

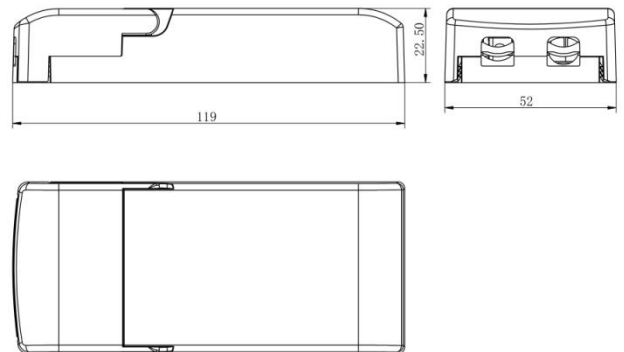


SWITCH TO BRIGHTER FUTURE

Product data sheet: IEM-12D 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, DALI-2

Housing properties

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

Electrical Specifications

Type		Unit	IEM-12D TW								
INPUT	Nominal voltage	V	220 – 240								
	Nominal frequency	Hz	50 / 60								
	AC voltage range	V	198 – 264								
	DC voltage range	V	176 – 250								
	Nominal current	A	0.08								
	THD (Full load)	%	≤15								
	Power factor (Full load)		0.95								
	Efficiency (Full load)	%	79								
	No load	W	≤0.5								
	Protection class		II								
	Inrush current(Cold start)	A pk	15(th = 100 μs)								
Max.units per circuit breaker		B10:46 B13:60 B16:74 B20:93 C10:93 C13:121 C16:149 C20:186									
OUTPUT	Nominal voltage range	V	10-50	10-50	10-50	10-46	10-42	10-34	10-30	10-27	10-24
	Maximum voltage(Open Circuit)	Vdc	≤ 59								
	Nominal current	mA	150	180	230	260	300	350	400	450	500
	Current accuracy	%	+/- 5								
	Current ripple 100Hz	%	≤ 20								
	Pst LM		≤ 1								
	SVM		≤ 0.4								
	Nominal power range	W	1.5-7.5	1.8-9	2.3-11.5	2.6-12	3-12	3.5-12	4-12	4.5-12	5-12
	Maximum power	W	12								
	Galvanic isolation		SELV								
ENVIRONMENT	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	0.5 1 (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

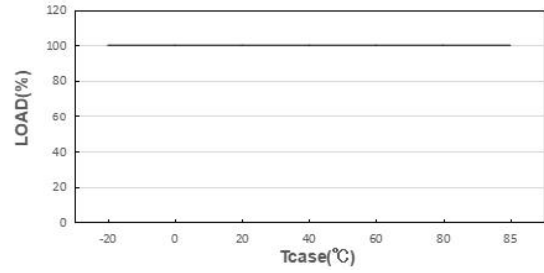
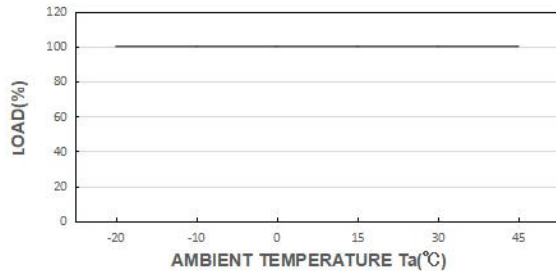
Input overvoltage

Maximum allowed input voltage 264V AC

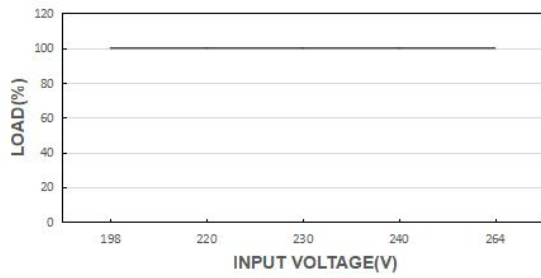
Output overvoltage

Yes

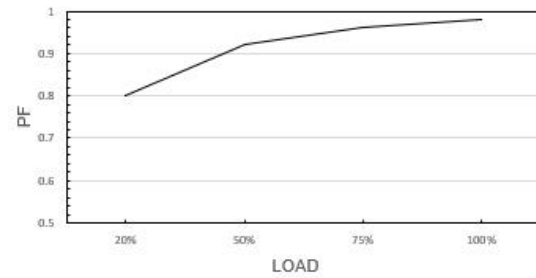
OUTPUT LOAD vs TEMPERATURE



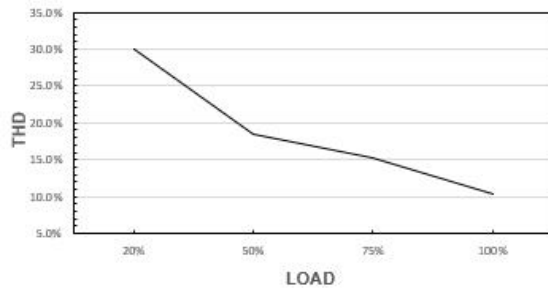
STATIC CHARACTERISTIC



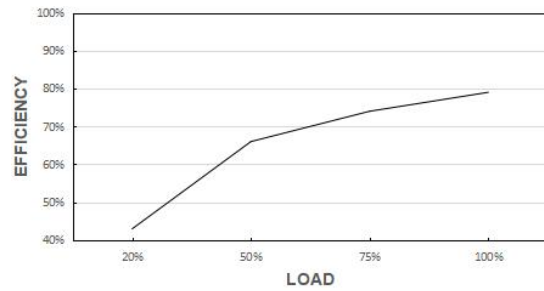
POWER FACTOR (PF) CHARACTERISTIC



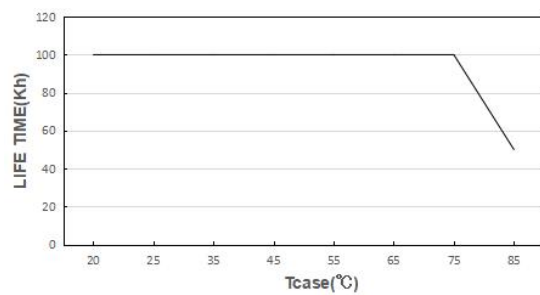
TOTAL HARMONIC DISTORTION (THD)



EFFICIENCY vs LOAD



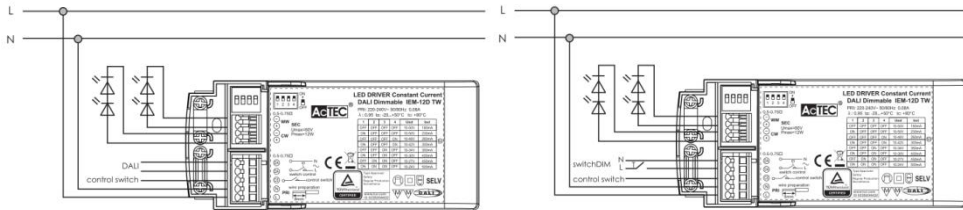
LIFE TIME



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

Wiring Diagram

Terminal:	Push Button
Max. cable length – DALI system:	300 m
Dimensions(LxWxH):	119 x 52 x 22.5 mm
Mounting hole spacing	N/A
Weight:	100 ± 5 g



PRI

Cable cross-section:	0.75mm ²
Stripping:	8mm

SEC

Cable cross-section:	0.5-0.75mm ²
Stripping:	8mm

DALI

Cable cross-section:	0.75mm ²
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 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

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