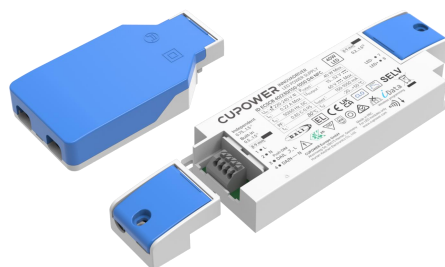




### Product features

- Built-in isolated adjustable power LED driver
- Supports DALI-2 D4i (part 250, 251, 252, 253)
- Current adjustment via NFC
- Flicker free LED driver
- Output current 150...1050 mA
- Max. output power 40 W
- Constant lumen output (CLO)
- DC emergency
- Current output default value 600 mA
- For luminaires with protection class I, II
- 5 years warranty



### Product specifications

#### 167876 ID ECSCB 40/230/150-1050 D4i NFC

| Output current | Input voltage                  | Output voltage | Efficiency @ full load | Current accuracy | Power factor                 | Dimension L x W x H (mm) |
|----------------|--------------------------------|----------------|------------------------|------------------|------------------------------|--------------------------|
| 150...1050 mA  | 220...240 Vac<br>220...240 Vdc | 15...52 Vdc    | 92%                    | ± 5%             | 0.9<br>(Output power > 15 W) | 135.0 x 56.5 x 21.0      |

### Electrical specifications

#### Mains voltage supply

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Rated input voltage range      | 220...240 Vac; performance range        |
| Max. input voltage range       | 198...264 Vac; operational safety range |
| Rated frequency range          | 0/50/60 Hz                              |
| Performance/Operational safety | 47...63 Hz                              |
| Max. input current             | 0.22 A @ 230 Vac & 0.22 A @ 230 Vdc     |

#### Battery operation

|                       |                                         |
|-----------------------|-----------------------------------------|
| DC voltage range      | 220...240 Vdc; performance range        |
| Max. DC voltage range | 176...276 Vdc; operational safety range |

#### Protection against voltage peaks

|                      |                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------|
| Withstand voltage    | I/P-O/P: 3.75 kVac, < 5 mA 60 sec, I/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 per IEC61000-4-5                                                                             |

#### Total harmonic distortion (THD)

|                                          |       |
|------------------------------------------|-------|
| At rated input voltage range @ full load | < 10% |
|------------------------------------------|-------|

#### Output data

|                          |                                           |
|--------------------------|-------------------------------------------|
| Output current tolerance | ± 5% at rated input voltage range         |
| No load output voltage   | ≤ 60 Vdc                                  |
| Ripple output current    | ≤ 3% (ripple = peak/average total 100 Hz) |

|                    |                                                                  |
|--------------------|------------------------------------------------------------------|
| Output PstLM       | $\leq 1$ at full load @ rated input voltage                      |
| Output SVM         | $\leq 0.4$ at full load @ rated input voltage                    |
| DC emergency level | Current output decreased to 15% (other values can be programmed) |

### Protection functions output side

|                          |                                                                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Over voltage protection  | The output voltage is less than or equal to 60 Vdc                                                                                              |
| Over power protection    | The output power is less than or equal to 44 W                                                                                                  |
| Short circuit protection | 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 |
|---------------------------|---------|

### Integrated DALI bus power supply

|                |                   |
|----------------|-------------------|
| Output current | 52 mA (max.60 mA) |
| Output voltage | 16 Vdc            |

### Connection terminals

|                          |                                                                                |
|--------------------------|--------------------------------------------------------------------------------|
| Connection terminal type | 45° push in terminal                                                           |
| Wire cross section       | Input wire: 0.5...1.5 mm <sup>2</sup> ; output wire: 0.2...1.5 mm <sup>2</sup> |
| Wire stripping length    | 8...9 mm                                                                       |

### Degree of protection

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

### Operating data

|                      |                                                |
|----------------------|------------------------------------------------|
| Output current range | NFC control adjusts the current: 150...1050 mA |
| Default current      | 150 mA                                         |
| Output voltage range | 15...52 Vdc                                    |
| Noise level          | < 20 dB, at full load @ 100 cm distance        |

### Circuit breaker / Inrush current

|                      |                            |     |     |                               |     |
|----------------------|----------------------------|-----|-----|-------------------------------|-----|
| MCB loading quantity | Inrush current Ipeak: 24 A |     |     | Inrush current Twidth: 150 µs |     |
|                      | MCB type                   | B10 | C10 | B16                           | C16 |
|                      | Units                      | 29  | 41  | 47                            | 66  |

### 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](http://www.cupower.com).
- External NTC are supported for temperature protection of the LED module or luminaire.
- Mind the polarity of the DALI lines. DA+ to DA+, DA- to DA- only.
- The luminaire manufacturer must ensure that condensation water cannot be created within the fixture.

### Environmental specifications

|                        |                                                           |
|------------------------|-----------------------------------------------------------|
| Operating temperature  | -40...+50°C                                               |
| Storage temperature    | -25...+85°C                                               |
| Working humidity       | 10%...90%                                                 |
| Store humidity         | 5%...95%                                                  |
| Lifetime               | at Tc 80°C: 50,000 hrs; at Tc 70°C: 100,000 hrs @ 230 Vac |
| Maximum Tc temperature | 80°C                                                      |

### Safety & EMC compliance

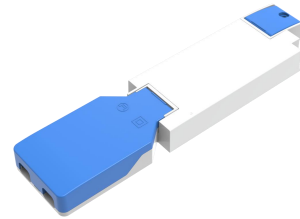
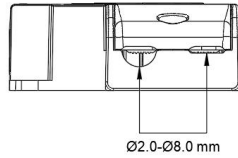
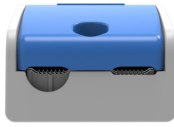
| ENEC+CE                       |
|-------------------------------|
| EN 61347-1:2015/A1:2021       |
| EN 61347-2-13:2014/A1:2017    |
| EN IEC 62384:2020             |
| EN IEC 55015:2019/A11:2020    |
| EN IEC 61547:2023             |
| EN IEC 61000-3-2:2019/A2:2024 |
| EN 61000-3-3:2013/A2:2021     |
| EN 300 330 V2.1.1:2017        |
| EN 62479:2010                 |
| EN 50663:2017                 |
| EN 301 489-1 V2.2.3:2019      |
| EN 301 489-3 V2.3.2:2023      |
| EN 62493:2015/A1:2022         |

| CCC |
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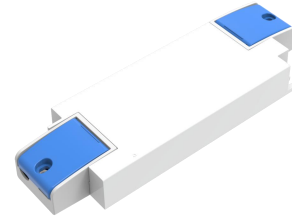
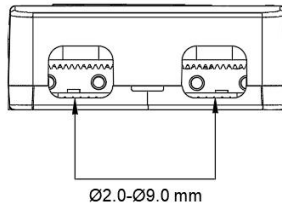
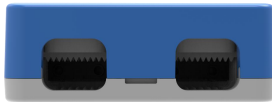
| SAA                    |
|------------------------|
| AS 61347.2.13          |
| AS/NZS 61347.1:2016+A1 |
|                        |

| DALI-2 Acc. to EN 62386   |
|---------------------------|
| Acc. to IEC 62386-101:Ed2 |
| Acc. to IEC 62386-102:Ed2 |
| Acc. to IEC 62386-207:Ed1 |
| Acc. to IEC 62386-251:Ed2 |
| Acc. to IEC 62386-252:Ed2 |
| Acc. to IEC 62386-253:Ed2 |
|                           |
|                           |

### Accessories (optional)



Art. 161195 XZ-ID-C



Art. 161201 XZ-ID-LOOP-C

| Dimensions                          | Length (mm) | Width (mm) | Height (mm) |
|-------------------------------------|-------------|------------|-------------|
| XZ-ID-C                             | 39          | 33         | 21          |
| XZ-ID-LOOP-C                        | 105         | 56.5       | 21          |
| Driver incl. 2 x XZ-ID-C            | 178         | 56.5       | 21          |
| Driver incl. XZ-ID-C + XZ-ID-LOOP-C | 242.8       | 56.5       | 21          |

### Dimensions

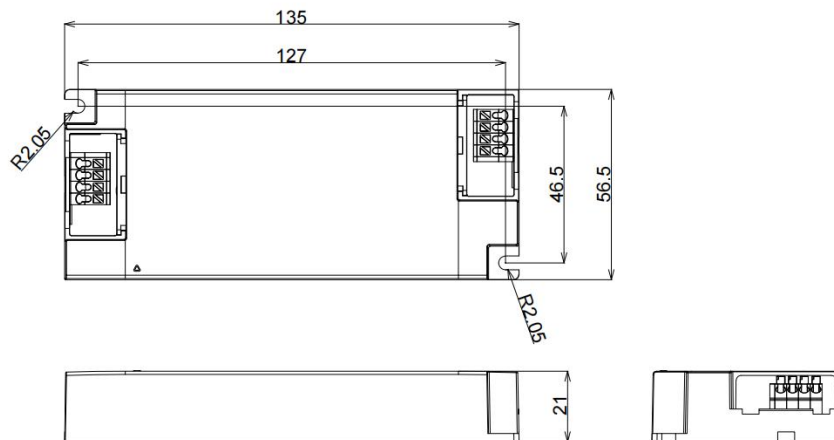
#### Housing dimensions

|            |          |
|------------|----------|
| Length (L) | 135.0 mm |
| Width (W)  | 56.5 mm  |
| Height (H) | 21.0 mm  |

For all dimensions: values in mm; tolerances:  $\pm 0.5$  mm

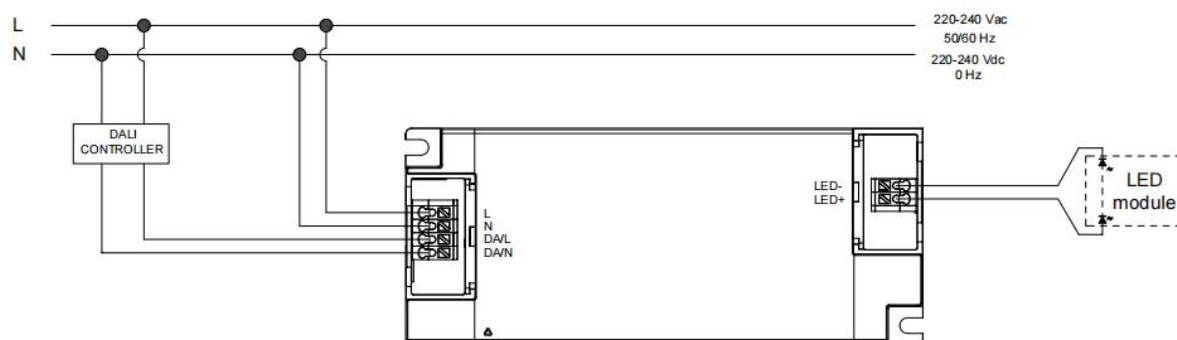
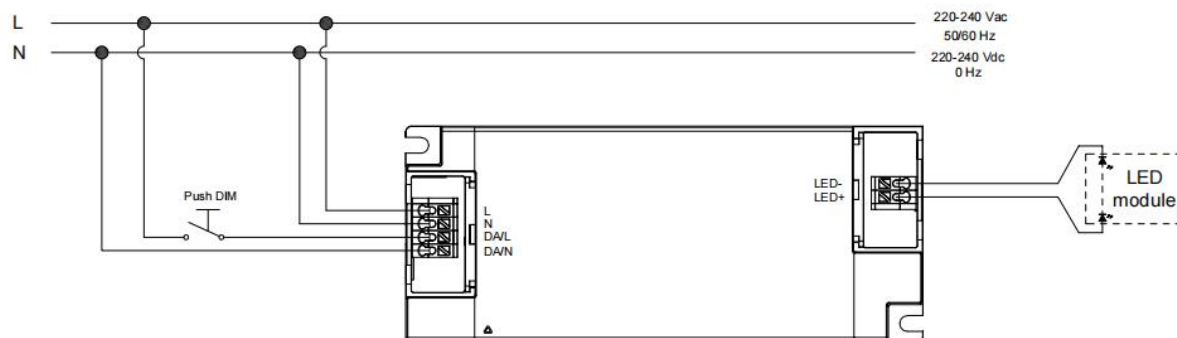
#### Packaging details

|                |                      |
|----------------|----------------------|
| Packing units  | 24 pcs               |
| Carton size    | 280 × 179.5 × 114 mm |
| Carton weight  | 3.72 kg              |
| Product weight | 0.13 kg              |



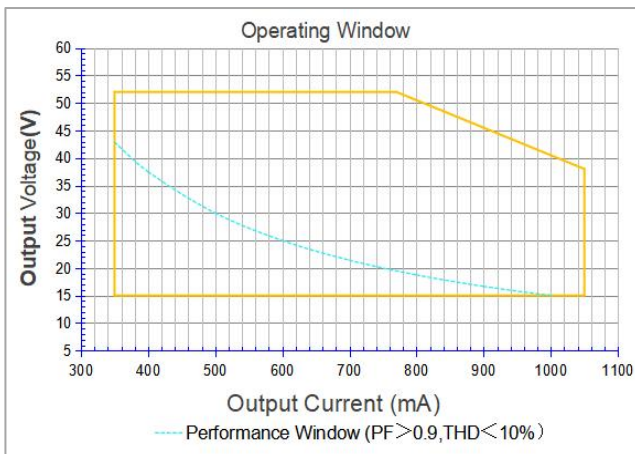
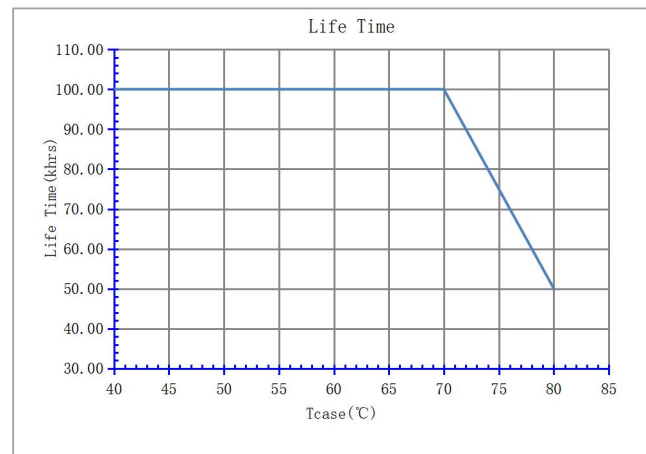
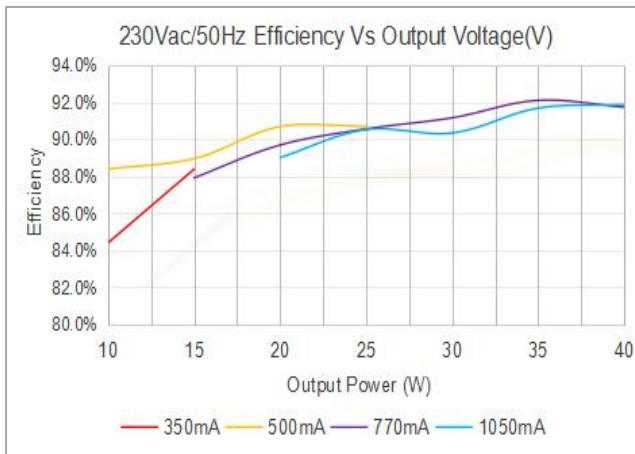
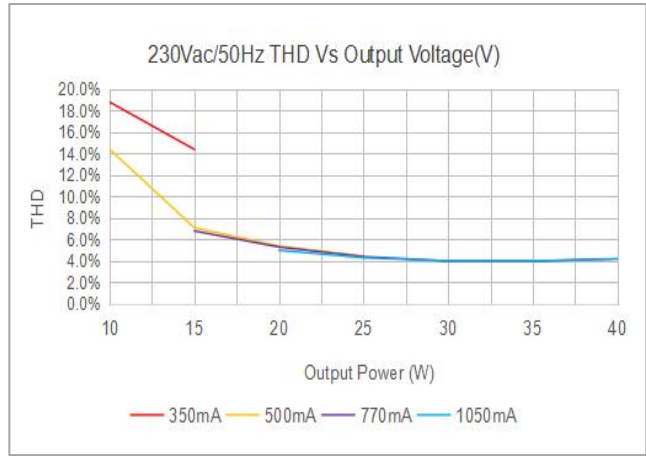
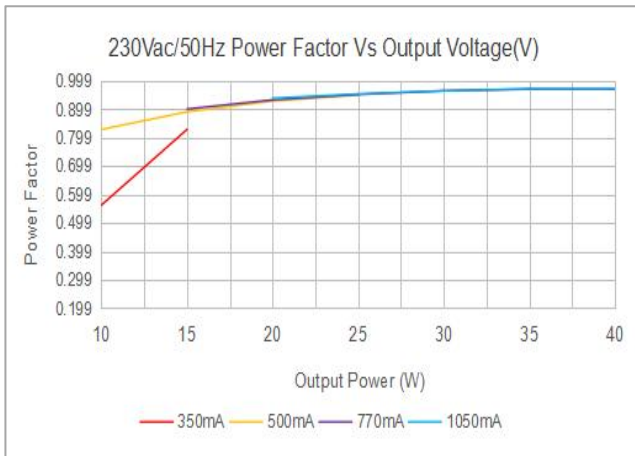
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### Wiring diagram



- 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 circuit.
- When using the PUSH dimming function, the Integrated DALI bus power supply function needs to be turned off.

### Technical information



It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 40 W + 5%.

#### Example of AOC settings

| V LED (Vdc) | AOC max | Pout (W) |
|-------------|---------|----------|
| 52          | 350 mA  | 18.2     |
| 52          | 500 mA  | 26       |
| 52          | 770 mA  | 40       |
| 38          | 1050 mA | 40       |