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1. **Scope**

This document details the electrical, mechanical and environmental specifications of DRV100WTP and DRV100NWP LED drivers.

2. **Input Characteristics**

2.1 **Input Voltage & Frequency**

The range of input voltage is 90~280VAC single phase.

Item	Symbol	Min	Nominal	Max	Units
Power Factor	P_F	0.93	0.95	1	
Input Voltage	V_I	90	100~240	280	V
Input Frequency	I_F	47	50~60	63	Hz

2.2 **Input AC Current**

0.5Amax @ 115VAC Input & Full load

0.24Amax @ 230VAC Input & Full load

2.3 **Inrush Current (cold start)**

30Amax. @ 264VAC input

2.4 **Efficiency (Normal)**

90% max @ Nominal Input & Full load

3. **Output Characteristics**

3.1 **Static Output Characteristics**

Min Load	Max Load	Rated Load	Output Range	Output current
20V	36V	36V	20-36V	3000mA

Ripple & Noise: Measurement was performed with a 20MHz bandwidth oscilloscope and the output paralleled to a 0.1uF ceramic capacitor and a10uF electrolytic capacitor.

3.2 **Line/ Load Regulation**

Output	Load Condition		Line Regulation	Load Regulation
Rail	Min. Load	Max. Load		
1.5A	20V	36V	±5%	±5%

3.3 **Hold-up Time**

300ms min. @ Full load &115Vac/60Hz input turn off at worst case
500ms min. @ Full load &230Vac/50Hz input turn off at worst case

3.4 **Rise Time**

20ms max. @ Rated load

3.5 **Fall Time**

30ms max. @ Full load

3.6 **Output Overshoot / Undershoot**

10%max. When the power on or off

3.7 **Output Load Transient Response**

Output voltage for load step from 0% to 80%, R/S: 0.5A/μs, frequency: 100Hz
Duration: 8ms at 80%.

4. Circuit protections

4.1 **Over Current Protection**

OCP Point Limited: Load
The output shall blink when over currents applied to the output rail, and will self-recovery when the fault condition is removed.

4.2 **Short Circuit Protection**

The input power shall decrease when short circuit is applied to the output rail. The driver won't suffer any damage, and will self-recovery when the fault condition is removed.

4.3 **Over Temperature Protection**

The power supply will power off when over temperature occurs, and self-recovery when temperature decreases to normal

4.4 **Over Voltage Protection**

The power supply will blink when the over voltage occurs on the output rail, the power supply won't suffer any damage.

5. Environment Requirements

5.1 **Operating Temperature and Relative Humidity**

0°C~60°C; 10%RH ~ 90%RH

5.2 **Storage Temperature and Relative Humidity**

-20°C+80°C; 5%RH ~ 95%RH non-condensing @ Level shall be lower 10,000 feet from sea level

5.3 **Vibration**

10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z.

5.4 **Drop in test survival**

Tested on corners, edges and Surfaces from height=80cm on the cement plane.

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6. **Reliability**

   6.1 **Burn-in**

   The driver will work at least 4 Hours at 60°C±5°C under full load condition.

   6.2 **MTBF Qualification**

   The MTBF shall be at least 15,000hours at 25°C under Full load and nominal input condition

7. **Safety Standards**

   7.1 **Dielectric Strenght**

   Primary to Secondary: 2000VAC/ 2mA / 60 seconds (3 seconds for production)

   7.2 **Leakage Current**

   0.25mA max @ 264Vac / 50Hz