

### Product features

- Isolated adjustable power LED driver
- Constant lumen output (CLO)
- Current adjustment via DIP Switch
- Output current 200...400 mA
- Max. output power 16.8 W
- DC emergency
- Flicker-free, dimming range 1%...100% (amplitude dimming)
- Current output default value 100%
- For luminaires with protection class I, II
- Anti-glow



### Product specifications

#### 169238 ID ECSCI 16/230/200-400 DT6 DIP CCT

| Output current | Input voltage                  | Output voltage | Efficiency @ full load | Current accuracy | Power factor                                     | Dimension L x W x H (mm) |
|----------------|--------------------------------|----------------|------------------------|------------------|--------------------------------------------------|--------------------------|
| 200...400 mA   | 220...240 Vac<br>220...240 Vdc | 9...42 Vdc     | 87% (@42 V<br>400 mA)  | ± 5%             | 0.9<br>(Output Power<br>>7 W @ 230<br>Vac 50 Hz) | 140.0 x 30.0 x<br>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                              |
| Max. input current        | 0.09 A @ 230 Vac & 0.09 A @ 230 Vdc     |

#### Battery operation

|                       |                                         |
|-----------------------|-----------------------------------------|
| DC voltage range      | 220...240 Vdc; performance range        |
| Max. DC voltage range | 176...280 Vdc; operational safety range |

#### Protection against voltage peaks

|                      |                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------|
| Withstand voltage    | I/p-O/p: 3 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                                                                                            |

#### 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   | ≤ 50 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       | Current output decreased to 15% (programmable) |

### Protection functions output side

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overvoltage protection   | The output voltage is less than or equal to 50 V                                                                                                                                                                                                                                                                                                                                                                                           |
| Overpower protection     | The output power is less than or equal to 18 W                                                                                                                                                                                                                                                                                                                                                                                             |
| Short circuit protection | <p>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:</p> <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 | < 0.5 W              |
| Dimming mode              | DALI-2, push dimming |
| Dimming method            | Amplitude dimming    |
| Dimming current range     | 1%...100%            |

### Connection terminals

|                          |                                                                                 |
|--------------------------|---------------------------------------------------------------------------------|
| Connection terminal type | Input terminal: 45°, Output terminal: 0°                                        |
| Wire cross section       | Input wire: 0.75...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 | DIP Switch control adjusts the current: 200...400 mA |
| Default current      | 200 mA                                               |
| Output voltage range | 9...42 Vdc                                           |

### Circuit breaker / Inrush current

|                      |                                          |     |     |                                            |     |
|----------------------|------------------------------------------|-----|-----|--------------------------------------------|-----|
| MCB loading quantity | Inrush current I <sub>peak</sub> : 9.5 A |     |     | Inrush current T <sub>width</sub> : 155 us |     |
|                      | MCB type                                 | B10 | C10 | B16                                        | C16 |
|                      | Units                                    | 72  | 106 | 115                                        | 170 |

## 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).

## Environmental specifications

|                        |                                   |
|------------------------|-----------------------------------|
| Operating temperature  | -20... +50 °C                     |
| Storage temperature    | -25... +85 °C                     |
| Working humidity       | 10%...90%                         |
| Store humidity         | 5%...95%                          |
| Lifetime               | at Tc 80 °C: 50,000 hrs @ 230 Vac |
| Maximum Tc temperature | 80 °C                             |

## Safety & EMC compliance

| ENEC+CE | CCC | SAA |
|---------|-----|-----|
| /       | /   | /   |
| /       | /   | /   |
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### Dimensions

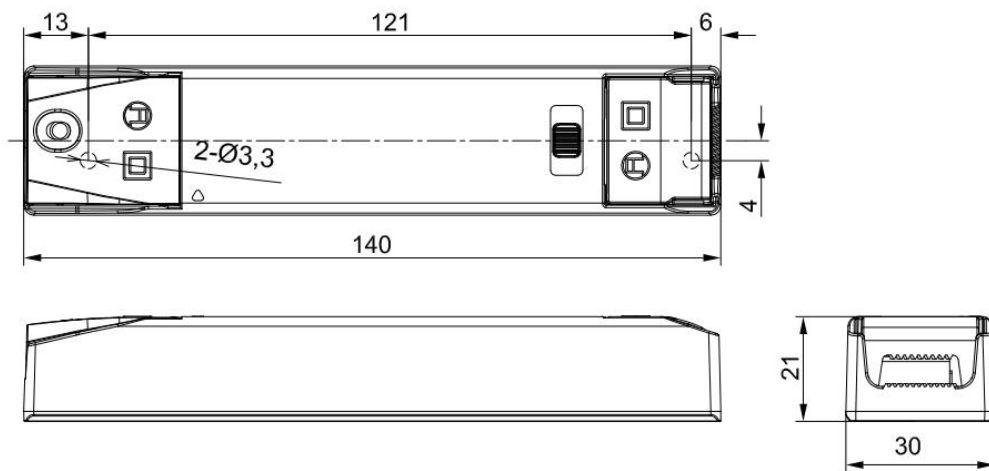
#### Housing dimensions

|            |          |
|------------|----------|
| Length (L) | 140.0 mm |
| Width (W)  | 30.0 mm  |
| Height (H) | 21.0 mm  |

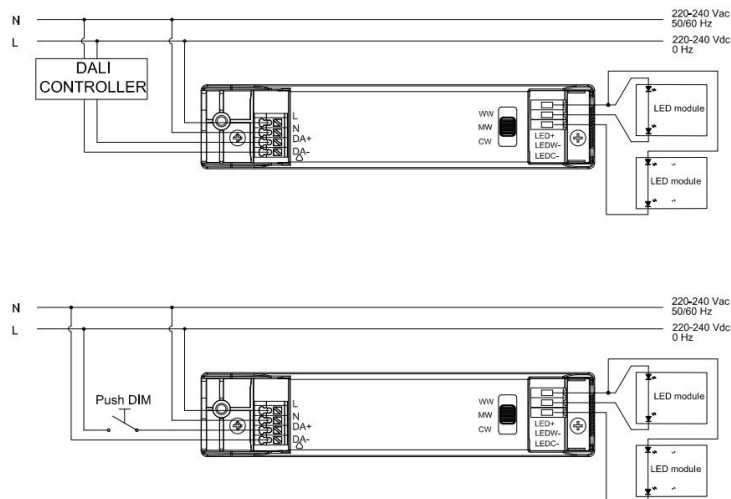
For all dimensions: values in mm; tolerances:  $\pm 0.5$  mm

#### Packaging details

|                |          |
|----------------|----------|
| Packing units  | TBD pcs  |
| Carton size    | TBD      |
| Carton weight  | TBD      |
| Product Weight | 0.068 kg |

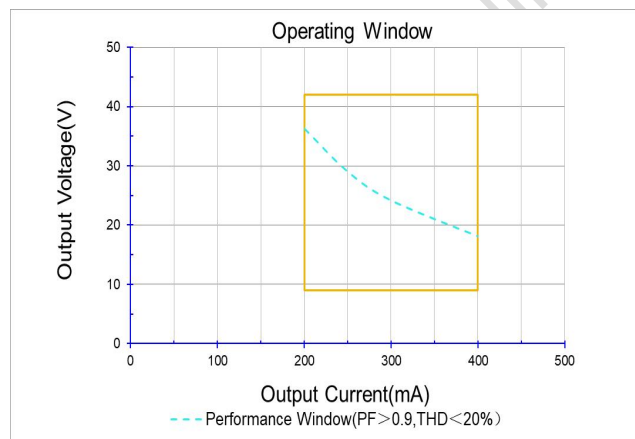
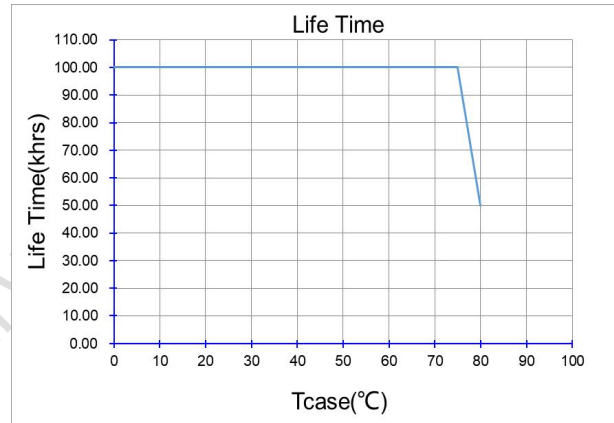
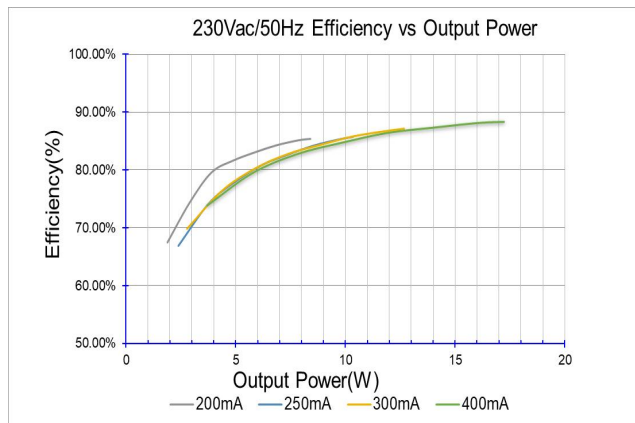
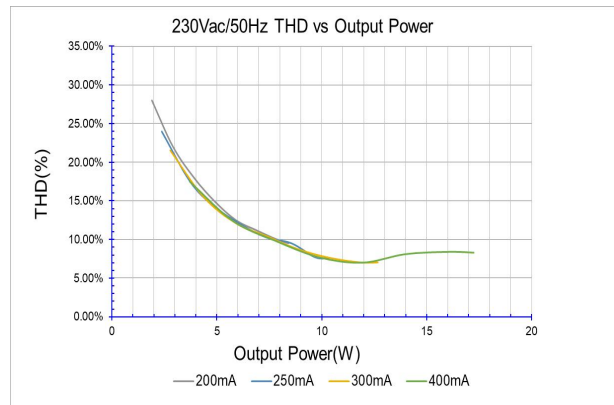
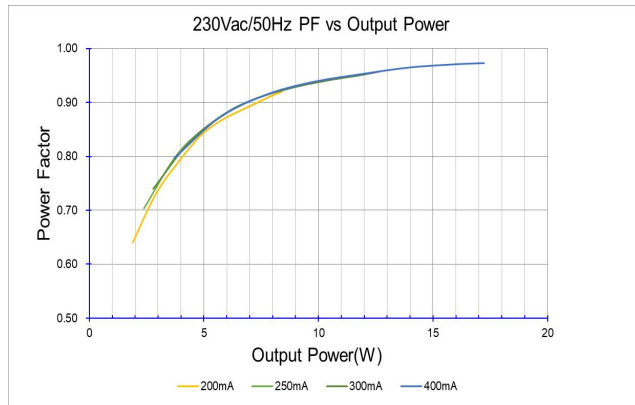


### Wiring diagram



- 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.

## Technical information



It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 16.8 W + 5%.

### Example of AOC settings

| V LED (Vdc) | AOC max | Pout (W) |
|-------------|---------|----------|
| 42          | 400 mA  | 16.8     |
| 42          | 300 mA  | 12.6     |
| 42          | 200 mA  | 8.4      |