

LDM100S SERIES

100 WATT SINGLE OUTPUT

AC-DC LED DRIVER

Features

- * Universal Input 90~305VAC
- * High Efficiency up to 90%
- * Meets EN55015, EN61000-3-2 Class C
- * Meets EN61347-1, EN61347-2-13
- * Meets UL8750
- * Dimming Input Range 1%~100%
- * Active PFC Function
- * IP67 Design for Indoor or Outdoor Installations (note7)
- * Max. Output power 100W
- * Dimming function: 1~10Vdc, PWM (note10) and Resistance or DALI (Optional)
- * Protections: Short circuit, Over Current Over Voltage and Over Temperature
- * 3 Years Warranty



LDM100 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
LDM100S120	12V	8.34A	120mV	±1%	±1%	±2%	6.5V~12V	5.3A~8.34A	10.8V~13.2V	88%
LDM100S240	24V	4.17A	120mV	±1%	±1%	±2%	13V~24V	2.6A~4.17A	21.6V~26.4V	89%
LDM100S360	36V	2.78A	120mV	±1%	±1%	±2%	19V~36V	1.74A~2.78A	32.4V~39.6V	90%
LDM100S480	48V	2.08A	120mV	±1%	±1%	±2%	26V~48V	1.3A~2.08A	43.2V~52.8V	90%

Ordering information

Model No. Optional type

LDM100SXXX -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

03: Constant Current Mode (IP67)

Dimming: 1~10Vdc or PWM and Resistance

No adjustment for output voltage and output current

03A: Constant Current Mode (IP65)

Dimming: 1~10Vdc or PWM and Resistance

With adjustment for output voltage and output current

04: Constant Current Mode (IP67)

Dimming: DALI

No adjustment for output voltage and output current

04A: Constant Current Mode (IP65)

Dimming: DALI

With adjustment for output voltage and output current

Specifications are subject to change without notice

Specifications

INPUT SPECIFICATIONS:

Voltage 90~305Vac
 Frequency 47 to 63Hz
 Inrush Current 75A max. @240Vac, Cold Start @25°C
 Conducted EMI CISPR/FCC Class B
 Power Factor PF> = 0.9
 Leakage Current 1mA max.

OUTPUT SPECIFICATIONS:

Holdup Time 16ms typ. @115Vac
 Short Circuit ProtectionHiccup Mode (Auto Recover)
 Temperature Coefficient $\pm 0.05\%$ / °C
 Over Voltage Protection TVS Component to Clamp
 Over current Limit.....constant current mode (note 9)
 Over Temperature Protection.....110°C typ
 Altitude.....2000 m
 Startup time.....2.5s typ.
 Rise time.....50ms typ.
 MTBF..... MIL-HDBK-217F, GB, at 25°C /115VAC...160Khrs typ.
 Vibration.....15~2000Hz 4G period for 60min,each along X Y Z axes

SAFETY AND EMC:

Emission and ImmunityEN55015 ,CISPR22
 EN61547, EN61000-3-2, EN61000-3-3
 Isolation Voltage.....I/P-O/P 3750VAC
 Surge.....4KV
 Safety.....UL8750, EN61347-1,EN61347-2-13
 Harmonic Current..... EN61000-3-2 Class C (>60% load)
 Isolation Resistance.....100MΩ min.

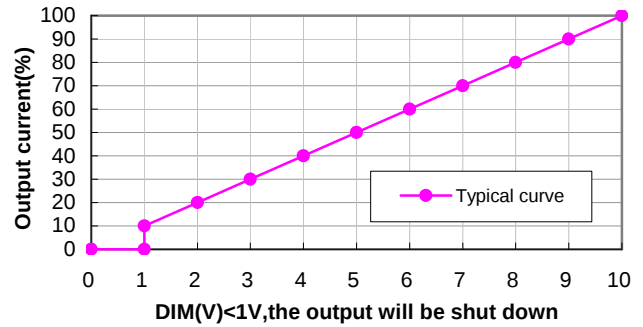
GENERAL SPECIFICATIONS:

Operating Temperature-40 ~ 70°C (see Derating Curve)
 Storage Temperature -40~85°C
 CoolingNatural Convection

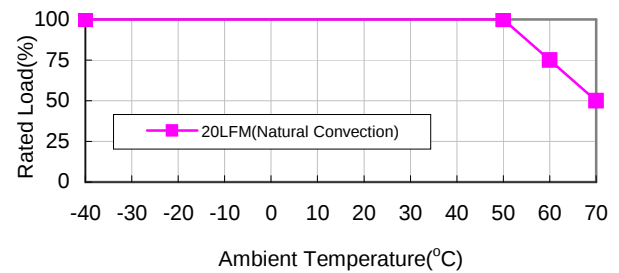
MECHANICAL CHARACTERISTICS:

Dimensions 1.5748x9.1338x1.1023inches (40x232x28mm)
 Weight 504g typ.

1~10V Dimming function for output current curve:



Derating curve:

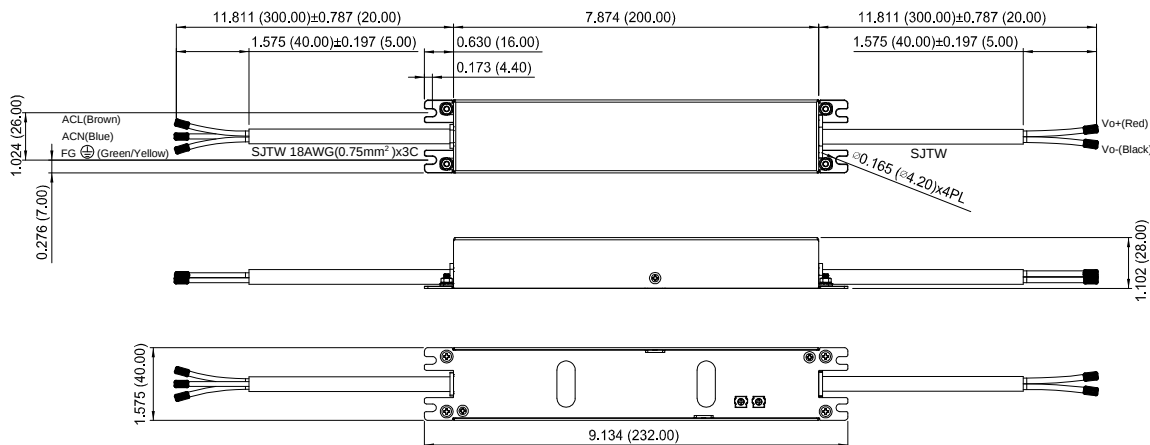


NOTE:

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 $\pm 5\%$
7. IP67 for model: LDM100SXXX-01, LDM100SXXX-03, LDM100SXXX-04
 IP65 for model: LDM100sXXX-02, LDM100SXXX-03A, LDM100SXXX-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. PWM function is signal reception, Non-Output PWM signal.

Mechanical Specification

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



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