

25W DALI+PUSH Dimming power supply



Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor > 0.95
- Efficiency : 85%
- Support DALI-2, Push Dimming
- 5 years warranty

Applications

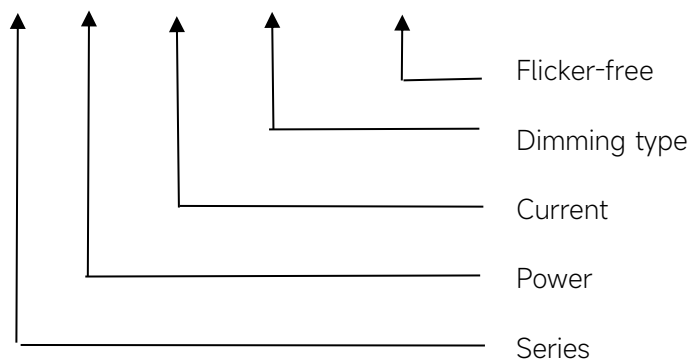
- LED panel, Down light

◆ Description

FLS-25-700 DALI-2 LA1 is a 25W constant current LED driver with 150 to 700mA output current and a forward voltage range from 9 to 52Vdc. The output current is adjustable by DIP Switch. With its dimensions from 160x 42 x 30mm it is easy to integrate in LED Panel and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

FLS-25-700 DALI-2 LA1



◆ Specification

| | | | | | | | | | | | | | | |
|-------------|----------------------------------|---------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|--------|--------|------|--------|
| Output | Constant Current (mA) | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | |
| | Voltage Range (VDC) | 9-52 | | | | | | | | | 9-47.5 | 9-43.5 | 9-40 | 9-37.5 |
| | Unload voltage Max. | 60VDC | | | | | | | | | | | | |
| | Current Accuracy | ±7% | | | | | | ±5% | | | | | | |
| | Output HF current ripple(≥1KHz) | ±10% | | | | | | | | | | | | |
| | Output LF current ripple(≤120Hz) | ±3% | | | | | | | | | | | | |
| | SVM | ≤0.4 | | | | | | | | | | | | |
| | P _{st} | ≤1 | | | | | | | | | | | | |
| | Efficiency(Typ.) | 85% | | | | | | | | | | | | |
| Input | Rated input voltage | 220-240VAC | | | | | | | | | | | | |
| | Range of input voltage | 198-264VAC | | | | | | | | | | | | |
| | Rated input voltage(DC) | 198-280VDC | | | | | | | | | | | | |
| | Frequency(Hz) | 0/50/60 Hz | | | | | | | | | | | | |
| | Displacement factor | ≥0.9 | | | | | | | | | | | | |
| | Power Factor | >0.95 | | | | | | | | | | | | |
| | Input Current | 0.2A | | | | | | | | | | | | |
| | Start-up time | < 0.5S | | | | | | | | | | | | |
| | No Load Power | ≤0.5W | | | | | | | | | | | | |
| | Standby Power | ≤0.5W | | | | | | | | | | | | |
| | Network standby power | ≤0.5W | | | | | | | | | | | | |
| | THD (Typ.) | <10% | | | | | | | | | | | | |
| Dimming | Dimming | YES | | | | | | | | | | | | |
| | Dimming mode | DALI-2 (IEC 62386-101,102,207) & Push | | | | | | | | | | | | |
| | Dimming depth | 1% | | | | | | | | | | | | |
| | Dimming current range | 1 ~100% | | | | | | | | | | | | |
| Protection | Over Load Protection | 103-120% | | | | | | | | | | | | |
| | | YES/Latch off | | | | | | | | | | | | |
| | Over Voltage Protection | > 60VDC | | | | | | | | | | | | |
| | | YES/Latch off | | | | | | | | | | | | |
| Environment | Short circuit Protection | YES/Latch off | | | | | | | | | | | | |
| | Over Temperature Protection | YES/Auto Resume | | | | | | | | | | | | |
| | Operating Temperature | -20°C~+45°C | | | | | | | | | | | | |
| | Humidity | 20%-90%RH | | | | | | | | | | | | |
| | Tc | 80°C | | | | | | | | | | | | |
| Surface | Storage Temperature | -25°C~+60°C | | | | | | | | | | | | |
| | Lifetime | >50000h,@Tc=70°C | | | | | | | | | | | | |
| Surface | Dimension | 160X42X30mm | | | | | | | | | | | | |

| | | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| standards | EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547; | |
| Others | ErP | EU 2019/2020 |
| | RoHS | RoHS (2011/65/EU) (EU)2015/863 |
| Note | 1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor. | |

◆ Model list

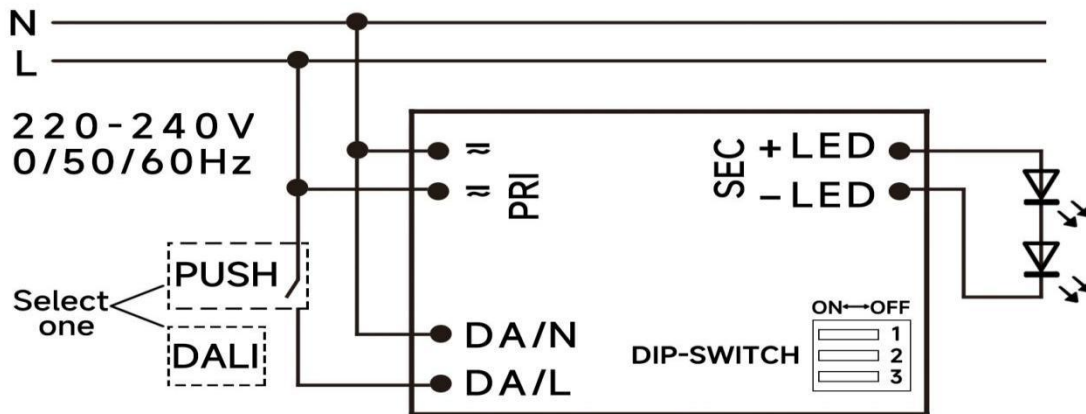
| Number | Output | Switch position | | | |
|--------|-------------|-----------------|----|----|----|
| | Current(mA) | 1 | 2 | 3 | 4 |
| 1 | 150 | -- | -- | ON | -- |
| 2 | 200 | ON | -- | ON | -- |
| 3 | 250 | -- | ON | ON | -- |
| 4 | 300 | ON | ON | ON | -- |
| 5 | 350 | -- | -- | -- | ON |
| 6 | 400 | ON | -- | -- | ON |
| 7 | 450 | -- | ON | -- | ON |
| 8 | 500 | ON | ON | -- | ON |
| 9 | 550 | -- | -- | ON | ON |
| 10 | 600 | ON | -- | ON | ON |
| 11 | 650 | -- | ON | ON | ON |
| *12 | 700 | ON | ON | ON | ON |

* Factory default

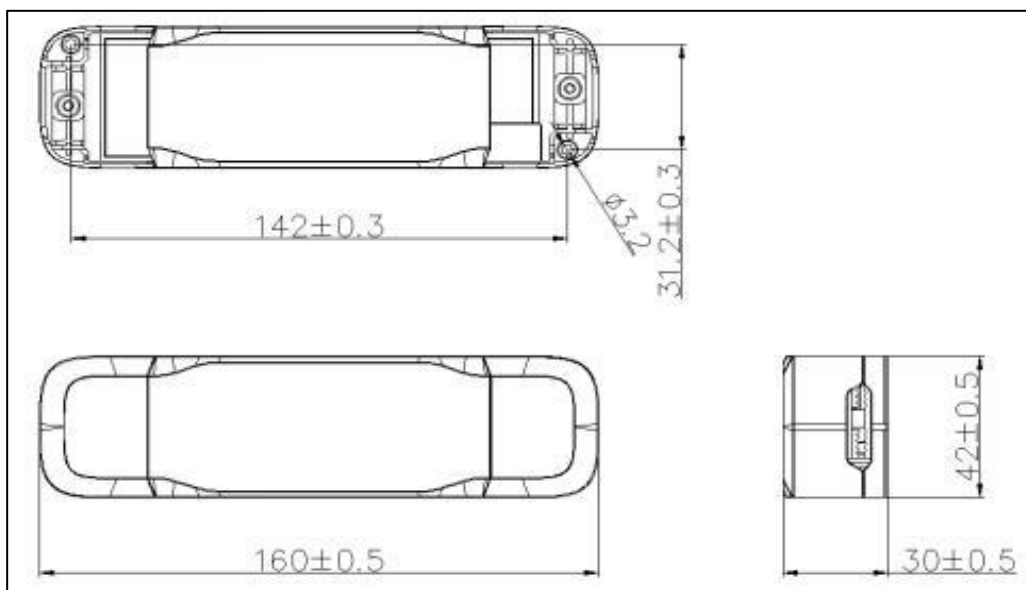
◆ Circuit Breaker

| I _{peak} | T _{width} | B10 | B16 | B20 | C10 | C16 | C20 |
|-------------------|--------------------|-------|-------|-------|-------|-------|-------|
| 6.16A | 43.1μs | 40pcs | 64pcs | 80pcs | 40pcs | 64pcs | 80pcs |

◆ **Wiring diagram**



◆ **2D diagram**

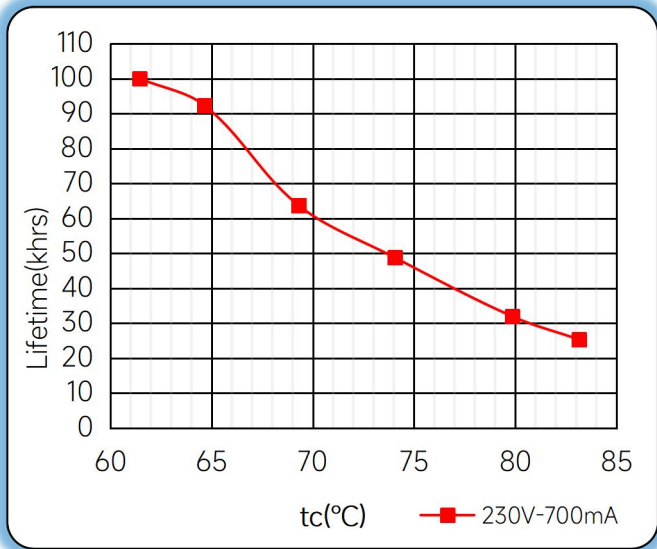


◆ **Wiring & Connections**

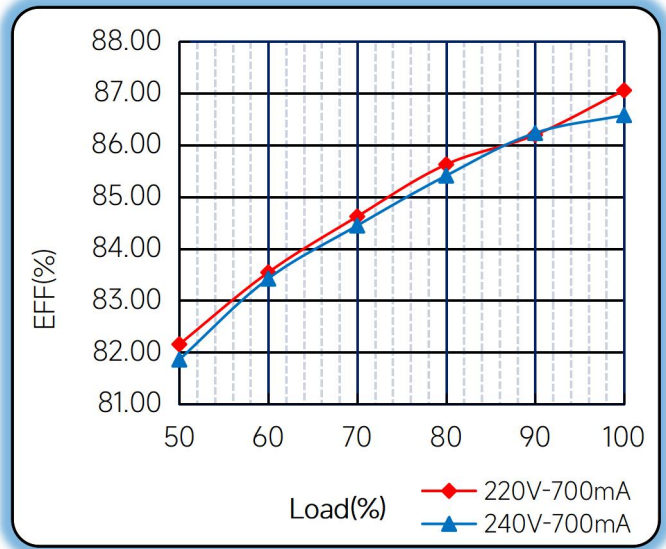
| Specification item | | Value (Unit) |
|--------------------|---------------------------|---------------------------|
| Input | Input wire cross-section | 0.5...1.5 mm ² |
| | Input wire gauge. | 16...20 AWG |
| | Input wire strip length | 8...9mm |
| Output | Output wire cross-section | 0.5...1.5 mm ² |
| | Output wire gauge. | 16...20 AWG |
| | Output wire strip length | 8...9mm |

◆ **Curve for FLS-25-700 DALI-2 LA1, I_o=700mA**

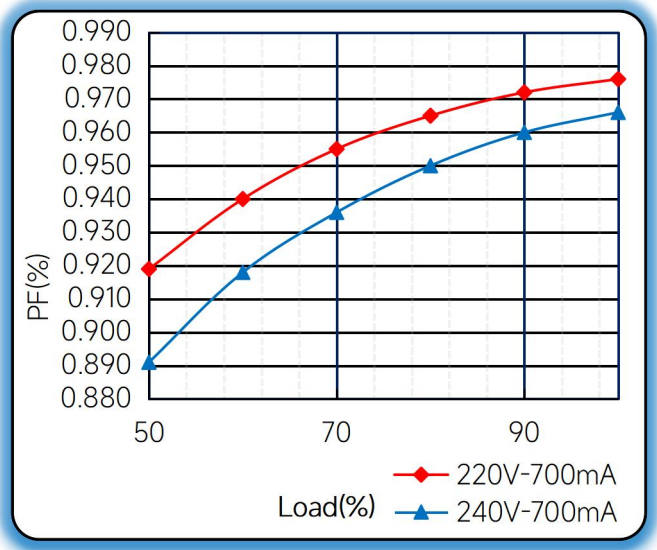
Lifetime vs. Temperature Curve



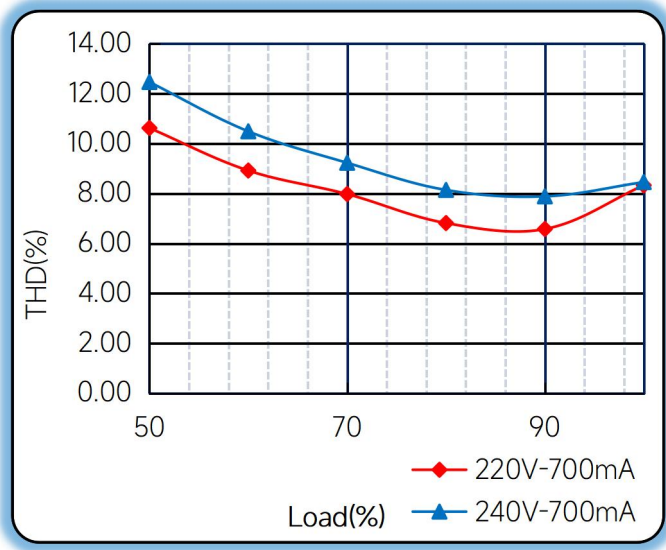
Efficiency vs. Load



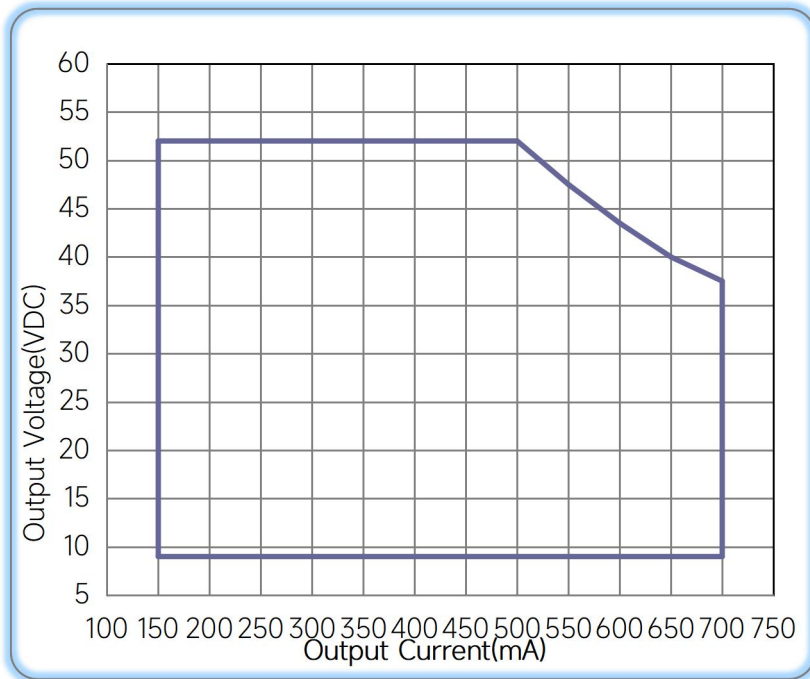
Power Factor Characteristics



THD vs. Load



◆ Operating window



— Operating window 100%

◆ Revision Updates

| ITEM | BEFORE | AFTER | VERSION | DATE |
|---------|--------|-------|---------|------------|
| Initial | | | A | 2022/05/07 |
| | | | | |

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual