

## TLD1040-12

### Description:

The TLD1040-12 is a compact and lightweight Constant Voltage Switch Mode Power Supply. Waterproof design within a 2x4 J box, IP66, NEMA 4 suitable for dry and damp locations. Convection cooled plastic housing. Designed for outdoor and indoor applications. Some typical applications include LED's, Lighting, etc.

### Specifications (@25C)

#### Electrical Specifications:

<b>Input Voltage:</b>	90-264Vac
<b>Input Frequency Range (1):</b>	47-63Hz
<b>Max Input Current:</b>	0.5A @ 115Vac; 0.25A @ 230Vac
<b>Max Inrush Current:</b>	<5A@115Vac, 10A@220Vac
<b>Power Factor:</b>	>0.9 at full load, 115Vac
<b>Output:</b>	12Vdc±5%, 3.33Adc Max
<b>Crest Factor (Ipk):</b>	1.5 Max.
<b>Leakage Current:</b>	300µA Typical
<b>Efficiency:</b>	84% Typical at full load
<b>Current Accuracy:</b>	±1% (when applicable)
<b>Load Regulation:</b>	±3%
<b>Hold up time:</b>	Half cycle minimum at 120 VAC and 80% of rated voltage
<b>Protection:</b>	Over-voltage, Over current and Short circuit protection: Auto-recovery

#### Environmental Specifications:

<b>Operating Temperature:</b>	-30 to 60°C (De-rating: 1%/°C from 60-70°C)
<b>Storage Temperature:</b>	-40 to 85°C
<b>Operating Humidity:</b>	5 to 95% RH (non-Condensing)
<b>Cooling:</b>	Convection cooling
<b>Vibration:</b>	5 to 50Hz
<b>MTBF:</b>	>100,000 Hours at full load and 25°C ambient conditions
<b>EMC:</b>	Compliant to 47CFR, Part 2, Part 15 and Cispur PUB, 22 Class B

#### General Specifications:

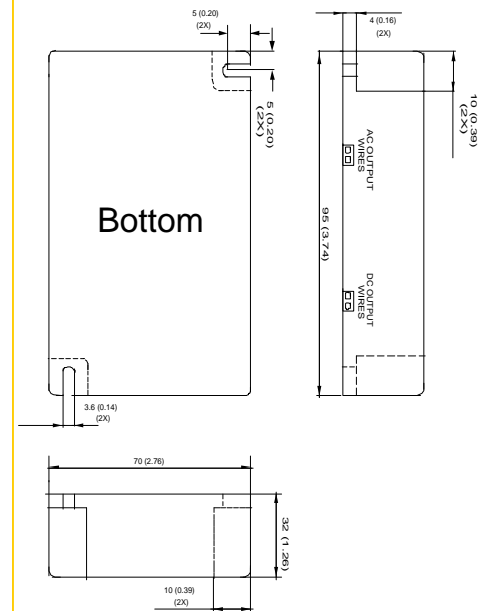
<b>Connections:</b>	5in leads - Input: 18 AWG; Output: 18 AWG
<b>Dimensions (WxLxH):</b>	70.0x95.0x32.0mm
<b>Weight:</b>	220g
<b>Warranty:</b>	3 years @ 40°C, 100% Load

#### Safety Standards:

<b>Standards:</b>	UL (cUL) 1310, UL48 CE
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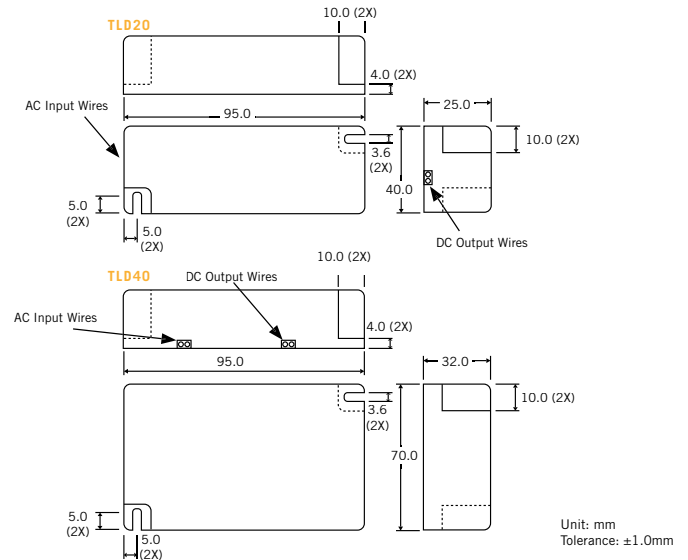


**RoHS Compliance:** This power supply meets the requirements 2002/95/EC, know as the RoHS initiative.



# TLD1020/40 Series

20~40 Watt Single Output Encapsulated Switching Power Supply with Power Factor Correction for Indoor & Outdoor IP66 / NEMA 4 Applications



## SPECIFICATIONS (@25°C)

### Input Characteristics

Input Voltage:	90 - 264VAC
Input Frequency Range:	47 - 63Hz
Power Factor:	0.9 at Full Load & 115 VAC
Crest Factor (I <sub>pk</sub> ):	1.5 Max
Max Input Current (max):	TLD1020: 0.3/ 0.15A @ 115/230 VAC TLD040: 0.5/0.25a @ 115/230 VAC
Max Inrush Current:	5 / 10A @ 115 / 230 VAC (cold start)

### Output Characteristics

Adjustment Range:	Fixed
Setpoint Accuracy	±5%
Current Accuracy:	±1% (when applicable)
Ripple/Noise (pk-pk 20MHz):	±5%
Regulation:	±3.0% Load / ±3.0% Line
Hold-up Time:	1/2 Cycle @ 120 VAC & 80% Load (min)
Over Current Protection:	120% (Auto-recovery)
Over Voltage Protection:	120% (Auto-recovery)

### General Specifications

Dimension (LxWxH):	TLD1020: 3.74 x 1.57 x 0.97" / 95 x 40 x 25mm TLD1040: 3.74 x 2.76 x 1.26" / 95 x 70 x 32mm
Weight:	120g
Reliability (MTBF):	>100k hrs. (Full Load & 25°C Operation)
Warranty:	3 years

### Environmental Specifications

Operating Temperature:	-30~+60°C Full Load, derate 1%/°C from 60~70°C max
Storage Temperature:	-40~+85°C
Cooling:	Convection Cooled Operation
Humidity:	5~95% RH, non-condensing
Vibration:	5 - 50Hz, 2G 1min / cycle, period of 60min, each axis

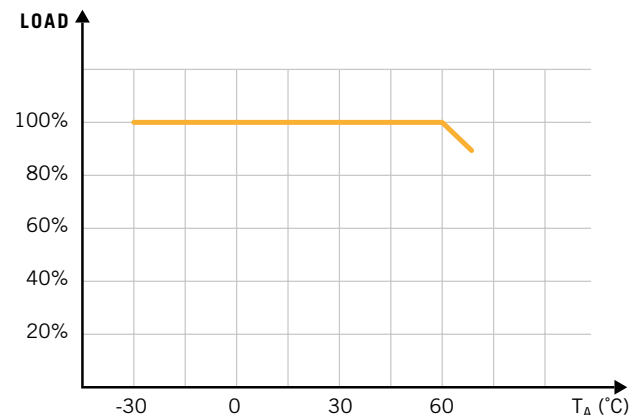
### EMC & Safety Specifications

EMC Emissions:	Compliant to 47CFR, Part 2, Part 15 and Cisp PUB, 22
Class II Safety Approval:	UL/cUL 1310, UL48, CE Mark (LVD)

## CONNECTOR TYPES

Input: 18AWG Wire, 5 inch leads  
Output: 18AWG Wire, 5 inch leads

## DERATING CURVE



Constant Voltage Models	Voltage	Current	Efficiency
TLD1020-12	12V	1.66A	84%
TLD1020-24	24V	0.83A	84%
TLD1040-12	12V	3.33A	84%
TLD1040-24	24V	1.67A	84%

Constant Current Models	Adc	VDC	Efficiency
TLD1020-24-C0350	350mA	12~24V	84%
TLD1020-24-C0700	700mA	12~24V	84%
TLD1020-36-C0350	350mA	18~36V	84%
TLD1040-24-C1050	1050mA	12~24V	84%
TLD1040-36-C0700	700mA	18~36V	84%
TLD1040-36-C1050	1050mA	18~36V	84%