



INTRODUCTION

The K3/K4/K5 series led driver provides the best compromise between an attractive price and qualified performance.

With a focus on application-related functions, the LED Driver range offers good quality and performance that ensures reliable operation of LED module.

Features

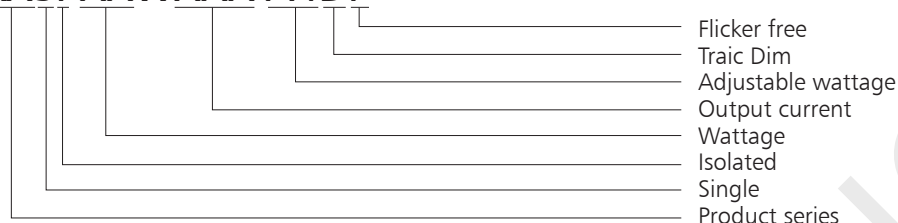
- Built-in active power factor correction circuit, high PF, low THD.
- Flicker free for green healthy lighting.
- Compatible with Class I / II lamps.
- With short circuit protection, over current protection, over voltage protection, over temperature protection.
- Indoor use only.
- Rated life up to 50000 hours.
- Adjustable power, Adjustable wattage for k5.
- Perfect triac dimming compatibility, applicable for leading & trailing edge dimmer, smooth dimming effect.
- Low noise operation, especially for leading edge dimmer.
- Temperature protection as per EN /EC61347.



TECHNICAL DATASHEET

Code Number Definition

KXSI-XXWXXX-A4DF



Driver Datasheet (Triac Dimmable)

| Code | | K3SI-XXWXXX-DF1 | K4SI-XXWXXX-DF1 | K5SI-10W230-A4DF1 | K5SI-15W350-A4DF1 |
|--------------|--------------------------------|--|------------------------|--|-------------------|
| Input | Input Power | 5-10W | 10-15W | 10 / 8 / 7 / 5W | 15 / 13 / 11 / 9W |
| | Input Voltage | 180-264V | | | |
| | Rated Input Voltage(V) | 200-240V | | | |
| | Frequency | 50Hz | | | |
| | Input Current | ≤0.07A | ≤0.1A | ≤0.07A | ≤0.1A |
| | Rated Input Current | ≤0.06A | ≤0.09A | ≤0.06A | ≤0.09A |
| | Power Factor (Typ) | 0.9 @230VAC ,full load (Please refer to "Power Factor (PF) Characteristic" section) | | | |
| | Total Harmonic Distortion(Thd) | <20% @230V | | | |
| | Efficiency (Typ) | ≥78% | ≥80% | ≥78% | ≥80% |
| | Inrush Current (Typ.) | 2.16A/48uS | 4.32A/53uS | 1.5A/148uS | 4.32A/53uS |
| | Max Circuit Breaker | Please refer to" Circuit breaker Specification" | | | |
| | Leakage Current | <0.5mA @240V | | | |
| | No Load Wattage | <1w @230V | | | |
| Output | Output Voltage Range | DC23-40V | | | |
| | Rated Output Current | 100-230mA | 200-350mA | Current level selectable via DIP switch, please refer to"DIP SWITCH TABLE" section | |
| | | | | 230/180/150/100mA | 350/300/250/200mA |
| | Line Regulation | ±5% | | | |
| | Open Circuit Voltage (Max) | 50V | | | |
| | Setup Time(Note1) | 500ms@230V | | | |
| Protection | Flickering Index(IEEStd 1789) | 5%(LOW RISK) | | | |
| | Short Circuit Protection | Constant current limiting, recovers automatically after fault condition is removed | | | |
| | Over Voltage Protection | Shut down o/p voltage | | | |
| Environment | Over Temperature Protection | Shut down o/p voltage, recovers automatically after temperature goes down | | | |
| | Ambient temperature range ta | -20...+45°C | | | |
| | Maximum case temperature tc | 85°C (Measured on tc point indicated of the product label, tc not exceeded) | | | |
| | Operating temperature | -20...+45 °C | | | |
| | Storage temperature/humidity | -25...+85 °C; 5-95% RH | | | |
| | Relative humidity | 5...85% | | | |
| | Environmental rating | Indoor | | | |
| | IP rating | IP20 | | | |
| Safety & EMC | Life time | > 50,000H @25°C | | | |
| | Safety Standards | IEC/EN61347-1, IEC/EN61347-2-13, IEC/EN62384 independent,GB19510.14,GB19510.1 approved | | | |
| | Withstand Voltage | I/P-O/P:3.75KVac,<5mA 60S; I/P-FG:1.6KVac,<5mA 60S; O/P-FG:0.5KVac,<5mA 60S | | | |
| | Isolation Resistance | I/P-O/P: 500VDC, ≥100M Ω | | | |
| | Surge | IEC/EN61000-4-5(L-N:0.5KV L N-PG:1KV) | | | |
| | EMC Emission | IEC/EN55015, IEC/EN61000-3-2 | | | |
| Other | EMC Immunity | IEC/EN61000-4-2,3,4,5,6,8,11; IEC/EN61547 | | | |
| | Dimension(mm) | 90.1*46.0*26.2mm(L*W*H) | 110.1*46*26.2mm(L*W*H) | 110.1*52.2*26.2mm(L*W*H) | |
| | Weight | 0.078Kg | 0.09K | 0.105Kg | 0.115Kg |

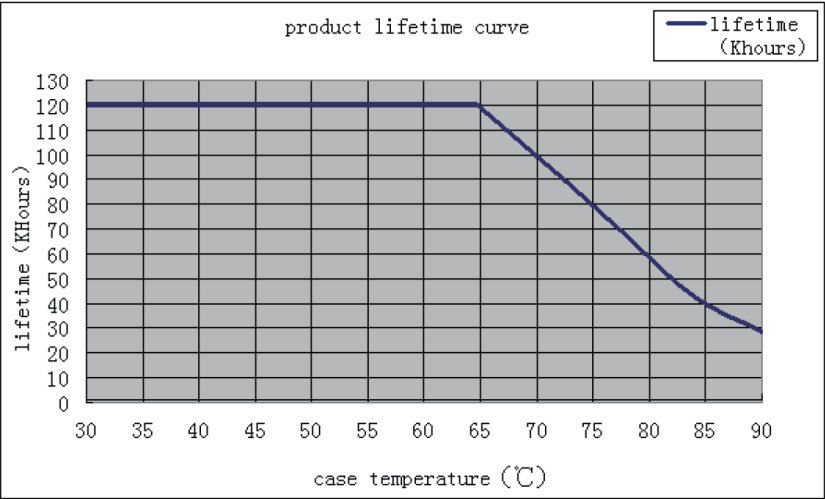
NOTE:

Dimmer types: leading, trailing, universal,not all of dimmers match the maximum number of LED Drivers per dimmer is defined by the power of the LED Driver and the dimmer.

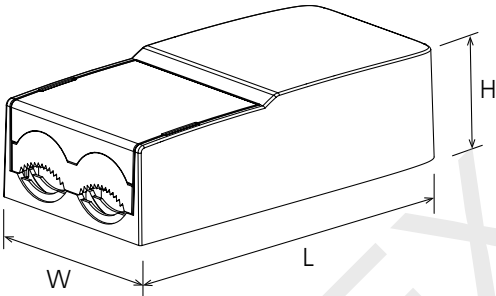
The total power of all connected LED Drivers must not exceed 50 % of the power of the dimmer.

PRODUCT REFERENCED LIFETIME

The curve below illustrates the driver's lifetime date when the LED driver's Max. case temperature reaches 40 °C,50°C,60°C,70°C, 80°C and 85°C



DIMENSION



| Code | Dimension(mm) | | |
|-------------------|---------------|------|------|
| | L | W | H |
| K3SI-XXWXXX-DF1 | 90.1 | 46 | 26.2 |
| K4SI-XXWXXX-DF1 | 110.1 | 46 | 26.2 |
| K5SI-10W230-A4DF1 | 110.1 | 52.2 | 26.2 |
| K5SI-15W350-A4DF1 | 110.1 | 52.2 | 26.2 |

CIRCUIT BREAKER SPECIFICATION

| Circuit Breaker Specification | | | | | | | | |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Code | B10 | B13 | B16 | B20 | C10 | C13 | C16 | C20 |
| | 10 | 13 | 16 | 20 | 10 | 13 | 16 | 20 |
| K3SI-XXWXXX-DF1 | 111 | 144 | 178 | 222 | 111 | 144 | 178 | 222 |
| K4SI-XXWXXX-DF1 | 74 | 96 | 119 | 148 | 74 | 96 | 119 | 148 |
| K5SI-10W230-A4DF1 | 111 | 144 | 178 | 222 | 111 | 144 | 178 | 222 |
| K5SI-15W350-A4DF1 | 74 | 96 | 119 | 148 | 74 | 96 | 119 | 148 |

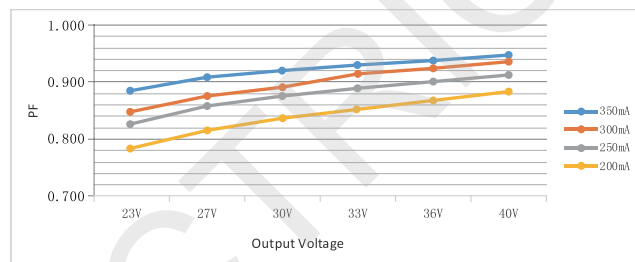
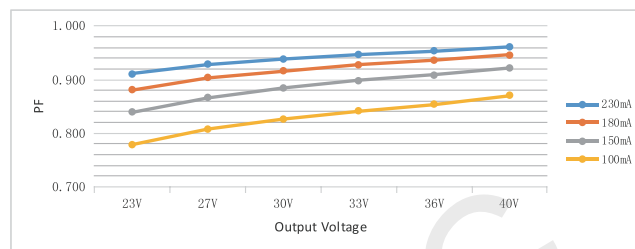
DIP SWITCH TABLE

| Code | Vout | Po Max | Io | 1 | 2 |
|-------------------------------------|--------|--------|-------|----|----|
| K5SI-10W230-A4DF1 Triac-Dimmable | 23-40V | 10.2W | 230mA | ON | ON |
| | 23-40V | 7.2W | 180mA | - | ON |
| | 23-40V | 6W | 150mA | ON | - |
| | 23-40V | 4W | 100mA | - | - |

| Code | Vout | Po Max | Io | 1 | 2 |
|-------------------------------------|--------|--------|-------|----|----|
| K5SI-15W350-A4DF1 Triac-Dimmable | 23-40V | 14W | 350mA | ON | ON |
| | 23-40V | 12W | 300mA | - | ON |
| | 23-40V | 10W | 250mA | ON | - |
| | 23-40V | 8W | 200mA | - | - |

POWER FACTOR CHARACTERISTIC

@AC230Vac Input



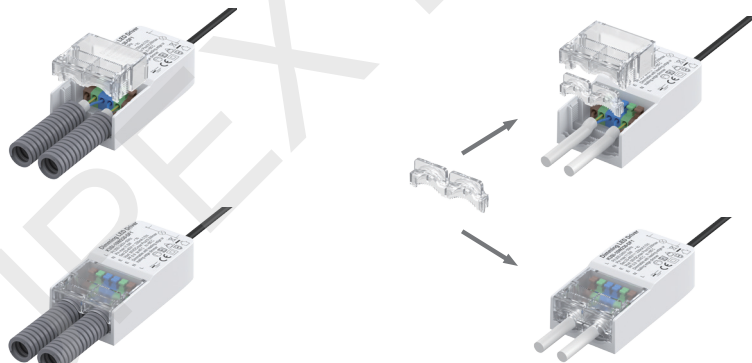
CIRCUIT DIAGRAM

No-load operation

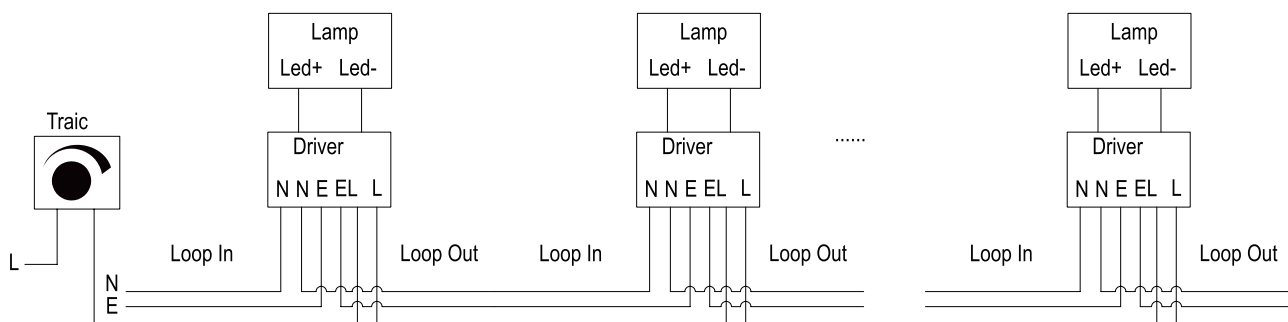
In case of open circuit, protection will be activated, there will be 50V output voltage.

Glow wire test

According to EN 61347-1 with increased temperature of 960°C passed.



Dimmable Circuit Diagram



TUPEX ELECTRIC

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