25cd Low-intensity Obstruction Light - Photocell and Flasher 230VAC

Defence Infrastructure Organisation - Ministry of Defence

CEL-LI-25-230-PCFL - LED Aircraft Warning Light

Key Features
- Based on LED technology
- Extremely reliable long lifetime
- Suitable for off-shore use
- Very low power consumption
- 230VAC input voltage
- Stabilised light output
- Lightweight and small - low wind load factor
- Easy to install, several mounting sets available
- Two cable glands, easy to chain without terminal boxes
- No RF-radiations
- Five (5) year warranty

Benefits
- Long maintenance intervals
- Low energy cost
- Supply power voltage variations do not affect light output
- Very low total lifetime costs
- Low wind load

Specifications met
- Satisfies Ministry of Defence minimum vertical obstruction lighting criteria
- Recommended Standards and Practices
- Defence Estates

Optical characteristics
- Intensity better than 25cd
- Colour aviation red
- Horizontal radiation pattern 360°
- Vertical radiation pattern 15°
- LED supply current stabilised by constant current generator
- Light output degradation less than 30% after 100,000hrs of operation

Electrical characteristics
- Nominal operating voltage 230VAC
- Power consumption less than 4VA 3W
- Operating voltage range 210 to 250VAC
- Over voltage protection

Mechanical characteristics
- Anodised marine grade aluminium body and end parts
- AISI 316 acid proof steel screws
- Colourless (clear) glass cover
- Terminal box for 1.5-6 mm² wires
- Degree of protection IP 65
- Operating temperature range -55°C to +55°C
- Height 210mm, diameter 104mm, weight 1.1 kg
- Wind load with CEL-MS-EV60 mounting kit@ 200 km/h less than 40 N

Options
- Mounting kits
- Light unit without Photocell & flasher: CEL-LI-25-230-F

Order Code: CEL-LI-25-230-PCFL

Photocell characteristics
- Turn on delay 1s
- Turn off delay 200s
- User selectable photocell sensitivity (bold = factory default)
  OFF/200 lux/400 lux/ 800 lux

Flash controller characteristics
- User selectable flashing rate (bold = factory default)
  Steady burning/20fpm/ 40fpm/ 60fpm
- 250ms flash duration
ELECTRICAL INSTALLATION INSTRUCTIONS

CEL-LI-25-230-PCFL have two cable glands for easy chaining without external distribution boxes.

CEL-LI-25-230-PCFL is an obstacle light utilising LED technology. The cabling and installation principles are similar to those of conventional obstacle lights.

Connection can be protected with a 6A or 10A fuse or with a circuit breaker (C curve).

**Installation specifications**
- Cable gland: M25
- Cable diameter: 11 to 17mm
- Wire diameter: max. 6mm²
- Recommended cable: 3x1.5mm² or 3x2.5mm²

**Options**
- **CGS-20**: Smaller cable glands
  Set include 2 pcs M20 gable glands with M25-M20 adapters for 7-13mm cables

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**PCFL DIP switches**

<table>
<thead>
<tr>
<th>DIP1</th>
<th>DIP2</th>
<th>PHOTOCELL</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>OFF (light always ON)</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>200 lux</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>400 lux</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>800 lux</td>
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<table>
<thead>
<tr>
<th>DIP3</th>
<th>DIP4</th>
<th>FLASH RATE</th>
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<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>STEADY BURNING</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>20 fpm</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>40 fpm</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>60 fpm</td>
</tr>
</tbody>
</table>

Default DIP settings: 800 lux, steady burning

Flash Duration 250 ms

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**CEL-LI-25-230-PCFL block diagram**

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**OPERATING VOLTAGE**

230Vac
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Mechanical dimensions

Cable Gland M25, 2pcs
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There are several types of mounting sets available as option:

**CEL-MS-HV80**
Mounting set for 33-80 mm vertical or horizontal pipe
Mounting set includes:
- 2 pcs M6 U-bolt
- 8 pcs M6 hex nut
- 4 pcs 6/12 mm washer
All parts AISI 316 acid proof steel
More detailed mechanical data: CEL-MS-HV80 datasheet
Order Code: **CEL-MS-HV80**

**CEL-MS-EV60**
Mounting set with extension plate for 30-60 mm vertical pipe installation
Mounting set include:
- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs extension plate
Extension plate marine grade anodised aluminium, other parts AISI 316 acid proof steel
More detailed mechanical data: CEL-MS-EV60 datasheet
Order Code: **CEL-MS-EV60**

**CEL-MS-EV100**:
Mounting set with extension plate for 60-100 mm vertical pipe installation
Mounting set include:
- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs extension plate
Extension plate marine grade anodised aluminium, other parts AISI 316 acid proof steel
More detailed mechanical data: CEL-MS-EV100 datasheet
Order Code: **CEL-MS-EV100**
**CEL-MS-EV150:**
Mounting set with extension plate for 100-150mm vertical pipe installation

Mounting set includes:
- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs extension plate

Extension plate hot dipped galvanised steel, other parts AISI 316 acid proof steel

More detailed mechanical data: CEL-MS-EV150 datasheet

Order Code: **CEL-MS-EV150**

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**CEL-MS-DEV60:**
Double mounting set with extension plate for 30-60mm vertical pipe installation

Mounting set includes:
- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- 1 pcs extension plate

Extension marine grade anodised aluminium, other parts AISI 316 acid proof steel

More detailed mechanical data: CEL-MS-DEV60 datasheet

Order Code: **CEL-MS-DEV60**

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**CEL-MS-DEV100:**
Double mounting set with extension plate for 60-100mm vertical pipe installation

Mounting set includes:
- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- 1 pcs extension plate

Extension marine grade anodised aluminium, other parts AISI 316 acid proof steel

More detailed mechanical data: CEL-MS-DEV100 datasheet

Order Code: **CEL-MS-DEV100**
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**CEL-MS-RW**
Mounting set for horizontal plate or wall installation
Mounting set includes:
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs L -shape 2mm plate
All parts AISI 316 acid proof steel
More detailed mechanical data: CEL-MS-RW datasheet
Order Code: **CEL-MS-RW**

**CEL-MS-LVU**
Mounting set for L and V -shape profiles
Mounting set includes:
- 1 set accessories for light unit fitting to plate
- 1 pcs extension plate with adjusting plate and accessories
Extension plate hot dip galvanised steel, other parts AISI 316 acid proof steel
More detailed mechanical data: CEL-MS-LVU datasheet
Order Code: **CEL-MS-LVU** (with galvanized extension plate)  
**CEL-MS-LVA** (with AISI 316 extension plate)

**CEL-MS-N1B**
Mounting set for 1” NPT at bottom
More detailed mechanical dimensions: CEL-MS-N1B datasheet
Order Code: **CEL-MS-N1B**