## PRODUCT DATA SHEET



Luminus LED Ballast 150W Single Output LED Ballast LB-150-48-3A20-01-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 CSM-360 devices for both indoor and outdoor installations.

- Designed for Luminus CSM-360
- Capable of driving 3 CSM-360 devices in series at 3.2A
- Universal AC Input
- High efficiency up to 92%
- Built-in active PFC function
- Constant Current Output
- Isolated plastic case with IP67 ingress protection
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · Cooling by free air convection
- RoHS Compliant





**IP67** 



# **PRODUCT DATA SHEET**



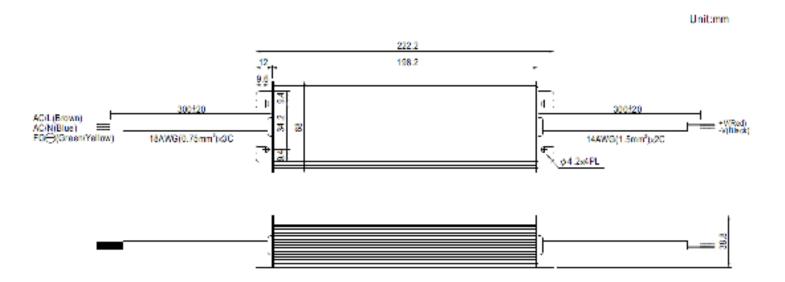
# **Specifications**

Specification		
	DC Voltage	48V
Output	LED Operating Voltage Note 4	36 ~ 48V
	Rated Current	3.2A
	Rated Power	153.6W
	Ripple & Noise Note 2	200mVp-p
	Voltage Tolerance Note 3	± 1.0%
	Load Regulation	± 0.5%
	Setup, Rise Time	3000ms, 80ms at full load 230VAC/115VAC
Input	Voltage Range Note 5	90 ~ 295VAC
	Frequency Range	47 ~ 63Hz
	Efficiency (Typ.)	92%
	Power Factor	PF > 0.9 at 75 ~ 100% load
	AC Current	2A/115VAC 1A/230VAC
	Inrush Current (Max.)	65A/230VAC
	Leakage Current	<1mA / 240VAC
Protection	Over Current	95 ~ 108% (max)
		Protection type: Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	57 ~ 65V
		Protection type: Shut down o/p voltage, re-power on to recover
Environment	Working Temp	-30 ~ +55°C
	Working Humidity	20 - 95% RH non-condensing
	Storage Temp., Humidity	-40 ~ +80°C, 10 ~ 95% RH
Safety & EMC	Safety Standards Note 6	UL1012, EN61347-1, EN61347-2-13, UL60950-1, TUV EN60950-1
	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	303.7Khrs min. MIL-HDBK-217F (25°C)
	Dimension	222.2 * 68 * 38.8mm (L*W*H)

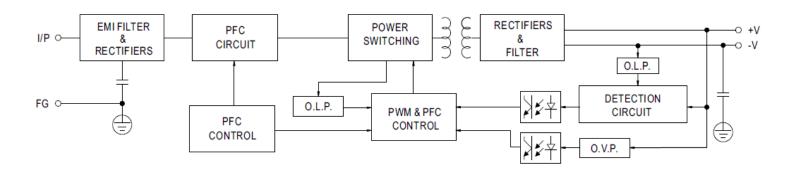




# **Mechanical Drawing**



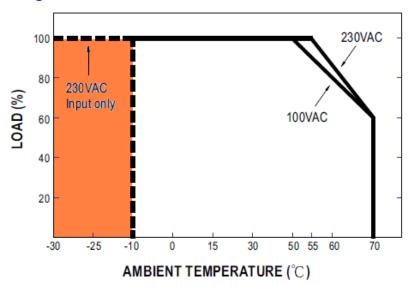
# **Block Diagram**



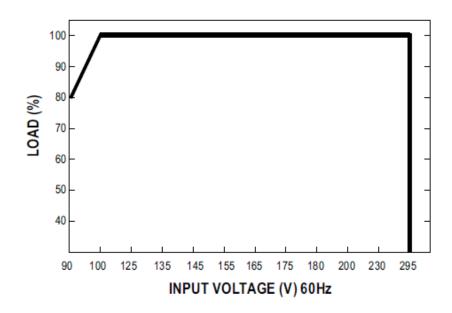




# **Derating Curve**



## **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. Constant current operation region is within 75 ~ 100% rated output voltage.
- Derating may be needed under low input voltage. Please check the derating curve for more details.
- 6. Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part 18.
- The power supply is considered a component which will be installed in final equipment. The final equipment muse be re-confirmed that it still meets EMC directives.



#### PRODUCT DATA SHEET



# **Ordering Information**

Ordering Part Number	Description
LB-150-48-3A20-01-N	150W LED ballast, 36-48V / 3.2A output

#### www.luminus.com

The products, their specifications and other information appearing in this document are subject to change by Luminus Devices without notice. Luminus Devices assumes no liability for errors that may appear in this document, and no liability otherwise arising from the application or use of the product or information contained herein. None of the information provided herein should be considered to be a representation of the fitness or suitability of the product for any particular application or as any other form of warranty. Luminus Devices' product warranties are limited to only such warranties as accompany a purchase contract or purchase order for such products. Nothing herein is to be construed as constituting an additional warranty. No information contained in this publication may be considered as a waiver by Luminus Devices of any intellectual property rights that Luminus Devices may have in such information. PhlatLight® is a registered trademark of Luminus Devices, Inc., all rights reserved.

