Constant Voltage Triac Dimmer
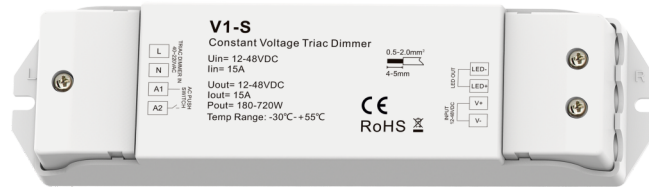
Model No.: V1-S

SKYDANCE

1 Channel/Constant voltage/Triac dimming/Logarithmic dimming curve/AC Push-Dim

V1-S
Constant Voltage Triac Dimmer
Uin= 12-48VDC
Iin= 15A
Uout= 12-48VDC
Iout= 15A
Pout= 180-720W
Temp Range: -30℃-+55℃
0.5-2.0mm²
4-5mm
CE
RoHS

FC C CE RoHS emc LVD

Features

- Triac dimming, input AC40V-220V dimming signal.
- Apply to leading edge/trailing edge Triac dimmers and dimming system.
- One channel PWM constant voltage output, output current 15A max.
- PWM digital dimming, logarithmic dimming curve.
- Over current protection, short circuit protection, over temperature protection.
- Connect with external AC push switch to achieve on/off and dimming function.

Technical Parameters

Input and Output

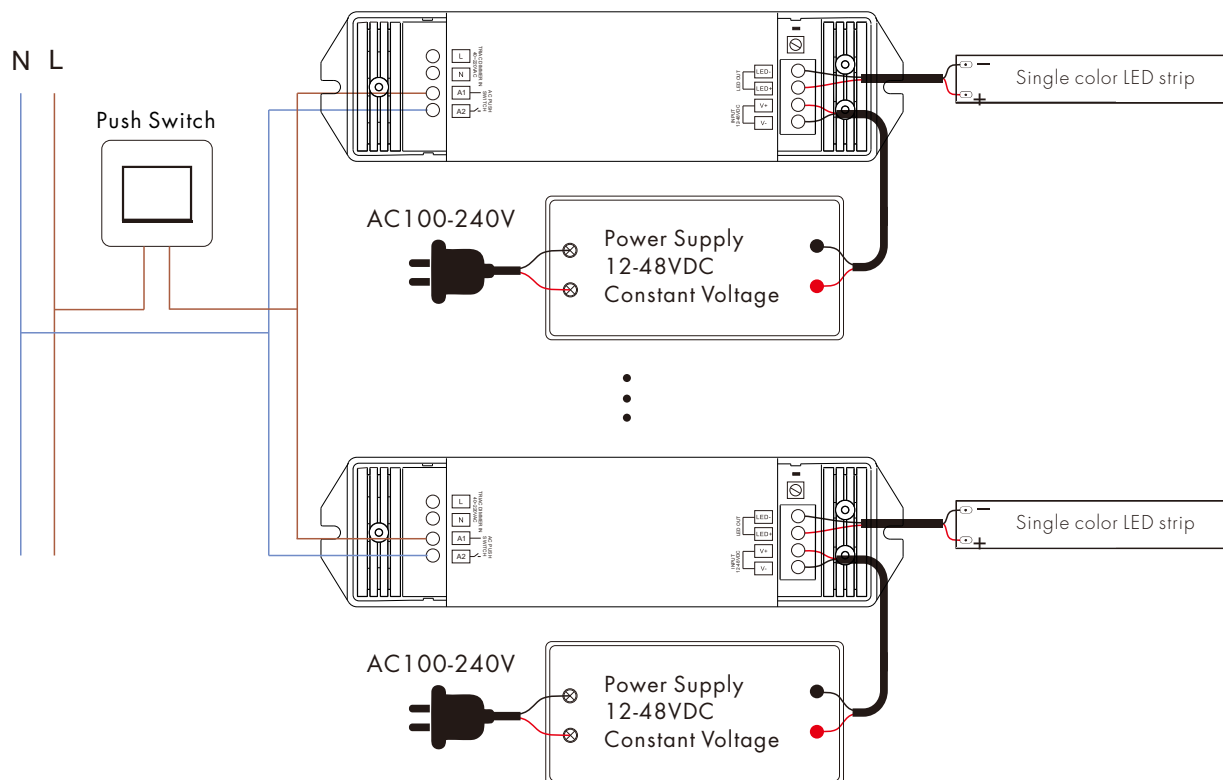| Input voltage	12-48VDC
Input current	15A
Output voltage	12-48VDC
Output current	1CH,15A
Output power	180W/360W/540W/720W (12V/24V/36V/48V)
Output type	Constant voltage

Safety and EMC

EMC standard (EMC)	EN301 489,EN 62479
Safety standard(LVD)	EN60950
Certification	CE,EMC,LVD

Environment

Operation temperature	Ta: -30℃ ~ +55℃
Case temperature (Max.)	Tc: +85℃
IP rating	IP20

Dimming data

Input signal	40-220VAC + AC Push-Dim
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	500Hz

Warranty and Protection

Warranty	5 years
Protection	Reverse polarity Over current Short circuit Over temperature

● Connect with AC push switch

N L

Push Switch

AC100-240V

Power Supply
12-48VDC
Constant Voltage

Single color LED strip

AC100-240V

Power Supply
12-48VDC
Constant Voltage

Single color LED strip
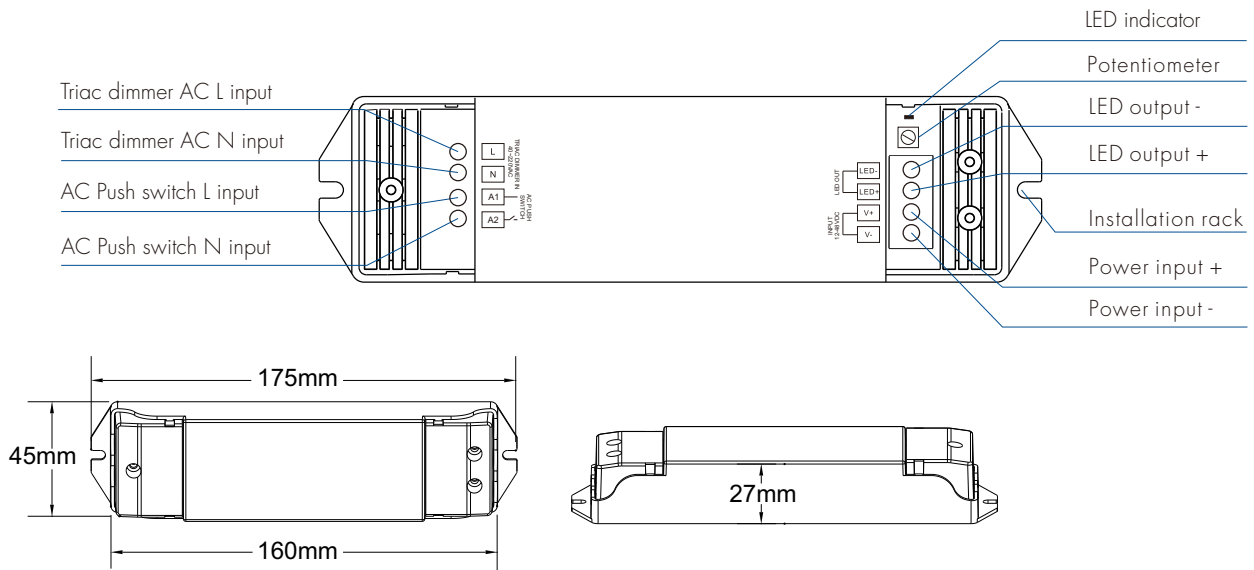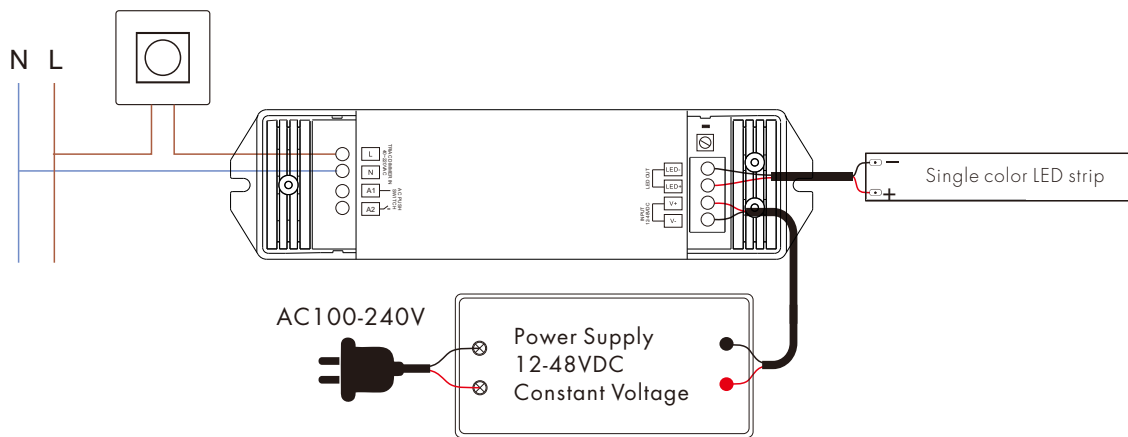
Triac Dimming Input

● AC40V-220V dimming signal input can get 0%-100% brightness output, and the brightness is proportional to the input dimming signal. If the brightness can not go to 0% or 100%, please check the input voltage whether can get to the lowest or highest voltage.

● 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.

● The product adopt analog method detect dimming signal input, adjust brightness consistency between different Triac dimmer through potentiometer.

● The Triac dimmer or Push switch can be connected at the same time, which makes the product more user-friendly and more options to fit for some extra-ordinary demands.

● If the product be used with the Push-Dim interface prior to using the Triac interface, the Triac dimming signal should change over 10% to return Triac control.
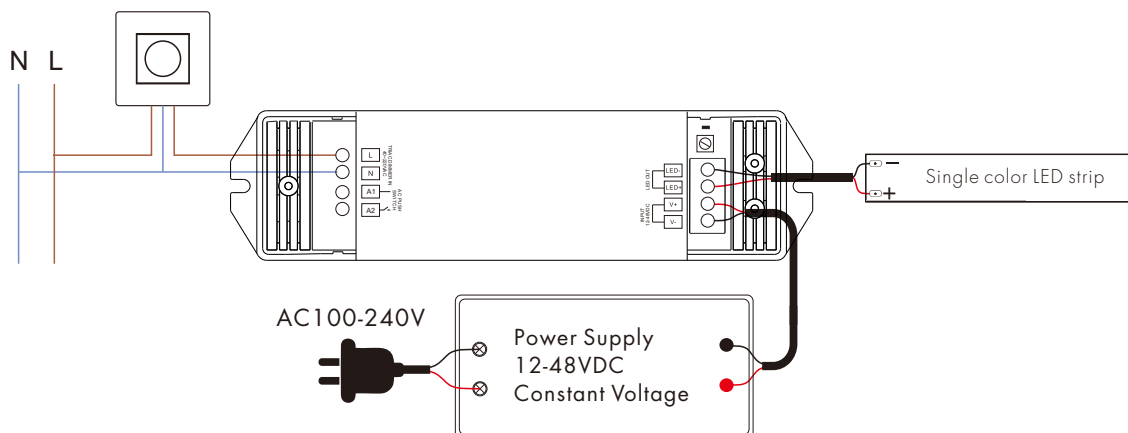
Mechanical Structures and Installations

Triac dimmer AC L input

Triac dimmer AC N input

AC Push switch L input

AC Push switch N input

LED indicator

Potentiometer

LED output -

LED output +

Installation rack

Power input +

Power input -

175mm

45mm

160mm

27mm

Wiring Diagram

1. Connect Triac dimmer(no Neutral wire)

N L

Single color LED strip

AC100-240V

Power Supply
12-48VDC
Constant Voltage

2. Connect Triac dimmer(with Neutral wire)

N L

Single color LED strip

AC100-240V

Power Supply
12-48VDC
Constant Voltage

AC Push-Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.

- **Short press:**

  Turn on or off light.

- **Long press (1-6s):**

  Press and hold to step-less dimming,

  With every other long press, the light level goes to the opposite direction.

- **Dimming memory:**

  Light returns to the previous dimming level when switched off and on again, even at power failure.

- **Synchronization:**

  If more than one controller are connected to the same push switch, do a long press for more than 10s,

  then the system is synchronized and all lights in the group dim up to 100%.

  This means there is no need for any additional synchrony wire in larger installations.

  We recommend the number of controllers connected to a push switch does not exceed 25 pieces,

  The maximum length of the wires from push to controller should be no more than 20 meters.

Dimming curve