



LDM60S SERIES

60 WATT SINGLE OUTPUT AC-DC LED DRIVER



UL[®] US CE Class 2

Features

- * Universal Input 90~305Vac or 127-420Vdc
- * High Efficiency up to 90%
- * Meets EN55015, EN61000-3-2 Class C
- * Meets EN61347-1, EN61347-2-13
- * Meets UL8750
- * Meets UL1310 Class 2
- * Dimming Range 5%-100%
- * Active PFC Function
- * IP67 Design for Indoor or Outdoor Installations (note7)
- * Max. Output Power 60W
- * Dimming Function: Digital (Optional)
- * Protections: Short Circuit, Over Current Over Voltage and Over Temperature
- * Constant Voltage and Constant Current
- * No Load Power Consumption<0.5W(note10)
- * 3 Years Warranty



LDM60 Series

MODEL	Output Voltage	Output Current Note.6	Ripple (mV p-p) Note.1	Voltage Accuracy Note.2	Line Regulation Note.3	Load Regulation Note.4	Constant Current Region	Current Adj. Rang (Optional) Note.5	Voltage Adj. Rang (Optional) Note.5	%EFF. (Typ.) Note.8
LDM60S120	12V	5.00A	120mV	±1%	±1%	±2%	6.5V~11.5V	3A~5A	10.8V~13.2V	87%
LDM60S240	24V	2.50A	120mV	±1%	±1%	±2%	13V~23.5V	1.5A~2.5A	21.6V~26.4V	88%
LDM60S360	36V	1.67A	120mV	±1%	±1%	±2%	19V~35.5V	1.0A~1.67A	32.4V~39.6V	89%
LDM60S480	48V	1.25A	120mV	±1%	±1%	±2%	26V~47.5V	0.75A~1.25A	43.2V~52.8V	90%

Ordering information

Model No. Optional Type

LDM60SXXX -XX

Optional type:

01: Constant Current Mode (IP67)

No dimming

No adjustment for output voltage and output current

02: Constant Current Mode (IP65)

No dimming

With adjustment for output voltage and output current

04: Constant Current Mode (IP67)

Dimming: Digital meets IEC62386 part 102,207 ver.1

No adjustment for output voltage and output current

04A: Constant Current Mode (IP65)

Dimming: Digital meets IEC62386 part 102,207 ver.1

With adjustment for output voltage and output current

Specifications are subject to change without notice

Specifications

INPUT SPECIFICATIONS:

Voltage	90~305Vac or 127~420Vdc
Frequency	47 to 63Hz
Inrush Current	60A max. @240Vac, Cold Start @25°C
Conducted EMI	CISPR/FCC Class B
Power Factor	PF> = 0.9
Leakage Current	0.75mA max. @277Vac
Input Current	0.6A typ. @110Vac, Pout=59W 0.31A typ. @230Vac, Pout=59W

OUTPUT SPECIFICATIONS:

Holdup Time	16ms typ. @115Vac
Short Circuit Protection	Hiccup Mode (Auto Recover)
Temperature Coefficient	±0.05%/°C
Over Voltage Protection	TVS Component to Clamp
Over Current Limit	Constant Current Mode (note9)
Over Temperature Protection	110°C typ.
Altitude	2000m
Startup Time	2.5s typ.
Rise Time	50ms typ.
MTBF	MIL-HDBK-217F, GB, at 25°C/115Vac 150Khrs typ.
Vibration ...	15~2000Hz 4G period for 60min, each along X Y Z axes

SAFETY AND EMC:

Emission and Immunity	EN55015, CISPR22 EN61547, EN61000-3-2, EN61000-3-3
Isolation Voltage	I/P-O/P 3750Vac
Surge	±4kV
Safety	UL8750, UL1310 Class 2, EN61347-1, EN61347-2-13
Harmonic Current	EN61000-3-2 Class C (>60% Load)
Isolation Resistance	100MΩ min.

GENERAL SPECIFICATIONS:

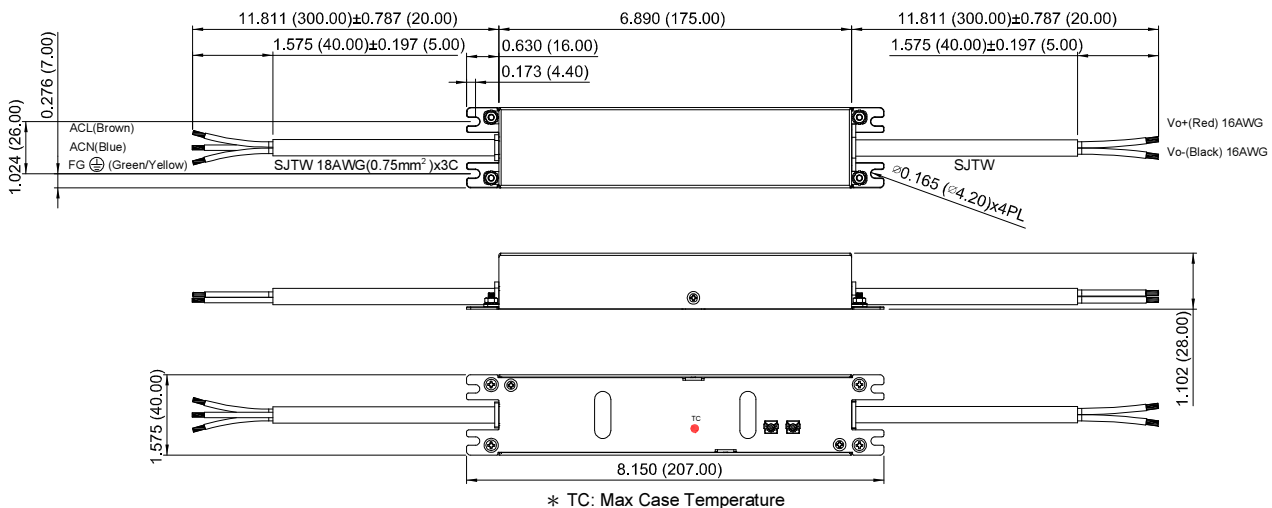
Operating Temperature	- 40 ~ 70°C (See Derating Curve)
Storage Temperature	-40~85°C
Cooling	Natural Convection

MECHANICAL CHARACTERISTICS:

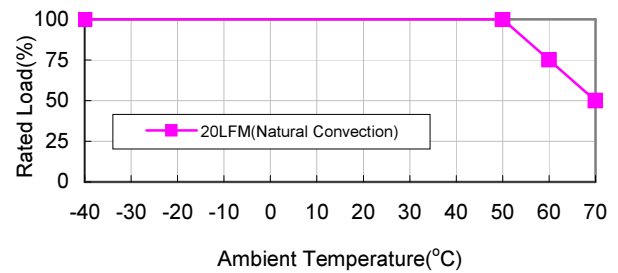
Dimensions	8.149x1.5748x1.1023 Inches (207.00x40.00x28.00 mm)
Weight	454g typ.

Mechanical Specification

All Dimensions in Inches(mm)
Tolerance Inches:x.xxx±0.02
Millimeters:x.xx±0.5



Derating curve:



NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple noise measuring @20MHz BW and 95% rated current.
2. Voltage accuracy is set of 90% rated current.
3. Line regulation is measured from high line to low line with 90% rated current.
4. Load regulation is measured from 90% to 10% rated current.
5. Can be adjusted by internal potentiometer.
6. Output constant current accuracy ±5%.
7. IP67 for model: LDM60SXXX-01, LDM60SXXX-04
IP65 for model: LDM60SXXX-02, LDM60SXXX-04A
8. Efficiency is measured 95% rated power at Vin=230Vac.
9. Less than 50% (typ.) of the rated output voltage will enter hiccup mode.
10. No load power consumption<0.5W for LDM60SXXX-01, -02
No load power consumption<1.5W for LDM60SXXX-04, -04A
Stand by power consumption<0.5W for LDM0SXXX-04, -04A

Typical at 25°C, nominal line and 75% load, unless otherwise Specified