

### Product features

- Flicker-free LED driver
- Supports DALI-2, push DIM, push CCT control
- Usable as DT6 (2-channel) or DT8 (tunable white) driver
- Current adjustment via NFC
- Supports i-Data function (DALI part 251, 252, 253)
- Output current 150...700 mA
- Max. output power 75 W
- DC emergency
- Current output default value 100%
- For luminaires with protection class I
- Anti-glow



### Product specifications

165070 ID ELNCB 75/230/150-700 DT8 NFC

| Output current | Input voltage                  | Output voltage | Efficiency @ full load | Current accuracy | Power factor          | Dimension L x W x H (mm) |
|----------------|--------------------------------|----------------|------------------------|------------------|-----------------------|--------------------------|
| 150...700 mA   | 220...240 Vac<br>220...240 Vdc | 50...240 Vdc   | 92%                    | ± 5%             | 0.9<br>( @ 23...75 W) | 29.5 x 30.0 x<br>16.0    |

### Electrical specifications

#### Mains voltage supply

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Rated input voltage range        | 220...240 Vac                     |
| Max. input voltage range         | 198...264 Vac                     |
| Rated frequency range            | 0/50/60 Hz                        |
| Performance / Operational safety | 47...63 Hz                        |
| Max. input current               | 0.4 A @ 230 Vac & 0.4 A @ 230 Vdc |

#### Battery operation

|                       |               |
|-----------------------|---------------|
| DC voltage range      | 220...240 Vdc |
| Max. DC voltage range | 176...278 Vdc |

#### Protection against voltage peaks

|                      |                                 |
|----------------------|---------------------------------|
| Withstand voltage    | I/p-FG: 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% |
|--|-----|

### 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 82 W  |
| Short circuit protection | Short circuit protection is designed to turn off the output and cannot be automatically restored. After removing the short circuit, the output can be restored by one of the following two operations: <ul style="list-style-type: none"> <li>• After receiving DALI instruction Off, turn on the light by dimming instruction</li> <li>• Restart the driver: Power on the driver five seconds after the power failure</li> </ul> |
| No load output voltage   | Open circuit protection is designed to shut off the output and cannot be automatically restored. After the open circuit is removed, the output can be restored by one of the following two operations <ul style="list-style-type: none"> <li>• After receiving DALI instruction Off, turn on the light by dimming instruction</li> <li>• Restart the driver: Power on the driver five seconds after the power failure</li> </ul>  |

### Dimming operation and interface

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

### Connection terminals

|                          |  |
|--------------------------|--|
| Connection terminal type | 0° 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 (DT8) | NFC control adjusts the current: 150...700 mA  |
| Output current range (DT6) | NFC control adjusts the current: 50...700 mA per channel<br>Max sum of output current: 1050 mA |
| Default current            | 150 mA   |
| Output voltage range       | 50...240 Vdc   |

### Circuit breaker / Inrush current

|                      |   |     |   |     |     |
|----------------------|---|-----|---|-----|-----|
| MCB loading quantity | Inrush current I <sub>peak</sub> : 16.5 A |     | Inrush current T <sub>width</sub> : 14.6 μs |     |     |
|                      | MCB type                                  | B10 | C10   | B16 | C16 |
|                      | Units                                     | 22  | 22  | 35  | 35  |

### 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).
- The recommended NFC communication distance: 5...20 mm.

### Environmental specifications

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

### Safety & EMC compliance

| ENEC+CE                    |
|----------------------------|
| EN 61347-1:2015/A1:2021    |
| EN 61347-2-13:2014/A1:2017 |
| EN 62384:2020              |
| EN 300 330 V2.11:2017      |
| EN 62479:2010              |
| EN 50663:2017              |
| EN 301 489-1 V2.2.3:2019   |
| EN 301 489-3 V2.3.2:2023   |
| EN 55015:2019/A11:2020     |
| EN 61547:2023              |
| EN 61000-3-2:2019/A1:2021  |
| EN 61000-3-3:2013/A2:2021  |

| CCC |
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| SAA                        |
|----------------------------|
| AS/NZS IEC 61347.2.13.2018 |
| AS/NZS 61347.1:2016        |
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### Dimensions

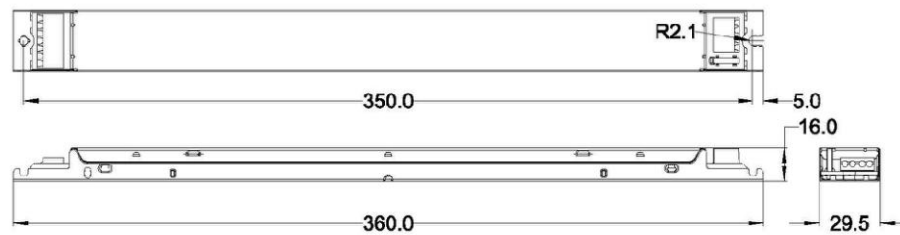
#### Housing dimensions

|            |          |
|------------|----------|
| Length (L) | 360.0 mm |
| Width (W)  | 29.5 mm  |
| Height (H) | 16.0 mm  |

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

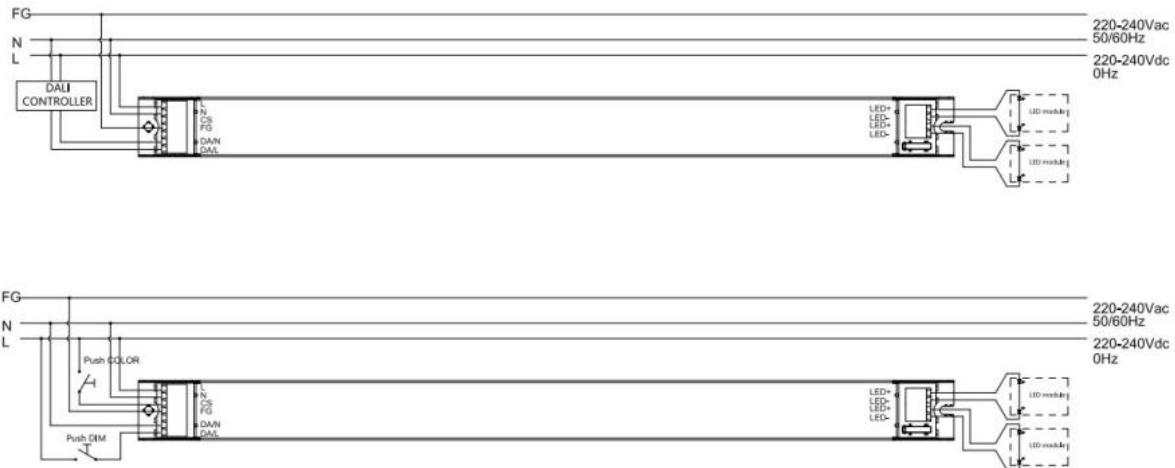
#### Packaging details

|                |                    |
|----------------|--------------------|
| Packing units  | 20 pcs.            |
| Carton size    | 381 x 128 x 103 mm |
| Carton weight  | 5.8 kg             |
| Product weight | 0.232 kg           |



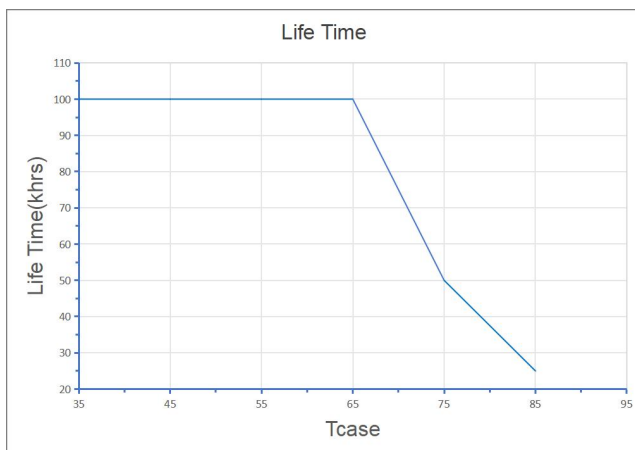
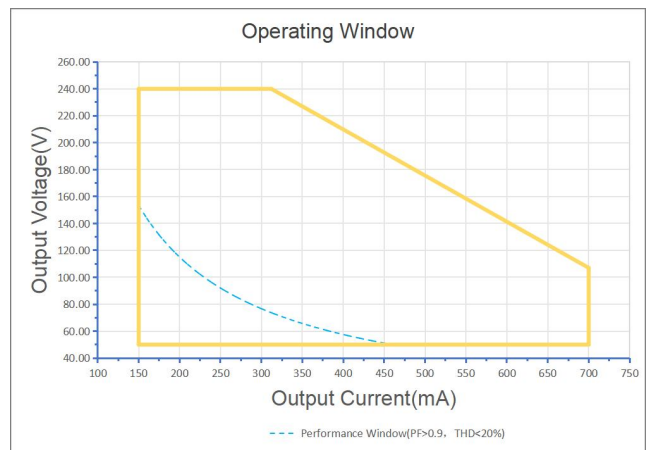
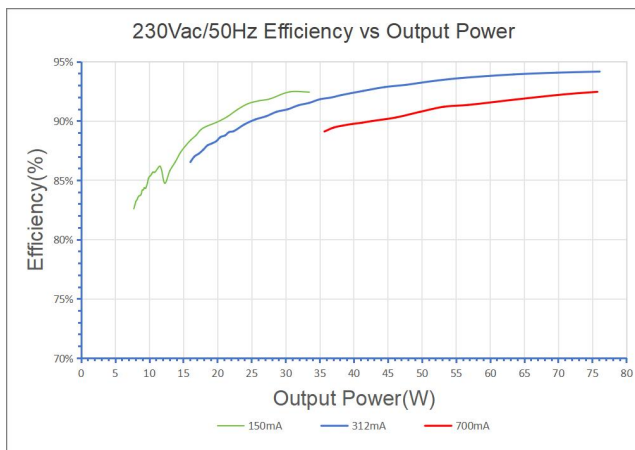
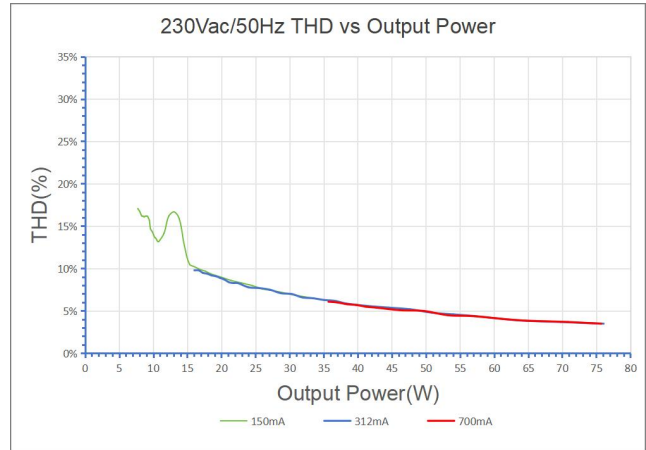
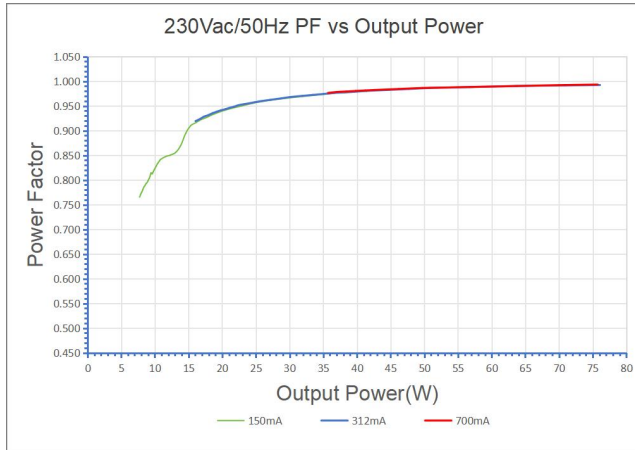
unit:mm  
tol:  $\pm 0.5$  mm

### 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.

### Technical information



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) |
|-------------|---------|----------|
| 240         | 150 mA  | 36       |
| 240         | 250 mA  | 60       |
| 136         | 550 mA  | 75       |
| 108         | 700 mA  | 75       |