

TLD1020-12

Description:

The TLD1020-12 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:

Input Voltage:	90-264Vac
Input Frequency Range (1):	47-63Hz
Max Input Current:	0.6A @ 115Vac; 0.3A @ 230Vac
Max Inrush Current:	<5A@115Vac, 10A@220Vac
Power Factor:	>0.9 at full load, 115Vac
Output:	12Vdc±5%, 1.66Adc Max
Crest Factor (Ipk):	1.5 Max.
Leakage Current:	300µA Typical
Efficiency:	84% Typical at full load
Maximum power:	20W
Current Accuracy:	±1% (when applicable)
Load Regulation:	±3%
Hold up time:	Half cycle minimum at 120 VAC and 80% of rated voltage
Protection:	Over-voltage, Over current and Short circuit protection: Auto-recovery

Environmental Specifications:

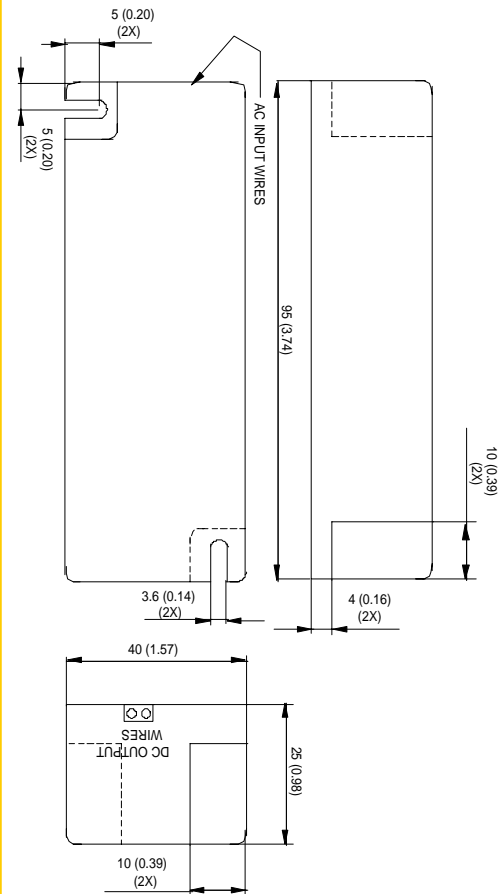
Operating Temperature:	-30 to 60°C (De-rating: 1%/°C from 60-70°C)
Storage Temperature:	-40 to 85°C
Operating Humidity:	5 to 95% RH (non-Condensing)
Cooling:	Convection cooling
Vibration:	5 to 50Hz
MTBF:	>100,000 Hours at full load and 25°C ambient conditions
EMC:	Compliant to 47CFR, Part 2, Part 15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

General Specifications:

Connections:	5in leads - Input: 18 AWG; Output: 18 AWG
Dimensions (WxLxH):	40.0x95.0x25mm
Weight:	120g
Warranty:	3 years @ 40°C, 100% Load

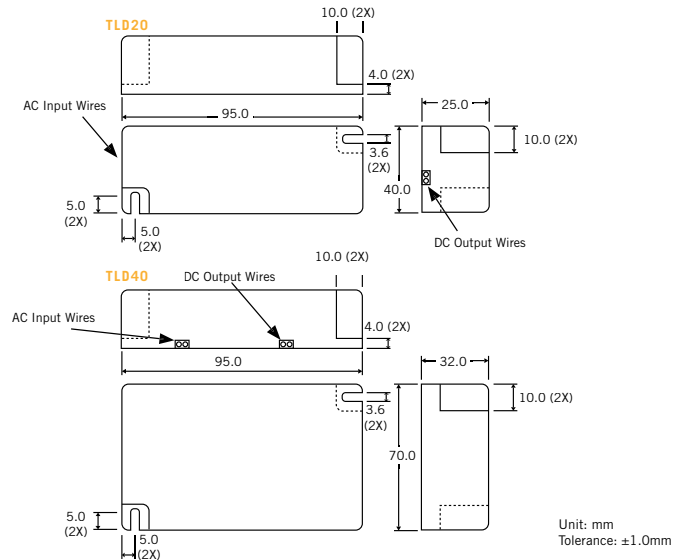
Safety Standards:

Standards:	UL (cUL) 1310, UL48 CE
-------------------	---------------------------



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 _{pk}):	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

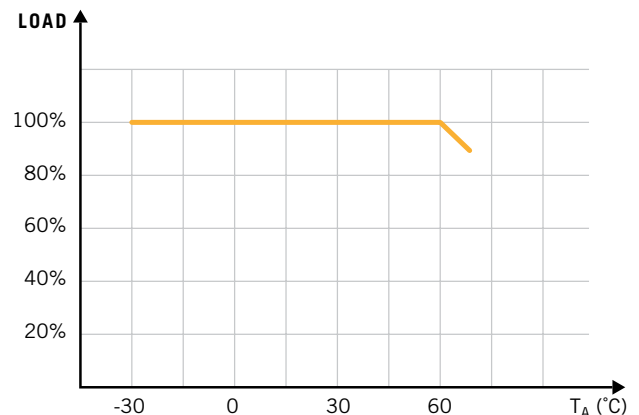
EMC & Safety Specifications

EMC Emissions:	Compliant to 47CFR, Part 2, Part 15 and CispR 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%