# 9010 novantadieci<sub>®</sub>



Compact Size Constant Current Independent Type LED Driver

# Model 026.252



### **Product Description**

- Fixed output Independent LED driver
- Constant Current LED driver
- Output Current: 350mA
- Output Wattage: 18W
- 30000 hours life span
- For luminaries of protection class I and class II
- Temperature Protection According to EN 61347-2-13 C5E
- 3 Years Warranty

### Performance

- Housing: White PC, RoHS Compliant
- IP20

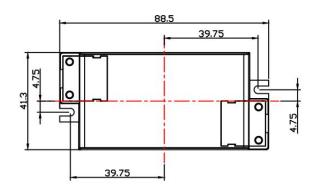
### Functions

- Overload protection
- Short circuit protection
- No load protection
- Under Voltage protection
- Over-temperature protection

## Specifications

Rated supply voltage	220 – 240 V
Input voltage, AC	198 – 264 V
Mains frequency	50 / 60 Hz
THD (at 230 V, 50 Hz, Full load)	< 20 %
Output current tolerance	±5%
Output current ripple (at 230 V, 50 Hz, Full load)	±7%
Max. output voltage (no-load voltage)	60 V
Turn on time (at 230 V, 50 Hz, full load)	≤ 0.5 s
Turn off time (at 230 V, 50 Hz, full load)	≤ 0.2 s
Ambient temperature ta	-20 +50 °C
Ambient temperature ta (at life-time 30,000 h)	40 °C
Storage temperature ts	-40 +85 °C
Dimensions L x W x H	88 x 41 x 23 mm
Net weight	68 g

# Compact Size Constant Current Independent Type LED Driver





Model	Output Current	Output Voltage	Output Power	Input Power	Input Current	PF	Efficiency
	(230V Full Load)	Range	Range	(230V Full Load)	(230V Full Load)	at Full Load	at Full Load
026.252	350mA	36-52V	12.6-18.2W	20.6W	0.11A	0.92	88.60%

All parameters are tested at 220VAC input, full load and 25  $^\circ C$  ambient temperature after connected to power for 30 minutes.

#### Standards

For TUV	For CCC
EN61347-1:2008/A2:20013	GB19510.1-2009
EN61347-2-13:2014	GB19510.14-2009
EN 62493:2010	GB7000.1-2007
EN 55015:2013	GB17743-2007
EN 61547:2009	GB14625.1-2012
EN61000-3-2:2014	
EN61000-3-3:2013	

For SAA AS/NZS IEC61347.2.13.2013 AS/NZS 61347.1.2002

#### **Over load protection**

If the output voltage range is exceeded the LED Driver reduces the LED output current or in burst modus. After elimination of the overload the nominal operation is restored automatically.

#### Short-circuit behaviour

In case of a short circuit on the secondary side (LED) the LED Driver switched off. After elimination of the short-circuit fault the LED Driver will recover automatically.

#### **No-load operation**

The LED Driver works in burst working mode to limit output voltage which allows the application to be able to work safely when LED string opens due to a failure.

#### **Under-voltage Protection**

The LED Driver will switch off when input voltage is lower than 150-170VAC.

#### **Over temperature protection**

The LED Driver will reduces the LED output current or in burst working.

### Installation instructions

Maximum torque: 0.5Nm / M4

The LED module and all contact points within the wiring must be sufficiently insulated against 1 kV surge voltage. Air and creepage distance must be maintained.

#### Storage conditions

Humidity:

5 % up to max. 85 %, not condensed (max. 60 days/year at 85 % humidity)

Storage temperature: -40 °C up to max. +85 °C

The devices have to be within the specified temperature range (ta) before they can be operated.

#### **Glow-wire test**

according to EN 61347-1 with increased temperature of 750 °C passed.

#### **Replace LED module**

- 1. Mains off
- 2. Remove LED module
- 3. Wait for 10 seconds
- 4. Connect LED module again

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

Electronic devices can be damaged by high voltage. This has to be considered during the routine testing of the luminaires in production.

According to IEC 60598-1 Annex Q (informative only!) or ENEC 303-Annex A, each luminaire should be submitted to an isolation test with 500 V DC for 1 second. This test voltage should be connected between the interconnected phase and neutral terminals and the earth terminal.

The isolation resistance must be at least 2 M  $\Omega$  .

As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strengthwith 1500 V AC (or 1.414 x 1500 V DC). To avoid damage to the electronic devices thistest must not be conducted.

## **Expected life time**

Model	ta	<b>40</b> ℃	<b>50</b> ℃
000 000	tc	<b>70</b> °C	<b>80</b> ℃
026.252	Life-time	30000H	15000H

\*The LED Drivers are designed for a life-time stated above under reference conditions and with a failure probability of less than 10 %.

## THD (at 230 V, 50 Hz, Full load)

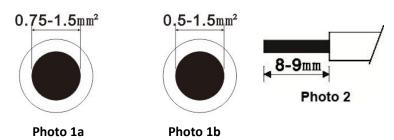
Model	THD	3	5	7	9	11
026.255	10	0.6	0.5	0.5	1.0	0.5

# 9010 novantadieci<sub>®</sub>

# Compact Size Constant Current Independent Type LED Driver

# Wiring type and cross section

The input wiring's cross section can be  $0.75 - 1.5 \text{ mm}^2$  and output wire can be  $0.5 - 1.5 \text{ mm}^2$ . Strip 8 - 9 mm of insulation from the cables to ensure perfect operation of the wire terminals.



# Release of the wiring

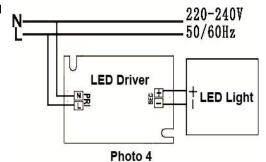
Loose the screw with a screwdriver and remove the cable from front.



## Wiring guidelines

- All connections must be kept as short as possible to ensure good EMI behaviour.
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 10 cm distance)
- Max. lenght of output wires is 2 m.
- Secondary switching is not permitted.
- Incorrect wiring can demage LED modules.
- The wiring must be protected against short circuits to earth

(sharp edged metal parts, metal cable clips, louver, etc.).



## 026.252

