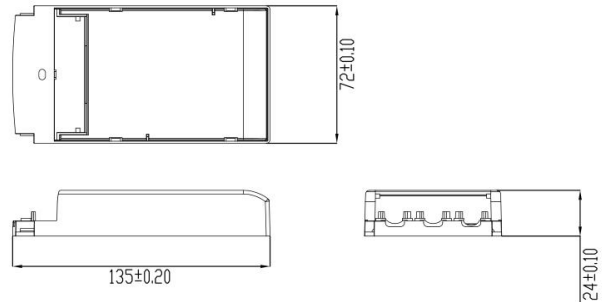


## SWITCH TO BRIGHTER FUTURE

### Product data sheet: IEM-45D TW

#### Features

- Dimmable independent constant current 2-channel LED driver with DALI DT8
- Analogue flicker-free
- DALI-2 certified
- Configurable constant current output via dip-switch
- Switch-Dim function
- SwitchDIM and colourSWITCH with memory function
- ColourSWITCH with predefined colours
- Dimming range 2...100%
- Push wire connections
- Protections: opencircuit, shortcircuit, overload, overtemperature
- DC input compatible (176-250V DC)
- SELV equivalent
- Suitable for use in emergency lighting systems
- Suitable for protection class II luminaires
- Protection class II



#### Applications

- Office
- Shop
- Hospitality
- Public areas

#### Approbations & Certifications

TUV,CE,CB,DALI2

#### Housing properties

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

## Electrical Specifications

Type		Unit	IEM-45D TW						
<b>INPUT</b>	Nominal voltage	V	220 – 240						
	Nominal frequency	Hz	0 / 50 / 60						
	AC voltage range	V	198 – 264						
	DC voltage range	V	176 - 250						
	Nominal current	A	0.26						
	THD (Full load)	%	≤ 15						
	Power factor (Full load)		0.95						
	Efficiency (Full load)	%	87						
	NO load	W	≤ 0.5						
	Protection class		II						
	Inrush current(Cold start)	A pk	30(th = 100 μs)						
	Max.units per circuit breaker		B10: 23 B13: 30 B16: 37 B20: 46 C10: 38 C13: 50 C16: 61 C20: 76						
<b>OUTPUT</b>	Nominal voltage range	V	10 - 50	10 - 50	10 - 50	10 - 50	10 - 50	10 - 50	10 - 43
	Maximum voltage(Open Circuit)	Vdc	≤ 59						
	Nominal current	mA	350	500	600	700	800	900	1050
	Current accuracy	%	+/- 5						
	Current ripple 100Hz	%	≤ 20						
	Pst LM		≤ 1						
	SVM		≤ 0.4						
	Nominal power range	W	3.5 – 17.5	5 - 25	6 - 30	7 - 35	8 - 40	9 - 45	10.5 -45
	Maximum power	W	45						
	Galvanic isolation		SELV						
<b>ENVIRONMENT</b>	Ambient temperature range ta	°C	-20 ...+45						
	Maximum case temperature tc	°C	90						
	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

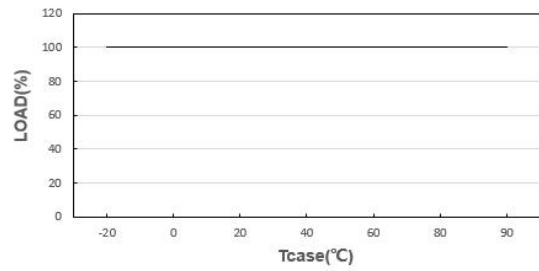
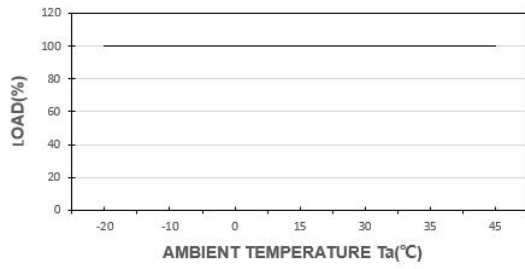
**Input overvoltage**

Maximum allowed input voltage 264V AC

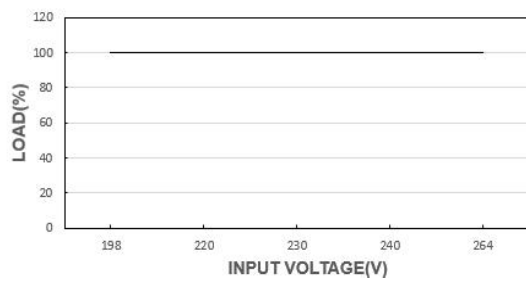
**Output overvoltage**

Yes, Limitation of Output voltage < 59V

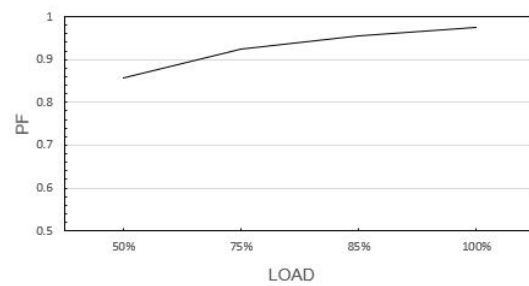
### OUTPUT LOAD vs TEMPERATURE



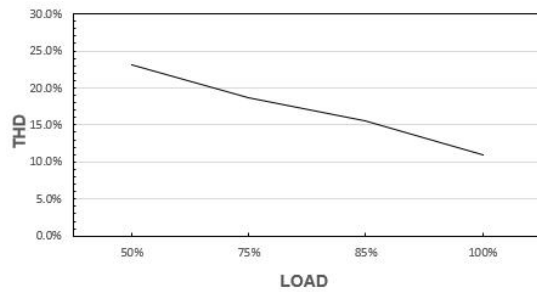
### STATIC CHARACTERISTIC



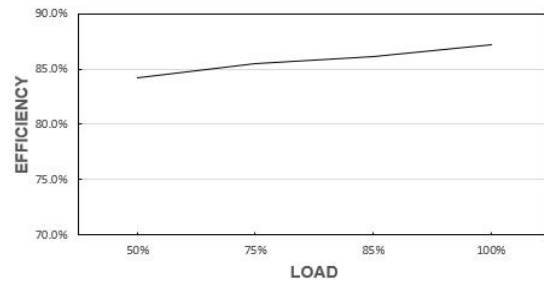
### POWER FACTOR (PF) CHARACTERISTIC



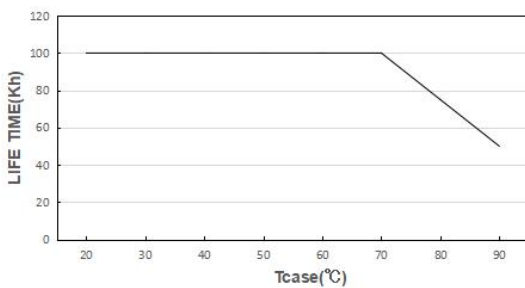
### TOTAL HARMONIC DISTORTION (THD)



### EFFICIENCY vs LOAD



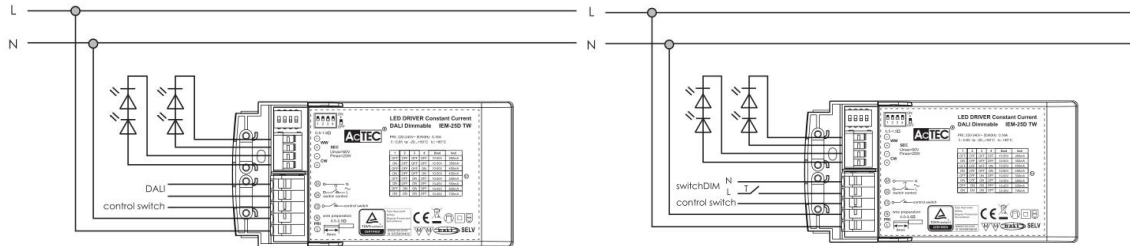
### LIFE TIME



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

## Wiring Diagram

Terminal: Push in terminals  
Max. cable length – DALI system: 300 m  
Dimensions(LxWxH): 135 x 72 x 24 mm  
Weight: 190 ± 10 g



### PRI

Cable cross-section: 0.75-2.5  
Stripping: 8mm

### SEC

Cable cross-section: 0.5-1.5  
Stripping: 8mm

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  
EN 62386-101  
EN 62386-102  
EN 62386-207  
EN 62386-209  
IEE1789  
(EU) 2019/2020

## Manufacturer's address:

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