

# Datasheet SOLOdrive 1060/1061

**AC Series** 



# 100W Single-Channel Mains LED Driver/Controller

## **SOLOdrive AC Series**

SOLOdrive is an integrated AC mains, constant current driver/controller, which is targeted at high-power, general white LED lighting applications. SOLOdrive is available in a DALI or 1-10V compatible version. It offers a 20-bit resolution and gamma-corrected dimming curve.

# Application area: LED-based general white lighting

SOLOdrive is targeted at larger networked and standalone installations that require uniform white LED lighting. It is DALI and switch-dim or 1-10V compatible. DALI is ideal for larger, flexible networked installations. In smaller (standalone) applications, you can use either 1-10V or switch-dim. For

applications, you can use either 1-10V or switch-dim. For switch-dim, SOLOdrive must be connected to a momentary light switch. Pressing the switch turns the light on or off, pressing it and holding it down lets you set the dimming level. Further advantages of switch-dim include multiple control points, soft start and return to last setpoint.

SOLOdrive combines both LED driver and power electronics, simplifying setup and installation. Its compactness makes it highly suitable for use in general lighting.

# **Dimming control**

SOLOdrive supports a wide dimming range of 100% down to 0.1% and a gamma corrected dimming curve. The gamma correction combined with high resolution results in eye sensitivity adjusted, smooth and flicker free dimming of high-power LED luminaires.

## Suitable for practically all LED types

The available LED output current on SOLOdrive ranges from 200mA up to 1,050mA in 50mA steps, making it the perfect match for practically every light engine and configuration.

#### LEDcode interface

SOLOdrive is LEDcode compatible, meaning you can finetune LED output current settings for your LED application over the LEDcode connectors. The LEDcode connectors can also be used to connect a  $47k\Omega$  NTC thermistor. An NTC thermistor provides temperature feedback and ensures that normal LED operating temperatures are maintained.

#### **Features**

- DALI, 1-10V and switch-dim compatible
- Compact: 388x42x30mm / 370x41x30mm / 230x80x30mm
- Input voltage range: 100 277 VAC
- · Power output: 100W
- · Linear and gamma-corrected dimming curves
- · Excellent resolution: 20-bit
- · LED output current setting via LEDcode

# **Advantages**

- Highly efficient (90%) over a wide power range
- Maximum (rated) power available over wide LED voltage and LED current range
- Ideal for general white LED lighting applications such as architectural lighting



#### Electrical data: input

- Line voltage: 100 277 VAC
- Maximum line current:

   1A at 120V/60Hz (113W) typ.
   0.5A at 230V/50Hz (111W) typ.
   0.45A at 277V/60Hz (110W) typ.
- Line frequency: 50/60 Hz
- Efficiency: 90% (typ.)
- · Power factor:

0.99 at 120V/60Hz (typ.)

0.98 at 230V/50Hz (typ.)

0.94 at 277V/60Hz (typ.)

# Electrical data: output

- Maximum power output: 100W
- LED output current range: 200mA - 1,050mA
- · Maximum voltage output: 60V (57V typ.)
- Hybrid HydraDrive
- · Dynamic range:
  - 0 100% in 20-bit resolution

# Mounting data

Mounting holes: M4 (2 or 4)

#### Control

- · Brightness: DALI, 1-10V, switch-dim
- High contrast ratio
- · Control channels: 1
- LEDcode interface: for configuration of LED output current or connecting a thermistor

#### Thermal data

- · Cooling: passive
- · Over temperature protection
- LEDcode/thermistor (47kΩ) interface

#### Certifications

- CE
- IEC 61347, IEC 62384 (VDE),
   EN 55015, EN 55022, IEC 61000-3-2,
   IEC 61547
- · UL and VDE: pending

## **Dimensions LxWxH**

SL106xA1: 388x42x30 mm

SL106xM1: 370x41x30 mm

• SL106xS1: 230x80x30 mm

# **Environmental ratings**

- Ta range: -20°C...50°C (-4°F...122°F)
- Tc max: 65°C (149°F)
- · Relative humidity: non-condensing

#### Connectors: input side

- Power: Line, Neutral and Ground (3)
- DALI or 1-10V: + (2) and (2)
- Wiring: 0.5 1.5 mm<sup>2</sup> cross section
   9mm strip length

# Connectors: output side

- LED outputs: + (4) and (4)
- LEDcode/NTC: + and (2)
- Wiring: 0.5 1.5 mm<sup>2</sup> cross section
   9mm strip length



Always make sure that the driver's cabling is in compliance with all applica ble regulations, building codes and legislation.

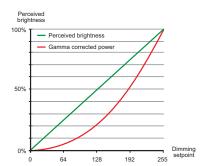


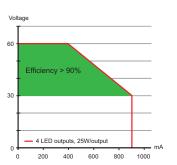
SOLOdrive 1060 and 1061 should only be installed by a qualified electrician.











# **Ordering information**

| Description   | Product     | Order nr |
|---|-------------|----------|
| SOLOdrive AC 100W, DALI 1 ballast, 4x 60V LED outputs, constant current               | Solo 1060/A | SL1060A1 |
| SOLOdrive AC 100W, 1-10V, 4x 60V LED outputs, constant current                        | Solo 1061/A | SL1061A1 |
| SOLOdrive AC 100W, DALI 1 ballast, 4x 60V LED outputs, constant current, metal        | Solo 1060/M | SL1060M1 |
| SOLOdrive AC 100W, 1-10V, 4x 60V LED outputs, constant current, metal                 | Solo 1061/M | SL1061M1 |
| SOLOdrive AC 100W, DALI 1 ballast, 4x 60V LED outputs, constant current, metal/square | Solo 1060/S | SL1060S1 |
| SOLOdrive AC 100W, 1-10V, 4x 60V LED outputs, constant current, metal/square          | Solo 1061/S | SL1061S1 |