

THCC-1M1UNV240P-85E



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COMPLIANT

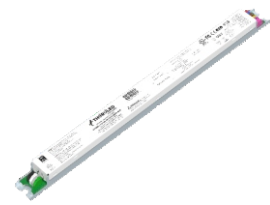


Constant Current LED Driver

- 120~277VAC(NA), 220-240VAC(EU), 50/60Hz
- cULus Listed, Class P, CE
- Programmable: 700mA - 2400mA
- 0-10V dimmable from 100%-1%, Dim to off (only applicable in North America)
- 12V, 200mA AUX Output
- Linear Form Factor with Connectors
- Flicker Free (<5%)
- NTC

General Specifications

Input Voltage / Frequency	120~277VAC(NA), 220-240VAC(EU) 50/60Hz
Input Current	0.9A Max (NA), 0.5A Max(EU)
Input Power	100 W Max
Input Power Factor	>0.9
THD	<20%
Driver Type	Constant Current
Output Voltage	10-55VDC
Output Current	700-2400mA
Default Output Current	2100mA
Output Power	85W Max
Efficiency	89%
Output Type	LED Class 2
Inrush Current	84.7A@277Vac
Line Regulation / Load Regulation	Line Regulation +/-5%, Load Regulation +/-5%
Flicker Percentage	<5%
Dimming Type	0-10V
Dimming Range	100%-1%, Dim-to-off disabled by default (dim-to-off only applicable in North America and can be enabled using the TPSB-100 or SmartSet Software)
Operating Ambient Temperature Range	-40°C to 55°C (-40°F to 131°F)
Max. Driver Case Tc Temperature (Per UL)	90°C (194°F)
Start Up Time	<500ms
Number of Output Channels	1
Overall Size	16.69" x 1.18" x 1.02"(424mm X 30mm X 26mm)
Wire Type / Length	N/A
Safety / Compliance	UL8750, CSA-C22.2 No.250.13, IEC/EN 61347-1, IEC/EN61347-2-13
IP Rating	IP20, Suitable for Dry and Damp locations
Withstand Voltage	Input to Output: 3750 Vac. Output to Dim: 2000Vac
EMC	FCC 47 CFR Part 15 Class A EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6; EN61547
Operating Humidity	Max 85% RH
Input Surge Protection	Input Surge Line-Neutral 2.5KV, Line & Neutral-Ground 2.5KV Ring Wave
Protections	Output Over Current (OCP) Output Temperature Protection (OTP) Output Over Voltage (OVP)
Hot Swappable	No
Service Life	50,000 hours lifetime @ Tc 85°C (185°F)
Warranty	5 Years @ Tc 85°C (185°F) from the date of manufacture



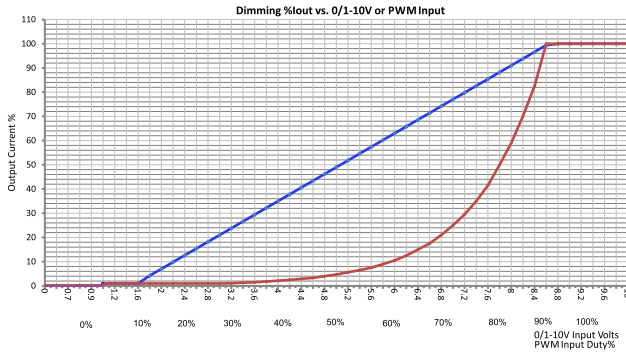
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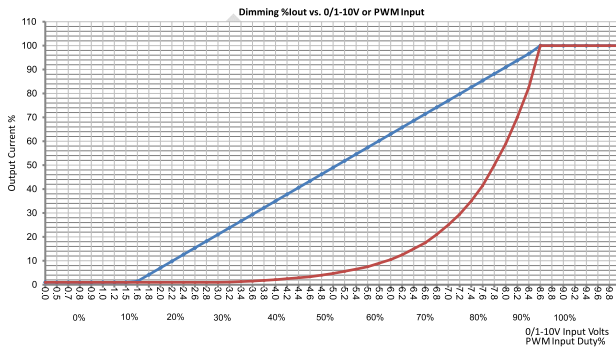
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Charts

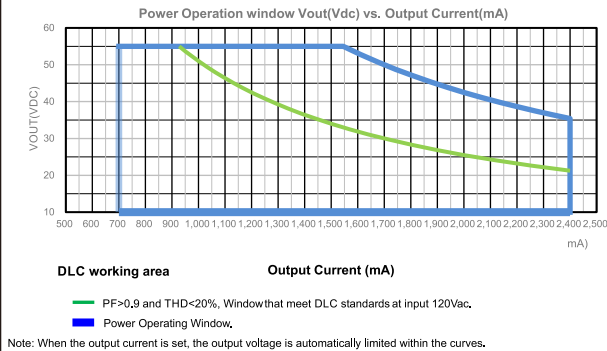
0-10V Dimming Curve @ Minimum Dimming Set to 1% And Dimming Off Enable



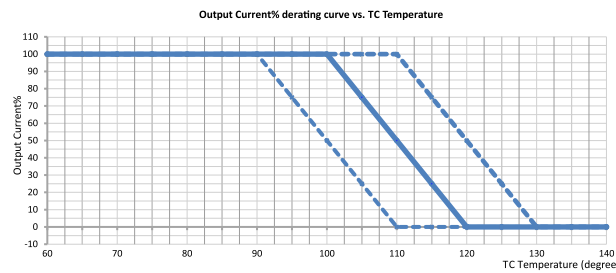
0-10V Dimming Curve @ Minimum Dimming Set to 1% And Dimming Off Disable



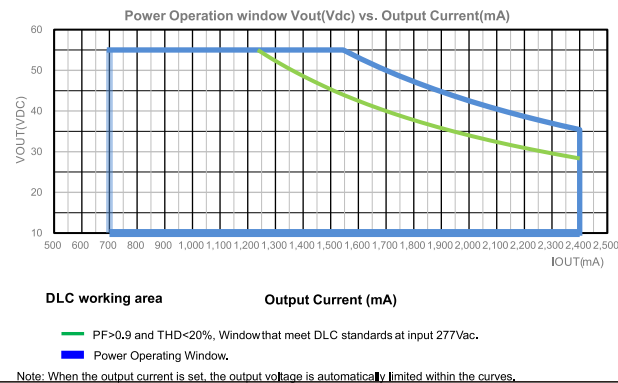
Power Operating Window & DLC Window



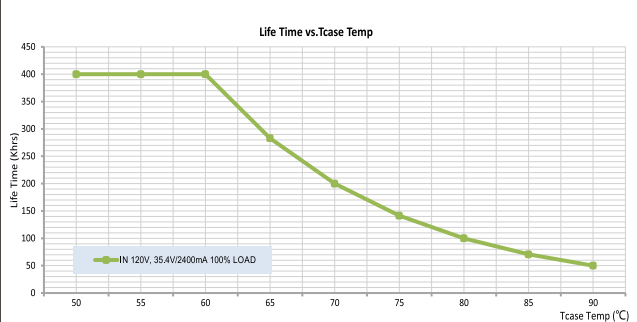
Output Current Derating vs. TC Temperature Curve

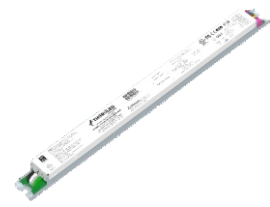


Power Operating Window & DLC Window



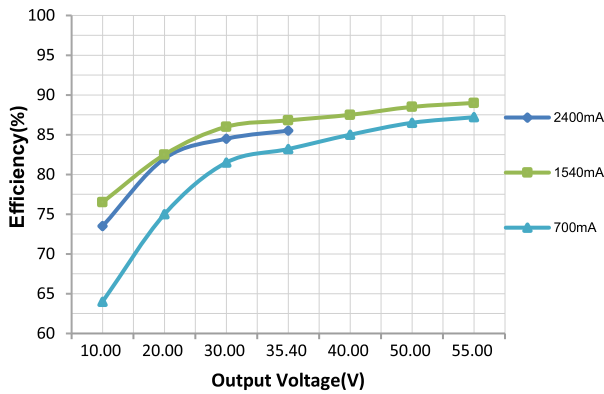
Life Time vs. Tcase Temp



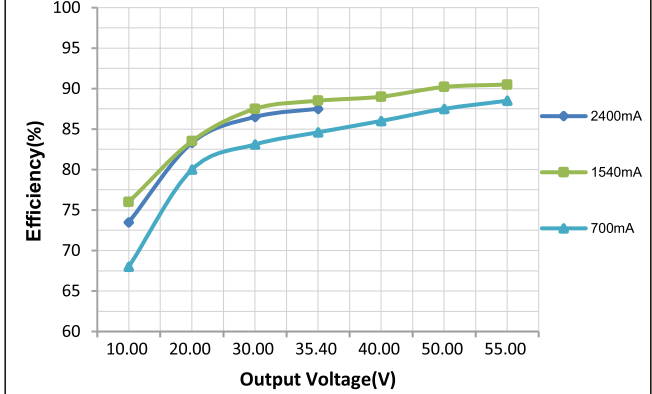


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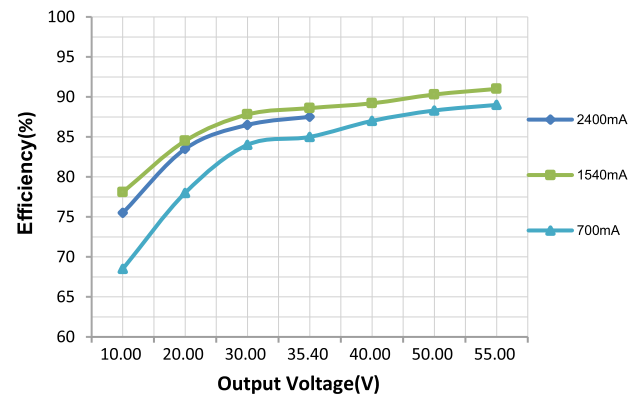
Efficiency vs Output Voltage at 120Vac



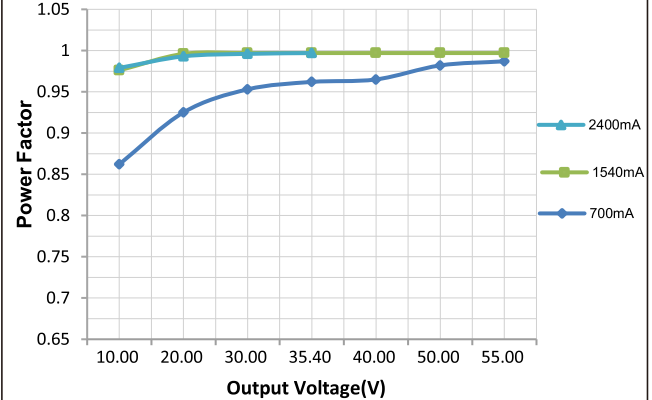
Efficiency vs Output Voltage at 230Vac



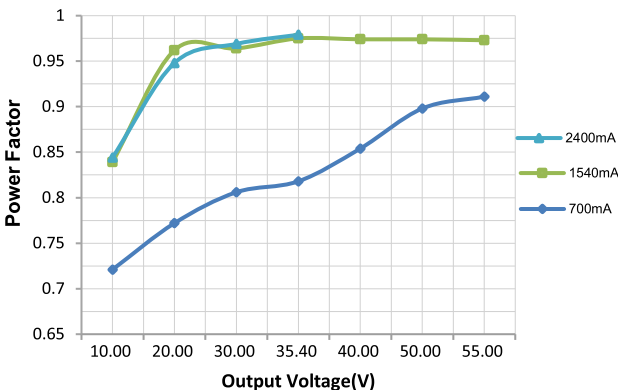
Efficiency vs Output Voltage at 277Vac



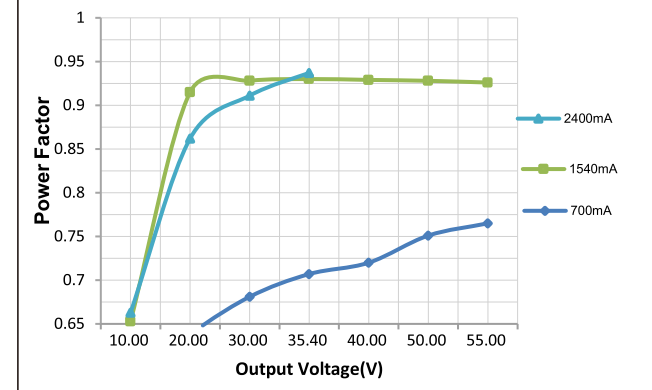
Power Factor vs Output Voltage at 120Vac

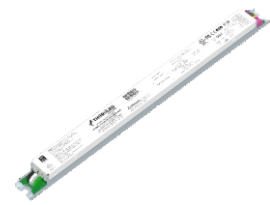


Power Factor vs Output Voltage at 230Vac



Power Factor vs Output Voltage at 277Vac





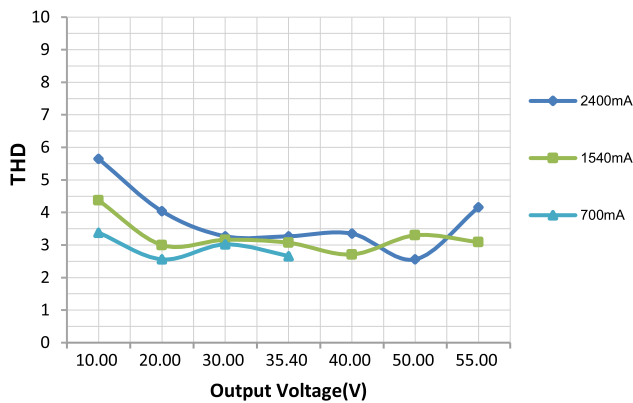
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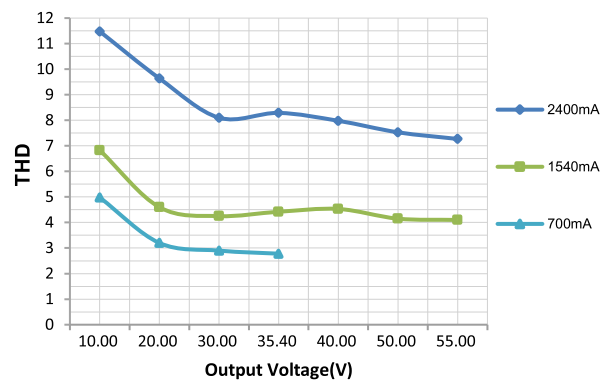
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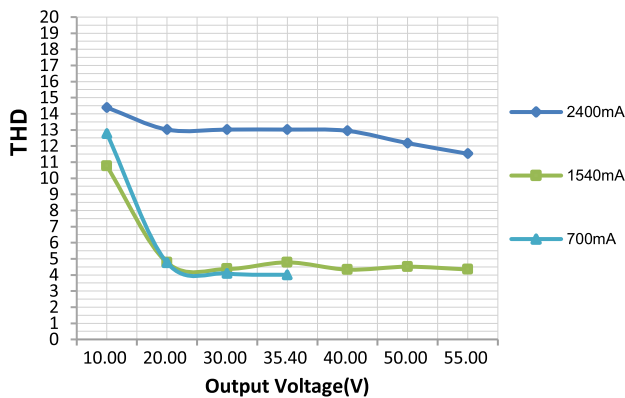
THD vs Output Voltage at 120Vac

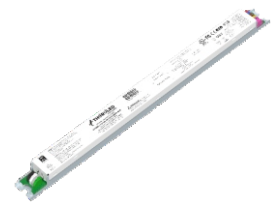


THD vs Output Voltage at 230Vac



THD vs Output Voltage at 277Vac





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Programming

TPSB-100 Programming Controller

Please consult the user manual for instructions on using the TPSB-100 SmartSet Programming Controller.



Programming Instructions

1. To program use the Fulham TPSB-100 SmartSet controller; connect the programming forks in to the appropriately labeled programming connections located on the LED driver.
2. Program the driver output current between 700mA - 2400mA. (Note: set current represents total current of one channel).
3. Current programming and more function setting can be done through SmartSet PC Software.



SmartSet Software



TPSB-100 SmartSet
Controller



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Part Number Matrix

THCC 1 M 1 UNV 240 P 85 E

LED Driver	Constant Current	# of Control Channels	Control Type	# of Output Channels	Input Voltage	Output current	Characteristic	Max Output Power	Case Type
TH=ThoroLED	CC = Constant Current	1 = 1 Channel	M = 0-10V dimming	1 = 1 Channel	UNV=120~277V	240=2400mA	P = Programmable	85=85W	E = Long + Terminals

Grounding

- Driver must be grounded by means of the driver's case or ground wire/connection.

Over temperature protection

- The Fulham ThoroLED drivers is protected against thermal overload. If the temperature limit is exceeded, the output current is reduced.

LED load

- Fulham ThoroLED drivers are designed to drive passive LEDs, -COB's and -LED assemblies .Proper function is not guaranteed when (LED)loads with active components are used.

Short-circuit protection

- In case of a short circuit the LED driver switches to protection mode. After the removal of the short-circuit the LED driver will recover automatically.

No-load Operation

- This product isn't recommended working under no load condition for a long time for energy saving purpose.
- It's not recommended to use this product for a long time without load.

Hot Swapping

- This driver does not support hot swapping of the LEDs.

Remote Mounting

- Up to 50ft with 18AWG. Contact Fulham for higher remote distance.

Service life/Lifetime

- Failure Rate Info based upon MTBF modeling: 90% survivals at end of life @ $\leq T_c$ lifetime rating.

Warranty

- Reference Fulham's limited Warranty: <https://cdn.fulham.com/PDFs/Limited-Warranty.pdf>



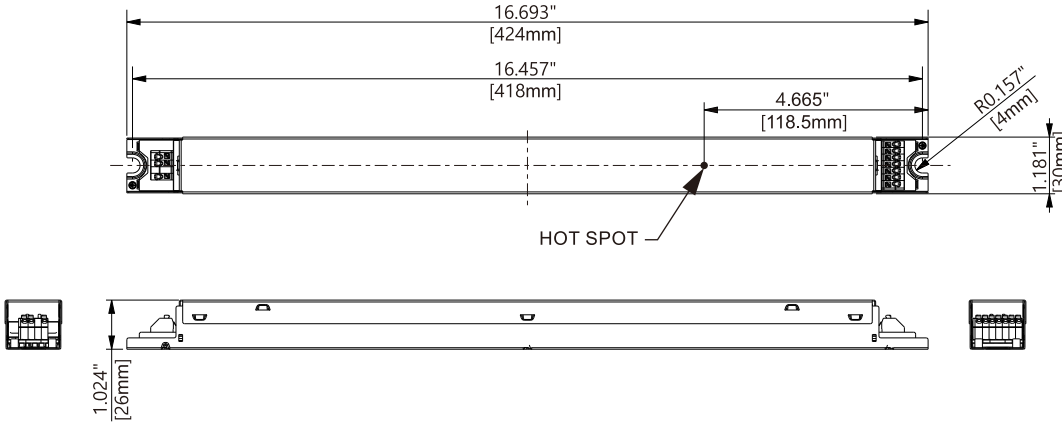
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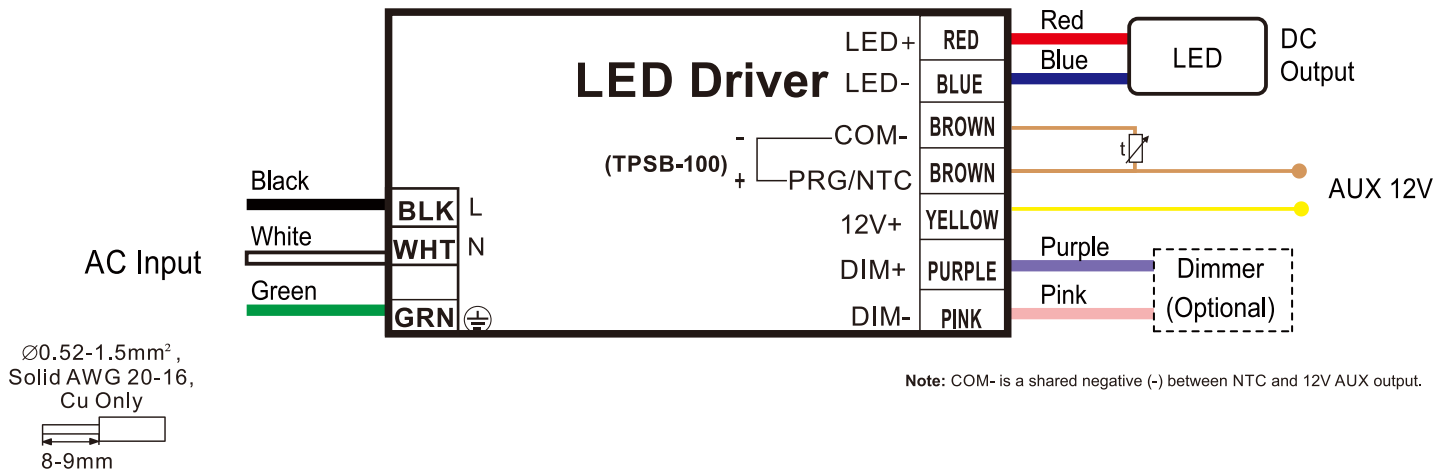
Mechanical Drawing



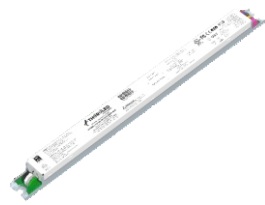
Overall Dimensions

Length	16.693" [424mm]
Width	1.181" [30mm]
Height	1.024" [26mm]
Mounting	16.457" [418mm]
Connector Type	
Push in connector	

Wiring Diagram



Servicing should only be performed by qualified service personnel.
Use 16-20 AWG solid copper wire stripped to 3/8" with driver push in connectors.



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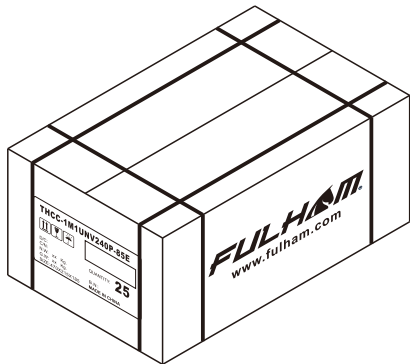


Product Image:



Packaging

Master Carton



OUTER DIMENSION		
L	W	H
18.5" (470mm)	8.5"(215mm)	7.3" (185mm)
Net Weight	Gross Weight	QUANTITY
27.6 lbs. (12.5kg.)	29.5 lbs. (13.4kg)	25 pcs.