DMX LED driver-Constant current output-KIX series 10W

KIX Series 10W

Whole Family: KIX-010-1C [10W 20W 40W 60W]



Features

Output:	Constant Current
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 79%
Protections:	Short circuit/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP20.(EU) Full plastic protection housing, for dry and damp locations.(US)
Dimming function:	DMX512 dimming, digital dimming, accurate and smooth, single lighting control, the control is more flexible.
Dimming range:	0-100% Dimming depth: 1%
NFC function:	Read and write the address.
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

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Specification

Model		KIX-010-1C							
Certificate		CE/SELV/ROHS/REACH							
Output	Rated current ON OFF	100mA	150mA	200mA	250mA	300mA	350mA	400mA	450mA
	Current Tolerance	±5%							
	DC Voltage (V)	3-42V	3-42V	3-42V	3-40V	3-33V	3-29V	3-25V	3-22V
	Rated Power	4.2W	6.3W	8.4W	10W				
	No-load Voltage	52V							
Input	Rated Voltage	100-277VAC							
	Frequency Range	47-63HZ							
	Power Factor @ full load	0.97@120VAC 60HZ 0.91@230VAC 50HZ 0.86@277VAC 60HZ							
	THD @ full load	10%@120VAC 60HZ 12%@230VAC 50HZ 13.6%@277VAC 60HZ							
	Efficiency @ full load	79%@120VAC 60HZ 79% @230VAC 50HZ 77%@277VAC 60HZ							
	No-load Power	≤1W							
	AC Current (Max.)	≤0.15A							
	Inrush Current	2.6A, 32us@50%Ipeak@120VAC 9.8A, 20us@50%Ipeak@230VAC 7.0A, 24.8us@50%Ipeak@277VAC							
	Leakage current	<0.50mA							
Protection	Short Circuit	Constant current mode, recovers automatically after fault condition is removed							
	Over temperature	Ambient temp. over 50℃±5℃, output current will be reduced to 50%; Ambient temp. over 60℃±5℃, output current will be reduced to 0%; Ambient temp. reduce to 45℃±5℃, recovers automatically .							
Environment	Working TEMP.	-40-+60℃							
	Working Humidity	20-90%RH, non-condensing							
	Storage TEMP.Humidity	-40-+80℃,10-95%RH							
	TEMP. coefficient	±0.03%/℃ (0-50℃)							
	Vibration	10-500Hz, 2G 10min./1 cycle,period for 60min.each along X,Y,Z axes							
Safety & EMC	Safety standards	EN61347-1; EN61347-2-13 & UL8750; CAN/CSA-C22.2 No.250.13							
	Withstand voltage	I/P-O/P:3.75KVAC (EU) & I/P-O/P:1.88KVAC (US)							
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70%RH							
	EMC Immunity	EN61547; EN61000-4-2,3,4,5,6,11 & FCC/ICES do not request this test.							
	EMC Emission	EN55015; EN61000-3-2,3 & FCC Part 15 Subpart B							
Others	Net Weight	0.065KG							
	Dimension	135*30*20mm(L*W*H)							
	Packing	350*300*135mm 100pcs/CTN							
Notes	1. All parameters NOT specially mentioned are measured at rated load and 25℃of ambient temperature. 2. Tolerance: includes set us tolerance, line regulation and load regulation.								

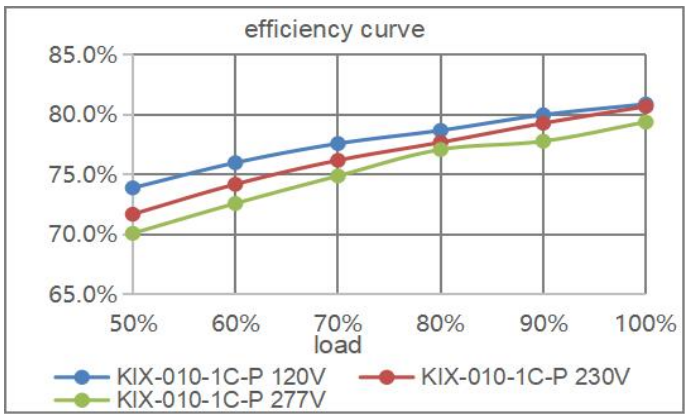
MCB recommendation

When the input voltage is 120Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type(breaking capacity:6KA)	10A	66
	13A	86
	16A	106
	20A	133
	25A	166
When the input voltage is 230Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type(breaking capacity:6KA)	10A	114
	13A	148
	16A	182
	20A	228
	25A	285
When the input voltage is 277Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type(breaking capacity:6KA)	10A	133
	13A	173
	16A	213
	20A	266
	25A	333

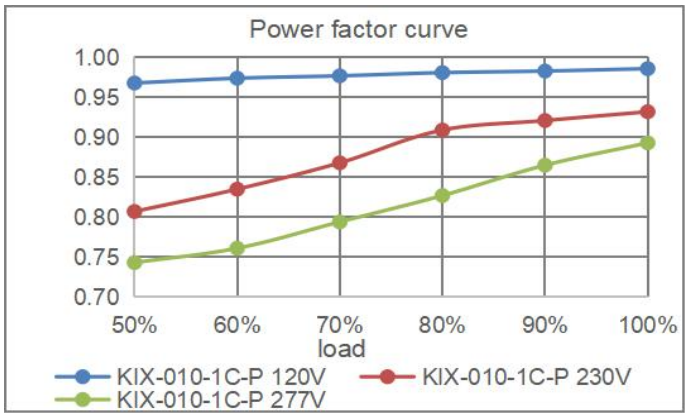
Note:

1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50 °C
2. The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve.

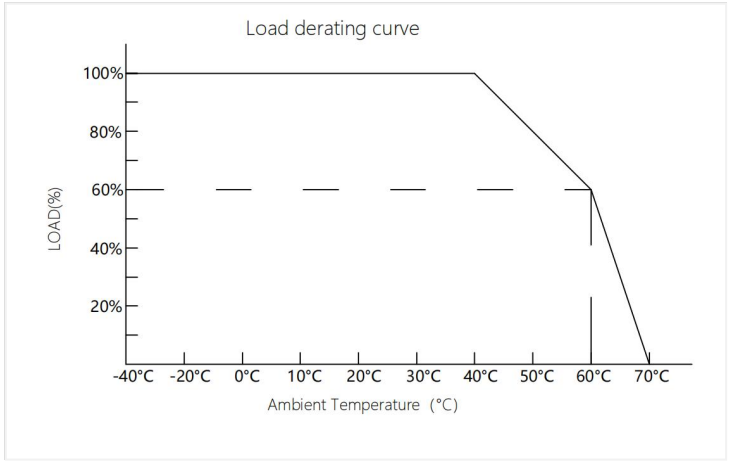
Efficiency Curve (efficiency vs output load)



Power Factor Curve (power factor vs output load)

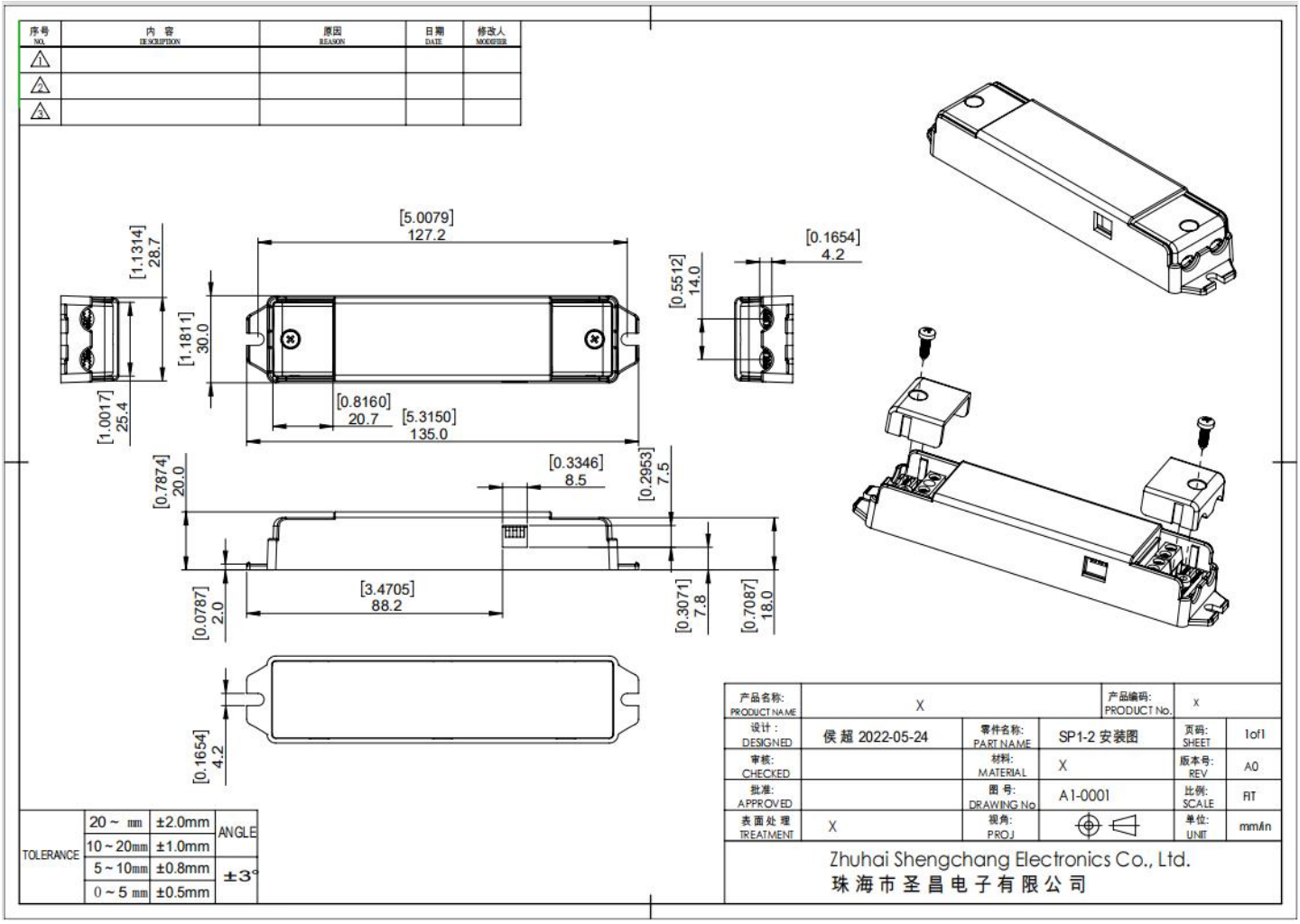


Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Mechanical Specification



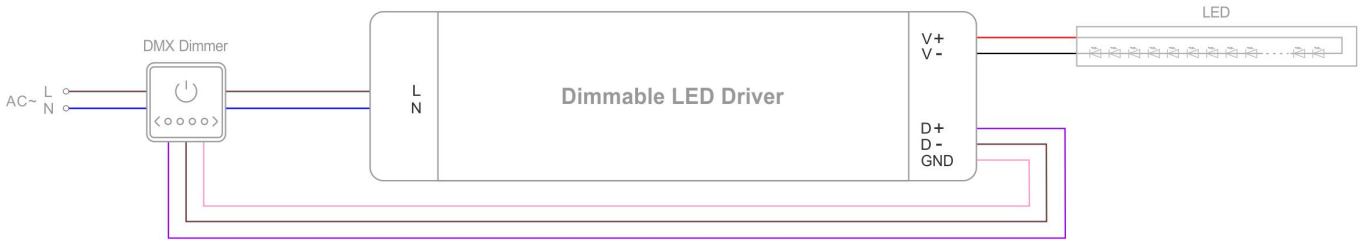
1. Input with ULO-TB51-126/5.0-03P-4126A : Live Wire AC (L), Neutral Wire AC(N).
2. Output LED SEC with ULO-TB17-381/3.81 5P : output Positive (LED+), output negative (LED-). Connected to LED Lamps DMX+ ; DMX -; and GND.
3. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

Warm tips:

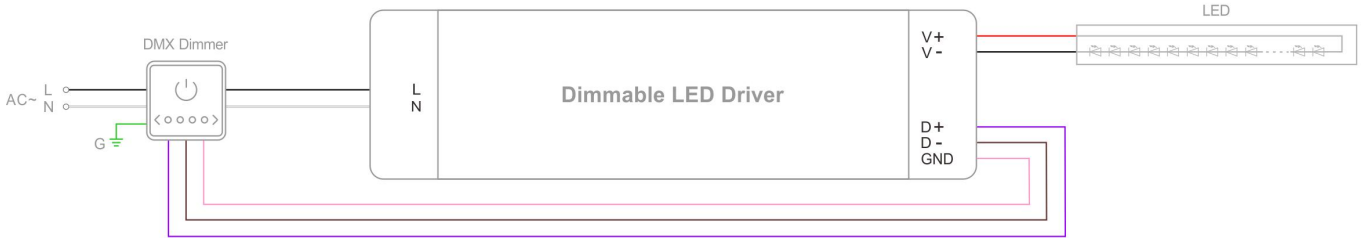
1. Suggested wire diameter: Input 0.75-2.0mm^2; Output & dimming wires:0.5-1.0mm^2.
2. Any other requests for, we can customize.

Dimming Operation and Connecting Diagram

DMX512 - 1 Channel



DMX512 - 1 Channel



NFC function

DMX512 address setting Operation

1. The default address for SC DMX driver is 001.
2. Address settings device:



RDM



ProNFC APP



NFC Handheld devices

IOS Download

Android Download

Address settings:

RDM setting address:

Set the address by the RDM device. For detailed operation, please refer to RDM device instruction manual.

NFC setting address:

The DMX address can be read and written by a mobile with Pro NFC APP or NFC handheld device (NFC read & write device: NFC-RW) by close to the NFC signal area of the DMX512 driver.

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