LEA Series Dimming LED Power Supply

24/36W Single Channel Constant Voltage Output

LEA103

Key Features

- Designed for LED lighting applications
- Universal AC input (100~277Vac)
- Built-in active PFC provide PF>0.90 over entire input range
- Turn on time < 1 second with soft start
- Aluminum case cooled by air convection
- Protections: Short circuit , Over voltage, Over Current , Over temperature
- IP67 / IP65 design for indoor or outdoor environment
- Suitable for dry, damp, wet location
- Compliance with worldwide safety regulations for lighting
- Dimmable output with flexible architecture
  - Standard DC0/1-10V control interface (2 wire dimming input, External dimming control signal to control the PWM dimming range from 0%-100%)
  - PWM Dimming (2-wire dimming input)
  - Supports majority of available dimming solutions
- 5year warranty

Orderable Part Numbers

Article Number：652103

Part Numbers	Constant Voltage output(DC,V)	Max. Output Current(A)	Load Reg.*	Max. Effic.	Max. Output Power(W)
LEA103A	12	2.0	±5%	>88%	24.5
LEA103B	24	1.0	±5%	>88%	24.7
LEA103C	12	3.0	±5%	>88%	36.3
LEA103D	24	1.5	±5%	>88%	36.8

Technical Data

Series	**LEA103**	
Output	DC Voltage Range	12 ~ 24Vdc (see orderable parts table for details)
	Rated Current Range	1.0A ~ 3.0A (see orderable parts table for details)
	Rated Power	up to 36.8W
	Load Regulation*	±5%
	Turn On Time	< 1s at full load
Input	Voltage Range	90 ~ 305Vac
	Frequency Range	47 ~ 63Hz
	Power Factor (Typ.@277VAC)	PF≧ 90% at full load
	Efficiency (Typ. @277VAC)	≥ 88% at full load(see orderable parts table for details)
	AC Current	0.41A @ 115Vac and 0.21A @ 230Vac
	Inrush Current (Typ.)	≤ 65A @ 230Vac cold start with full load
	LEAkage Current	≤ 0.75mA @ 277Vac
	THD (Total Harmonic Dist.)	< 25%
Dimming	Modes	Standard DC0/1-10V control interface, Sink or Source<1mA PWM Dimming Control Wide dimming range from 0% up to 100% Dimming over entire input voltage range
Protection	Short Circuit	Hiccup mode protection. Recovers automatically after fault condition is removed
	Over Voltage	< 30% above the maximum output voltage listed for the specific part number. Latch mode – unit needs to be power cycled to recover
	Over Current	< 10% above the maximum output current listed for the specific part number the unit limits the current. Unit auto recovers after fault is removed
	Over Temperature	Unit turns off when Tc > 90°C. Shuts down – unit needs to be power cycled to recover

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Environment	Working Temperature	-30°C ~ + 70°C at Full Load
	Working Humidity	20% ~ 90% RH non-condensing
	Storage Temperature	-40°C ~ + 80°C
	Storage Humidity	10% ~ 90% RH non-condensing
	Vibration	10 ~ 500Hz, 2G 10min/1 cycle period for 60 minutes along each axis (X, Y, Z)
Safety & EMC	Safety Standards	UL8750, UL1310,UL1012,UL879,UL60950-1,CSA C22.2 No. 250.0-08 (except for 15V-54V,), EN61347-1, EN61347-2-13 independent, IP67 approved ; TUV EN60950-1 Compliant
	EMI Conduction & Radiation	Compliance to EN55015 Class A, FCC 47CFR Part 15 Class
	Harmonic Current	Compliance to EN61000-3-2 Class C
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, Light Industry Level (surge 4KV), criteria A
Lifetime	**> 50,000 hours**	
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of 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 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but pLEAse reconfirm special electrical requirements for some specific system design. 5. Derating may be needed under low input voltages. PLEAse check the for more details. 6. Safety and EMC design refer to EN60598-1, subject CNS15233, GB7000.1, FCC part18. 7. LEAgth of set up time is measured at cold first start. Turning ON/OFF the power supply may LEAd to increase of the set up time. 8. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. static characteristics 9. Refer to warranty statement.	

Dimensions

Unit:mm