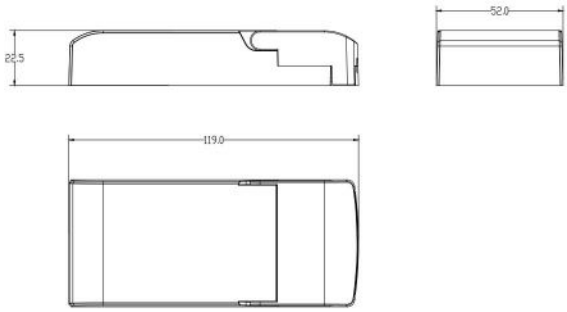
SWITCH TO BRIGHTER FUTURE

Product data sheet: IE-12D



Features

- Independent design
- Dimmable constant current driver
- Analogue flicker-free
- DALI-2 certified
- Configurable constant current output via dip-switch
- Switch-Dim function
- Dimming range 1...100%
- Push wire connections
- Protections: opencircuit, shortcircuit, overload, overtemperature
- 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	IE-12D							
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)	%	≤ 20							
	Power factor (Full load)		0.95							
	Efficiency (Full load)	%	79							
	No load	W	≤ 0.5							
	Standby power	W	≤ 0.5							
	Protection class		II							
	Inrush current(Cold start)	A pk	30(th = 300 μs)							
	Max.units per circuit breaker		B10:5 B13:7 B16:9 B20:11 C10:12 C13:16 C16:19 C20:24							
OUTPUT	Nominal voltage range	V	18-54	18-52	15-46	15-42	15-34	15-30	15-27	15-24
	Maximum voltage(Open Circuit)	Vdc	≤ 70							
	Nominal current	mA	180	230	260	300	350	400	450	500
	Current accuracy	%	±5							
	Current ripple 120Hz	%	≤40							
	Pst LM		≤ 1							
	SVM		≤ 0.4							
	Nominal power range	W	3.2-9.7	4.1-11.9	3.9-11.9	4.5-12.6	5.3-11.9	6-12	6.75-12.1	7.5-12
	Maximum power	W	12							
	Galvanic isolation		SELV							
ENVIRONMENT	Ambient temperature range ta	°C	-20 …+50							
	Maximum case temperature tc	°C	80							
	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℃ of ambient temperature

Protections

Over temperature

Yes

Over load

Yes

No load

Yes

Short-circuit

Yes

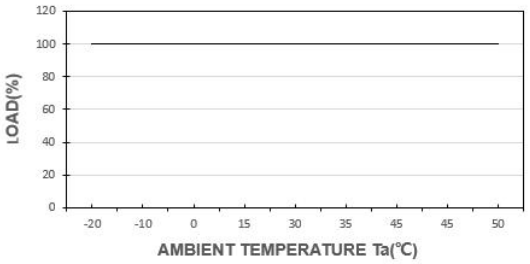
Input overvoltage

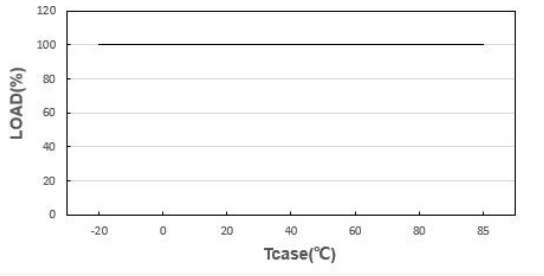
Maximum allowed input voltage 264V AC

Output overvoltage

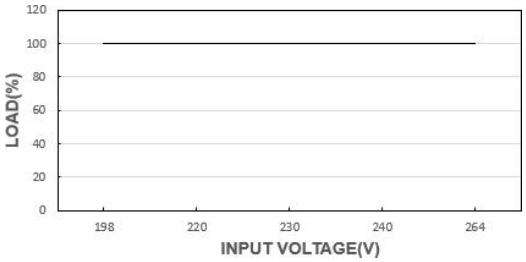
Yes

OUTPUT LOAD vs TEMPERATURE

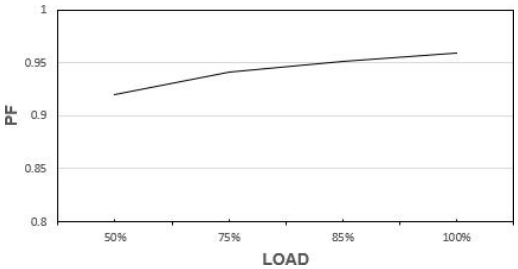




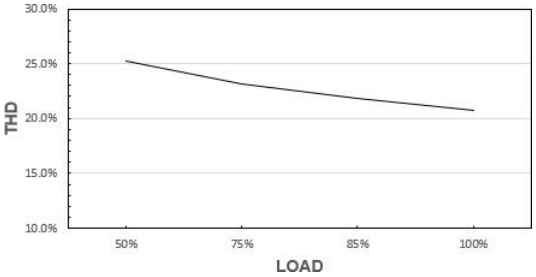
STATIC CHARACTERISTIC



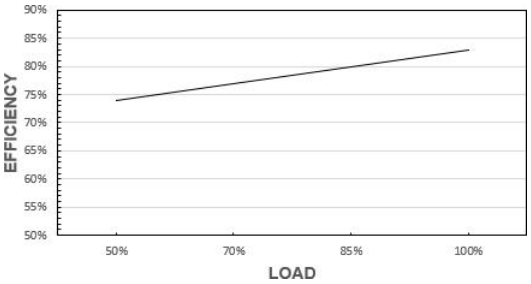
POWER FACTOR (PF) CHARACTERISTIC



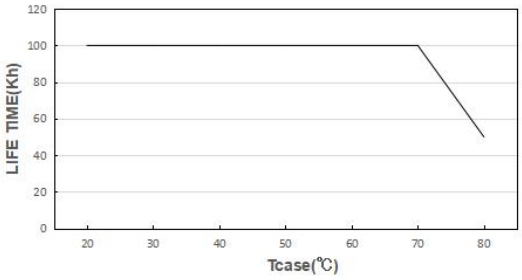
TOTAL HARMONIC DISTORTION (THD)



EFFICIENCY vs LOAD



LIFE TIME

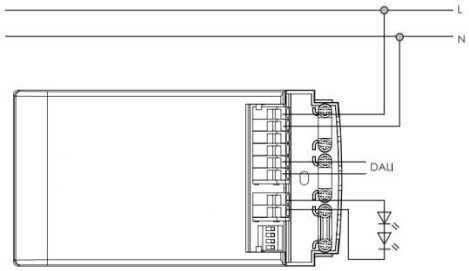


*The graph is for reference only，and the detailed values refer to the parameter table

Version: Sep 2022

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:	90 ± 5 g



PRI

Cable cross-section:	0.5-2.5□
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 62386-101
EN 62386-102
EN 62386-207
IEE1789
(EU) 2019/2020

Manufacturer's address:

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

www.actec.com