

## SWITCH TO BRIGHTER FUTURE



### Product data sheet: DIM48-100

#### Features

- Independent design
- Dimmable constant voltage driver
- Analogue flicker-free
- Diming with leading edge or trailing edge dimmer
- Smooth dimming compatible with most dimmer
- Dimming range 1...100%
- Captured terminal screws
- Protections: opencircuit, shortcircuit, overload, over temperature
- SELV equivalent
- Suitable for protection class I & II luminaires
- Protection class II

#### Applications

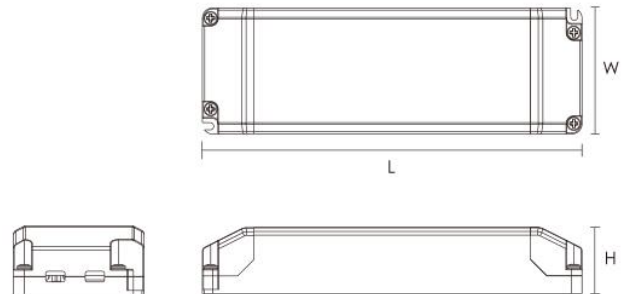
- Office
- Shop
- Hospitality
- Public areas

#### Approbations & Certifications

CE, CB

#### Housing properties

- Housing material: plastic, white.
- Type of protection IP20



## Electrical Specifications

Type		Unit	DIM48-100
<b>INPUT</b>	Nominal voltage	V	220 – 240
	Nominal frequency	Hz	50 / 60
	AC voltage range	V	198 – 264
	DC voltage range	V	NA
	Nominal current	A	0.6
	THD (Full load)	%	≤ 15
	Power factor (Full load)		0.95
	Efficiency (Full load)	%	89
	Turn on time	ms	≤ 500
	NO load	W	≤ 1.0
	Protection class		II
	Inrush current(Cold start)	A pk	45 (th = 100 μs)
	Max.units per circuit breaker		B10: 17 B16: 28 C10: 35 C16: 56
	<b>OUTPUT</b>	Nominal voltage	V
Maximum voltage(Open Circuit)		Vdc	≤ 55
Nominal current range		A	0.7 – 2.08
Voltage accuracy		%	+/- 5
Voltage ripple ≤120Hz		%	≤ 3
Pst LM			≤ 1
SVM			≤ 0.4
Nominal power range		W	33 – 100
Maximum power		W	100
Galvanic isolation			SELV
<b>ENVIRONMENT</b>	Ambient temperature range ta	°C	-20 ...+45
	Maximum case temperature tc	°C	85
	Max. Case temp. In fault condition	°C	110
	Storage temperature range	°C	-20 ...+70
	Relative humidity	%	5 ... 85 (Not condensing)
	Surge transient protection	kV	1   2 (L/N   LN/PE acc to. EN 61547 Clause 5.7)
	Environmental rating		Indoor
	IP rating		IP 20
	Mains switching cycles		> 100,000
	Expected lifetime	h	50,000 (0.2% / 1'000 h failure rate)

\*All parameters NOT specially mentioned are measured at 230VAC input ,rated current and 25°C of ambient temperature

### Protections

**Over temperature**

Yes

**Over load**

Yes

**No load**

Yes

**Short-circuit**

Yes

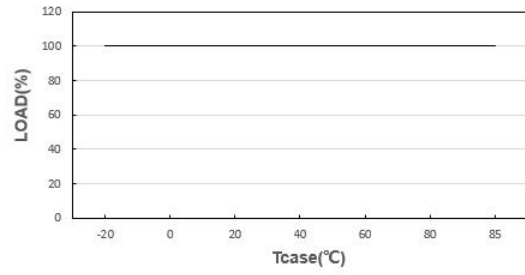
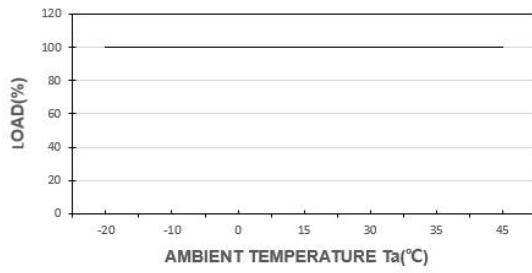
**Input overvoltage**

Maximum allowed input voltage 264V AC

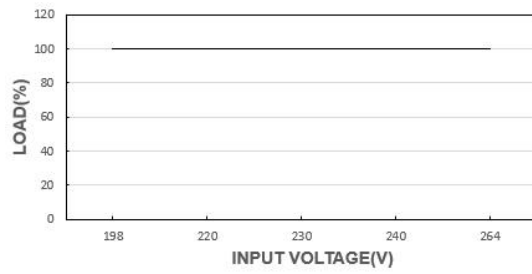
**Output overvoltage**

Yes, Limitation of Output voltage ≤ 55V

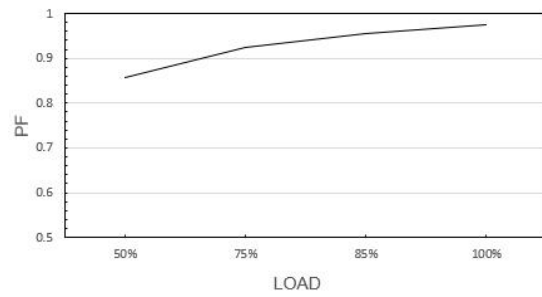
### OUTPUT LOAD vs TEMPERATURE



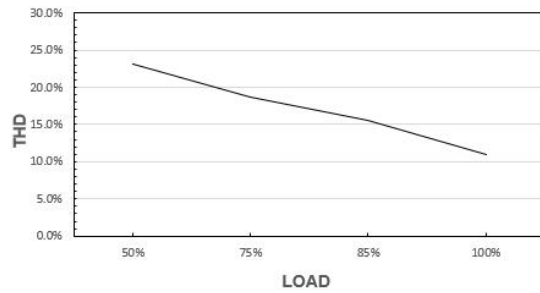
### STATIC CHARACTERISTIC



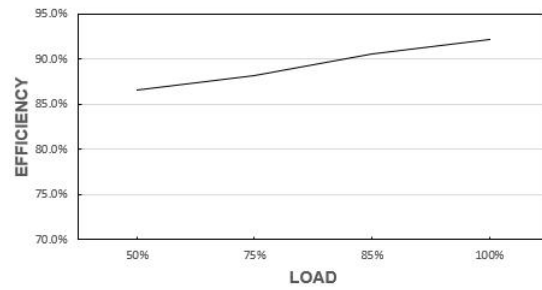
### POWER FACTOR (PF) CHARACTERISTIC



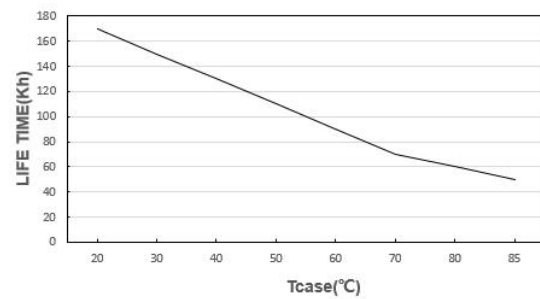
### TOTAL HARMONIC DISTORTION (THD)



### EFFICIENCY vs LOAD



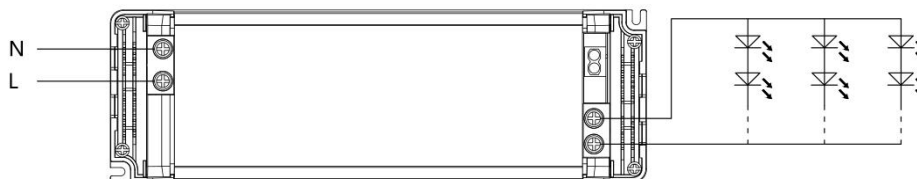
### LIFE TIME



\*The graph is for reference only, and the detailed values refer to the parameter table

## Wiring Diagram

Terminal:	Captured terminal screws
Max. cable length - system:	2 m
Dimensions(LxWxH):	210 x 67 x 34 mm
Weight:	360 g



## PRI

Cable cross-section:	0.75-2.5□/AWG 18-14
Stripping:	6mm

## SEC

Cable cross-section:	0.75-2.5□/AWG 18-14
Stripping:	6mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

## Remarks

-Touch current: lower than 0.7 mA, according to EN 60598-1 annex. G and EN 61347-1 annex A

## Standards

EN 61347-1  
EN 61347-2-13  
EN 62384  
EN 55015  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 60598-1  
EN 50581  
(EU) 2019/2020

## Manufacturer's address:

No.4, Tongfu Road, Tong'an Industrial Center, Tong'an District, Xiamen, Fujian, China

[www.actec.com.cn](http://www.actec.com.cn)