

SPECIFICATIONS

Product Features:

- ◆ Input Voltage Range:100~277VAC;
- ◆ High Power Factor;
- ◆ Efficiency Up to 87%;
- ◆ Meet UL8750 CB CE;
- ◆ International Protection:IP66;
- ◆ For Outdoor LED lights;
- ◆ 5 Years Warranty;



Model List:

| Model | Certification | Output Voltage | Output Current(Max) | Output Power(Max) | Efficiency |
|---|---------------|----------------|---------------------|-------------------|------------|
| NI15W-60C0250 | UL/CUL/CE/CB | 36-60V | 250mA | 15W | 86% |
| NI15W-60CXXXX | | | | | |
| xxxx are 4 digits from 50 to 0250, which indicates output current in mA. For example, 0250 represents output current 250mA; | | | | | |

Revision History:

| Change Date | Rev: | Before Change | After Change |
|-------------|------|---------------|-------------------------------------|
| 2017/06/03 | 1.0 | / | Datasheets Release |
| 2017/07/14 | 2.0 | -30-70°C | -40-60°C |
| 2017/12/09 | 2.1 | | Add modulation and output frequency |
| | | | |

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NI15W Series LED Driver

Input: 100-277VAC High Power Factor High efficiency IP66 UL CB CE

Electrical Specifications:

1. Input Specifications

| Parameter | Notes | Min. | Typ. | Max. | Unit |
|-----------------------|-----------------------------------|------|------|------|------|
| Input Voltage Range | | 90 | | 305 | Vac |
| Input Frequency Range | | 47 | | 63 | HZ |
| Input AC Current | 100%Load at 115V Input | | | 0.18 | A |
| Inrush Current | 100%Load at 230V Input Cold start | | | 20 | A |
| Power Factor | 70%-100%Load at100-277V Input | 0.9 | | | |
| THD | 70%-100%Load at100-277V Input | | | 20% | |

2. Output Specifications

| Parameter | Notes | Min. | Typ. | Max. | Unit |
|---------------------------|-------------------------------------|------|------|------|------|
| Output Voltage | Load at 100-277V Input | 60% | | 100% | |
| | No-load at 100-277V Input | | | 120% | |
| Line Regulation | 60%-100%Load at100-277V Input | -5% | | +5% | |
| Load Regulation | 60%-100%Load at100-277V Input | -5% | | +5% | |
| Current deviation | 60%-100%Load at100-277V Input | -5% | | +5% | |
| Output frequency | 100%Load at120V 60HZ Input | | 120 | | HZ |
| Output current modulation | 100%Load at120V 60HZ Input | | | 50% | |
| Starup Overshoot Current | 100%Load at LED load | | | 10% | |
| Efficiency | 100%Load at 230V Input | | 86% | | |
| Turn-on Delay Time | 100%Load at120V Input(Oscilloscope) | | | 1000 | ms |

3. Environment Features

| Parameter | Notes | Min. | Typ. | Max. | Unit |
|---------------------------|--------------|------|------|------|------|
| Operating TEMP. range | | -40 | | 60 | °C |
| Storage TEMP. Range | | -40 | | 85 | °C |
| International Protection: | | | IP66 | | |
| Case TEMP. (Tc) (2) | When Ta=60°C | | | 80 | °C |

Notes:

1. Test sample model:NI15W-60C0250
2. Refer to mechanical

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4. Protection Functions

| Parameter | Notes | Protection Performance |
|-----------------------------|---|------------------------|
| Over Voltage Protection | When the load voltage exceeds 1.2 times the rated voltage | Auto Restart |
| Over Load Protection | When the load power exceeds 1.2 times the rated power | Auto Restart |
| Short Circuit Protection | When the output is shorted | Reduce frequency mode |
| Over Temperature Protection | When the case temperature is over 120°C | Shutdown |

5. Product Specifications

| Parameter | Notes | Protection Performance |
|-----------|-----------------------------------|--------------------------|
| Size | 44*26*23mm | |
| Weight | 45g | |
| Color | White | |
| MTBF | 200000Hours | TA=25°C (MIL-HDBK-217F) |
| Life Time | When Tc<80°C Life Time>50000Hours | Refer to Life Time curve |

6. Safety Certification

| Safety Category | Standard |
|-----------------|--|
| UL/CUL | UL8750 ,UL1012 |
| CE | EN61347-1:2008+A1,EN61347-2-13:2006,EN62493:2010 |
| CB | IEC61347-1:2007+A1,IEC61347-2-13:2006 |

7. Electromagnetic Compatibility

| EMI | Notes |
|--------------|---|
| EN55015B | Conducted Emission Test & Radiated Emission Test |
| EN61000-3-2 | Harmonic current emissions |
| EN61000-3-3 | Voltage fluctuations & flicker |
| FCC Part 15 | ANSI C63.4:2009 Class B |
| EMS | Notes |
| EN61000-4-2 | Electrostatic Discharge (ESD): 8 kV air discharge, 4 kV contact discharge |
| EN61000-4-3 | Radio-Frequency Electromagnetic Field Susceptibility Test-RS |
| EN61000-4-4 | Electrical Fast Transient / Burst-EFT: Level 3, Criteria A |
| EN61000-4-5 | Surge Immunity Test: AC Power Line: Line to Line 4 kV Line to GND 6KV |
| EN61000-4-6 | Conducted Radio Frequency Disturbances Test-CS |
| EN61000-4-8 | Power Frequency Magnetic Field Test |
| EN61000-4-11 | Voltage Dips |
| EN61547 | Electromagnetic Immunity Requirements Applies To Lighting Equipment |

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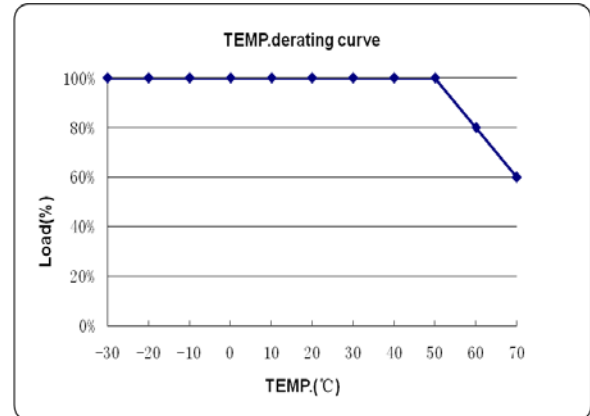
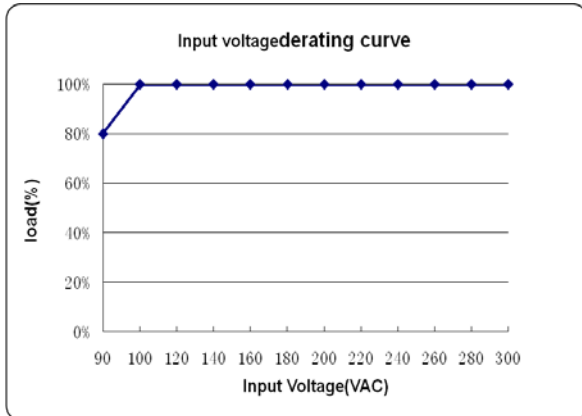
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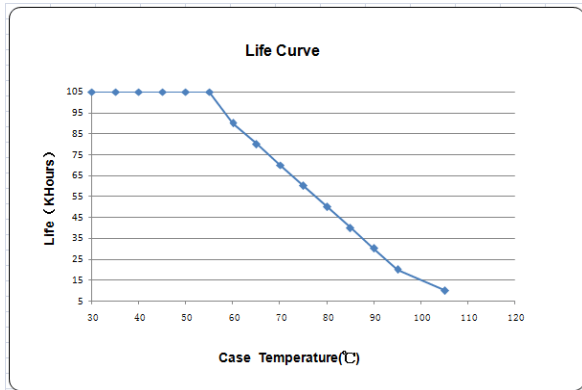
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Curve Feature:

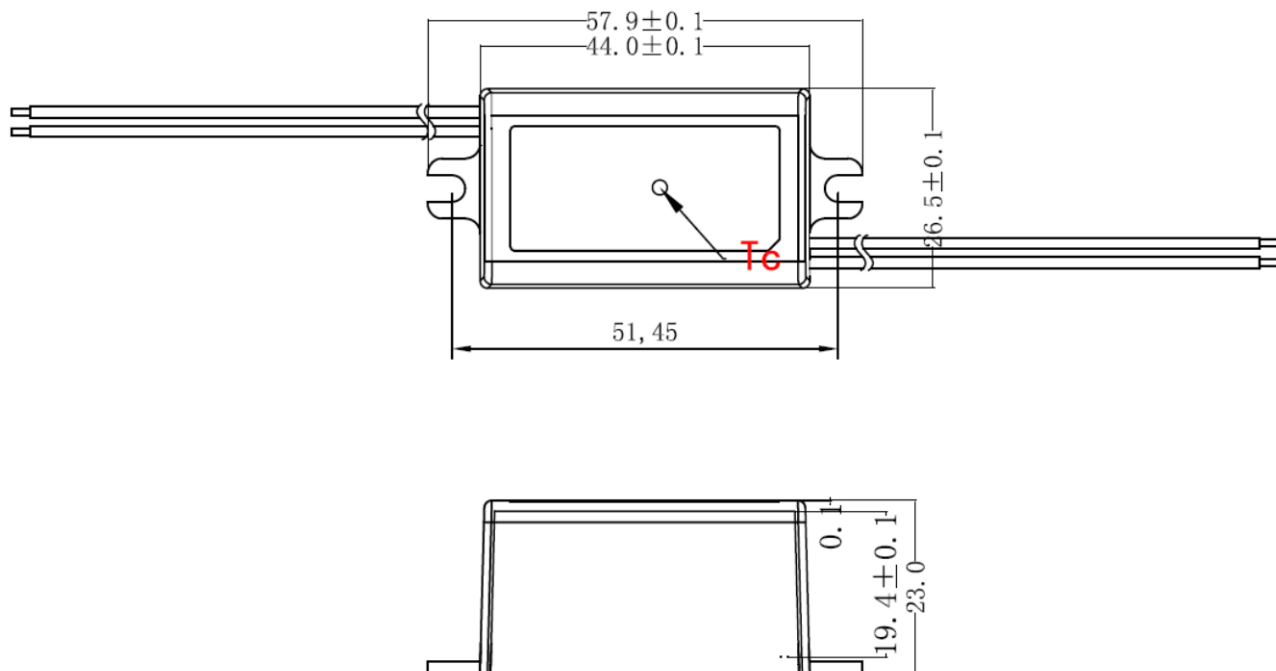
1, Derating curve



3, Life curve



Mechanical:



| Parameter | Cable Specifications | Standard length | Remark |
|-----------|-------------------------------|-----------------|--------------------------|
| AC cable | UL1332 18AWG Blue N , Brown L | A=120mm | Length can be customized |
| DC cable | UL1332 18AWG White+ Gray- | B=120mm | |