

KI2-TDW Series 10W

Whole Family: KI2-010450-TDW [10W 15W 20W 30W 40W 50W]



Features

Output:	Constant Current
Range:	120-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 77%
Protections:	Short circuit / Over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	For dry and damp location
Dimming function:	Phase dimming: work with forward phase /leading edge, MLV and Reverse phase /trailing edge, ELV, TRIAC dimmers.
Dimming range:	1-100%
Application:	Suitable for the application of LED lighting
Warranty:	5 years warranty

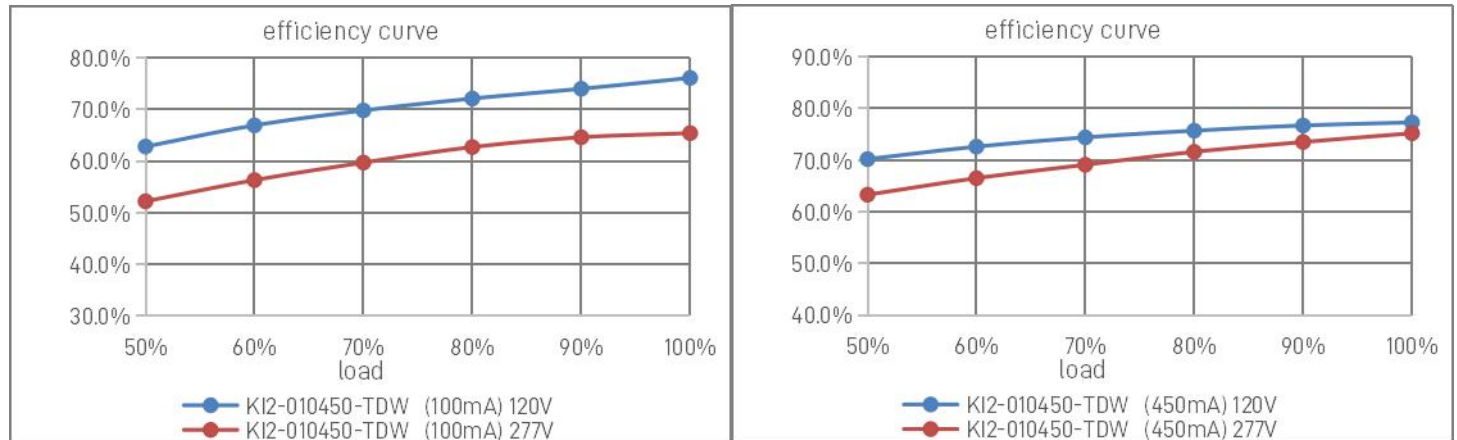
TRIAC Dimmable LED Driver - Constant Current Output - KI2-TDW Series 10W

Specification

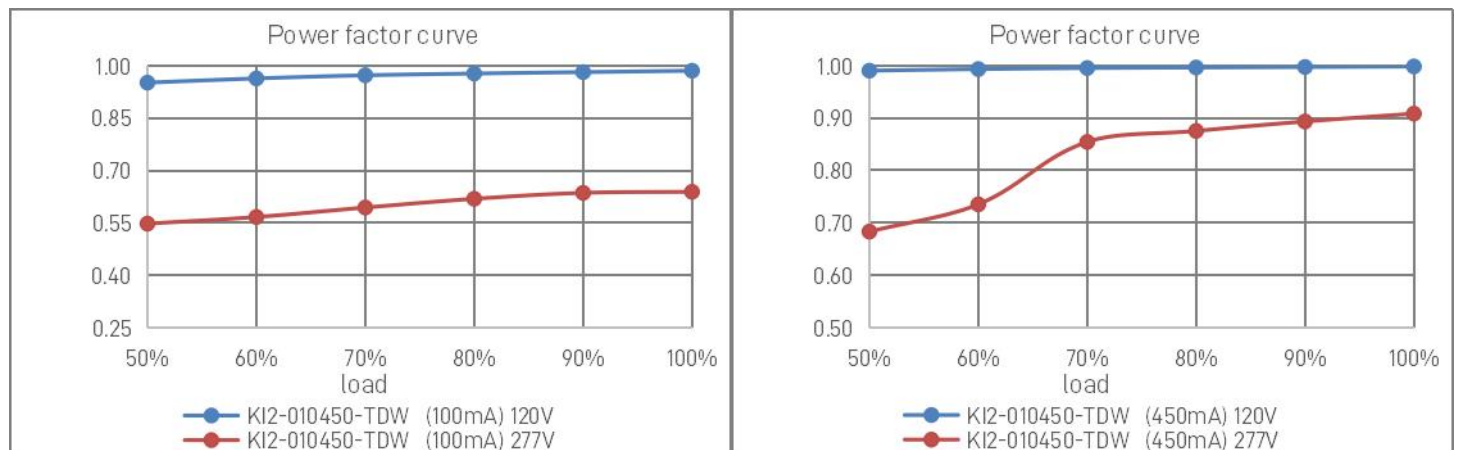
Model		KI2-010450-TDW							
Certificate		/							
Output	DIP switch 3Pin (T ON L OFF)	3 2 1 LLL	3 2 1 LLT	3 2 1 LTl	3 2 1 lTT	3 2 1 Tll	3 2 1 TlT	3 2 1 TTl	3 2 1 TTT
	Output current	100mA	150mA	200mA	250mA	300mA	350mA	400mA	450mA
	DC Voltage	3-42V	3-42V	3-42V	3-40V	3-33V	3-28V	3-25V	3-22V
	Current Tolerance	±4%							
	Overshoot Current	<0.1%							
	No Load Voltage	54V(max)							
	Rated current range	100-450mA(The output current can be adjusted within this range DIP switch)							
	Rated power	10W							
Input	Voltage Range	120-277VAC							
	Frequency Range	47-63Hz							
	Power Factor (Typ.) @ full load	≥0.99@120VAC ≥0.9@277VAC							
	THD(Typ.) @ full load	<9%@120VAC <12%@277VAC							
	Efficiency(Typ.) @ full load	≥76%@120VAC ≥74%@277VAC							
	AC Current (Max.)	0.11A							
	Inrush Current (Typ.)	4.64A, 3.04us @50%Ipeak 120VAC 4.48A, 2.88us @50%Ipeak 277VAC							
	Leakage current	<0.5mA							
Protection	Short Circuit	Constant current mode, can automatically recover after abnormal elimination.							
	Over temperature	Ambient temperature over 55°C±5°C , output reduce to 50%; Ambient temperature over 60°C±5°C, output off; When the temperature is reduced to 45°C±5°C the output returns to 100%							
Environment	Working TEMP.	-40 ~ +50°C (see below derating curve)							
	Working Humidity	20 ~ 90%RH non-condensing							
	Storage TEM.,Humidity	-40 ~ +80°C,10 ~ 95% RH non-condensing							
	TEMP.coefficient	±0.03%/°C(0 ~ 50°C)							
	Vibration	10~500Hz, 2G 12 minutes/cycle, 72 minutes each in X, Y and 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							
	Surge Immunity Test	AC Power Line: Differential Mode 1KV							
	EMC Immunity	FCC/ICES do not request this test.							
	EMC Emission	FCC Part 15 Subpart B							
Others	Net Weight	0.083KG							
	Dimension	54*48.2*24mm(Φ*W*H)							
	Packing	380*290*155mm 100pcs/CTN							
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°Cof ambient temperature. 2. Tolerance: includes set up tolerance and load regulation.								

TRIAC Dimmable LED Driver - Constant Current Output - KI2-TDW Series 10W

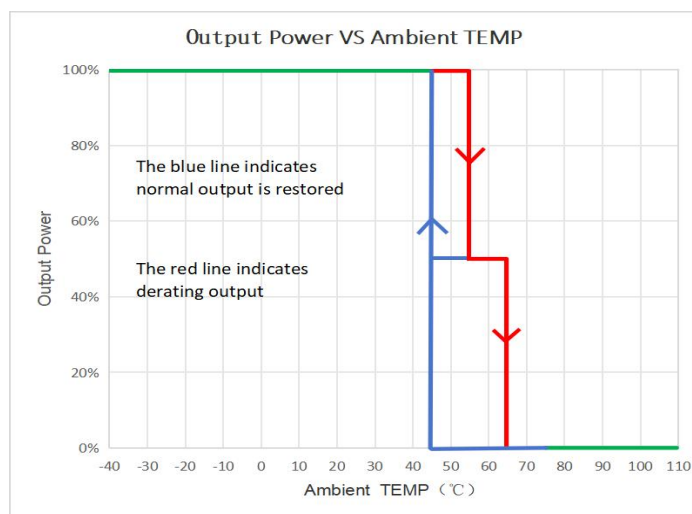
Efficiency Curve (efficiency vs output load)



Power Factor Curve (power factor vs output load)



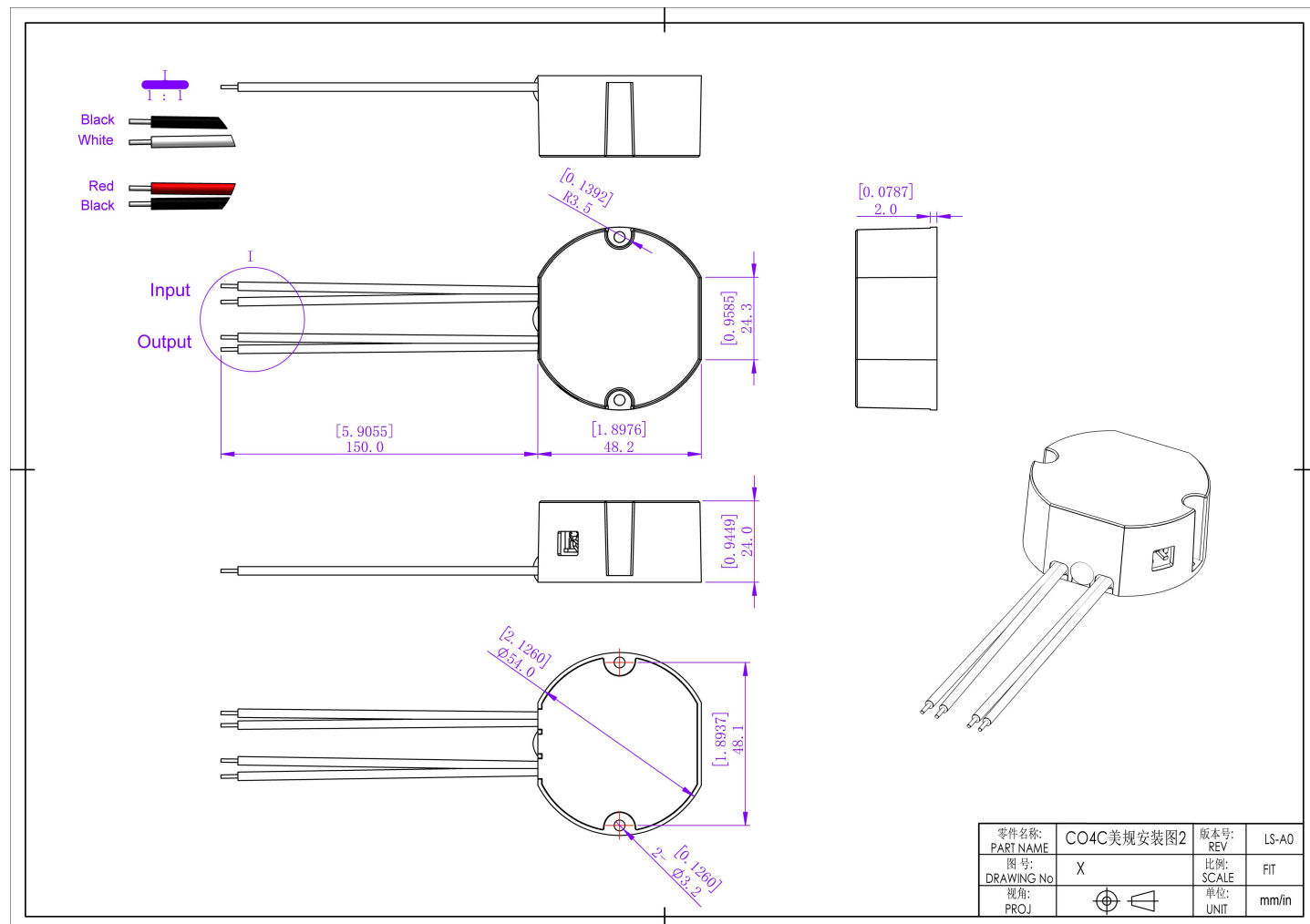
Derating Curve (output load vs TEMP.)



To extend their life, please refer to the Derating Curve and derate according to the temperature.

TRIAC Dimmable LED Driver - Constant Current Output - KI2-TDW Series 10W

Mechanical Specification



American wire gauge

CO4C

Input wire	Black(L) White(N) (2*18AWG)
Output wire	Red(V+) Black(V-) (2*22AWG)

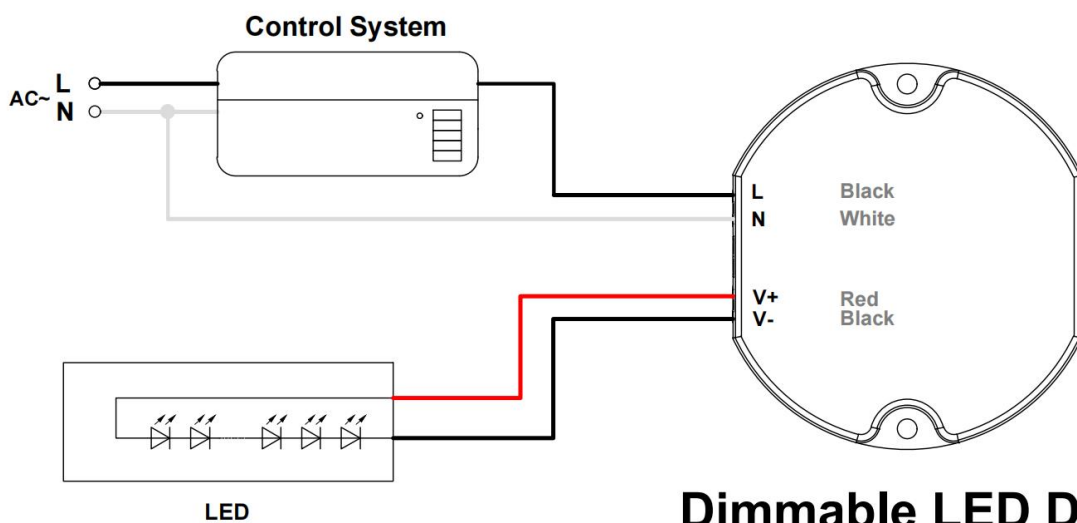
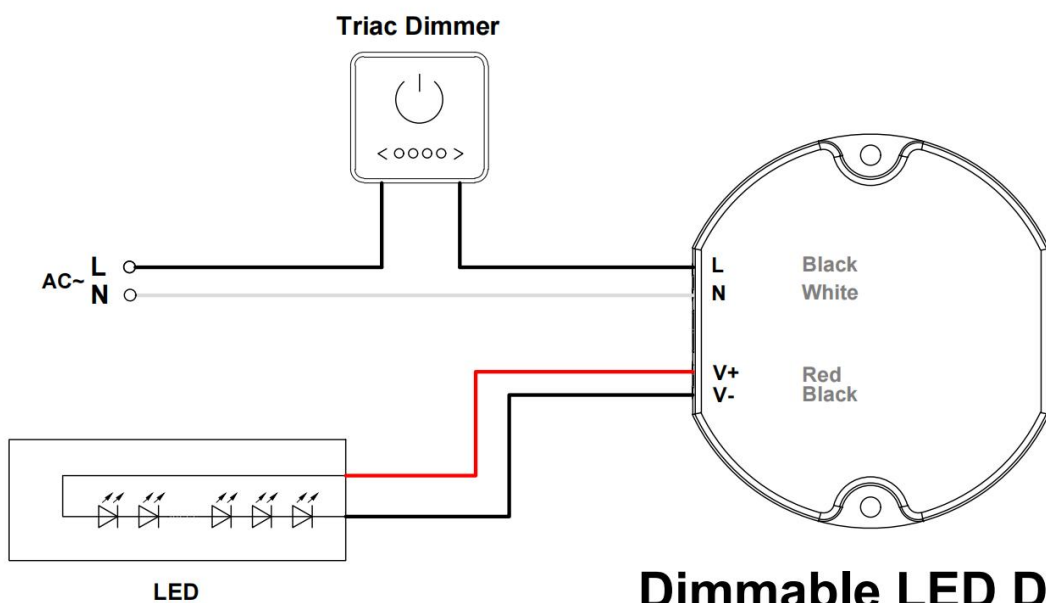
Remark: Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

Warm tips:

- Recommended Max. Carrying Current (A) = wire diameter(mm²) x 10A/mm²
For example: 1mm² output cable, Recommended Max. Carrying Current (A) = 1mm² x 10A/mm²=10A
- Any other requests for cable, we can customize.

TRIAC Dimmable LED Driver - Constant Current Output - KI2-TDW Series 10W**Dimming Operation and Connecting Diagram****Using one dimming ---TRIAC/Phase cut dimming**

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with forward phase /leading edge, MLV and Reverse phase /trailing edge, ELV, TRIAC dimmers or light system.
3. Min. loading is about 10%
4. Please try to use dimmers with power at least 1.5 times as the output power of the driver.



TRIAC Dimmable LED Driver - Constant Current Output - KI2-TDW Series 10W

Instructions

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver cannot work normally, don't maintain privately.

Have any questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/en