

## INTERFACE CONTROL DOCUMENT

# **PAR36 LED LANDING LIGHT**

P/N: 6490771 AMD(0)

Diffusion	Diffusion Interne à JPC			Exter	Externe à JPC		
	1 ex <b>→</b>			1 ex -	→ EASA		
Version	Document	Issue.	Date	Last evolution		Pages changed	
	649 07 71 ICD 01	<u>5</u>	22/02/2019	See page 2		all	
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### LIST OF EVOLUTIONS

Date	Issue N°	Affected pages	Evolution
16/12/2016	1		- Document creation.
30/01/2017	2	all	- Add of the installation procedure and the periodic inspection.
15/03/2017	3	All	- Update electrical current at 28V.
04/04/2018	4	All	- Update wires installation
22/02/2019	<u>5</u>	All	- Clarifications on position key on drawings

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### **Interface Control Document**

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#### 1 General

#### 1.1 Generalities

This document defines the electrical, mechanical and thermal interfaces and the installation procedure of the equipment "PAR36 Led Landing Light", P/N 6490771 amd(0).

#### 1.2 Destination

Aircraft of General Aviation.

#### 1.3 Description

PAR36 Led Landing Light is designed to provide enough light for night operations, with no dangerous glare or halation visible to the pilots.

The Led Landing Light aims to produce a white light in accordance with CS 23.1383 requirements.

The source of light is made up of 12 white diodes equipped with conical collimator.

The Leds diodes type is SMD LED 1 Watt with 120 °distribution, with high performances, identical to that already used in our strobe and anti-collision lights certified CS25 or CS29 for planes and helicopters.

The shape, mechanical interface, weight and electrical interface are preserved compared to incandescent Landing lights currently installed.

This design offers an extremely high reliability, a high resistance to shocks and vibration.

Positive points of this new equipment:

- Shape, electrical interface, weight and mechanics interface preserved.
- 20.000 hours MTBF.
- No high heat in the equipment.

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### 2 Physical, electrical and optical features

#### 2.1 Physical features

- Individual weight : 210 g +/- 10 %

- Dimensions : see 2D drawing in §6

- Number of LEDs : 12 white Leds

- Envelope color : Aluminum with SURTEC 650 protection

#### 2.2 Electrical interface

2 PC screw terminal - Screws 6-32 x 6.5 (3.5 x 6.5)

No polarity.

For standard crimp ring terminal 4mm.

#### 2.3 Electrical power supply

Supply Voltage : 14 / 28 V DC (DO 160 D, cat A)

Same performances from 12 V to 32 V

Current : 1.2 A +/- 10 % at 14 V

0.62 A +/- 10 % at 28 V

Performances In other situations (18, 21, 28 and 32 V):

Power supply level (in Volts )	Current	Performances
12 V	1.5 A	Preserved
14 V	1.2 A	Normal
16 V	1.1 A	Preserved
24 V	0.75 A	Preserved
28 V	0.62 A	Normal
32 V	0.55 A	Preserved

#### 2.4 Power dissipation

Power dissipation average	8 W

#### 2.5 Optical features

- 12 high power white Leds CREE.
- Collimators: 8°.
- Light intensity in accordance with CS-23 requirements.

#### 2.6 Operating temperature

Positive temperature : +70°C Negative temperature : -45°C

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#### 3D views 3





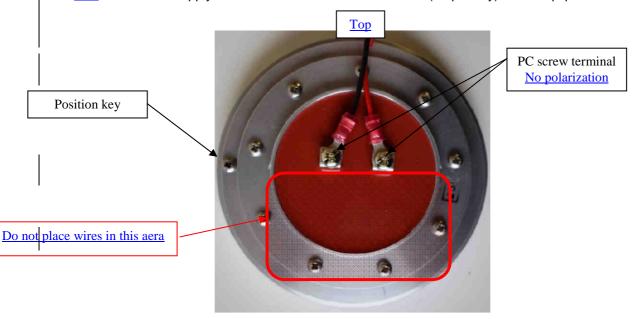
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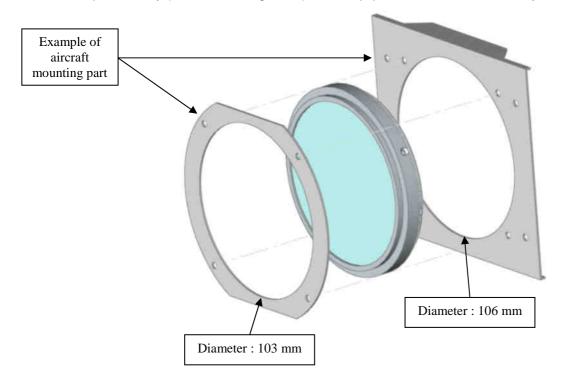
## 4 Installation procedure

The following information provides guidelines for the installation of the PAR36 LED LANDING LIGHT. Please refer to the OEM manual of the aircraft for specific removal and installation instructions.

\_\_\_\_Connect the supply wires on the two PC screw terminal (no polarity) of the equipment.



- Place the equipment in the aircraft mounting part (see picture below). If available, ensure that the position key (see 2D Drawing in § 6) of the equipment matches with the key of the aircraft mounting part.



- Tighten the aircraft mounting part on the equipment to hold it in position.



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## 5 Periodic Inspections

Every 100 hours or annually:

Check that all Leds are illuminated.
 WARNING: Due to the high light intensity emitted by the equipment, it is recommended to wear eyes protection.

- Check the glass aspect (absence of stripe or cracking)
- Check the good state of the mechanical assembly and the electrical connections.

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### 6 2D Drawing

