

# JBZN-SERIES | AFLEX

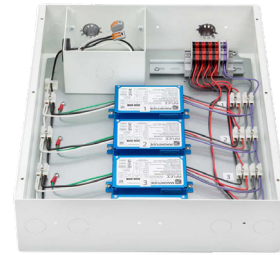
**Constant Current**  
**Programmable Electronic LED Driver**  
**0-10V | Zone Multi-Channel Dimming**

## Specification Sheet

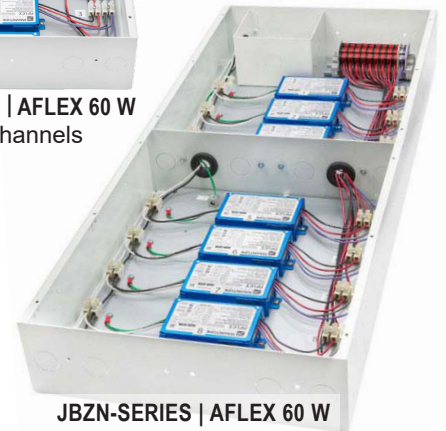
The AFLEX JBZN (Junction Box Zone)-SERIES delivers a zone dimmable multi-channel solution for programmable AFLEX LED drivers, making it the perfect product for multi-output residential and commercial lighting applications. Available in surface or recessed mount, the high-quality metal junction box includes multiple 1<sup>1</sup>/<sub>8</sub>" knockouts and comes pre-wired for quick and easy installation. Constructed with high voltage compartments and utilizes DIN rail terminal blocks to support independent channel outputs.

AFLEX is an electronic Class 2 dimmable LED driver that features current limiting, hiccup mode, over temp protection as well as an efficiency of over 88%, resulting in low operating case temperature. The drivers are dimmable down to 0.1% with 0-10V dimmers.

The AFLEX 60W Compact Series is available in 2 to 8 channel configurations and the AFLEX 100W Linear Series is available in 2 to 7 channel configurations.



**JBZN-SERIES | AFLEX 60 W**  
2 to 4 channels



**JBZN-SERIES | AFLEX 60 W**  
5 to 8 channels

- Installation:** Integrated junction box with multiple 1<sup>1</sup>/<sub>8</sub>" knockouts
- Driver Type:** Class 2 Multi-Channel
- Dimming:** Dimmable down to 0.1% with a 0-10V dimmer
- Dim to Off:** Yes
- Channel Dimming:** Individual zone dimming across all channels
- Input Voltage:** 120VAC-277VAC, 50/60Hz
- Output Voltage:** AFLEX Compact (1400mA) - 10 to 57V  
 AFLEX Linear (1650mA) - 10 to 57V  
 AFLEX Linear (2000mA) - 10 - 50V
- Output Current:** AFLEX Compact (1400mA) - 100 to 1400mA  
 AFLEX Linear (1650mA) - 100 to 1650mA  
 AFLEX Linear (2000mA) - 100 to 2000mA
- Environmental:** Dry
- Listing:** UL Listed, Class P, Class 2
- Certifications:** UL2108 | CSA C22.2 No. 250.0
- Warranty:** 5 year

MEETS  
**TITLE 24/JA8**  
 REQUIREMENTS

RoHS  
 Compliant

UL  
 LISTED

PROGRAMMABLE

DIMMABLE + DIM DOWN TO 0.1%

120 - 277VAC

CLASS 2

CLASS P



**JBZN-SERIES | AFLEX 100W**  
2 to 3 channels



**JBZN-SERIES | AFLEX 100W**  
4 to 7 channels

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### ORDERING GUIDES

#### JBZN-SERIES | AFLEX 60W / Channel

Type	No. of Channels	Max Power Per Channel	Output Current	Case Type	Dimming Curve	Voltage Range	Mounting	Finish
JBZN - JB Zone-Series	2 — 2 channel 3 — 3 channel 4 — 4 channel 5 — 5 channel 6 — 6 channel 7 — 7 channel 8 — 8 channel	60 — 60W*	100 - 1400mA (10 - 57 VDC)	S — Side Feed Compact	G — Logarithmic L — Linear	N/A	R — Recessed S — Surface	W — White

\*Consult factory for availability of other wattages

#### JBZN-SERIES | AFLEX 100W / Channel

Type	No. of Channels	Max Power Per Channel	Output Current	Case Type	Dimming Curve	Voltage Range	Mounting	Finish
JBZN - JB Zone-Series	2 — 2 channel 3 — 3 channel 4 — 4 channel 5 — 5 channel 6 — 6 channel 7 — 7 channel	100 — 100W*	100 - 1650mA (10 - 57 VDC) 100 - 2000mA (10 - 50 VDC)	L — Linear	G — Logarithmic L — Linear	G — 3 - 57VDC (up to 1650mA) D — 3 - 50VDC (up to 2000mA)	R — Recessed S — Surface	W — White

\*Consult factory for availability of other wattages

### SPECIFICATIONS

#### INPUT

Input Voltage Range	Universal 120 - 277VAC ± 10%
Input Frequency	50 / 60Hz
Input Current	0.29A - 0.6A @ 120VAC / 0.15A - 0.25A @ 277VAC* (Per Channel)
Inrush Current	38A Max
Efficiency	>88%
Power Factor	0.991 - 0.992 @ 120VAC / 0.90 - 0.95 @ 277VAC (Refer to graph on page 5*) *Depending on model

#### OUTPUT (Per Channel) - 2 to 8 Channel

Output Voltage Range	10 - 57VDC (100W Linear version: 50VDC max. @ 2000mA)
Output Current Range	60W: 100-1400mA; 100W: 100-1650mA (100W Linear version: 2000mA max available)
Current Range Increment	1mA step programmable
Output Current Tolerance	± 5%
Output Current Ripple	± 5% @ Max Load
Line Regulation	± 5%
Load Regulation	± 5%
Turn On Delay Time	0.4 sec @ Max Load
Stand-by Power	>1W

#### TERMINAL BLOCKS (All Input and Output)

Wire Gauge Range	20 AWG to 16 AWG
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### SPECIFICATIONS, *Continued*

#### ENVIRONMENTAL

<b>Environmental Protection Rating</b>	Dry
<b>Surge Protection</b>	2.5kV
<b>Operating Ambient Temperature</b>	-40°C to +60°C
<b>Operating Temperature</b>	-40°C to +75°C
<b>Storage Temperature</b>	-40°C to +85°C
<b>Expected Lifetime</b>	50k hours at 75°C
<b>Audible Noise</b>	<24dB Class A
<b>Withstanding Voltage</b>	2.5kV

#### DIMMING

<b>Dimming Control</b>	0-10V
<b>Dimming Input Range</b>	-2 to +15V
<b>Dimming Curves</b>	Linear / Logarithmic (Programmable)
<b>Minimum Dimming Level</b>	Dim down to 0.1%
<b>Dim-to-Off</b>	Yes (Programmable)
<b>Current Consumption</b>	0.35A / Source (Per Channel)

#### LED THERMAL PROTECTION (NTC)

<b>NTC Value (Manufacture: Vishay)</b>	15 k $\Omega$ $\pm$ 5% @ 25°C P/N: NTCS0805E3153JMT
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#### PROTECTION

<b>Over Current Protection</b>	Current Limiting
<b>Short Circuit Protection</b>	Hiccup Mode
<b>Over Voltage Protection</b>	Hiccup Mode
<b>Over Temperature Protection</b>	Power Derating
<b>Mis-wiring Protection</b>	Auto Shutdown

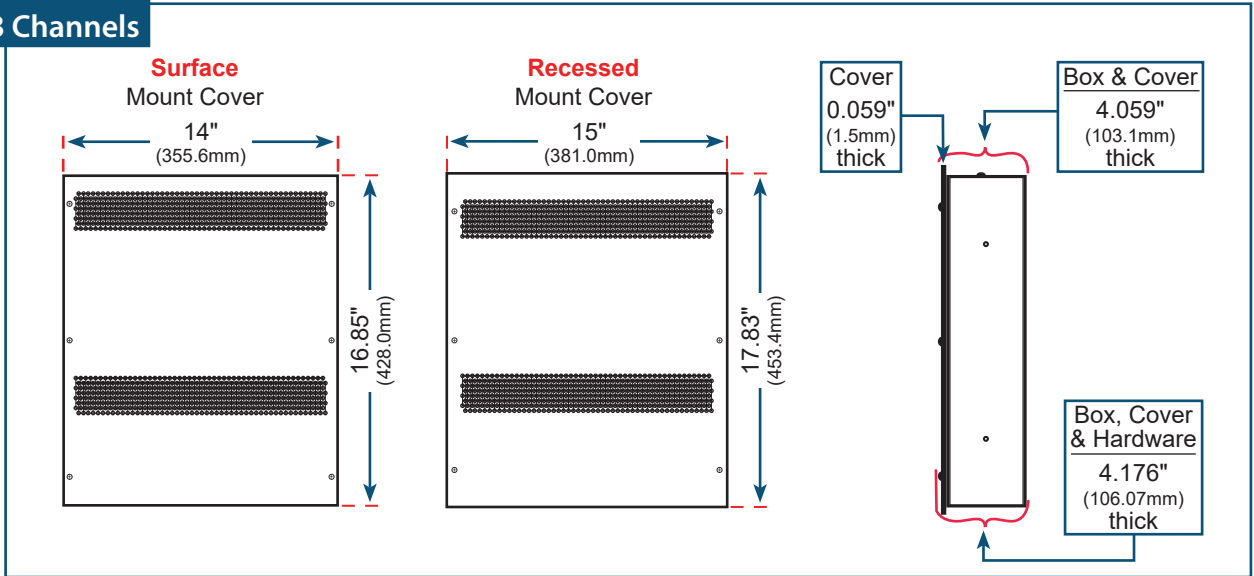
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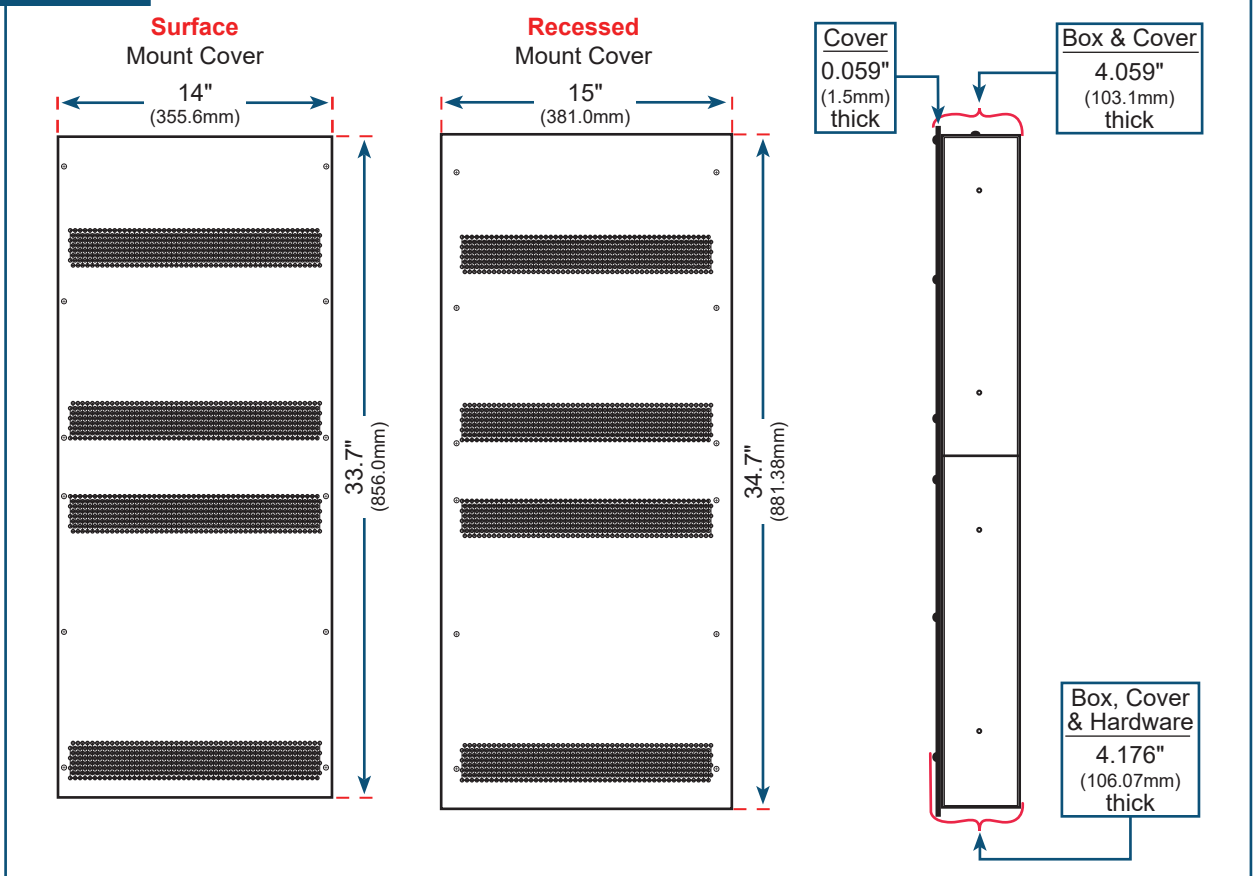
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### MECHANICAL DIAGRAMS

60W: 2 to 4 Channels  
100W: 2 to 3 Channels



60W: 5 to 8 Channels  
100W: 4 to 7 Channels

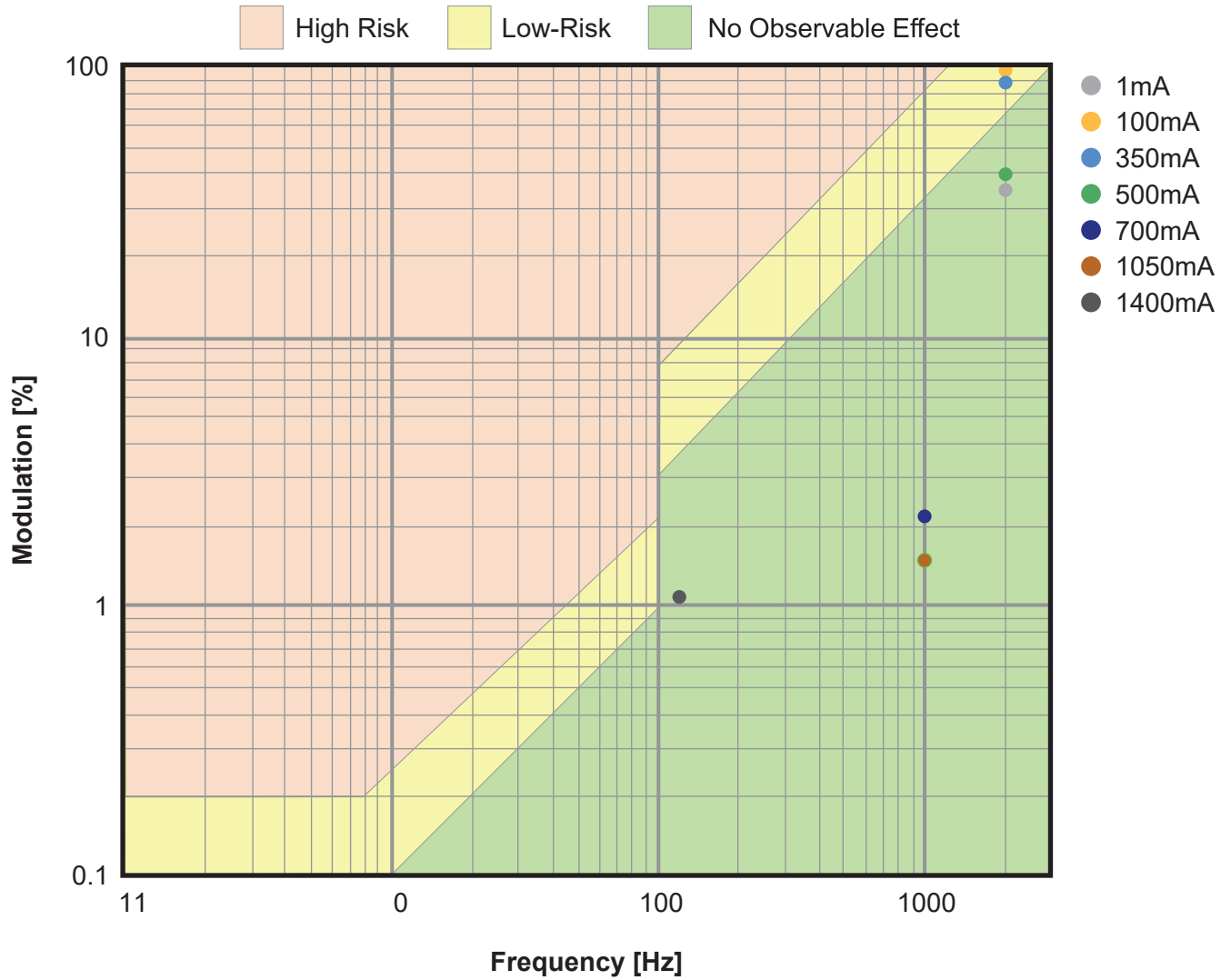


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### The IEEE P1789 Flicker Test Performance Results

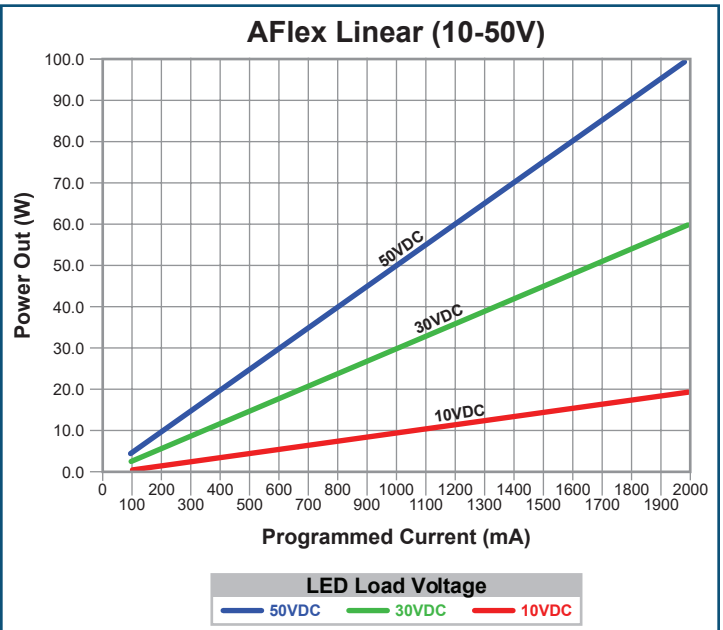
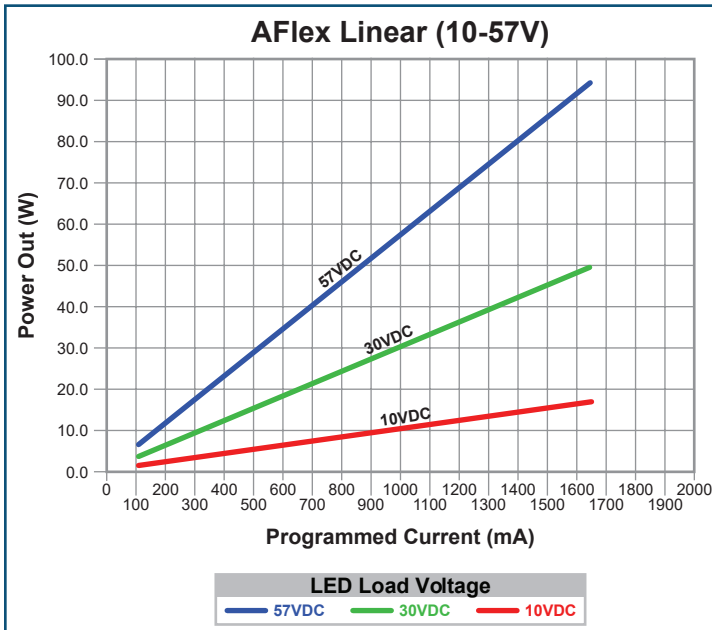
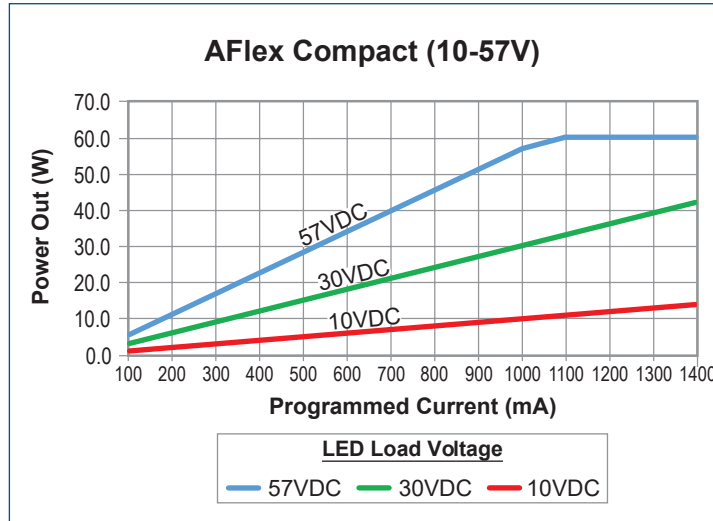


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### OPERATING POWER OUTPUT

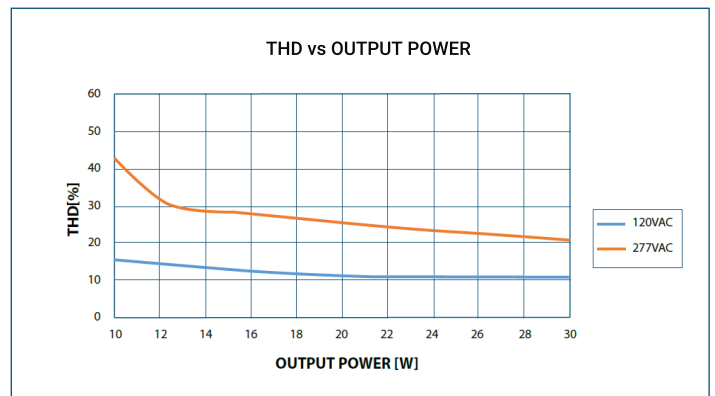
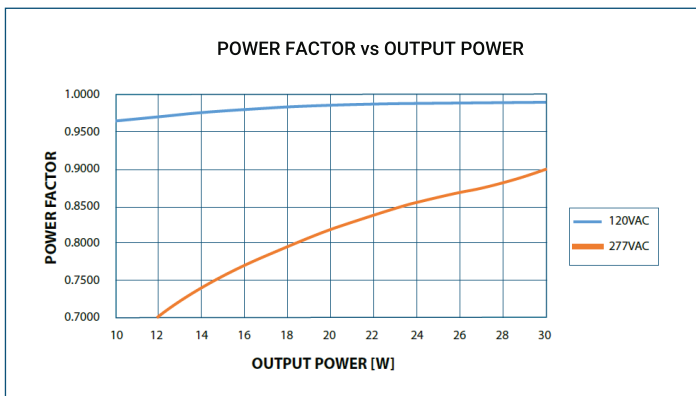
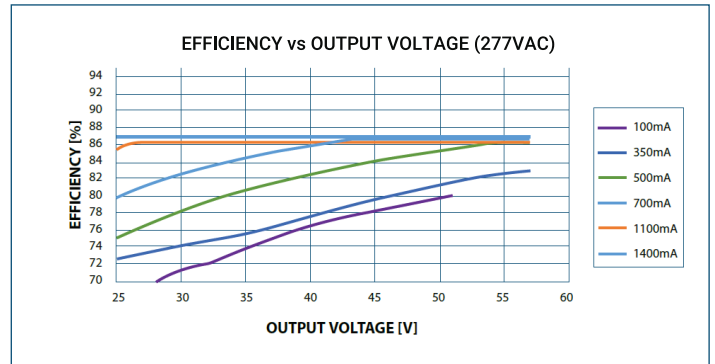
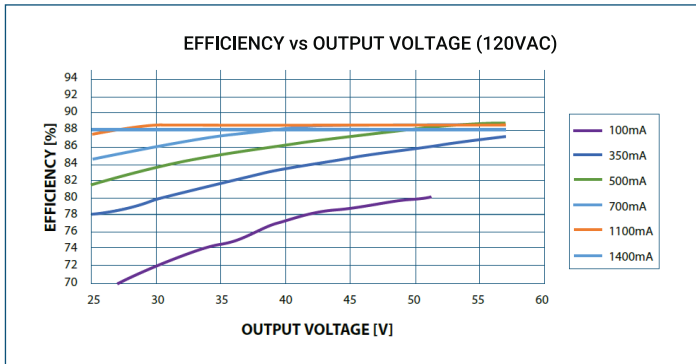
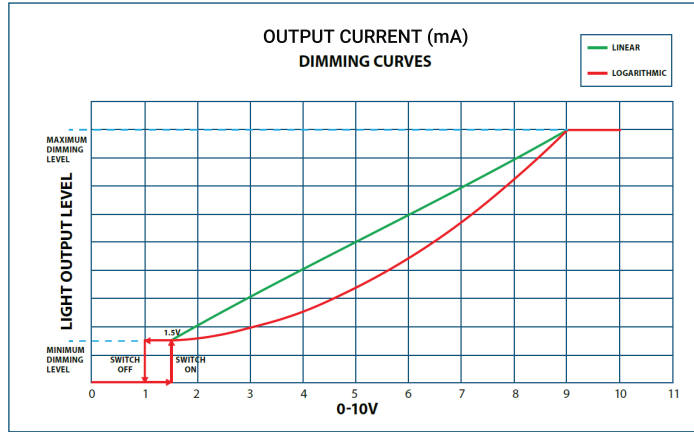


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### PER CHANNEL



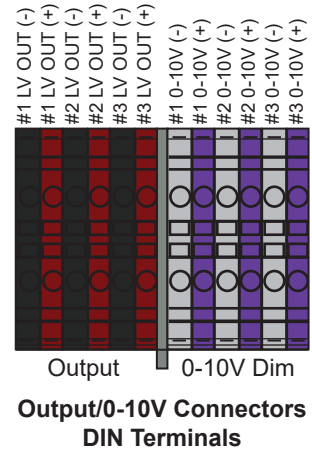
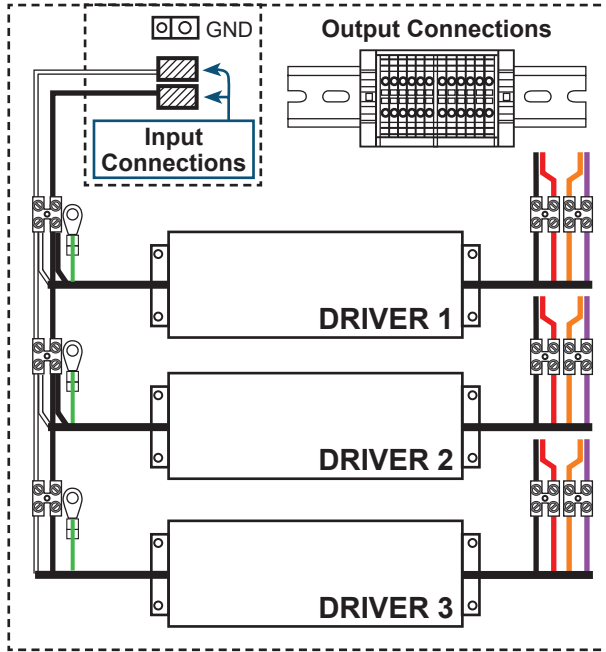
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### WIRING DIAGRAM

60W: 2 to 4 Channels  
100W: 2 to 3 Channels



Note: Wiring diagram typical for 2 and 4 channel versions. Fits 26 to 12 gauge wire.



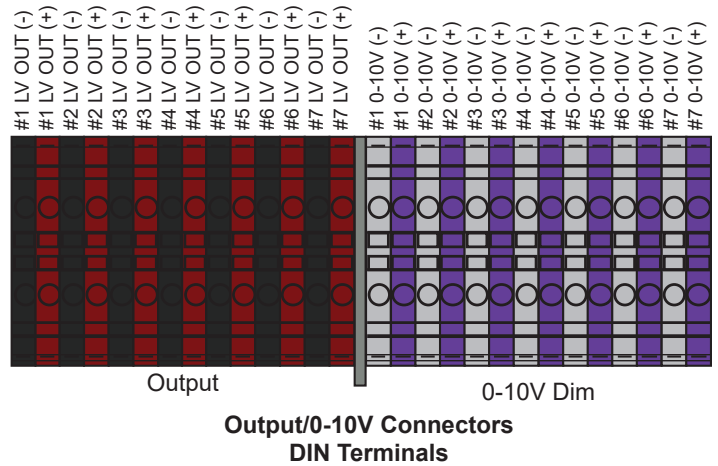
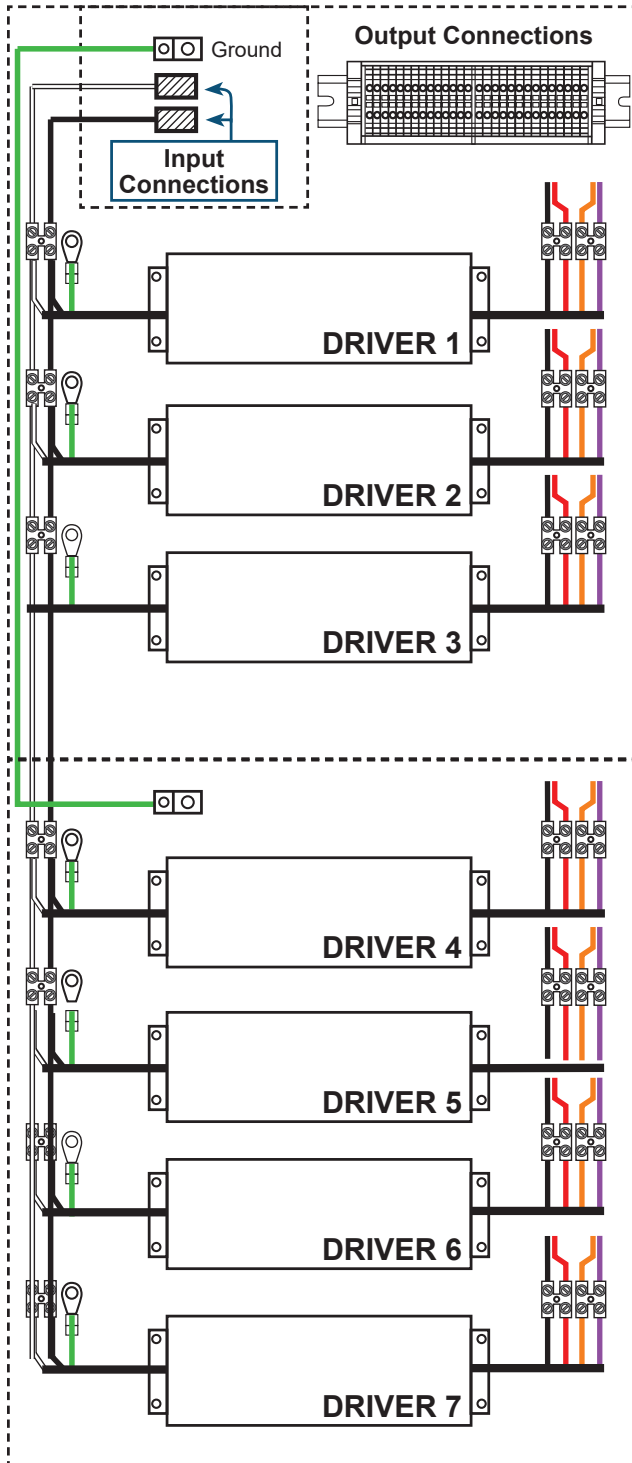
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### WIRING DIAGRAM

60W: 5 to 8 Channels  
 100W: 4 to 7 Channels



Note: Wiring diagram typical for 5 to 8 channel versions.  
 Fits 26 to 12 gauge wire.