

SWITCH TO BRIGHTER FUTURE

Product data sheet: IE-45D

Features

- Independent design
- Dimmable constant current driver
- Low ripple current, flicker-free
- DALI-2 certified
- Configurable constant current output via dip-switch
- Switch-Dim function
- Dimming range 0.1...100%
- Push wire connections
- Protections: open circuit, short circuit, overload, overtemperature
- SELV equivalent
- Suitable for use in emergency lighting systems
- Suitable for protection class II luminaires
- Protection class II
- Nominal life-time up to 50,000 h
- 5-year guarantee

Applications

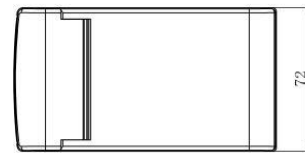
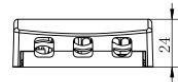
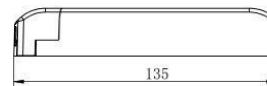
- Office
- Shop
- Hospitality
- Public areas

Approbations & Certifications

CE, CB, DALI-2

Housing properties

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



Electrical Specifications

| Type | | Unit | IE-45D | | | | | | |
|-------------------------------|------------------------------------|--------------------------------------|---|---------|-------|---------|-------|---------|---------|
| INPUT | Nominal voltage | V | 220 – 240 | | | | | | |
| | Nominal frequency | Hz | 0 / 50 / 60 | | | | | | |
| | AC voltage range | V | 198 – 264 | | | | | | |
| | DC voltage range | V | 176 - 370 | | | | | | |
| | Nominal current | A | 0.15 | 0.2 | 0.23 | 0.26 | | | |
| | THD (Full load) | % | ≤25 | | | ≤15 | | | |
| | Power factor (Full load) | | 0.90c | | | 0.95 | | | |
| | Efficiency (Full load) | % | 87 | | | | | | |
| | NO load | W | ≤ 0.5 | | | | | | |
| | Protection class | | II | | | | | | |
| | Inrush current(Cold start) | A pk | 20(th = 100 μs) | | | | | | |
| | Max.units per circuit breaker | | B10: 23 B16: 37 C10: 46 C16: 74 | | | | | | |
| | OUTPUT | Nominal voltage range | V | 25-70 | 25-70 | 25-70 | 25-64 | 25-56 | 25-50 |
| Maximum voltage(Open Circuit) | | Vdc | ≤ 80 | | | | | | |
| 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 | 9-24.5 | 12.5-35 | 15-42 | 17.5-45 | 20-45 | 22.5-45 | 22.5-45 |
| Maximum power | | W | 45 | | | | | | |
| Galvanic isolation | | | SELV | | | | | | |
| ENVIRONMENT | Ambient temperature range ta | °C | -20 ...+50 | | | | | | |
| | 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

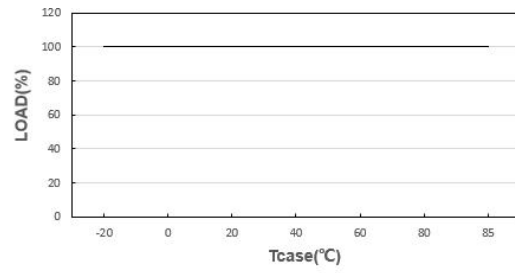
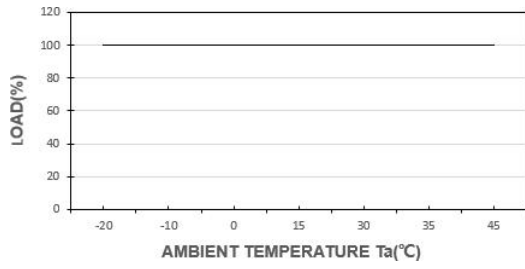
Input overvoltage

Maximum allowed input voltage 264V AC

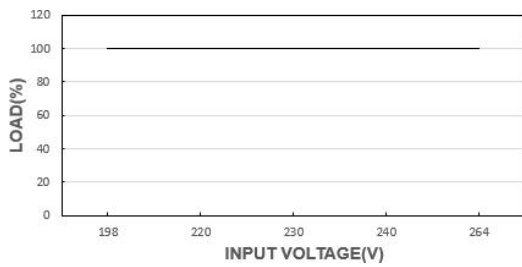
Output overvoltage

Yes, Limitation of Output voltage < 80V

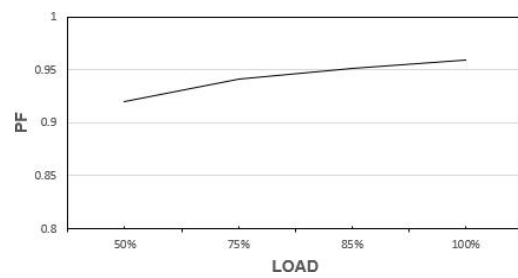
OUTPUT LOAD vs TEMPERATURE



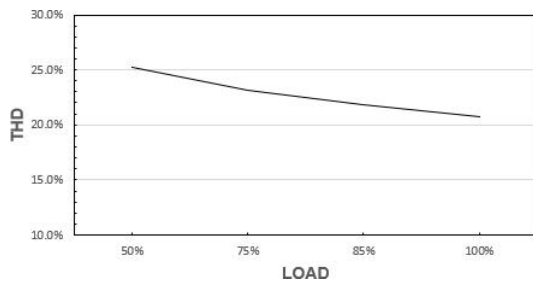
STATIC CHARACTERISTIC



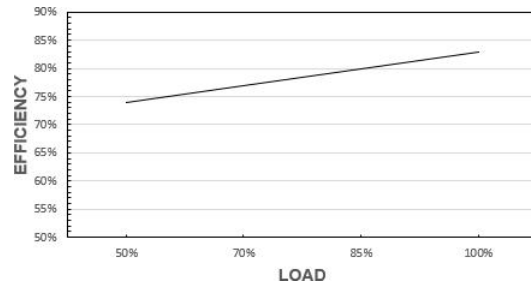
POWER FACTOR (PF) CHARACTERISTIC



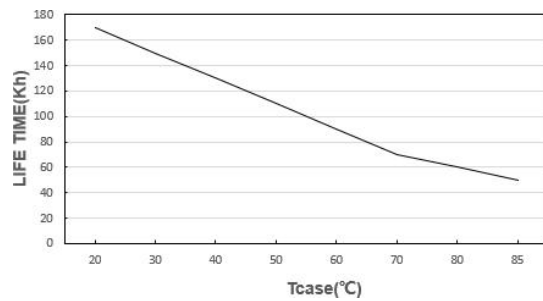
TOTAL HARMONIC DISTORTION (THD)



EFFICIENCY vs LOAD



LIFE TIME



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

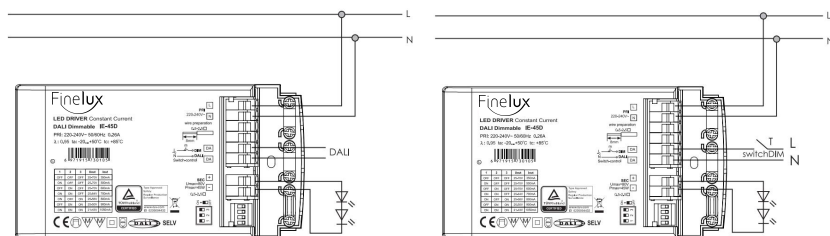
Wiring Diagram

Terminal: Push in terminals

Max. cable length – DALI system: 300 m

Dimensions(LxWxH): 135x72x24 mm

Weight: 180 g



PRI

Cable cross-section: 0.5-2.5□/AWG 20-14

Stripping: 8mm

SEC

Cable cross-section: 0.5-2.5□/AWG 20-14

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