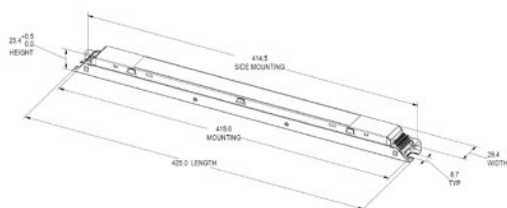


## OPTOTRONIC Linear Programmable LED Drivers

57430 / OTi85/347- 480V/2A3 DIM L HB



The OPTOTRONIC programmable dimmable family consists of highly efficient linear constant current LED power supplies. One click programming through the OPTOTRONIC programmer allows OEMs to configure the output current with 1mA resolution. Also fully customizable by customers are the end of life indicator, LED thermal protection and the constant lumen maintenance features. The OPTOTRONIC programmer does not require the power supply to be powered up or connected to AC line voltage while programming. The power supplies are available with built-in 0-10V dimming protocol with models available in 1% to 10%. The auxiliary output has the capability to power various sensors and is optimized for the OSRAM Connected Lighting Module (CLM).

### Product family features

- OEM Programmable with 1mA resolution to perfectly match LED load and maximize performance
- Integrated OEM programmable features include: - Constant lumen maintenance - End of life indication - LED thermal protection
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- Specification grade dimming down to 1% or 10% on 0-10V dimmers
- Available optional auxiliary output to power 12 V, 20 V, and 24 V low power applications
- Slim form factors
- Input voltage: - Universal 120-277 V<sub>AC</sub> 50/60Hz - 347 V<sub>AC</sub> 50/60 Hz
- UL Class 2 output for safe operation

### Areas of application

- Indirect/direct
- Linear
- Recessed troffer

# Product datasheet

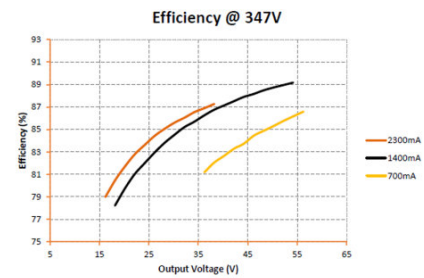
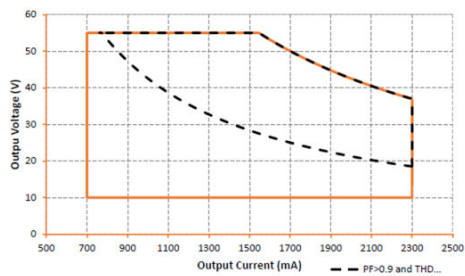
## Technical data

### General product information

Product Name	OTI85347480V2A3DIMLHB 10/CS 1/SKU
Ordering Abbreviation	OTI85/347- 480V/2A3 DIM L HB
Brand Name	OSRAM
General Description	85W 347-480V 10% Dimming Driver
Programmable Features	Output current/Dimming level/Dim-to-off, Soft Start/LED thermal protection/Auxiliary output voltage/Constant lumen output/End-of-life indicator
Programming Tool	51645 & 51647/51648
Type	Constant Current, Class2
Product Number	57430

### Electrical data

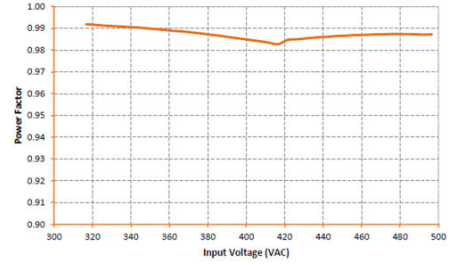
Nominal Total Max Wattage	85 W
Nominal Voltage	347-480 V



Operating Window

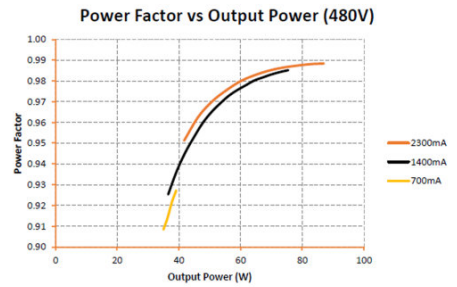
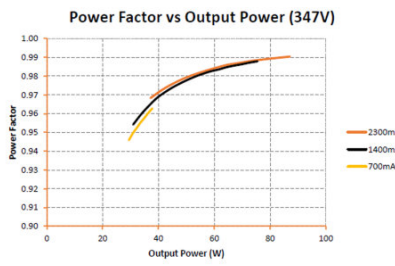
Typical Efficiency v Load 120 V 60 Hz

# Product datasheet



Typical Efficiency v Load 120 V 60 Hz

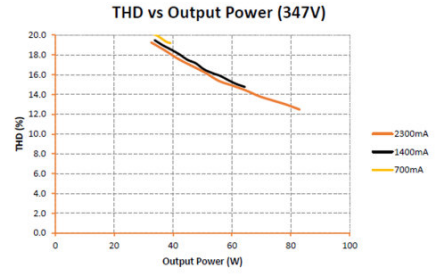
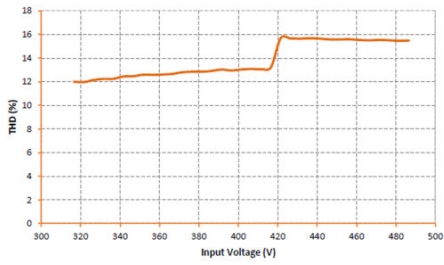
Typical Power Factor v Load



Typical Power Factor v Load

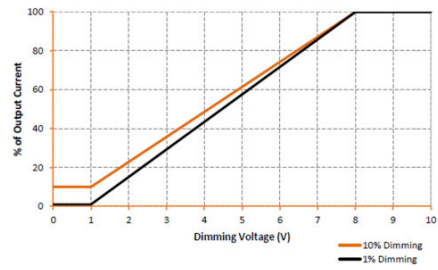
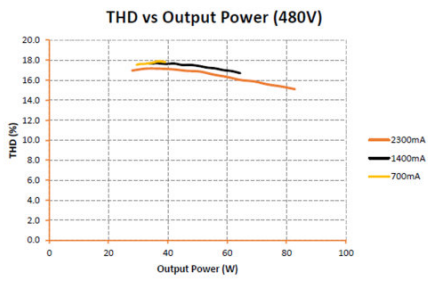
Typical Power Factor v Load

# Product datasheet



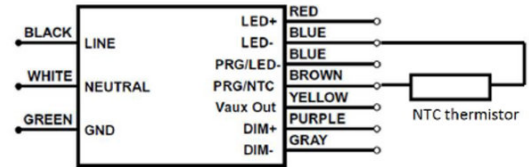
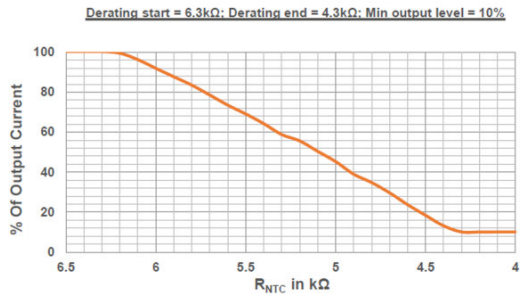
Typical THD v Load

Typical THD v Load



Typical THD v Load

0-10 V Control Input



LED Thermal Protection perc. of Out Curr

LED Thermal Protection - Wiring Diagram

**Electrical specifications - Auxiliary output (for AUX models only)**

Output Current (mA) Aux Only	40
Output Voltage (VDC) Aux Only	12/20/24V (configurable)
Voltage Regulation	+/- 10%

**Electrical specifications - Dimming**

Dimming Control	0 – 10V (Isolated) <sup>1)</sup>
Dimming Input Isolation [CRM]	2.5kV
Dimming Range	10-100%
Dimming Type	Current Reduction
Dim-to-Off OFF/ON	0.8V
Source/Sink Current	0.2mA

<sup>1)</sup> CAUTION: More than one power supply present

**Electrical specifications - Input**

Frequency Range (Hz)	50 – 60 Hz (+/- 10%)
Input Voltage (VAC)	347V-480V (+/- 10%)
Efficiency @ Full load 347V	≥87%
Efficiency @ Full load 480V	≥88%
Input Current (A) 347V	0.3
Input Current (A) 480V	0.22

## Product datasheet

Inrush Current (Apk, T@50% of Apk) 347V	30A, 150s
Inrush Current (Apk, T@50% of Apk) 480V	50A, 200s
Power Factor @ Full load 347V	>0.9
Power Factor @ Full load 480V	>0.9
THD @ Full load 347V	<20%
THD @ Full load 480V	<20%

### Electrical specifications - LED thermal protection (NTC)

NTC Value Active Range	$\leq 25k\Omega$ <sup>1)</sup>
Temperature Derating start	User defined

<sup>1)</sup> External NTC cannot leave the fixture. The PRG/ NTC control circuit terminals or lead wires are not isolated.

### Electrical specifications - Output

LED Power-Up Time	<1sec
Line Regulation	<3%
Load Regulation	<3%
Max. Output Power (W)	85W
Output Current (mA)	700-2300mA (1mA step)
Output Ripple Current	<5% @ 2300mA
Output Short-Circuit Protection	Yes, non-latching
Output Voltage (VDC)	10-55VDC <sup>1)</sup>
Over Load Protection	Yes, non-latching
Over Temperature Protection	Foldback to 50°C at 105°C
Over Voltage Protection	Yes, non-latching

<sup>1)</sup> Default V Aux is 12V

### Environmental specifications

Ambient Operating Temperature	-40 °C to 50 °C
Case Temperature (Tc)	85°C (50kHrs) <sup>1)</sup>
EMI Compliance	FCC Part 15 Class A
Max. Relative Humidity (%)	85% non-condensing
Max. Storage Temp.	70°C
Sound Rating	Class A
Transient Protection	ANSI C82.77-5-2015 (6kV)
UL Environmental Rating	Dry & Damp
UL File number	E320395

<sup>1)</sup> Warranty applicable only at 85°C

### Packaging Information

## Product datasheet

Item number	EAN/UPC	Packaging	Quantity	Outside dimensions L x w x h	Gross weight
57430	4052899552715	Unpacked (SKU)	1		
57430	4052899552722	Shipping box (Case)	10	18 in x 6.2 in x 2.4 in	9.3 lb

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

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### Accessories Mandatory

Product name	Accessory name	Item number	EAN/UPC
OTi85/347- 480V/2A3 DIM L HB	OT PROGRAMMER	51645	▶ 4052899209640

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### Disclaimer

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