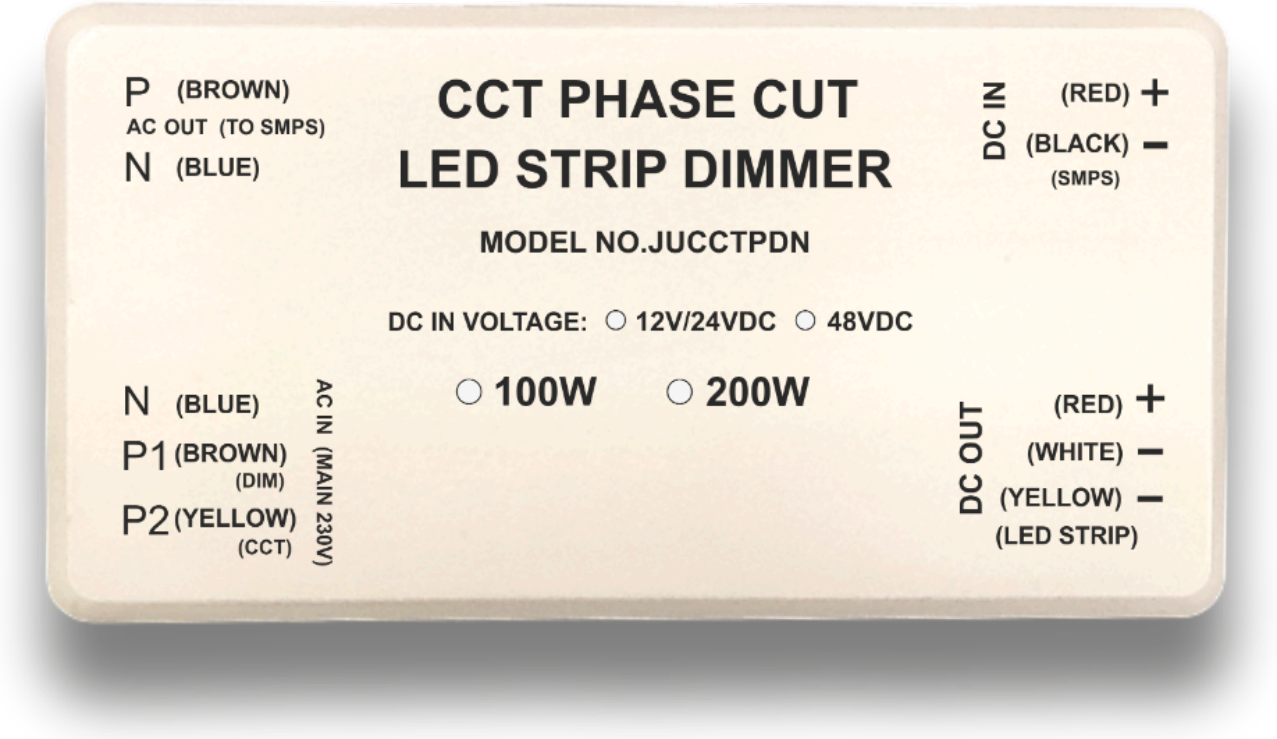
CCT TUNABLE PHASE CUT
LED STRIP DIMMER

JUCCTPDN-100W / JUCCTPDN-200W



KEY FEATURES

- Universal Control Voltage Dimming
- Compatible with Any Make Non-Dimmable SMPS
- Dimming up to 1%
- Smooth Dimming, Flicker Free
- Colour Changing 2500K to 6500K
- Soft Start
- Compatible with Both Leading & Trailing Edge Wall Dimmers

APPLICATIONS

Constant Voltage (SMPS); Indoor lighting (LED Strips, Profiles).

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LED STRIP DIMMER

DESCRIPTION

JUCCTPDN-100W / 200W is a compact CCT Tunable Phase Cut (Triac) Constant Voltage LED Strip Dimmer designed for dimming and color temperature control of 12V / 24V CCT LED strip lighting systems. It operates on 220–240Vac input and is compatible with both leading edge and trailing edge wall dimmers.

The dimmer provides smooth, flicker-free dimming from 1% to 100% along with seamless CCT tuning from 2500K to 6500K. It is suitable for indoor lighting applications and must be used with a constant voltage SMPS.

A CCT Tunable phase-cut dimmer is utilized for dimming and color temperature of LED strips by connecting it to an SMPS (Switched-Mode Power Supply). This application is specifically suited for constant voltage systems. Phase-cut dimming provides smooth and continuous brightness control, while CCT tuning allows adjustment between warm white (2500K) and cool white (6500K).

By reducing the power supplied to the LEDs, phase-cut dimming can lead to energy savings and prolonged LED lifespan. Many existing lighting systems use phase-cut dimming, making it easy to integrate CCT LED strips into these setups.

MODEL NO. & WATTAGE

Model No.: JUCCTPDN-100W / JUCCTPDN-200W

Output Type: Constant Voltage (12V / 24V)

DIMENSIONS & WEIGHT

Parameter	Value
Length	80 mm
Breadth	41 mm
Height	30 mm
Weight (100W)	70 g
Weight (200W)	80 g
Connector	No
Prewired	Yes

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ELECTRICAL DATA

Parameter	JUCCTPDN-100W	JUCCTPDN-200W
Frequency	50–60 Hz	50–60 Hz
Maximum Input Current	0.6A	1.2A
DC Input Voltage	12Vdc / 24Vdc	12Vdc / 24Vdc
DC Output Voltage	12Vdc / 24Vdc	12Vdc / 24Vdc
Output Type	Constant Voltage	Constant Voltage
Output Wattage	100W	200W
Max Output Current @12V	8.3A	16.6A
Max Output Current @24V	4.2A	8.3A
Efficiency	>85%	>88%
Power Factor	>0.9	>0.9
THD	<15%	<15%
Surge Immunity (L/N)	2 KV	2 KV
Isolation	Class II	Class II

STANDARDS & CERTIFICATES

Parameter	Value
Standards	IEC61347-1, IEC 61347-2-13, IEC 62384, CISPR 15, IEC 61000-3-2, IEC 61000-3-3, IEC 61547
Certificates	BIS (R-71027472)
Protection Class	II
Type of Protection	IP20

REFERENCE

Model No.: JUCCTPDN-100W / JUCCTPDN-200W

Source Document: JSK URJA Product Datasheet — JUCCTPDN-100W/200W (JU2502-P001-1)

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CCT TUNABLE PHASE CUT LED STRIP DIMMER

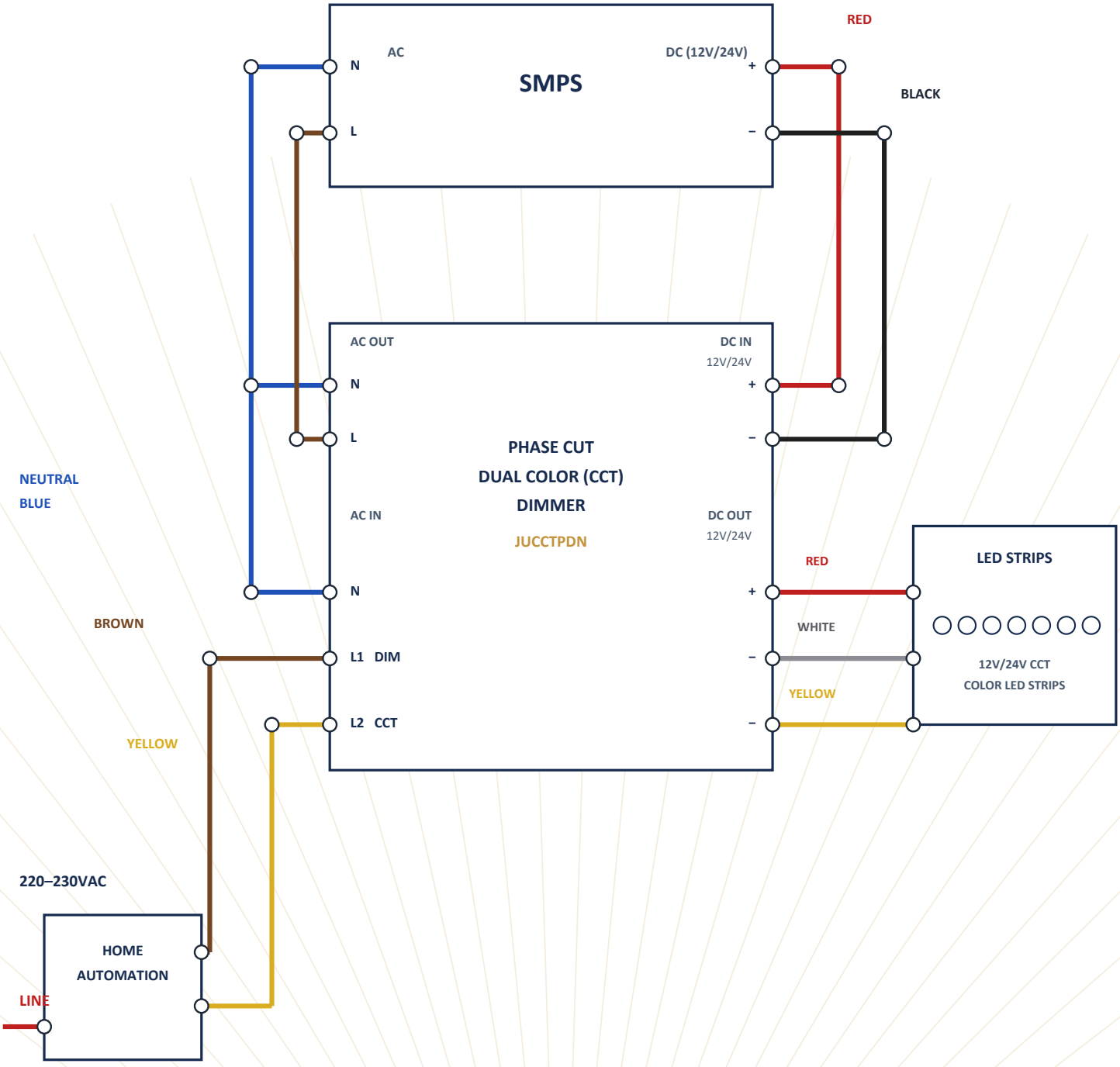
DIMMING & PROTECTION

Parameter	Value
Dimming Method	Phase Cut / Triac
Leading Edge	Yes
Trailing Edge	Yes
Dimming Range	1–100%
CCT Range	2500K–6500K
Surge Protection	Up to 6 KV
Over Voltage Protection	Yes
Over Current Protection	Yes
Short Circuit Protection	Yes
Class II	Yes
Flicker	Flicker Free
Soft Start	Yes

TEMPERATURE & MATERIAL

Parameter	Value
Ambient Temperature	50°C
Case Temperature	70°C
Enclosure Material	Plastic (FR Rated)
Enclosure Color	Upper - White
Max. Housing Temperature (in Case Fault)	<85°C

JSK URJA PHASE CUT DUAL COLOR (CCT) DIMMER CONNECTION DIAGRAM



Source wiring preserved. AC OUT feeds the SMPS. DC IN returns from the SMPS. AC IN is the wall-dimmer control.