

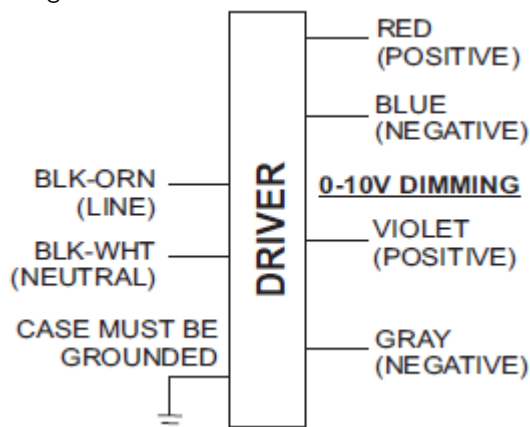
## LEDHCNA0024V4IDL0M

### Electrical Specifications

|                 |                                        |
|-----------------|----------------------------------------|
| Brand Name      | XITANIUM                               |
| Description     | Xitanium 100W 24V 4.1A 0-10V HCN-F sXt |
| Input Voltage   | 347~480                                |
| Input Frequency | 50/60Hz                                |
| RoHS            | Yes                                    |
| Status          | Active                                 |

| Output Power (W) | Output Voltage (V) | Output Current (A) | Efficiency@ Max Load |      | Max Case Temp. (°C) | Input Current |      | Max. Input Power (W) | Inrush Current (A <sub>in</sub> /50%-μs) |          | THD @ Max Load (%) | Power Factor @ Max Load | Surge Protection Common/Diff (KV) | Weight (Lbs/kgs) | Envir. Protection Rating |
|------------------|--------------------|--------------------|----------------------|------|---------------------|---------------|------|----------------------|------------------------------------------|----------|--------------------|-------------------------|-----------------------------------|------------------|--------------------------|
| 100              | 15~24              | 4.1                | 347V                 | 85.0 | 85 °C               | 347V          | 0.32 | 112                  | 347 Vin                                  | 60/ 120  | 20                 | >0.9                    | 3/3                               | 2.8/ 1.27        | UL Dry & Damp            |
|                  |                    |                    | 480V                 | 85.5 |                     | 480Vac        | 0.23 |                      | 240 Vin                                  | 85 / 115 |                    |                         |                                   |                  |                          |

Wire Diagram



#### Lead Length

Input: Black-Orange 270mm (±30mm), Black-White 270mm (±30mm)  
Output: Red 270mm (±30mm), Blue 270mm (±30mm)  
Dimming: Violet 270mm (±30mm), Gray 270mm (±30mm)

| Dimming Method | Dimming Range | Minimum Output Current (A) | Min (typ). Output Power(W) | Other Comments                 |
|----------------|---------------|----------------------------|----------------------------|--------------------------------|
| 1-10V Isolated | 15% ~ 100%    | 0.615                      | 60                         | Dimming source current: 150 μA |

### Enclosure



|                 | in. (mm)     |
|-----------------|--------------|
| Case Length     | 8.38 (211.1) |
| Case Width      | 2.35 (59.1)  |
| Case Height     | 1.47 (37.1)  |
| Mounting Length | 9.0 (226.2)  |
| Mounting Width  | 1.7 (42.9)   |
| Overall Length  | 9.54 (240.5) |

Revised 02/02/2012

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## Electrical Specifications

| LEDHCNA0024V41DLOM |                                        |
|--------------------|----------------------------------------|
| Brand Name         | XITANIUM                               |
| Description        | Xitanium 100W 24V 4.1A 0-10V HCN-F sXt |
| Input Voltage      | 347~480                                |
| Input Frequency    | 50/60Hz                                |
| RoHS               | Yes                                    |
| Status             | Active                                 |

| Product Data                      |                                                              |
|-----------------------------------|--------------------------------------------------------------|
| Order code                        | LEDHCNA0024V41DLOM                                           |
| Full product code                 | LEDHCNA0024V41DLOM                                           |
| Full product name                 | Xitanium 100W 24V 4.1A 0-10V HCN-F sXt                       |
| Net weight per piece              | 1.27 KG / 2.8 lbs                                            |
| Interfaces                        | 0-10V Dimming                                                |
| Ambient Temp Range                | -40C to +55C                                                 |
| Corresponding Tcase               | -15C to +85C                                                 |
| Cycling Temperature               | -20C to -40C limited to (400cycles max)                      |
| Line Voltage                      | 347-480V                                                     |
| Line Current                      | 0.32A @ 347V, 0.23A @ 480V                                   |
| Line Frequency                    | 50/60Hz                                                      |
| Envir. Protection Rating          | UL Dry & Damp                                                |
| Life @ TC 65C                     | 100000 hr [nom] refer to graph below                         |
| Life @ TC 75C                     | 50000 hr [nom] refer to graph below                          |
| Suitable for Outdoor use?         | Yes                                                          |
| Max TC                            | 85C                                                          |
| Inrush current Width              | Refer to table                                               |
| Maximum ballast number on MCB 16A | 12 [max]                                                     |
| LED Current Tolerance             | +/- 125mA                                                    |
| Earth leakage current             | 0.7 mA [max]                                                 |
| Mains voltage safety (AC)         | +/-10%                                                       |
| Mains voltage performance (AC)    | +/-10%                                                       |
| Min. Mains voltage operational    | 300 V [min]                                                  |
| Output peak voltage               | 24V [max]                                                    |
| Output Current ripple             | 30% @ 4.10 A (ripple = pk-pk/avg)                            |
| THD total                         | < 20%                                                        |
| THD 3 <sup>rd</sup> Harmonic      | < 15%                                                        |
| PF @ Max Load                     | >0.90                                                        |
| Wire Isolation                    | All wires are Double isolated to ground                      |
| Protections                       | Short Circuit and Open Circuit Protection for LED + and LED- |
| Standby power                     | NA                                                           |

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## Electrical Specifications

| LEDHCNA0024V4IDLOM |                                        |
|--------------------|----------------------------------------|
| Brand Name         | XITANIUM                               |
| Description        | Xitanium 100W 24V 4.1A 0-10V HCN-F sXt |
| Input Voltage      | 347~480                                |
| Input Frequency    | 50/60Hz                                |
| RoHS               | Yes                                    |
| Status             | Active                                 |

### 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/105°C rating or higher.

#### Section II – Performance

- 2.1 LED Driver has a rated lifetime of 50,000 hours @ TC ≤75°C.
- 2.2 LED Driver tolerates sustained open circuit and short circuit output conditions without damage.
- 2.3 LED Driver maximum allowable case temperature is 80°C – see product label for measurement location.
- 2.4 LED Driver reduces output power to LEDs if its case temperature exceeds >90°C –thermal protection.
- 2.5 LED Driver complies with the requirements of CE, ENEC, CISPR 15 Ed 7.2.

347V to 480V

4435 250 30851 REV. A



7 8108710907312

**PHILIPS ADVANCE**

LED Electronic Driver

**LEDHCNA0024V4IDLO**

ASSEMBLED IN MEXICO

**XITANIUM**

**100W 24V - 4.1A**

**0-10V Analog Dimming**

|          |              |
|----------|--------------|
| Vin (V)  | 347~480VAC   |
| Iin (A)  | 0.32~0.23AAC |
| Freq.    | 50/60Hz      |
| PF       | 0.9min       |
| Vout (V) | 15-24VDC     |
| Iout (A) | 4.1ADC       |

MAX 85°C

Tc

RED (POSITIVE)

BLUE (NEGATIVE)

0-10V DIMMING

VIOLET (POSITIVE)

GRAY (NEGATIVE)

BLK-ORN (LINE)

BLK-WHT (NEUTRAL)

CASE MUST BE GROUNDED

### Section III - Conditions of Acceptability - When installed in the end product, consideration shall be given to the following:

- 3.1 The LED Driver has been evaluated to comply with Class 2 output criteria.
- 3.2 The LED Driver is only suitable for use in Dry and Damp Locations.
- 3.3 The LED driver should be used within the recognized electrical ratings.
- 3.4 The LED driver case must be grounded in the end-use application.
- 3.5 In the end product, power supply spacing to other heat producing components shall be minimum 4 inches spacing to sidewalls, and minimum 3 inches spacing to top of enclosure and mounted not closure than 1 in. end to end or 4 in. side to side from adjacent LED power supplies.
- 3.6 The units were submitted and tested for a maximum manufacturer's recommended Tc point described in the table below. If adjacent LED power supplies are spaced closer than 1 in. end to end or 4 in. side to side, a temperature test shall be conducted in the end use product.

| Model No.         | Input Voltage, Hz | Max. Case @ Tc, °C | Ambient, °C (Reference only)* |
|-------------------|-------------------|--------------------|-------------------------------|
| LEDHCNA0024V4IFLO | 347-480,60        | 85                 | 52/53                         |
| LEDHCNA0024V4IDIO | 347-480,60        | 85                 | 57.8/58.2                     |

- 3.7 The 0-10V dimming output for Model LEDHCNA0024V4IDLO is part of the Class 2 secondary circuit.

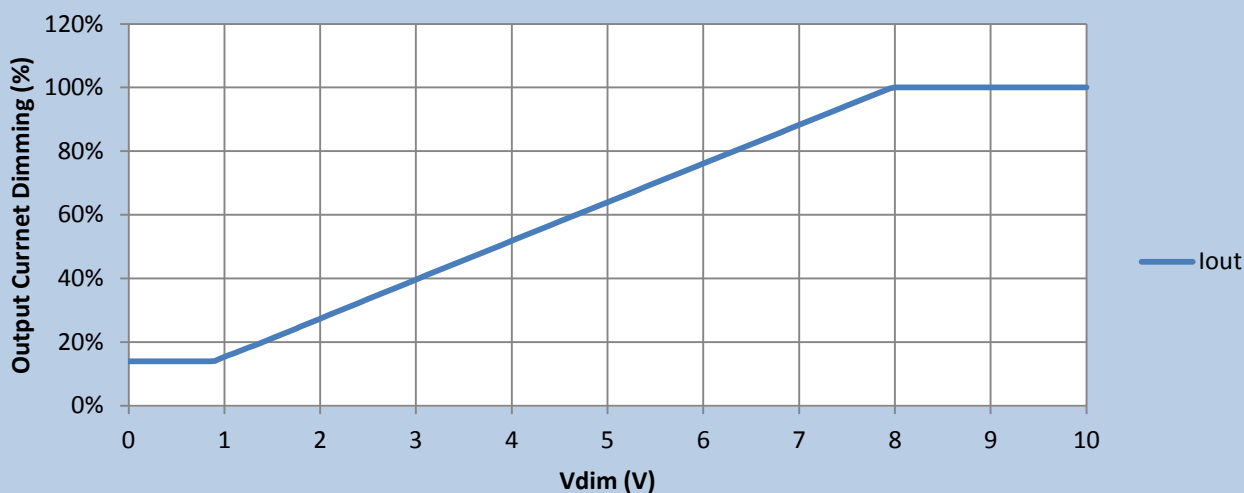
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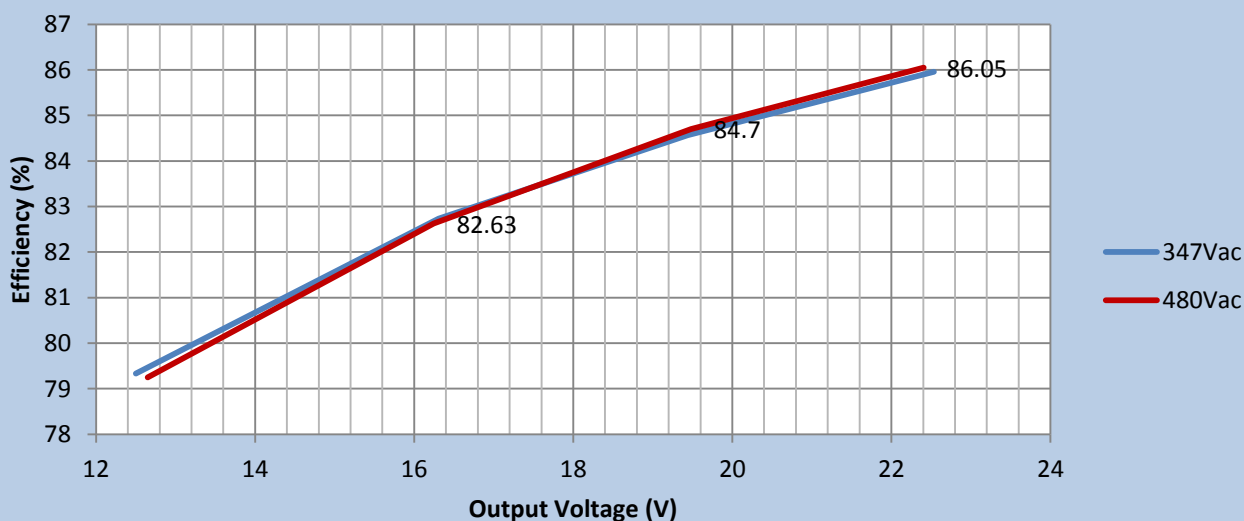
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| Input Voltage   | 347~480                                |
| Input Frequency | 50/60Hz                                |
| RoHS            | Yes                                    |
| Status          | Active                                 |

### Electrical Specifications

#### I<sub>out</sub>



#### Efficiency vs. Output Voltage @ 70C T<sub>case</sub> and Max Output Current



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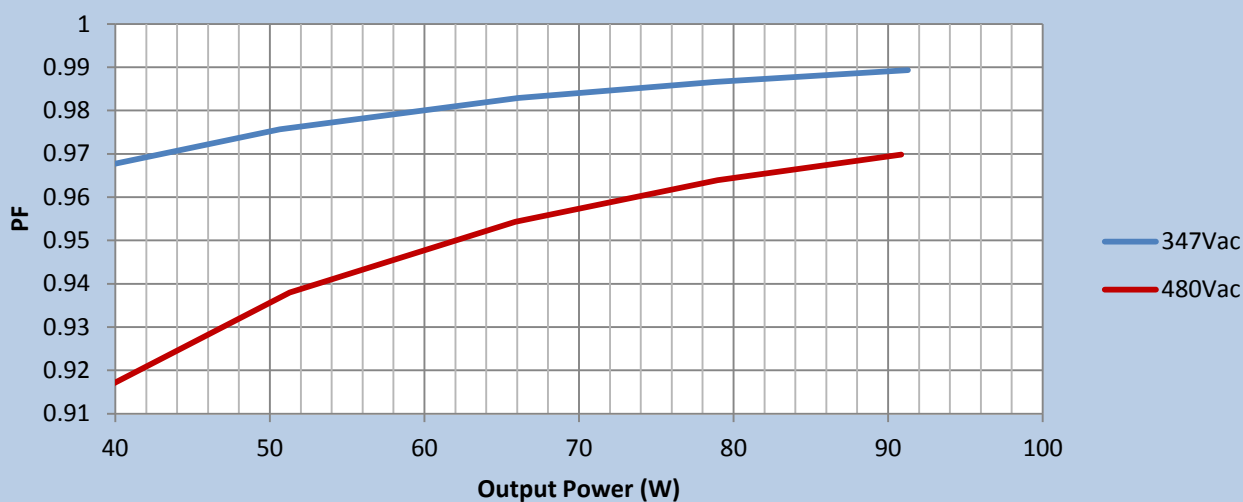
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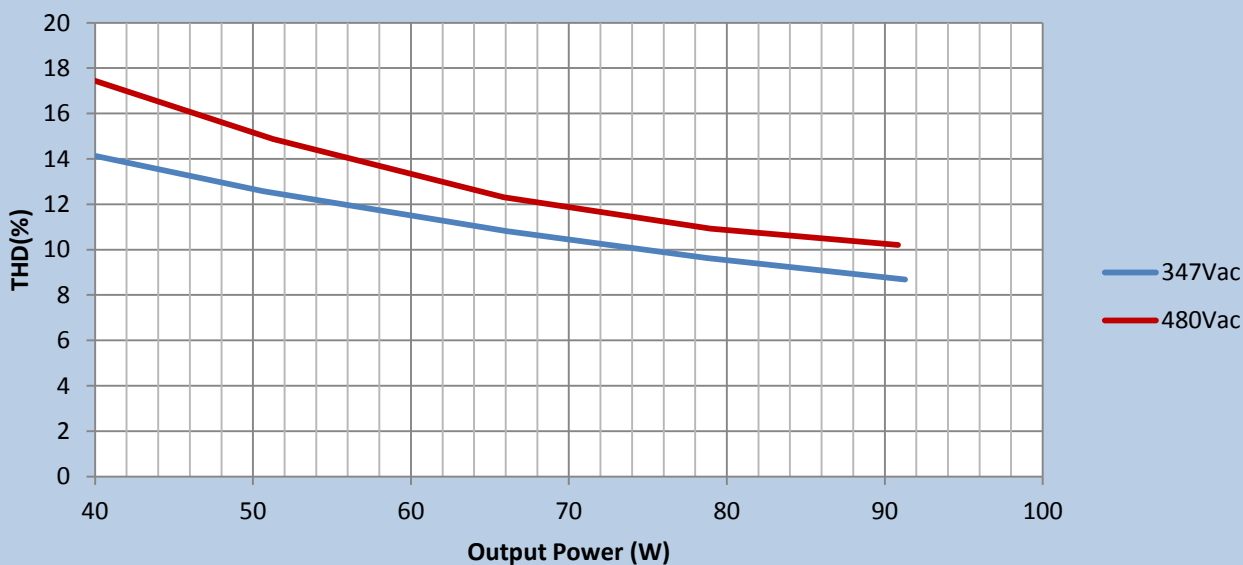
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| Description     | Xitanium 100W 24V 4.1A 0-10V HCN-F sXt |
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| Input Frequency | 50/60Hz                                |
| RoHS            | Yes                                    |
| Status          | Active                                 |

### Electrical Specifications

#### Power Factor vs. Output Power @ 70C Tcase



#### THD vs. Output Power @ 70C Tcase



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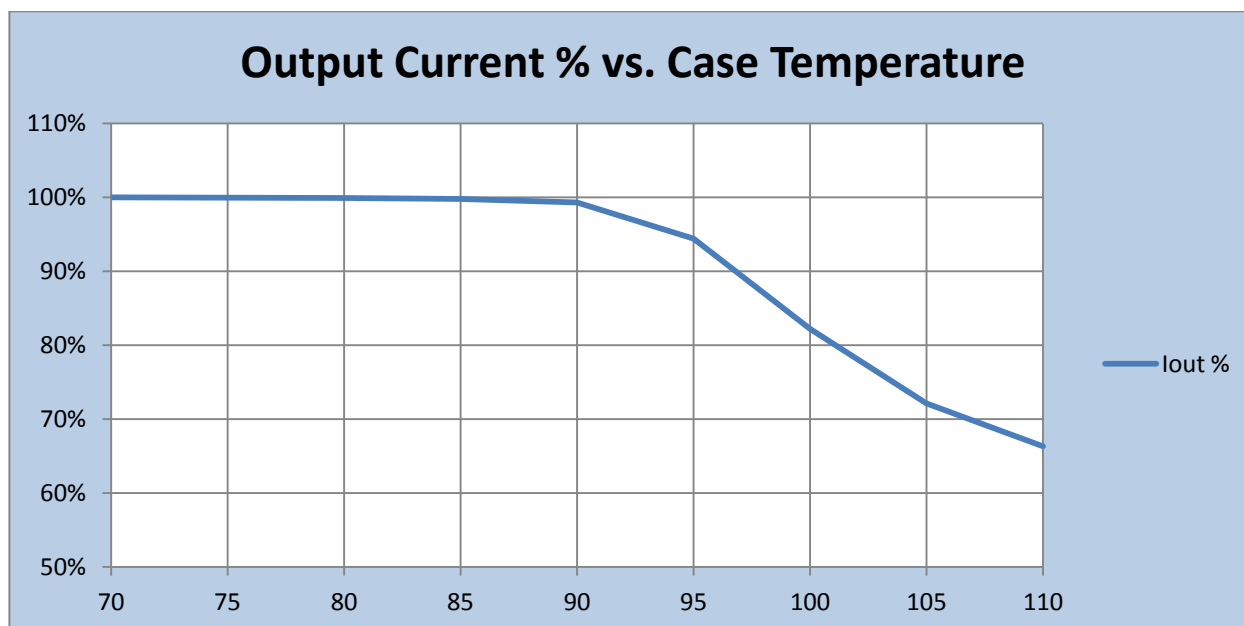
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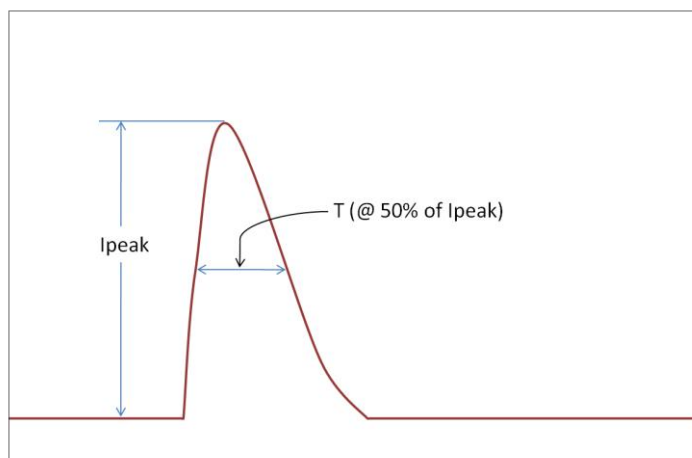
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| Input Frequency | 50/60Hz                                |
| RoHS            | Yes                                    |
| Status          | Active                                 |

### Electrical Specifications

I<sub>out</sub> vs. T<sub>case</sub> of Driver:



Inrush Current Info:



| V <sub>in</sub> | I <sub>peak</sub> | T (@ 50% of I <sub>peak</sub> ) |
|-----------------|-------------------|---------------------------------|
| 347 Vrms        | 60 A              | 120 μs                          |
| 480 Vrms        | 85 A              | 115 μs                          |

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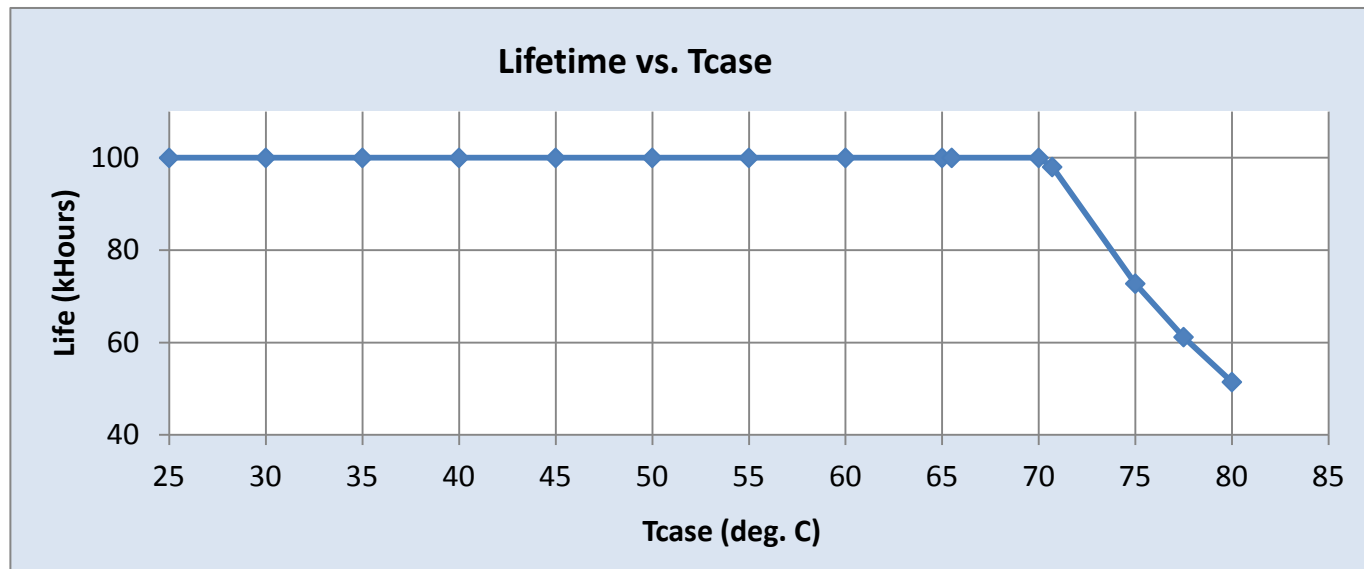
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|-----------------|----------------------------------------|
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| Input Voltage   | 347~480                                |
| Input Frequency | 50/60Hz                                |
| RoHS            | Yes                                    |
| Status          | Active                                 |

### Electrical Specifications

#### Lifetime vs. Tcase of Driver:



#### Failure Rate Info:

1. <0.01% per 1 kHr @<= Tcase 70 C

#### Isolation:

| Isolation   | Input Wires | Output Wires | 0-10V Wires | Chassis |
|-------------|-------------|--------------|-------------|---------|
| Input Wires | NA          | 1750         | 1750        | 3750    |
| 0-10V Wires | 1750        | 1750         | NA          | 3750    |
| Chassis     | 3750        | 3750         | 3750        | NA      |

#### Revision History:

| Rev No. | Date       | Description                    | Approval | Remarks |
|---------|------------|--------------------------------|----------|---------|
| 1.1     | 02/02/2012 | * Add Envir. Protecting Rating | N.T      |         |
| 1.2     | 02/02/2012 | *Add Cycling Temperature       | N.T      |         |
| 1.3     | 02/02/2012 | *Add COA                       | N.T      |         |
|         |            |                                |          |         |

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