# **RiZ**Ö

# Triac Constant Current LED Driver

### Model No.: RZ-TD-100-450-12E; RZ-TD-350-700-12E







#### Features

- Dimming interface: Triac/ELV
- Apply to leading edge/trailing edge Triac dimmers and dimming system
- PW/M digital dimming, no alter LED color rending index
- 1 channel constant current output, configurable current via DIP switch
- Over-heat / Over-voltage / Over-load / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

#### Mechanical Structures and Installations





#### **Technical Parameters**

Model		RZ-TD-100-450-12E	RZ-TD-350-700-12E					
Output	Output Voltage	9-45VDC	3-24VDC					
	Max Output Voltage	48VDC	30VDC					
	Output Power	Max.12W	Max.12W					
	Output Current	100-450mA	350-700mA					
	Dimming Range	0~100%						
	PWM Frequency	2000Hz						
	Current Accuracy	±5%						
	Ripple & Noise	< 100mV						
	Risetime	15/230VAC						
Input	Input Voltage Range	200~240VAC						
	Frequency Range	50/60Hz						
	Efficiency	>78%/230VAC						
	Alternating Current	0.13A/230VAC						
	Inrush Current	Cold start 16A at 230VAC						
	Anti Surge	L-N:1KV						
	Leakage Current	< 0.5mA/230VAC						
	No Load Power	< 1.5W						
Protection	Over Load Power	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced						
	Short Circuit	Shut down automatically if short circuit occurs, auto recovers.						
	Over Temperature	Intelligently adjust or turn off the output current if the PCB temp > 100°C, auto recovers.						
	Woking Temperature	-30℃~55℃						
	T-case Max	70°C						
	Working Humidity	20%~90%RH, non-condensing						
Environment	Storage Temp/Humidity	-40°C~80°C, 10%~95%RH						
	Temperature Coefficient	±0.03%/°C (0-50%)						
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min						
	IP Rating	IP20						
Safety&EMC	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13	1					
	Withstand Voltage	I/P-O/P: 3750VAC						
	Insulation Resistance	I/P·O/P: 100MΩ/500VDC/25°C/70%RH						
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-2						
	EMC Immunity	EN61000-4:2.3.4.5.6.8.11, EN61347						
	Certications	CE, EMC						



Model	1 2 3								
RZ-1D-350-700-12E	Output Voltage	3-24V	3-24V	3-24V	3-24V	3-22V	3-20V	3-18V	3-17V
	Output Current	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA
RZ-TD-100-450-12E	Output Voltage	9-45V	9-45V	9-45V	9-45V	9-40V	9-34V	9-30V	9-26V
	Output Current	100mA	150mA	200mA	250mA	300mA	350mA	400mA	450mA

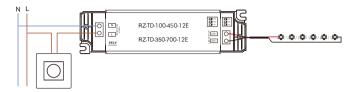
#### Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

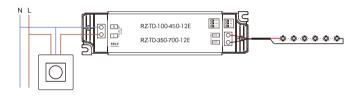
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### Wiring Diagram

1. Connect Triac dimmer(no Neutral wire)



2. Connect Triac dimmer(with Neutral wire)



## Triac Dimming Input

While connected with a Triac dimmer, such as Lutrom, Clipsal, Dynalite dimmer, different Triac dimmers from different suppliers may have different minimum dimming levels which the driver can not be dimmed below. To dim to 1%, please make sure the dimmer supports 1% minimum dimming level.

# Dimming Curve

