180W 12V Class 2 Triac / 0-10V Dimmable Driver

Model : MD-012-180VTD52JV2

LED WORLD INC
ledworldlighting.com | ledworld.ca
1-800-387-4081

12V DC | 180W | c UL us LISTED | FC | SELV | SMOOTH DIMMABLE | 6 Years Limited Manufacturer Warranty | 3 MULTI TAP

FEATURES

- Constant Voltage Output
- Universal AC input: 100~277VAC
- Power Factor > 0.99
- High efficiency > 89%
- Protection : Short circuit / Over Loading / Over temperature
- Design suitable for use in dry, damp and wet indoor/outdoor applications
- Easy installation
- Free Air convection cooling
- Compatible with leading edge and trailing edge Triac Dimmers
- Flicker-free PWM dimming
- Capable of 1% dimming using 0-10V PWM dimming technology
- Full protection aluminum housing
- cULus listed
- Meets California Title 24 standard
- Suitable for LED lighting and sign lighting applications
- 8 Knockouts for easy wiring

SPECIFICATIONS

Output	DC Voltage	12V
	Voltage	±0.5V Tolerance, ±0.5% Regulation
	Rated Current	3 x 5A
	Rated Power	180W (60W x 3)
Input	Voltage Range	100~277VAC
	Frequency Range	47~63Hz
	Power Factor (Typ.)	PF ≥ 0.99/120VAC, PF ≥ 0.94/277VAC
	Efficiency (Typ.)	86% @ 120VAC, 88% @ 277VAC
	THD (Typ.) @ full load	<20%
	AC Current (Typ.)	2.2A @ 100VAC
	Inrush Current (Typ.)	19A (twidth=1.3ms) @ 120VAC; 38A (twidth=960us) @ 277VAC
	Leakage Current	< 0.50mA
Protection	Short Circuit	Shutdown o/p voltage, re-power to recover after short circuit
	Over Current	≤ 1.4 x I out
	Over Temperature	100°C±10°C shutdown o/p voltage, automatically recovers after cooling
	Over Loading	≤ 120% Constant current limiting, auto recovery
Environment	Working Temp.	-40°C ~ 60°C (-40°F ~ 140°F)
	Working Humidity	20~90 % RH, non-condensing
	Storage Temp. Humidity	-40°C ~ 80°C, 10~95 % RH
	Temp. Coefficient	±0.03% / °C (0°~50°C)
	Vibration	10~500Hz, 2G 10min/1 cycle, period for 60min each along X, Y, Z axes
Safety & EMC	Safety standards	UL8750 CAN/CSA-C22.2 NO.250.13
	Withstand voltage	I/P-O/P:1.88KVAC
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
	EMC EMISSION	FCC Part 15 B
	EMC IMMUNITY	Compilance to EN61000-4-2, 3,4,5,11 (Surge 4KV)
Other	Net. Weight	2.3Kg (5.07lbs)
	Size	278L x 110W x 46H mm (10.94" x 4.33" x 1.82")

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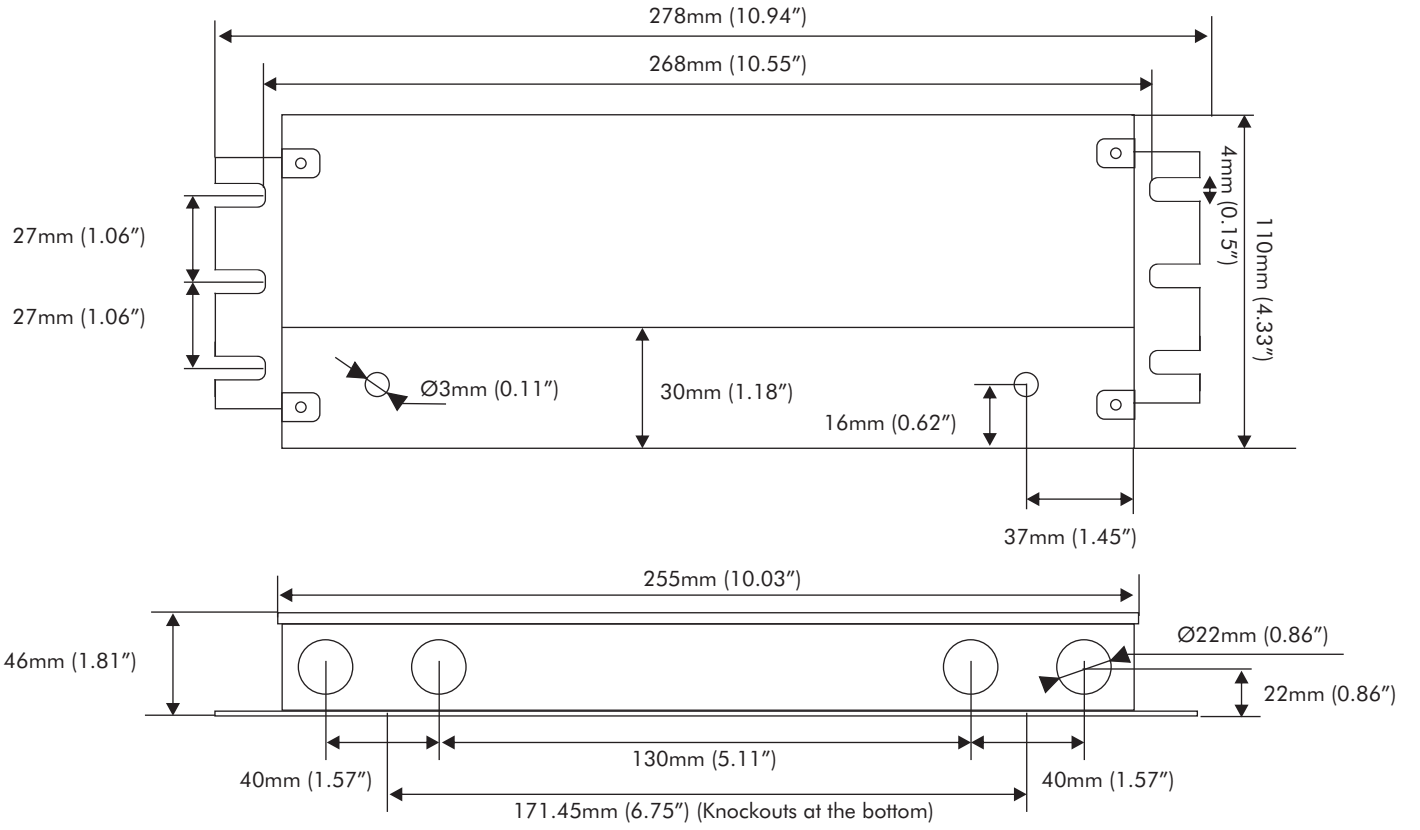
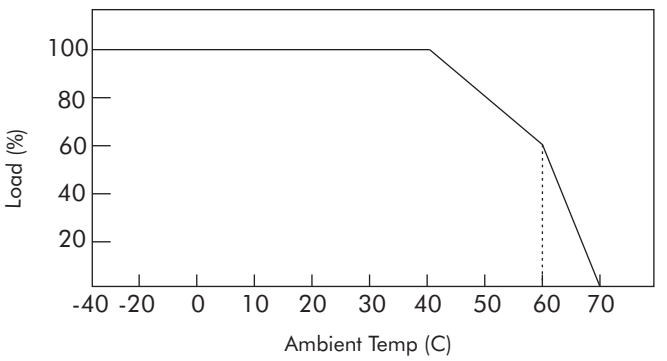
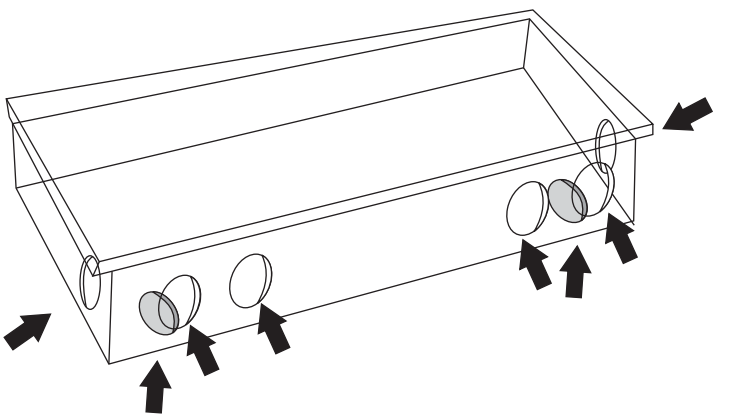
PRODUCT DIMENSION



DERATING CURVE



KNOCKOUTS



DIMMING OPERATION

- The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connecting a triac dimmer
- Match with leading edge Triac Dimmer (Can customized as a driver only matching trailing edge Triac Dimmers if needed)
- Use dimmers with power at least 2.5 times as the output power of the driver
- For forward phase, magnetic low voltage and Triac dimmers
- 0-10V Dimming: Dim(+) Purple wire to 0-10V dimmer signal(+), Dim(-) Grey wire to 0-10V dimmer signal(-)

WARNING

- Check polarity
- Risk of Electric Shock.
- Risk of Fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician.
- Risk of Electric Shock. Mount the unit at a height more than 1 ft (30cm) from the ground

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