Thomas Research Products

Rev 3-3-2017

S050W-054C1400-L03-UN-D2

50W Programmable Driver

selectSYNC intelligent

Electrical Specifications

Maximum Power:	50W
Typical Efficiency:	87%
Input Voltage Range:	120-277 Vac ± 10%
Frequency:	50/60 Hz
Power Factor:	> 0.90 @ 80-100% load, 120-277Vac
Inrush Current:	TBD
Input Current (Max):	0.6A @ 120Vac, TBD @ 277Vac
Output Dimming Range:	1-100%
Load Regulation:	TBD
Line Regulation:	TBD
THD:	<20% @ 80-100% load, 120-277Vac
Start Up Time	<1,000ms @ 100% load
Output Ripple Current:	5% Io

Protections

Over-voltage:	Latch-off
Over-current:	Auto recovery
Short Circuit:	Auto recovery
Over-temperature:	TBD

Environmental Specifications

Maximum Case Temp:	80ºC
Minimum Starting Temp:	-30ºC
Storage Temperature:	-30ºC to +85 ºC
Humidity:	10% to 90%
Cooling:	TBD
Vibration Frequency:	TBD
Sound Rating:	TBD
Lifetime:	50,000 Hours @ 75ºC case temp *(see graph for details)*
Weight:	TBD

NFC · cULus CLASS P · CE · FC · RoHS COMPLIANT · IP20

- Constant Current, Dimmable
- Programmable Output Current (POC): 400mA to 1400mA
- Dim-to-off mode
- Flicker-free output
- Auxiliary output: 12Vdc, 100mA max
- 0-10V dimming, down to 1% at max output current
- UL Dry & Damp Location Rated, Class 2 output
- Class P
- NFC Programming with app for flexible and precise tuning
- Narrow cross-section fits T5-style ballast channels
- Metal housing
- 5 year warranty*

Part	Model	Adj. Current Out *(mA ±5%)*	Voltage Out *(Vdc)*	Max Power *(W)*	Wire Entry
93057525	S050W-054C1400-L03-UN-D2	400-1400	10-54	50	Ends

Factory Default = **mA** **Class 2: US/Canada**

Safety Cert.	Standard
UL/CUL	UL8750, UL1310 for UL Class 2 & CAN/CSA C22.2 No. 250.13, UL Class P
CE	EN61347-1, EN61347-2-13
EMC Standard	**Notes**
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (Consumer Limit)
EN 61000-3-2	Harmonic Current Emissions Class C
EN 61000-4-5	Part 4-5: Surge Immunity test, 2 kV L-N, 4 kV L-FG & N-FG

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

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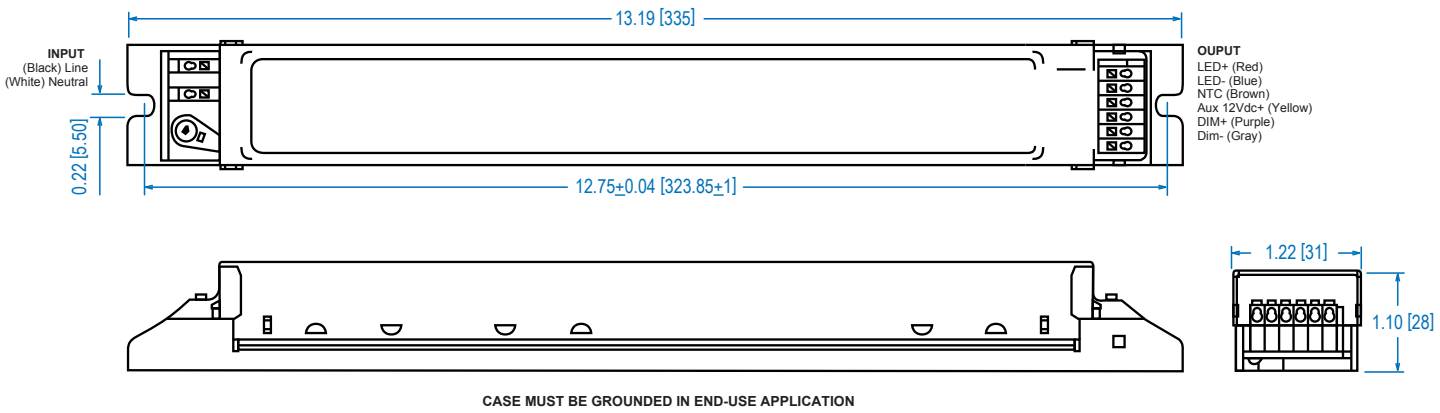
HUBBELL

Dimensions

IN [mm]

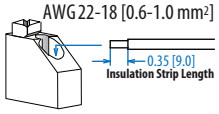


CASE MUST BE GROUNDED IN END-USE APPLICATION

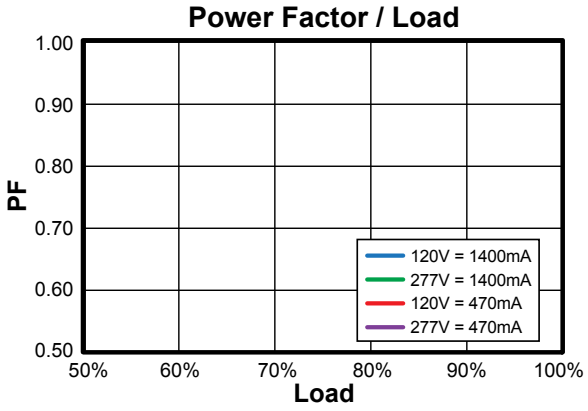
Remote Mounting:
Max Distance 26ft. using #18 AWG

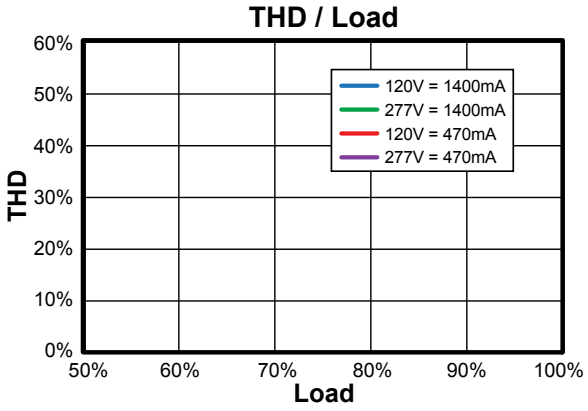
PUSH IN CONNECTORS

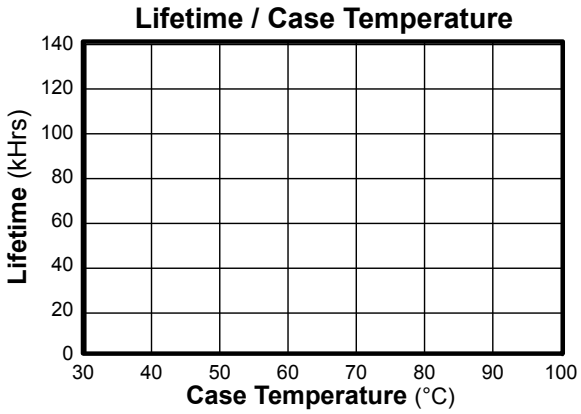
Wire Gauge: Solid Copper
AWG 22-18 [0.6-1.0 mm²]

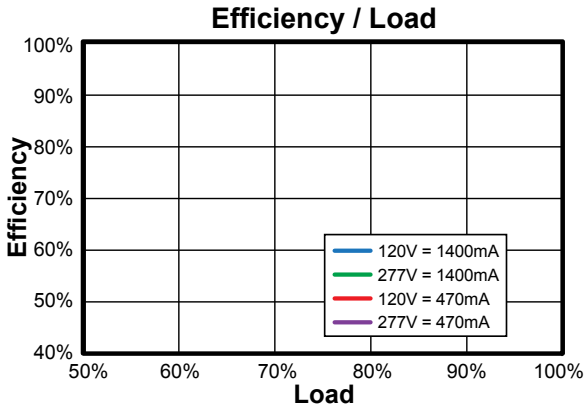


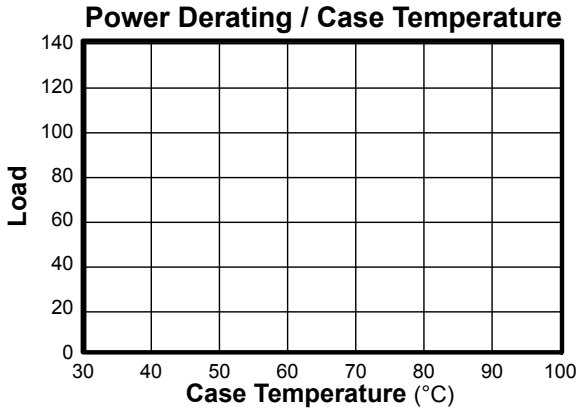
Power Characteristics





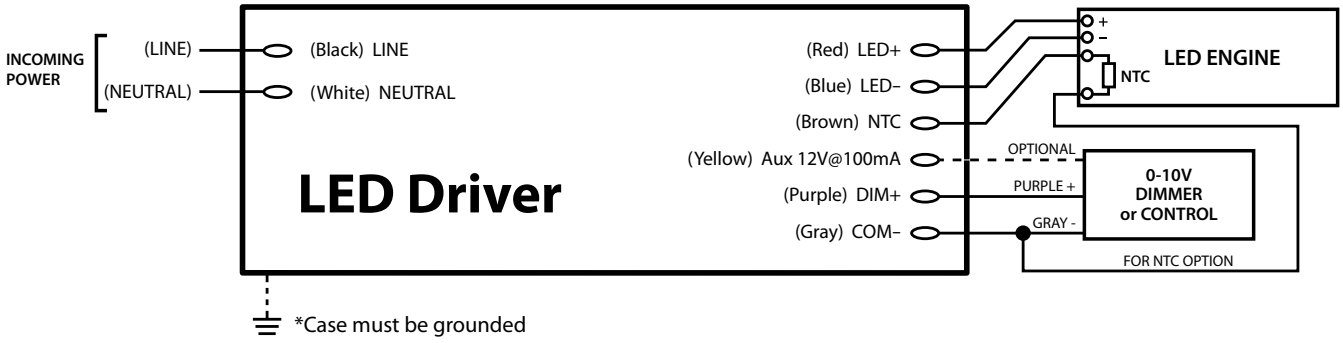




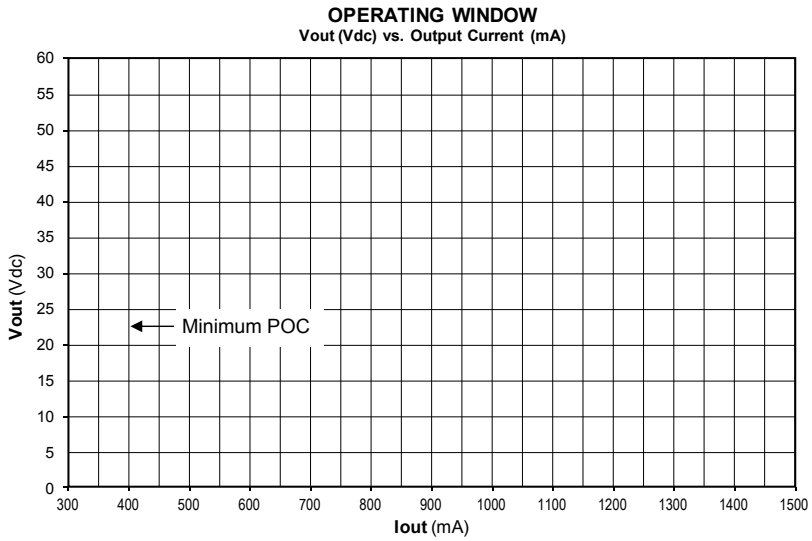


Note: *The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances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

Wiring



Power Operating Window



Programming Guide

Lumen Output Compensation (LOC)

Parameters	Min	Max	Notes
Working Hours (Max 16 steps)	0 Hr	127.5 kHrs	± 4%, Min step: 500 hrs.
Dim Level (Max 16 steps)	10%	130%	Min step: 1%

Dimming Interface

Parameters	Min	Max	Notes
1-10V	1%	100%	Min step: 1%
Schedule Dimming	Off/5% If Set On	100%	Min step: 1%

Temperature Protection Control (TPC) - *Use with external NTC Resistor*

Parameters	Min	Max	Notes
T start	50ºC	85ºC	Min step: 1ºC , Temp. @ Dim start
T stop	55ºC	95ºC	Min step: 1ºC , Temp. @ Dim stop
T max	60ºC	105ºC	Min step: 1ºC , Temp. @ Dim off
TPC tolerance	-3ºC	3ºC	Tolerance @ Tstart, Tstop, Tmax
Protection Dim Level	10%	90%	Min step: 1% , Dim Level @ T stop

***Note:** External TPC is settable based on NCP18XH103 or equivalent thermistor (10kΩ at 25ºC).*

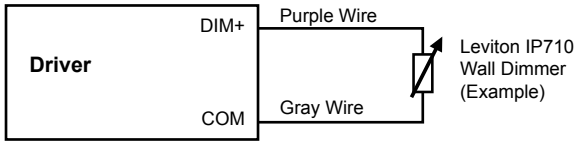
Labeling Programmable Drivers

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.

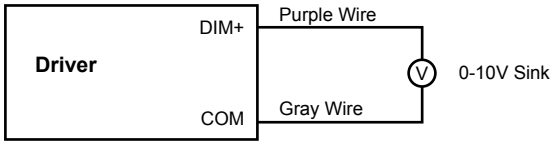
Dimming: 0-10Vdc

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

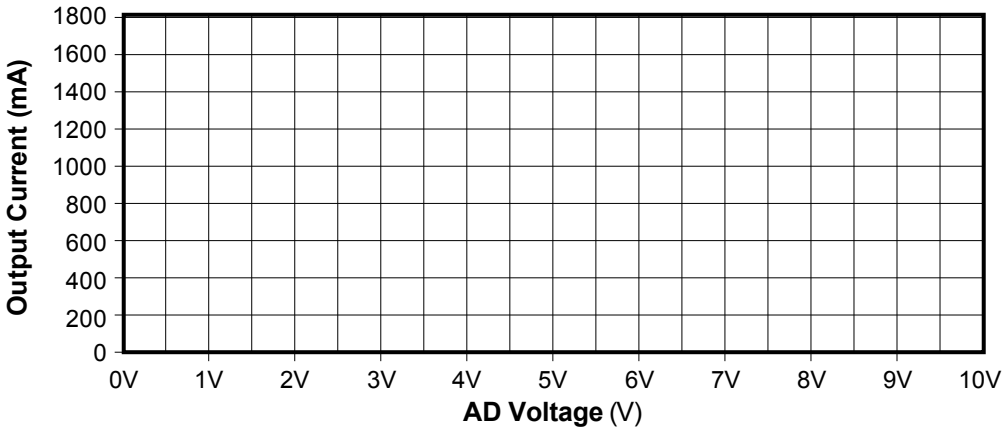
Typical Dimming Circuit: 2-Wire Resistance



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



Operating Current Behavior by AD 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 Vdim ≤0.60V.
4. Output will be 100% with Purple/Gray open and 10% with Purple/Gray Shorted.