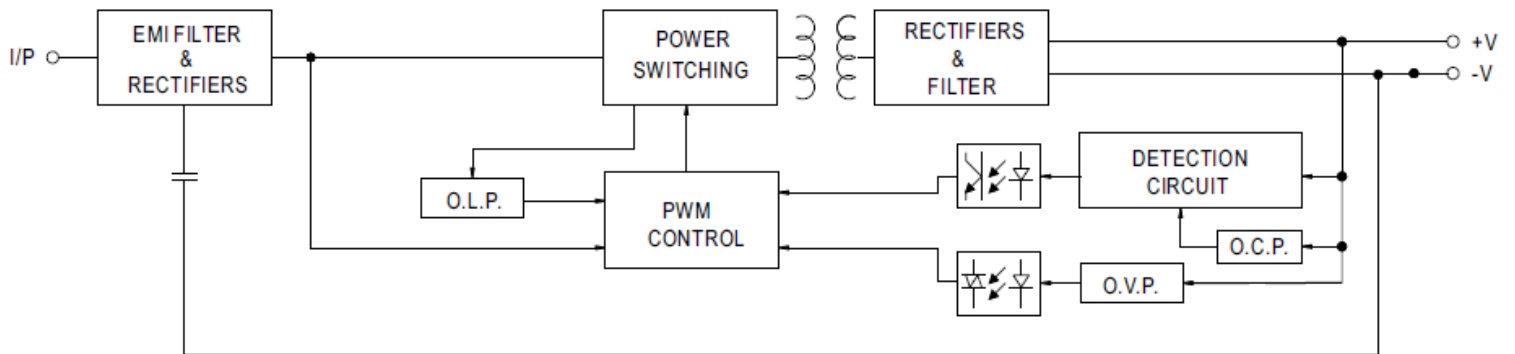
## Specifications

Output	DC Voltage	15V
	LED Operating Voltage	10.5 ~ 15V
	Rated Current	3.2A
	Rated Power	60W
	Ripple & Noise <small>Note 2</small>	2.4Vp-p
	Voltage Tolerance <small>Note 3</small>	± 10.0%
	Load Regulation	± 5.0%
	Setup Time	1500ms / 230VAC      3000ms / 115VAC at full load
Input	Voltage Range <small>Note 4</small>	90 ~ 264VAC
	Frequency Range	47 ~ 63Hz
	Efficiency (Typ.)	86%
	Power Factor	PF > 0.9 at 75 ~ 100% load, 115VAC / 230VAC
	AC Current	0.8A/115VAC      0.4A/230VAC
	Inrush Current (Max.)	40A/230VAC
	Leakage Current	<0.75mA / 240VAC
Protection	Over Current	110% (max) Protection type: Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	17.5 ~ 21V Protection type: Shut down o/p voltage, re-power on to recover
Environment	Working Temp	-30 ~ +50 °C
	Working Humidity	20 - 95% RH non-condensing
	Storage Temp., Humidity	-40 ~ +80 °C, 10 ~ 95% RH
Safety & EMC	Safety Standards	UL1310 Class 2, CAN/CSA C22.2 No. 223-M91, IP64 approved, design refer to TUV EN61347-1, EN61347-2-13
	Withstand Voltage	I/P-O/P: 3.75KVAC    I/P-FG:1.88KVAC    O/P-FG:0.5KVAC
	Isolation Resistance	I/P-O/P: >100M Ohms / 500VDC / 25 °C / 70% RH
	EMI Conduction & Radiation	Compliance to EN55022 (CISPR22) Class B, EN55015
	Harmonic Current	Compliance to EN61000-3-2 Class C (>75% load); EN6100-3-3
	EMS Immunity	Compliance to EN6100-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level, criteria A
Other	MTBF	497.8Khrs min. MIL-HDBK-217F (25 °C)
	Dimension	181 * 61.5 * 35mm (L*W*H)

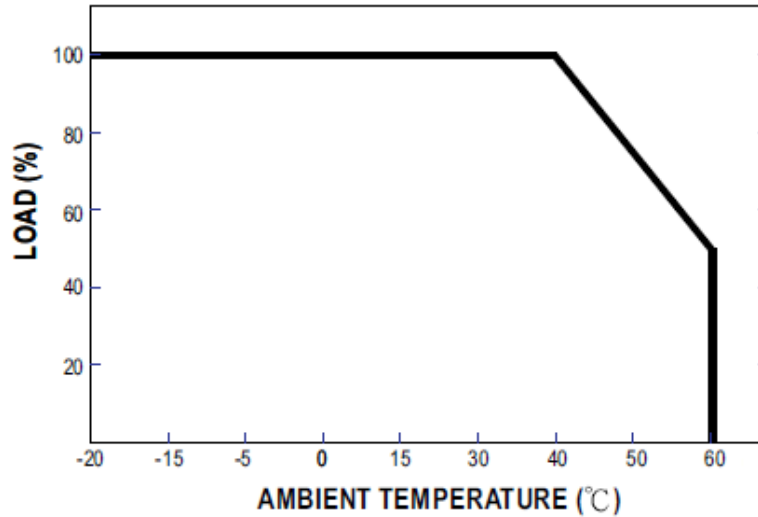
Mechanical Drawing



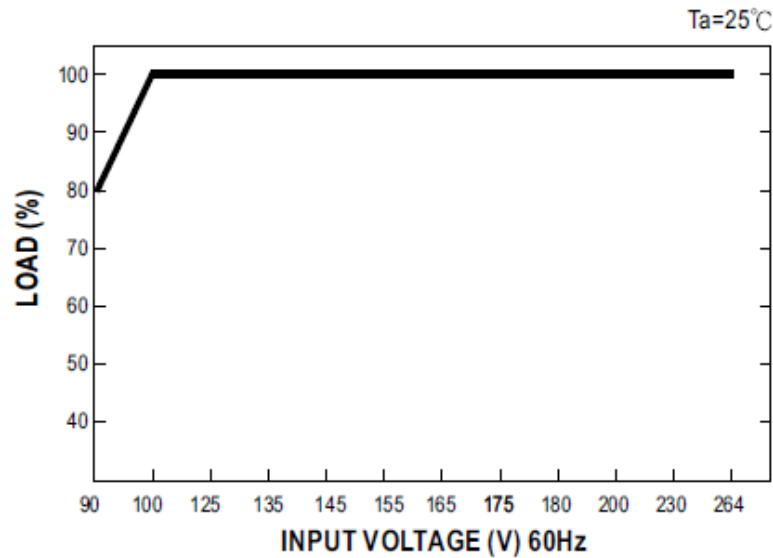
Block Diagram



## Derating Curve



## Static Characteristics



### NOTES:

1. All parameters NOT specially mentioned are measured at 230VAC, rated load and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the derating curve for more details.
5. Length of set up time is measured at first cold start. Turning the power supply ON/OFF may lead to increase of set up time.
6. The power supply is considered a component which will be installed in final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

## Ordering Information

Ordering Part Number	Description
LB-060-15-3A20-01-N	60W LED ballast, 10.5-15V / 3.2A output

[www.luminus.com](http://www.luminus.com)

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