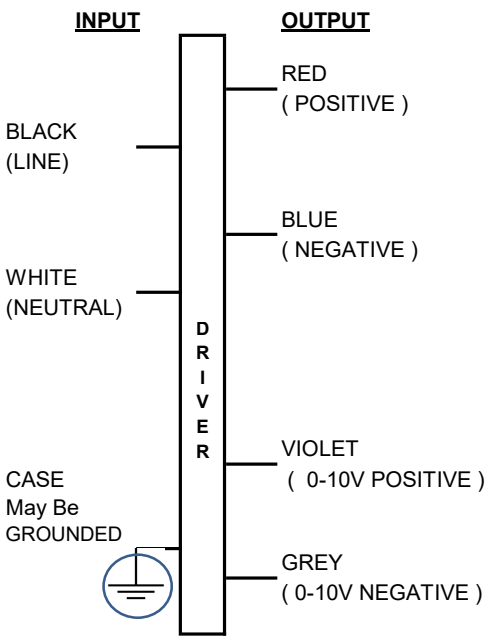
PHILIPS

Ordering 12NC	9290 021 02606
Brand Name	Xitanium
Description	Xitanium 100W 0.7A 1-10V Dim
Model Number	X100C070V143CNY1AO
Input Voltage	240V
Input Frequency	50 / 60 Hz
RoHS	Yes
Approbations	IS 15885 (Part 2 / Sec 13)
Status	BIS Certified

Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency at Max Load	Max Case Temp (ºC)	Input Current (Arms)	Max Input Power (W)	Inrush Current (Apk/50%-µs)	THD @ Max Load (%)	Power Factor @Max Load	Surge Protection Com/Diff(KV)	Weight (Kg)	Envir. Protection Rating
100	85 - 143	0.7	@ 240V 90%	80	@ 240V 0.45	110	@ 240V 46 /470	<10 @Max Load	> 0.95	4 / 4	0.7	Dry & Damp

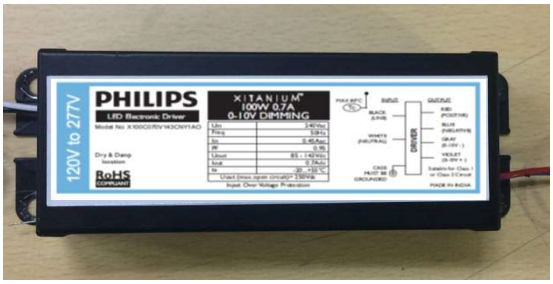
Wire Diagram



Input and output use lead-wires.
Lead-Wires are 18AWG 105C / 600V
Solid Copper

Lead Length
Standard lead length is 270mm (±30mm)
on all wires outside the can

Enclosure



	(mm)
Case Length	138
Case Width	59.1
Case Height	38
Mounting Length	153
Mounting Width	42.9
Overall Length	168

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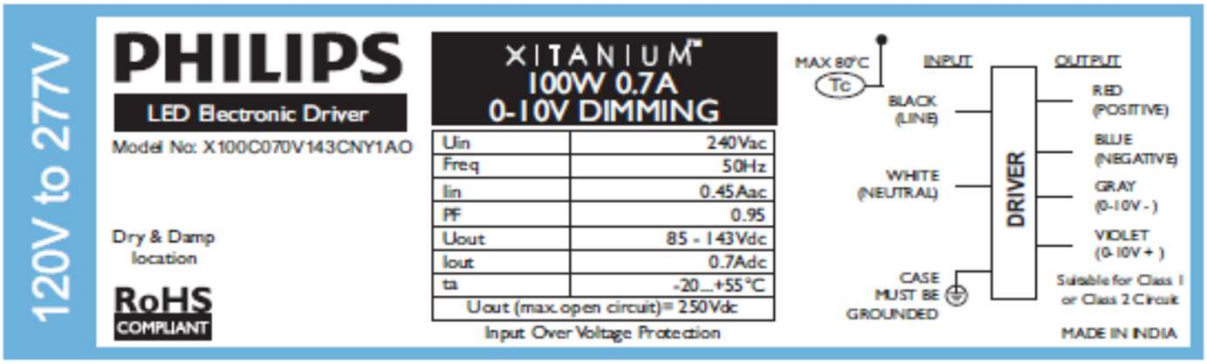

Product Data	
Full product code	9290 021 02606
Full product name	Xitanium 100W 0.7A 1-10V Dim
Net weight per piece	700 gms
Dimming	Yes (0-10V)
Ambient Temp. Range	-20ºC to +55ºC
Corresponding T case	+5ºC to +80ºC
Line Voltage (AC operation)	120 - 277V
Line Voltage (Performance)	240V ± 15%, CLO @ 120 - 277V
Line Current	0.45A @ 240V
Line Frequency	50/60 Hz
Envir. Protection Rating	Dry and Damp (Potted Driver)
Life at Tc 80 degree C	50000 hrs (nom.)
Suitable For Outdoor Use	Yes
Max. Tc	80ºC
Inrush Current	46 Apk @ 240V
Max. Driver number on MCB 16A (Type B)	11 (max.)
Input Over Voltage	Can Survive input Voltage Stress of 320V for 48 hours
Input Over Voltage Cut Off	Auto Shutdown at ≥ 325V and Auto Recovery at 300V - 315V
Input Over Voltage Protection	Can Survive input Voltage Stress of 440V for 8 hours
Input Under Voltage Protection	Can Survive input Voltage Stress of 100V for 48 hours
LED Current Tolerance	+/- 5%of Imax
Earth Leakage Current	0.7 mA (max)
THD Total	≤ 10% @ Full Load @ 240V Supply
P.F. at Max. Load	≥ 0.95
Isolation (Input - Output)	Isolated Driver (Basic isolation : 1.5KV)
Protection	Short Circuit and Open Circuit Protection for LED + and LED -
Standby Power	≤ 6W

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Installation & Application Notes :

Section I - Physical Characteristics

1.1 LED Driver shall be installed inside an electrical enclosure

1.2 Wiring inside electrical enclosure shall comply with 600V/105ºC rating or higher

Section II - Performance

2.1 LED Driver has a rated lifetime of 50,000 hours @ Tc ≤ 80ºC

2.2 LED Driver tolerates sustained open circuit and short circuit output conditions without damage

2.3 LED Driver maximum allowable case temperature is 80ºC - see product label for measurement location

2.4 LED Driver has Thermal Fold Back or shutdown above Tcmax, please refer to the table for typical performance

2.5 LED Driver reduces output power to LEDs if its case temperature > 85ºC

2.6 LED Driver complies with the requirements of IS 15885 (Part 2 / Sec 13)

ELECTRICAL RATINGS :

	Input, 50/60 Hz		Output (nominal)		
Model	V	A	V DC	mA DC Max	Watts
Xitanium 100W 0.7A 1-10V Dim	240	0.45	85 - 143	700	100

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVES USE) :

Section III - Conditions of acceptability

When installed in the end-use equipment, the following are among the considerations to be made :

3.1 The equipment shall be installed in compliance with the enclosure, mounting, spacing, casualty and segregation requirements of the ultimate application.

3.2 The driver case must be grounded in the end-use application.

3.3 The driver is suitable for use in "Damp" and "Dry" locations.

3.4 When the drivers are installed in the end-use application, the case temperature should not exceed the temperature limits specified in the following table:

Model	Input Voltage, Hz	Max Case @ TC , ºC
Xitanium 100W 0.7A 1-10V Dim	240 , 50/60	80

3.5 The leakage current test should be repeated in the end device.

Model	Input Voltage, Hz	Leakage Current
Xitanium 100W 0.7A 1-10V Dim	240 , 50/60	0.7mA max.

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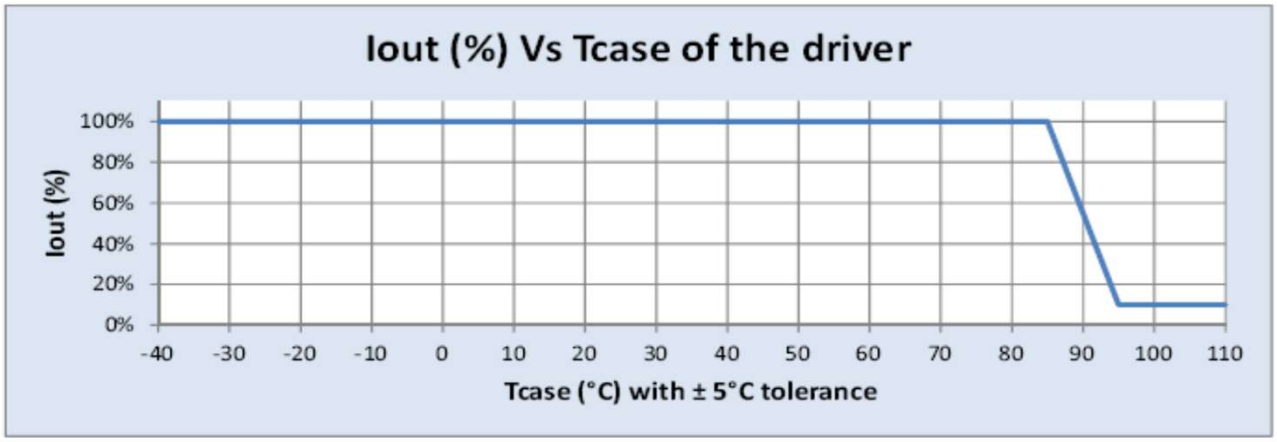
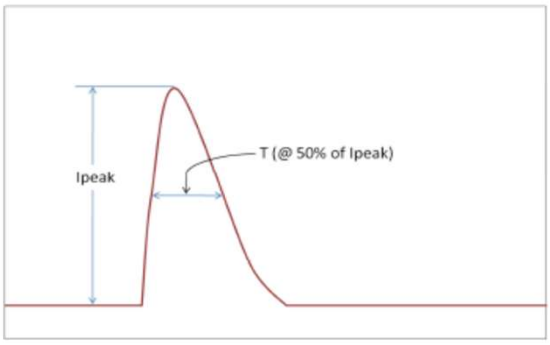
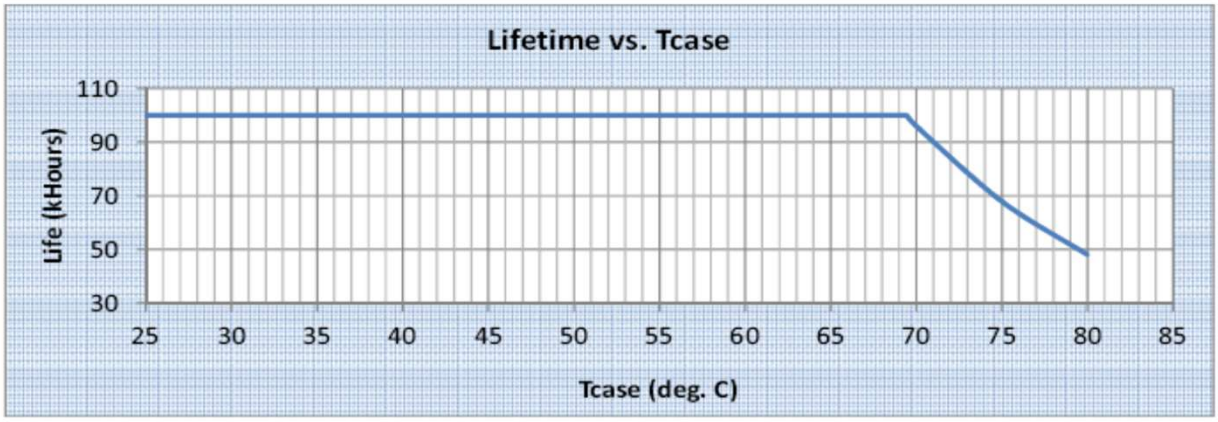


Inrush Current info :



Vin	Ipeak	T (@50% of Ipeak)
240 Vrms	46A	470 µs

Lifetime vs Tcase of Driver :



Failure rate info based upon field called rate data:
< 0.2% per 1 KHr @ ≤ T case 80ºC

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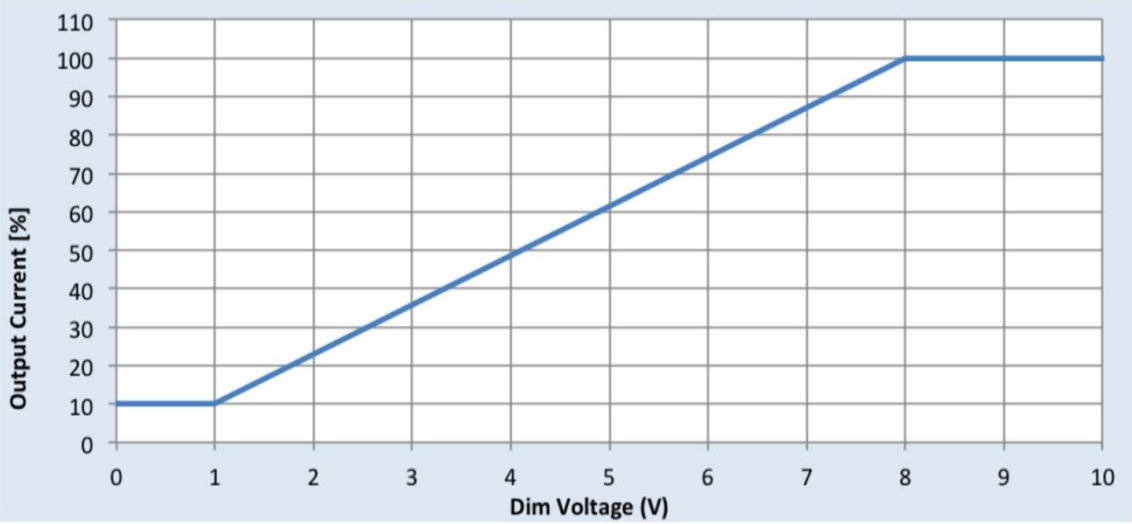
Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

0-10V Dimming Curve

Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 10% of Iout



Isolation :

Isolation	Input Wires	Output Wires	Chassis
Input Wires	NA	1750 V	3750 V
Output Wires	1750 V	NA	3750 V
Chassis	3750 V	3750 V	NA

Address: Signify Innovations India Ltd
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DLF Cyber City, DLF Phase III
Gurgaon 122002
India

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