ADVANCE

i-Xitanium™
LED Electronic Driver

25W and 40W Constant Voltage Output

These drivers are included in the i-Xitanium (illumination) segment of the Xitanium family of products.

The i-Xitanium constant voltage drivers provide the required constant DC current output required LEDs enhancing their long life and optimum operation.

Xitanium™ Drivers have an operating life matching that of the LEDs.

Features	Benefits
Square housing, compact size (83x77x34 mm)	Provides freedom (flexibility) to designers; Support spatial unobtrusiveness of LEDs.
Meet approbation requirements (UL, CSA, FCC)	It is a hazard free product; It can be installed in practically any location.
DC constant voltage output	It can operate any LED lamp design the customer is developing or already marketing; No binning of LEDs results in cost savings.
Reliability	Drivers last as long as LEDs (≥ 50,000 hrs); 5 years warranty (similar to ballasts).
Power Efficiency	Optimization of the usage of the total system power; Can be fitted into the standard 4" junction box used; Customer pays for the power required and no more (optimized cost of ownership—COO); Power losses (up to 40% of total power) saved by constant current operation mode.

Selection Guide

Part Number	Description
LED120A0012V21F	120V/25W/12V Xitanium LED Driver
LED120A0024V10F	120V/25W/24V Xitanium LED Driver
LED120A0027V09F	120V/25W/27V Xitanium LED Driver
LED120A0024V18F	120V/40W/24V Xitanium LED Driver

Environmental Ratings

Parameter	Symbol	Minimum	Maximum	Units
Operating Ambient Temperature	T_{op}	-40/-40	+60/+140	°C/°F
Storage Ambient Temperature	T_{st}	-40/-40	+80/+176	°C/°F
Case Temperature	T_c	–	+95/+203	°C/°F
Relative Humidity	RH	–	80	%
Lifetime (failures after 50,000 hours)	L_{50K}	–	5	%

Notes:
1. Case temperature should be measured at test point Tc, as marked on driver label.

Electrical Characteristics

Input

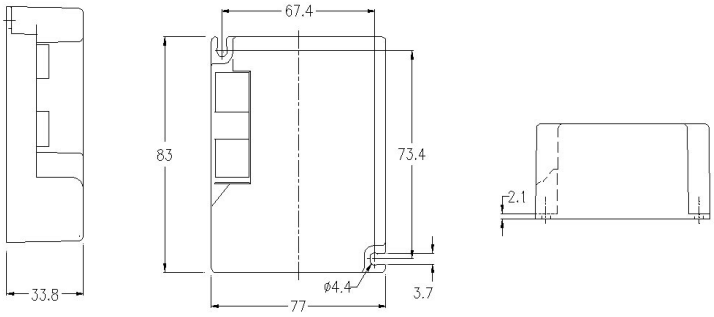
Parameter	Symbol	LED120A0012V21F	LED120A0024V10F	LED120A0027V09F	LED120A0024V18F	Units
Input Voltage Range	V_{in}	108 – 132	108 – 132	108 – 132	108 – 132	V
Frequency	f	60	60	60	60	Hz
Power Consumption Range	P_{in}	2.9 – 31.9	2.9 – 31.9	2.9 – 31.9	4.4 – 51.0	W
Efficiency	–	80% typical	80% typical	80% typical	80% typical	%

Output

Parameter	Symbol	LED120A0012V21F	LED120A0024V10F	LED120A0027V09F	LED120A0024V18F	Units
Power Output Range	P_o	2.3 – 25.5	2.3 – 25.5	2.3 – 25.5	3.5 – 40.8	W
Output Voltage Range	V_o	12.0 (±0.6)	24.0 (±1.2)	27.0 (±1.4)	24.0 (±1.2)	V
Total Harmonic Distortion	THD	20 Maximum	20 Maximum	20 Maximum	20 Maximum	%
Power Factor	P_f	0.9 Minimum	0.9 Minimum	0.9 Minimum	0.9 Minimum	–
Crest Factor LED Current	I_{pk}/I_{avg}	1.5 Maximum	1.5 Maximum	1.5 Maximum	1.5 Maximum	–
Output Current	I_o	0.2 – 2.1	0.1 – 1.05	0.1 – 0.95	0.15 – 1.7	A

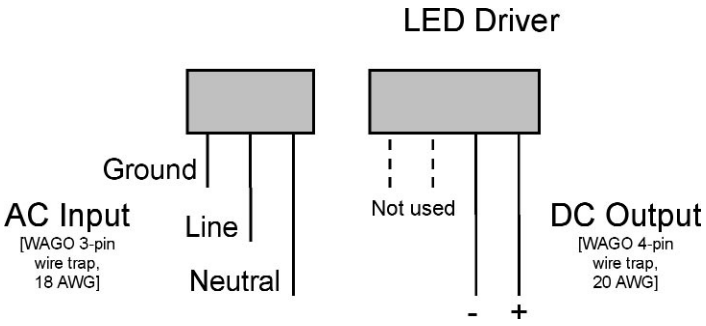
Notes:
1. Electrical characteristics at 25°C ambient temperature.
2. Output insulation 3.25KV, 60 Hz.
3. FCC Class B for conducted EMI, FCC Class A for radiated EMI.

Mechanical Dimensions



Notes:
1. All dimensions are in millimeters.
2. Drawing not to scale.
3. Feature two slots for mounting with M4 or #6 size screws.
4. AC input WAGO 2-pin wire trap, 18AWG. Leads must be solid core or tinned if multi-stranded wire is used.
5. DC output WAGO 4-pin wire trap, 18-20AWG. Leads must be solid core or tinned if multi-stranded wire is used.
6. Housing material Noryl HS2000, UL 94-V0 flame retardant, color black.
7. Driver weight, 140 grams

Driver Wiring Diagram



Part Number Description

LED xxx x xxxx x xx x

LED	LED Driver
xxx	Input Voltage (024, 120, 230)
x	AC or DC Input (A=AC; D=DC)
xxxx	Output Voltage in Volts or Output Current in mA
x	Output Mode (C=constant current; V=constant voltage)
xx	Output Current in tenths of Amps (1/10) or Max Open Circuit Voltage in Volts
x	Output Type (F=Fixed; D=Dimmable; C=use with DC/DC Controller only)

Example: LED 120 A 0012 V 21 F

LED	LED Driver
120	Input Voltage
A	AC Input
0012	Output (in Volts)
V	Constant Voltage
21	Output Current in tenths of Amps (i.e. 2.1 Amps)
F	Fixed Output