ID LCCB 75/230/050-400 DALI NFC FV1

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A Contraction of the owner of the

- Built-in non isolated adjustable power LED driver
- Supports DALI-2, push DIM control
- Current adjustment via NFC
- Constant lumen output(CLO)
- Supports i-Data function (DALI part 251, 252, 253)
- Output current 50...400 mA
- Max. output power 75 W
- DC emergency

**Product features** 

- Flicker-free, dimming range 1%...100% (amplitude dimming)
- Current output default value 100%
- For luminaires with protection class I
- 5 years warranty
- with anti glow function
- Packing unit programming: configure a large number of drivers in parallel via NFC

# **Product specifications**

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| Output current | Input voltage            | Output voltage | Efficiency<br>@full load | Current<br>accuracy | Power factor                    | Dimension<br>LxWxH (mm) |
|----------------|--------------------------|----------------|--------------------------|---------------------|---------------------------------|-------------------------|
| 50400 mA       | 220240 Vac<br>220240 Vdc | 50220 Vdc      | 92% (@ 187 V<br>400 mA)  | ± 5%                | 0.9<br>(Output Power<br>> 20 W) | 278 x 30 x 16           |

# **Electrical specifications**

### Mains voltage supply

| Rated input voltage range | 220240 Vac                        |  |
|---------------------------|-----------------------------------|--|
| Max. input voltage range  | 198264 Vac                        |  |
| Rated frequency range     | 0/50/60 Hz                        |  |
| Max. input current        | 0.4 A @ 230 Vac & 0.4 A @ 230 Vdc |  |

### Battery operation

| DC voltage range      | 220240 Vdc |
|-----------------------|------------|
| Max. DC voltage range | 176276 Vdc |

#### Protection against voltage peaks

| Withstand voltage    | l/p-FG: 1.5 kVac, < 5 mA 60 sec, l/p-Da: 1.5 kVac, < 5 mA 60 sec,<br>O/p-Da: 1.5 kVac, < 5 mA 60 sec |  |  |
|----------------------|--|--|--|
| Mains surge immunity | L-N 1 kV, L-FG 2 kV, N-FG 2 kV   |  |  |

#### Total harmonic distortion (THD)

|  | At rated input voltage range @ full load | 20% |
|--|--|-----|
|--|--|-----|

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#### Output data

| Output current tolerance | ± 5% at rated input voltage range                   |
|--------------------------|---|
| No load output voltage   | ≤ 250 Vdc   |
| Ripple output current    | 5% (ripple = peak/average total 100 Hz)             |
| Output PstLM             | ≤ 1 at full load @ rated input voltage              |
| Output SVM               | ≤ 0.4 at full load @ rated input voltage            |
| DC emergency level       | DALI current output decreased to 15% (programmable) |

#### Protection functions output side

| Overvoltage protection   | The output voltage is less than or equal to 250 V   |  |  |
|--------------------------|---|--|--|
| Overpower protection     | The output power is less than or equal to 90 W  |  |  |
| Short circuit protection | Hiccup mode. Protection device will trigger when short circuit and will auto recover after the fault mode is removed. |  |  |

#### Dimming operation and interface

| Standby power consumption | ≤ 0.3 W              |
|---------------------------|----------------------|
| Dimming mode              | DALI-2, push dimming |
| Dimming method            | Amplitude dimming    |
| Dimming current range     | 1%100%               |

#### **Connection terminals**

| Connection terminal type | 0° push in terminal                           |
|--------------------------|---|
| Wire cross section       | Input and output wire: 0.51.5 mm <sup>2</sup> |
| Wire stripping length    | 89 mm   |

#### Degree of protection

| Protection rating | IP20 |
|-------------------|------|
|                   |      |

#### **Operating data**

| Output current range | NFC control adjusts the current: 50400 mA |
|----------------------|---|
| Default current      | 50 mA                                     |
| Output voltage range | 50220 Vdc                                 |

#### Circuit breaker / Inrush current

|                      | Inrush current Ipeak: 29.4 A |     |     | Inrush current Twidth: 112 µs |     |     |
|----------------------|------------------------------|-----|-----|-------------------------------|-----|-----|
| MCB loading quantity | MCB type                     | B10 | C10 |                               | B16 | C16 |
|                      | Units                        | 22  | 22  |                               | 35  | 35  |

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## Supplementary instructions

- The luminaire manufacturer is responsible for measuring and verifying the EMI compliance of the complete luminaire, as the level of radio interference will vary depending on the luminaire construction. Especially primary and secondary cable lengths and their routing may have a significant effect on radio interference.
- For the push DIM function, please follow our instructions, which can be downloaded from www.cupower.com.
- The recommended NFC communication distance: 5...20 mm.

# **Environmental specifications**

| Operating temperature  | -25 +55°C                        |
|------------------------|----------------------------------|
| Storage temperature    | -40 +80°C                        |
| Working humidity       | 10%90%                           |
| Store humidity         | 5%95%                            |
| Lifetime               | at Tc 75°C: 50,000 hrs @ 230 Vac |
| Maximum Tc temperature | 85°C                             |
|                        |                                  |

# Safety & EMC compliance

| ENEC+CE                     |
|-----------------------------|
| EN 61347-2-13:2014/A1: 2017 |
| EN 61347-1: 2015            |
| EN 62384:2006/A1: 2009      |
| EN 55015:2019/A11: 2020     |
| EN 61000-3-2: 2019          |
| EN 61000-3-3: 2013          |
| EN 61547:2009               |
| EN 300 330 V2.1.1: 2017     |
| EN 62493: 2015              |

| ССС |  |  |
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| SAA                        |  |  |
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| AS/NZS IEC 61347.2.13.2013 |  |  |
| AS/NZS 61347.1: 2016       |  |  |
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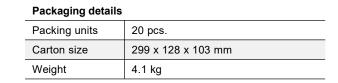
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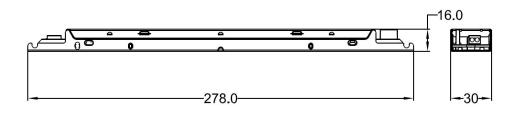
### Dimensions

#### Housing dimensions

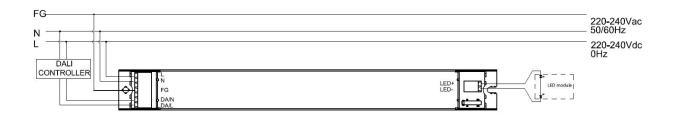
| Length (L) | 278 mm  |
|------------|---------|
| Width (W)  | 30 mm   |
| Height (H) | 16 mm   |
| Weight     | 0.18 kg |

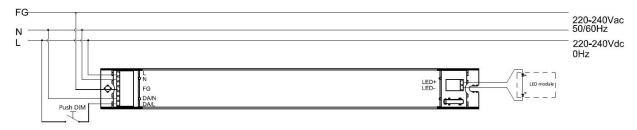






## Wiring diagram



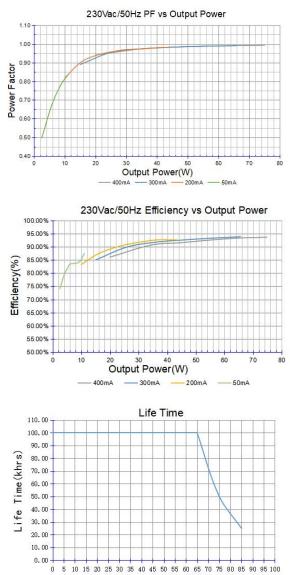


- All connections must be as short as possible to ensure good EMI performance.
- The luminaire wire should keep a certain distance from the LED power supply and other wires (5...10 cm is preferred).
- No secondary switches are allowed.
- Incorrect wiring can damage the LED.
- The wire must be well protected against short circuits.

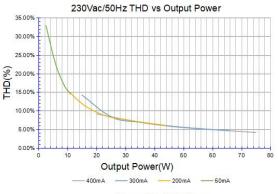
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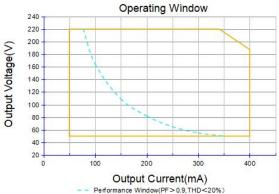
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# **Technical information**



Tcase(°C)





It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 75 W + 5%.

#### Example of AOC settings

| V LED (Vdc) | AOC max | Pout (W) |
|-------------|---------|----------|
| 220         | 340 mA  | 75       |
| 210         | 357 mA  | 75       |
| 200         | 375 mA  | 75       |
| 187.5       | 400 mA  | 75       |

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