



SoliDrive Specification Sheet

Electronic Constant Voltage 0-10V or Non-Dimmable LED Driver

Key Features

- Dim-To-Dark; dims to 0.1% minimum
- Constant Current Reduction (CCR) output dimming method
- Current limiting overload protection
- UL2043 plenum-rated

Specification Overview

- 0-10V dimmable and non-dimmable models
- Universal input voltage, 120 to 277VAC
- Constant Voltage 12, 24, 36 or 48VDC output
- J-Box option has 7/8" (1/2" trade size) knockouts
- IP66 rated for dry or wet location
- UL8750 Class P, Title 24 / JA8
- 5-year warranty

ORDERING INFORMATION

Model		Dimming		Power		Options		Output	
CV									
CV	SoliDrive	N	Non-Dimming	30¹	30W	L	With Junction Box	12	12VDC
		D	0-10V Dimming	50²	50W	R	Flying Leads	24	24VDC
				60¹	60W			36	36VDC
				96³	96W			48	48VDC

¹ 24V & 48V only

² 12V only

³ 24V, 36V & 48V only

ENCLOSURE DETAILS

Dimensions	Material	Finish	Environmental
With J-Box: 12.1" W x 2.4" H x 1.4" D (307mm x 60mm x 36mm)	Aluminum	Powder Coat	IP66, NEMA 3R
With Leads: 7.5" W x 2.4" H x 1.9" D (190mm x 60mm x 36mm)			

120-277V

12V / 24V

36VDC

48VDC

CLASS 2

CLASS P

SELV

TYPE HL

IP66



SPECIFICATIONS

Input	30W	50W	60W	96W
Input Voltage Range	120 to 277VAC ± 10%	120 to 277VAC ± 10%	120 to 277VAC ± 10%	120 to 277VAC ± 10%
Input Frequency	50 / 60Hz	50 / 60Hz	50 / 60Hz	50 / 60Hz
Input Current	0.30A Max (24VDC) 0.30A Max (48VDC)	0.51A Max	0.59A Max	0.96A Max
Inrush Current	5A Max@120VAC 30A Max@277VAC	6A Max@120VAC 30A Max@277VAC	5A Max@120VAC 30A Max@277VAC	5A Max@120VAC 30A Max@277VAC
Efficiency	> 84% Max (24VDC) > 84% Max (48VDC)	> 80% Max	> 84% Max	> 84% Max (24VDC) > 84% Max (36VDC) > 84% Max (48VDC)
Power Factor	> 0.91 (24VDC) > 0.95 (48VDC)	> 0.95	> 0.95	> 0.95
THD	< 20%	< 20%	< 20%	< 20%

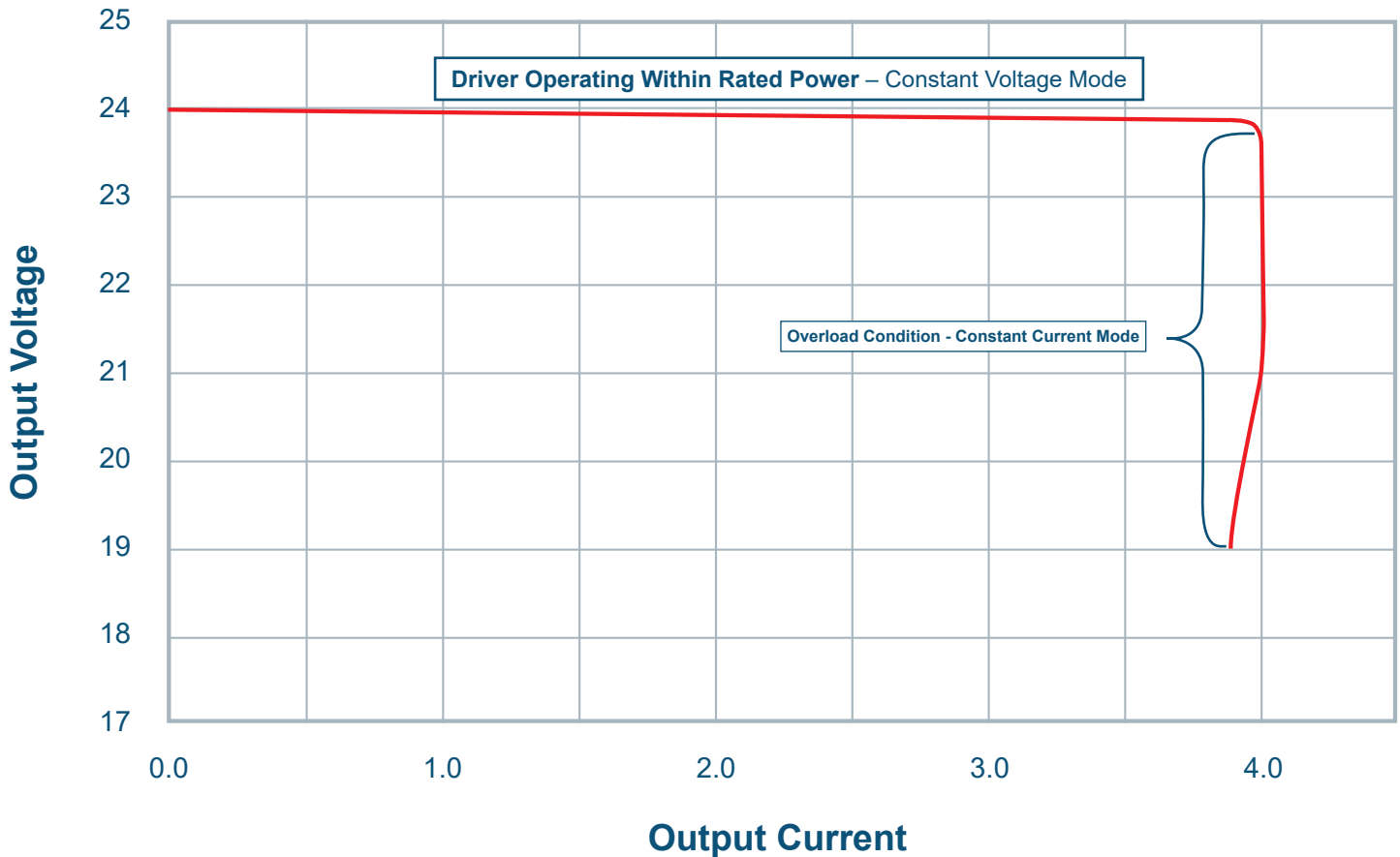
Output	30W	50W	60W	96W
Output Voltage	24VDC / 48VDC	12VDC	24VDC	24VDC / 36VDC / 48VDC
Maximum Load	30W	50W	60W	96W
Minimum Load	5W	5W	5W	5W
Output Current @ Max. Load	1.3A (24VDC) 625mA Max. (48VDC)	4.2A	2.6A	4.1A (24VDC) 2.7A (36VDC) 2.0A (48VDC)
Output Dimming Method	Constant Current Reduction (CCR)	Constant Current Reduction (CCR)	Constant Current Reduction (CCR)	Constant Current Reduction (CCR)
Output Ripple	< 3%	< 3%	< 3%	< 3%
Line Regulation	< 2%	< 2%	< 2%	< 2%
Load Regulation	< 3% (24VDC) < 1% (48VDC)	< 5%	< 3%	< 3% (24VDC) < 3% (36VDC) < 1% (48VDC)
Turn On Delay Time	< 0.3 sec	< 0.3 sec	< 0.3 sec	< 0.3 sec

Environmental	30W	50W	60W	96W
Environmental Protection Rating	IP66	IP66	IP66	IP66
Ambient Operating Temperature	-25°C to +40°C (-13°F to 104°F)	-25°C to +40°C (-13°F to 104°F)	-25°C to +40°C (-13°F to 104°F)	-25°C to +40°C (-13°F to 104°F)
Max. Case Temperature (Tcase)	80°C (176°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)
Storage Temperature	-40°C to +85°C (-40°F to 185°F)	-40°C to +85°C (-40°F to 185°F)	-40°C to +85°C (-40°F to 185°F)	-40°C to +85°C (-40°F to 185°F)
Expected Lifetime	50k hours (> 65°C) Tc	50k hours (> 65°C) Tc	50k hours (> 65°C) Tc	50k hours (> 65°C) Tc
Audible Noise	< 24dB Class A	< 24dB Class A	< 24dB Class A	< 24dB Class A

Dimming (Dimming Models Only)	30W	50W	60W	96W
Dimming Control	0-10V	0-10V	0-10V	0-10V
Minimum Dimming Level	0.1%, Dim-to-Dark	0.1%, Dim-to-Dark	0.1%, Dim-to-Dark	0.1%, Dim-to-Dark
Dimming Curve	Linear	Linear	Linear	Linear
0-10V Current Consumption	0.2mA Max. Source / Sink	0.2mA Max. Source / Sink	0.2mA Max. Source / Sink	0.2mA Max. Source / Sink
Compliance	0-10V Dimming Compliant with ANSI C137.1	0-10V Dimming Compliant with ANSI C137.1	0-10V Dimming Compliant with ANSI C137.1	0-10V Dimming Compliant with ANSI C137.1

Protection	30W	50W	60W	96W
Over Voltage Protection	Yes	Yes	Yes	Yes
Over Temperature Protection	Yes/Hiccup Mode	Yes/Hiccup Mode	Yes/Hiccup Mode	Yes/Hiccup Mode
Overload Protection	Yes/Current Limit	Yes/Current Limit	Yes/Current Limit	Yes/Current Limit
Short Circuit Protection	Yes/Current Limit	Yes/Current Limit	Yes/Current Limit	Yes/Current Limit

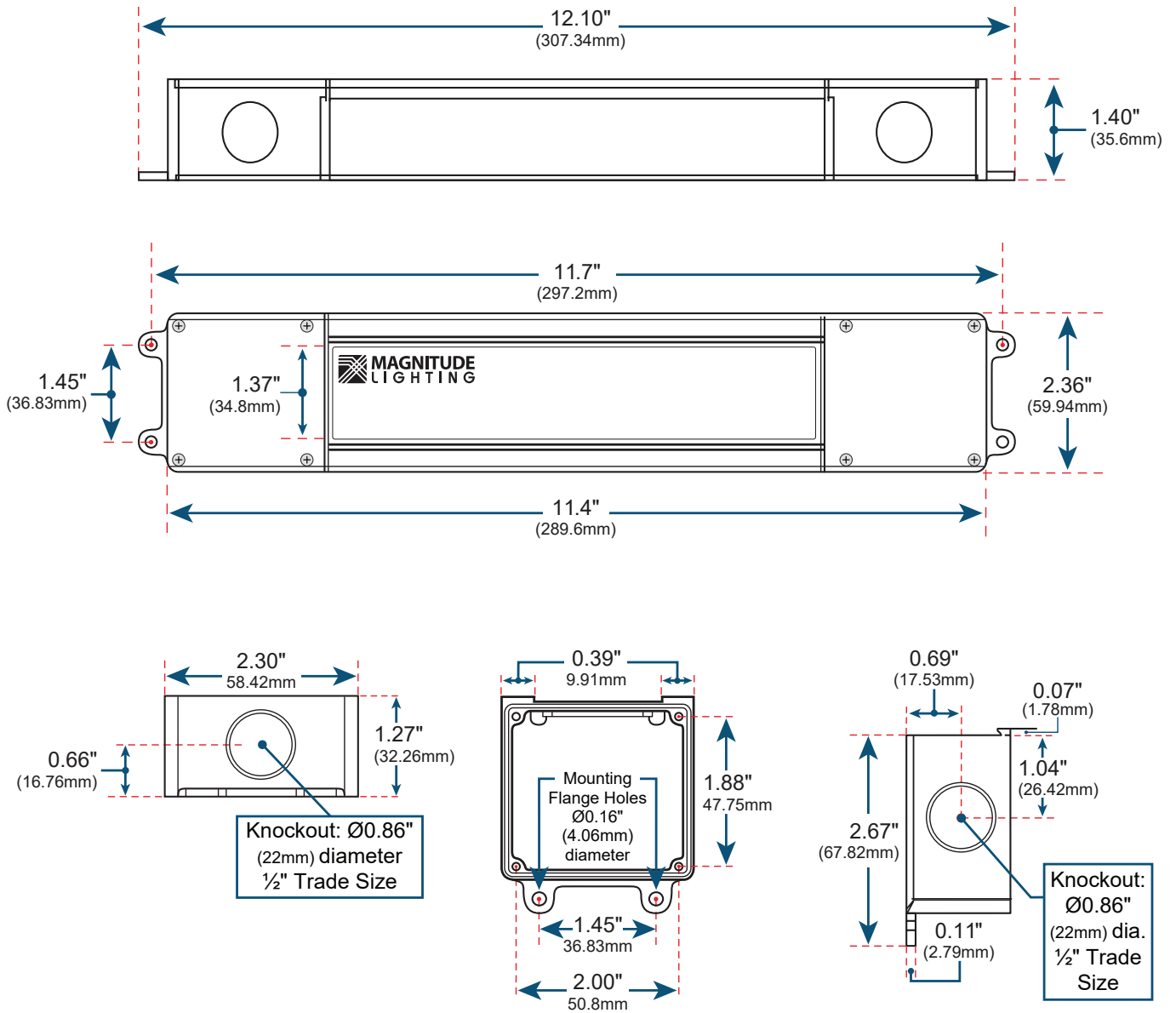
CURRENT LIMITING OVERLOAD PROTECTION



- Using Solidrive, installers and designers can use LED lighting loads that match its full rated power. No derating is required.
- SoliDrive’s constant current overload protection avoids the problem of unwanted flashing or shut down due to the LED driver being at or near its maximum rated output.
- This protection feature makes slight reductions to the output voltage if the LED load draws too much current. It’s the same effect as barely dimming the output to stay at the rated power.
- The driver will not shut down upon an overload condition; no blinking lights and no driver resets.

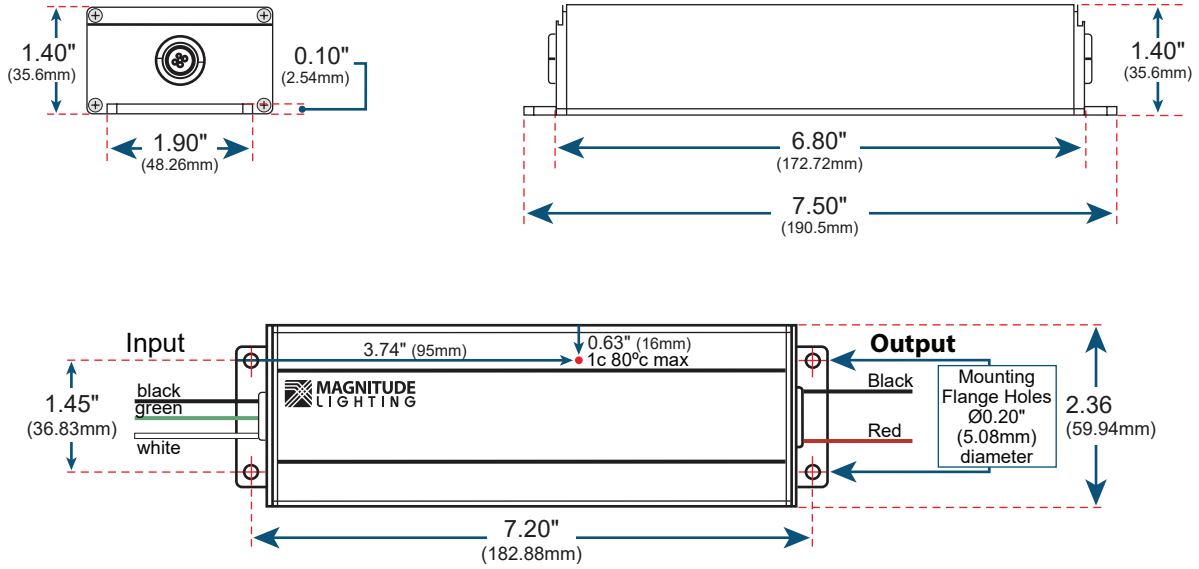
MECHANICAL DIAGRAMS

With Integrated Junction Box



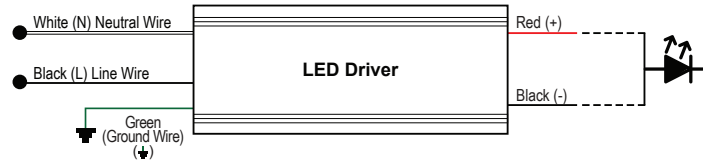
MECHANICAL DIAGRAMS

Without Junction Box



WIRING DIAGRAMS

Non-Dimmable Configuration



Dimmable Configuration

