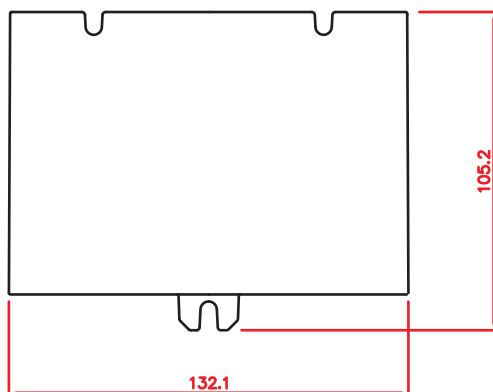
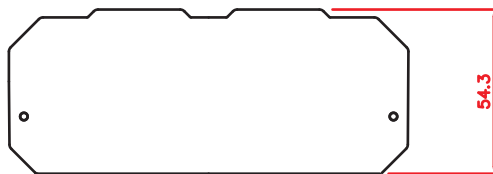


SMARTLAMP

ELECTRONIC BALLAST FOR GAS DISCHARGE LAMPS SL-70 / SL-100 / SL-150



SL-100



Definition:

A one-piece, microchip controlled electronic ballast for gas discharge lamps with dimmer and calendar to create a new generation of intelligent lighting system (dedicated to 70W, 100W and 150W bulbs).

Description:

- Fully integrated, microchip controlled ignition system
- High frequency operation for maximum efficiency
- 5kV stable ignition circuit allows for warm lamp ignition
- Full discharge arc control improves the brightness and life time of lighting units
- Energy savings of up to 50% compared to classic ballasts
- Ability to work with old and heavily used bulbs and equipment
- Operates with complete stability to eliminate acoustic resonance
- Flicker free operation (no stroboscopic effect)
- Remote control operation (Input/output port)
- A wide input voltage range (see below)
- Soft start (to avoid rapid degradation of electrodes during ignition)
- active PFC (not passive - zero lossless of apparent power)

Applications:

- Roads and Car parks
- Residential areas
- Tunnels
- Sports facilities and stadiums
- Industrial facilities
- Retail parks and shopping centres

SMARTLAMP

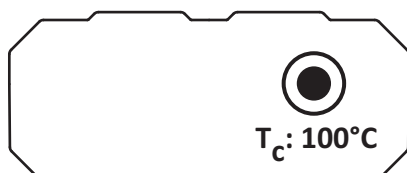
ELECTRONIC BALLAST FOR GAS DISCHARGE LAMPS SL-70 / SL-100 / SL-150

Technical data:

Input voltage: 240V
Input voltage frequency: 50/60 Hz
Output power - standard mode: 70W / 100W / 150W
Output power - standard dim mode: 50W / 70W / 100W
Output power - max dim mode: 35W / 50W / 75W
Power Factor 100% > 0.98
Power Factor 50% > 0.95
Output voltage: $\approx 100V$
Cold lamp ignition voltage: < 2kV
Warm lamp ignition voltage: < 5kV
Cold lamp ignition time HPS, MH, CMH: 15sec - 60sec
Warm lamp ignition time: HPS: 15sec - 60sec, MH: up to 6min
Run up time before dimming: 5min
Fade down time 100%-50%: 15sec - 90sec
Fade up time 50%-100%: 15sec - 90sec
Operation frequency: 100kHz
I/O port: TTL compatible
Thermal protection (power limiter): 90°C
Thermal protection (shutdown): 100°C
Max ambient temperature: 70°C
Min ambient temperature: -40°C
IP protection: IP65
Protection Class II
Dimensions: 132,1 x 105,2 x 54,3 [mm]
Weight: 800g ($\pm 5g$)

TC point:

Temperature measuring must be made in a specially designated area of the housing. Measurement point is located at the rear of the unit and is marked with a circular mark. The maximum temperature of this point is 100°C



DALI interface:

This device is equipped with DALI interface which is accessible through gray pair of cables (galvanic isolated) located under service connector (RJ-45 connector).

DALI connectivity is optional, that is not required for this unit to operate properly, however DALI can extend its functionality.

Installation:

The installation should be started from disconnecting the voltage cable from the connector which is part of the luminaire.

In the case of modernization, if needed (not enough space) the existing electrical gear of the ignition system can be removed, although it is not necessary for the proper operation of the electronic ballasts from the "SL" series.

The next step of the proper installation, is connect the voltage wires (indicated as input 230V) to the connector which is part of the luminaire, or another connector which is compatible of norm IEC 61347-2-12.

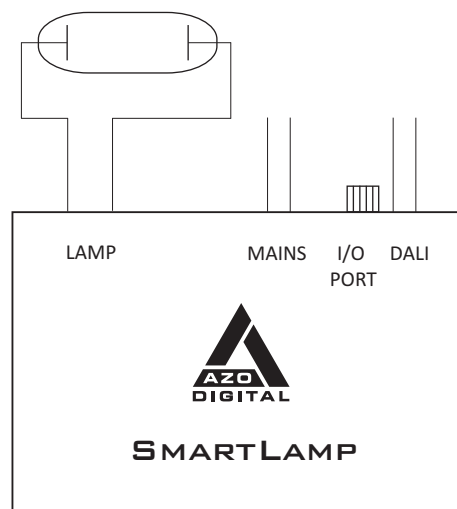
The wire designated as an output from electronic ballast, must be connect to lampholder of the luminaire.

Lampholder must be fitted with isolation accessories providing a second class of protection.

So the connected device is ready for use.

NOTE: In the installation, use time-delay fuse type.

Installation schema:



EU norms and approvals:

According to research report no. 012/LMC-805/2010 of "IEL" Electrotechnical Institute Gdańsk Branch:

- PN-EN 61000-6-2:2008
- PN-EN 55015:2007 +A1:2007+A2:2009
- PN-EN 61000-4-3:2007 +A1:2008
- PN-EN 61000-4-4:2005
- PN-EN 61000-4-5:2006
- PN-EN 61000-4-6:2009
- PN-EN 61000-4-11:2007
- PN-EN 61000-3-2:2007 +A1:2010+A2:2010
- PN-EN 61347-1:2008