20.5.2021



# ALCV040 LED DRIVER SERIES

# TRIAC DIMMABLE IP65 CONSTANT VOLTAGE LED DRIVER

#### ALCV040-xxx-65-DIM

#### **FEATURES**

- AC phase-cut dimming
- Input range from 205VAC to 256VAC
- Work with leading edge and trailing edge TRIAC dimmers
- Fully potted suitable for dry and damp location applications
- Protections: Over Current / Short Circuit /Over Voltage/Over Temperature
- 2 Years warranty
- RoHS compliant

#### **APPLICATION**

- Can be used with LED Strips (aLED KIDEFLEX)
- · Indoor or outdoor installations







#### **Technical Data**

Product Code		ALCV040-012-65-DIM	ALCV040-024-65-DIM	
Output	Voltage Range	12VDC	24VDC	
	Ripple & Noise (Max.) note.2	0.8Vp□p	0.6Vp□p	
	Voltage Tolerance	± 5%	± 5%	
	dimming Range	5%~100%	5%~100%	
	Rated Current	3.4A	1.7A	
	Rated Power	40.8W	40.8W	
	Efficiency (Typ.) note.1	82%	84%	
	Set up Time (Max)	0.5S / 230VAC at full load		
Input	Rated Voltage	220~240VAC		
	Voltage Range	205~256VAC		
	Frequency Range	50/60 Hz		
	AC Current (Max.)	0.5A at 230VAC		
	Power Factor	> 0.45 at 230VAC with full load.		
	Inrush Current (Typ.)	Cold Start 50A at 230VAC		
	Leakage Current (Typ.)	<1mA / 230VAC		
Protections	Over Voltage	120 % - 150% Output voltage limiting, auto-recovery		
	Over Current	120% - 150% Constant current limiting, auto-recovery		
	Over Temperature	110°C - 125°C Temperature limiting, auto-recovery		
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed		
Environment	Operation Temp.	□20°C ~ 45°C (Refer to output load derating curve)		
	Operation Humidity	20% ~ 90% RH non-condensing.		
	Storage Temp.	-20 ~ +80°C		
	Storage Humidity	10% ~ 90% RH		

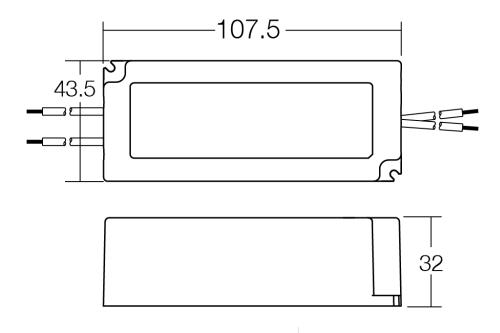
#### **NOTES**

- 1. All parameters NOT specially mentioned are measured at 230V/50HZ AC input, rated load and 25°C ambient temperature.
- 2. Ripple & Noise are measured at 20MHZ bandwidth oscilloscope and with 0.1uf & 47uf parallel capacitor at 100% duty output
- 3. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.





#### **Dimensions**



Lenght	107,5mm			
Width	43,5mm			
Height	32mm			
Weight	240g			
Safety				
Safety Standards	meet EN61347-1,EN61347-2-13			
Withstand Voltage	I/P - O/P : 3.75K VAC			

Warranty and Lifetime		
Warranty	2 years	
MTBF	100K hours min. @Ta=25°C	

## **Compatible products**

aLED KIDEFLEX LED Strip



Isolation Resistance

EMC Standards note.3

I/PO/P: 100M ohms / 500VDC at 25°C

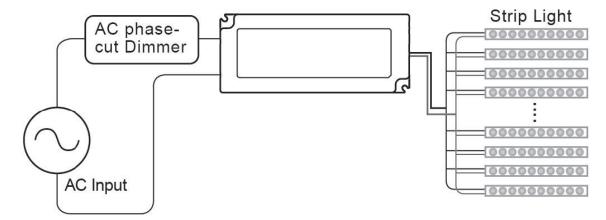
meet EN55015,EN61000-4-2,3,4,5,6,8,11 ,EN61547



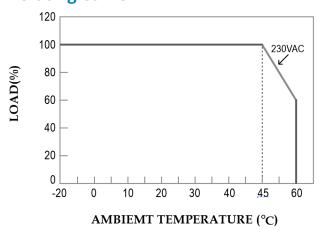
#### **Dimmer Recommended**

Brand	Parts NO.
BERKER	286710
IMPORTE PAR TIBELEC	27222
JONYEI	JY-50182
Корр	DIMMER 8085
LICHTREGLER	814
SCHNEIDER	EV51RD400
SHIHLIN	A5-21A1
SIEMTEC	V9-032

### **Wiring Diagram**



# **Derating Curve**



#### **Static Characteristics**

