



S027W-038C1000-R01-UN-DA1

27W Programmable Driver

select **SYNC**
Intelligent

Electrical Specifications

Maximum Power:	27W
Typical Efficiency:	83%
Input Voltage Range:	108-305 Vac
Frequency:	47/63 Hz
Power Factor:	>0.90 @ >75% Output Load
Inrush Current:	15A @ 120V 143ms@50% Ipk 35A @ 277V 157ms@50% Ipk
Input Current (Max):	1.45A @ 120Vac 0.6A @ 277Vac
Output Dimming Range	10-100%
Load Regulation:	±5%
Line Regulation:	±5%
THD:	<20%
Start Up Delay Time:	<1,000ms @ 100% load
Output Ripple Current:	<10% Io

Protections

Over-voltage:	Auto Recovery
Over-current:	Auto recovery
Short Circuit:	Latch-off
Over-temperature:	Reduce Output To 10% @ Tc ≥ 100°C Tc

Environmental Specifications

Max Case Life Temp: (5 year warranty)	80°C
Maximum Case Temp:	80°C
Minimum Starting Temp:	-40°C
Storage Temperature:	-40°C to +85°C
Humidity:	10% to 90%
Cooling:	Convection
Vibration Frequency:	10-150 Hz/1.5g
Sound Rating:	Class A (Energy Star)
Weight:	21 oz (600g)

- Multiple Dimming Control Types: 1-10V, DALI, Schedule
- Dim-to-off mode (DALI)
- Programming Functions:
 - Programmable Output Current (POC),
 - Lumen Output Compensation (LOC),
 - Constant Power Control (CPC),
 - Temperature Protection Control (TPC)
- Programs with TRP Configurator and Wired Programming Module
- Programming doesn't require power to the driver
- Metal case, fully potted
- 5 year warranty*



Part	Model	Adj. Current Out (mA ±5%)	Voltage Out (Vdc)	Max Power (W)	Wire Entry
93057523	S027W-038C1000-R01-UN-DA1	200-1000	10-38	27	Ends

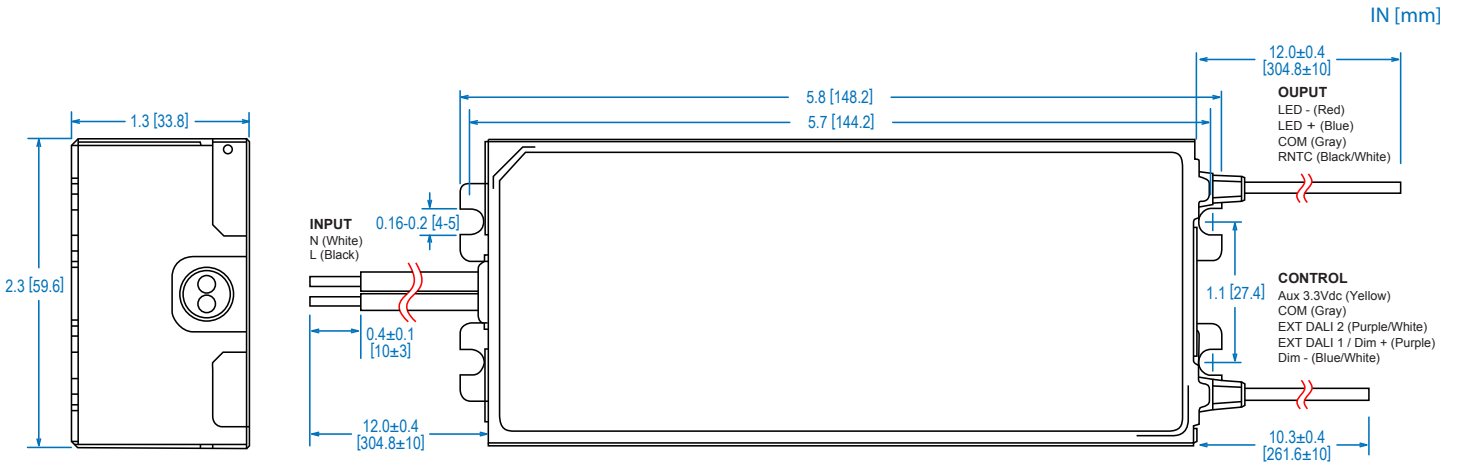
Class 2: US/Canada

Safety Cert.	Standard
UL/CUL	UL8750, UL1012
EMC Standard	Notes
FCC Part 15	Class B

* For extended warranty options beyond 5 yrs., contact factory.



Dimensions



Case must be grounded in end-use application.

WIRE SPECS:
Control Leads: UL1569, 20AWG, 10.3", 600V, 105°C
Input & Output Leads: UL1569, 18AWG, 12", 600V, 105°C.
Stranded Copper Wire
All stripped leads are copper dipped.

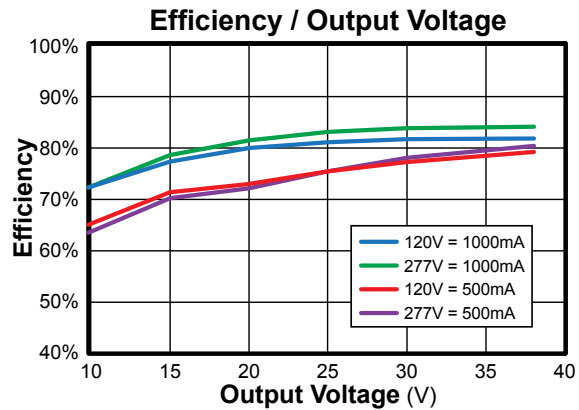
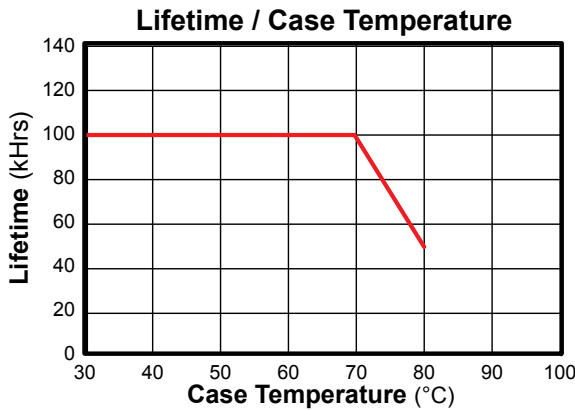
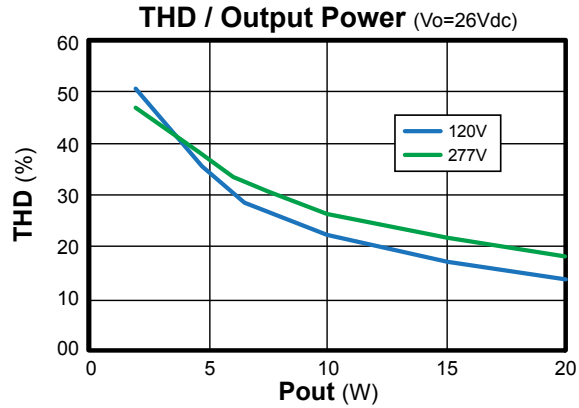
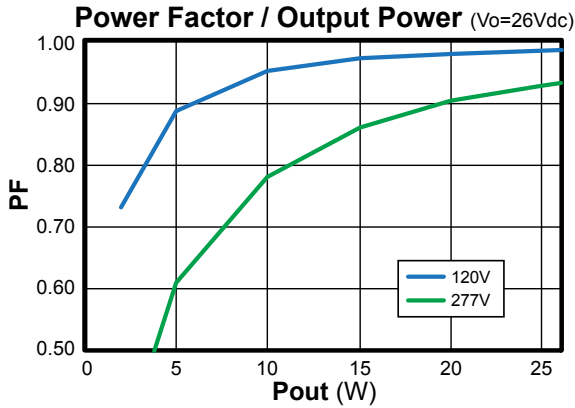
Remote Mounting:
Output Wires Max Distance 10m
Control Wires Max Distance 0.5m
For connector options contact factory.

Parameter Defaults

Parameter	Default Setting	Setting Range	Increment
Output Current (mA)	1000	200 - 1000	1
Enable Analog Dimming	No	Yes or No	
DALI Dimming Curve	Logarithmic	Linear or Logarithmic	
0-10V Minimum Level (%)	10	10 - 100	1
Enable NTC	No	Yes or No	
NTC-Derating Temperature Start (°C)	50	50 - 85	1
NTC-Derating Temperature Stop (°C)	70	55 - 95	1
NTC-Max Temperature (°C)	100	60 - 105	1
NTC-Minimum Derating Level (%)	90	10 - 90	1
Enable DALI Interface	Yes	Yes or No	

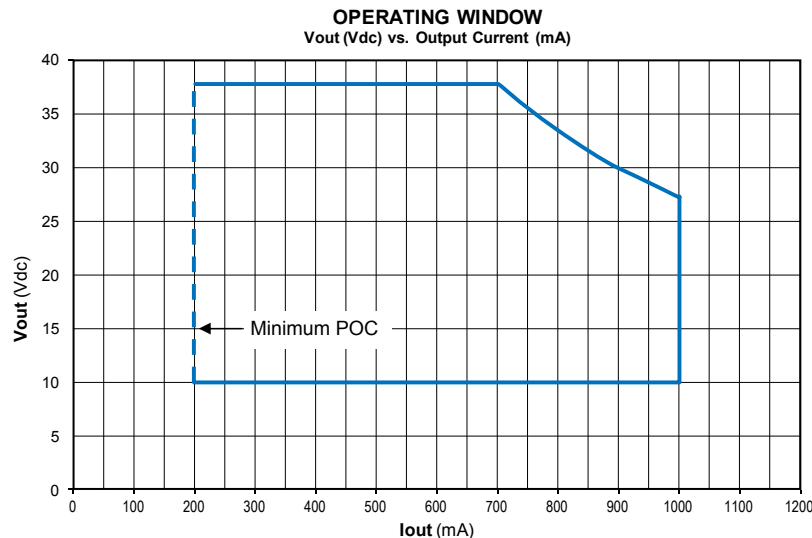


Power Characteristics



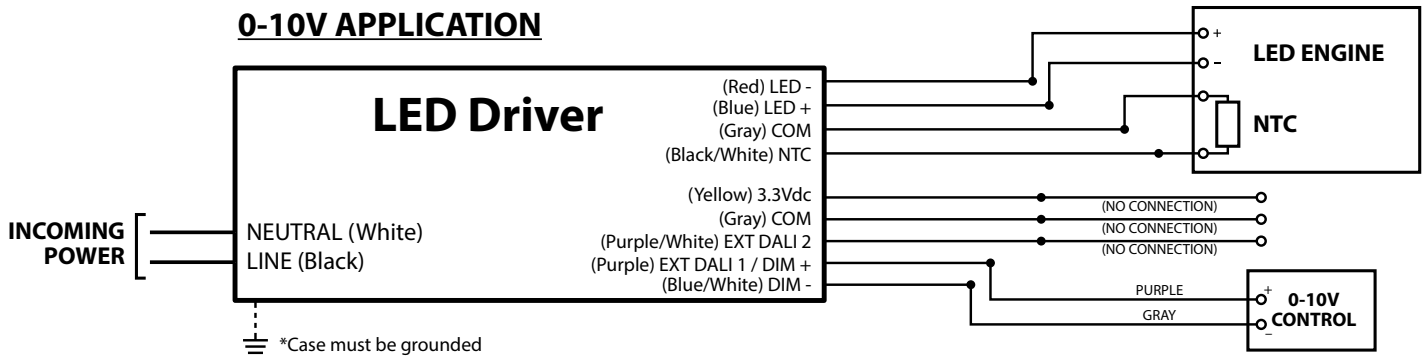
Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

Power Operating Window

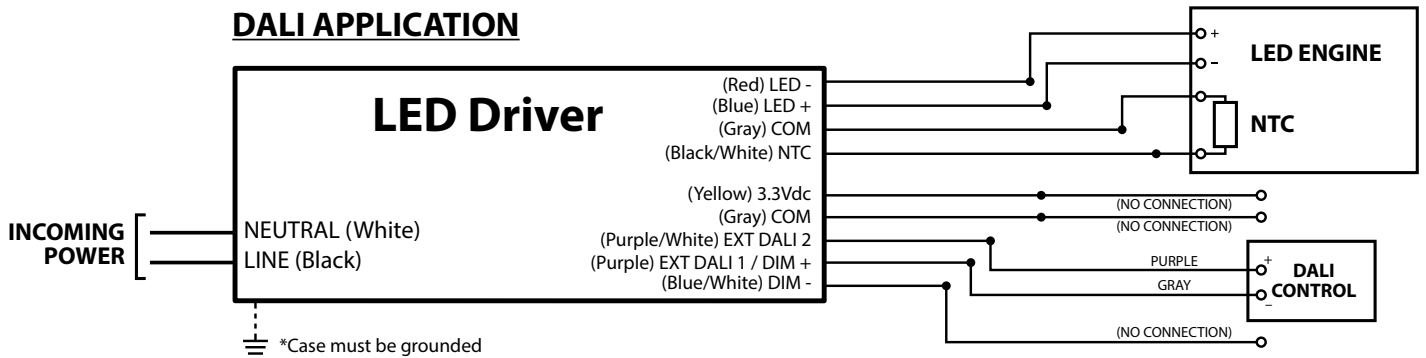


Wiring

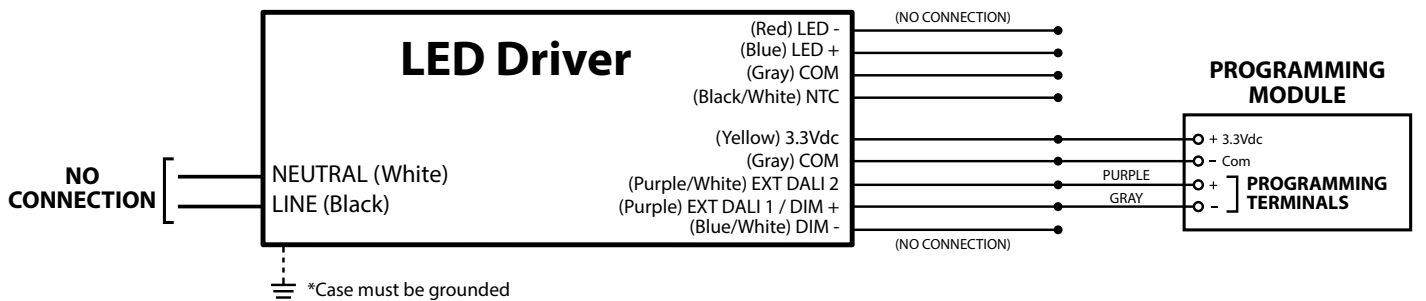
0-10V APPLICATION



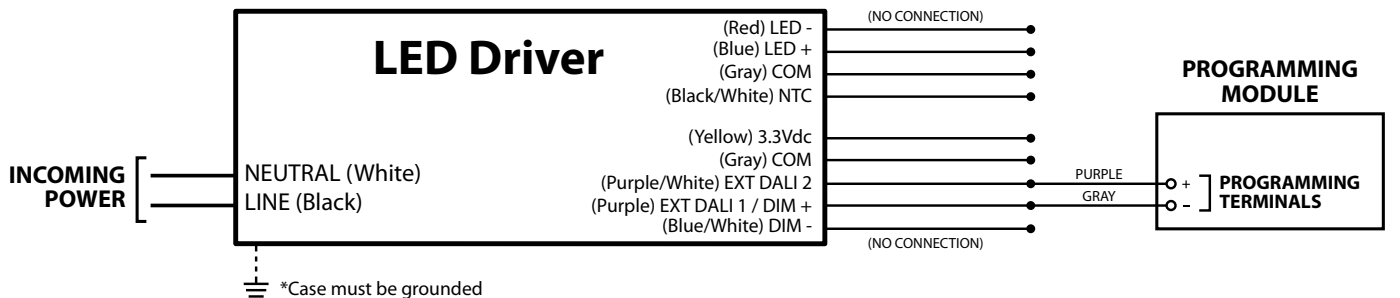
DALI APPLICATION



PROGRAMMING MODE #1



PROGRAMMING MODE #2



Programming Guide

Dimming Interface

Parameters	Min	Max	Notes
DALI	0% (Off)	100%	IEC 62386-102-207(Ed1.0)
1-10V	10%	100%	Input range: 1-8V
Schedule Dimming	10%	100%	Up to 5 steps. Min step: 1%

Temperature Protection Control (TPC)

Parameters	Min	Max	Notes
T start	50°C	85°C	Temperature @ Dim start
T stop	55°C	95°C	Temperature @ Dim stop
T max	60°C	105°C	Temperature @ Dim off
TPC tolerance	-3°C	3°C	Temperature @ TPC range
Protection Dim Level	10%	90%	Dim Level @ T stop

Lumen Output Compensation (LOC)

Parameters	Min	Max	Notes
Working Hours (Max 16 steps)	0 kHrs	127.5 kHrs	Min step: 500 hrs.
Dim Level (Max 16 steps)	10%	130%	Min step: 1%
Operating Time Accuracy	-4%	4%	

Schedule Dimmer

Parameters	Min	Max	Notes
Dimming Schedule	1min	5min	Min step: 1min
Dim Level	10%	100%	Min step: 1%
Override Hold Time	0	60min	Min step: 1min
Midnight Shift	-120min	120min	Min step: 1min

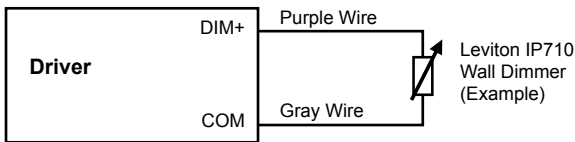
Labeling Programmable Drivers

It is highly recommended that the drivers be labeled with information traceable to the programmed current and feature configuration. **This information is critical to answering any field questions from the contractor or end user.**

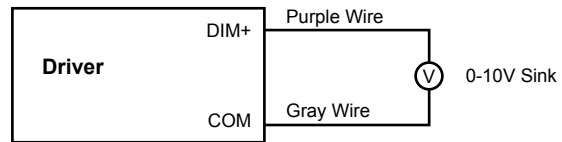
Dimming: 0-10Vdc

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0 mA	---	1.5 mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0 V	---	+15 V

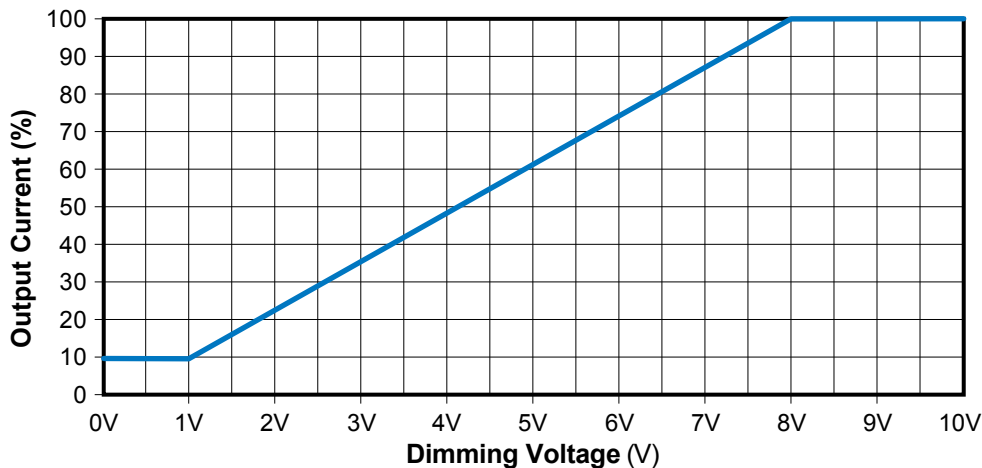
Typical Dimming Circuit: 2-Wire Resistance



Typical Dimming Circuit: 2-Wire 0-10V Analog



Output Current / Dimming Voltage



0-10V Dimming Notes:

1. Part comes with two dimming input connectors +Purple/-Gray on the output side.
2. Part is compatible with most 0-10V Wall Slide dimmers and 0-10V dimming.
3. Output current will be 10% when $V_{dim} \leq 1.0V$.
4. Output will be 100% with Purple/Gray open and 10% with Purple/Gray Shorted.