

**230 V_{AC} ICAO Low-intensity, Type A Obstacle Light
with photocell & flasher**

Key features

- Based on LED-technology
- Extremely reliable - long lifetime
- Suitable for off-shore use
- Very low power consumption
- 230 V_{AC} nominal operating 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 external junction boxes
- No RF-radiations
- Five (5) year warranty

Benefits

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

Specifications met

- ICAO International Standards and Recommended Practices:
Aerodromes - Annex 14 Volume 1, 4rd Edition, July 2004,
Chapter 6: Low-intensity, Type A Fixed Obstacle Light

Optical characteristics

- Intensity better than 10 cd
- Colour aviation red
- Horizontal radiation pattern 360°
- Vertical radiation pattern 50°
- LED supply current stabilised by constant current generator
- Light output degradation less than 30% after 100.000 h of operation

Electrical characteristics

- Nominal operating voltage 230 V_{AC}
- Power consumption less than 3 VA, 1.5 W
- Operating voltage range 210 to 250 V_{AC}
- Overvoltage protection

Mechanical characteristics

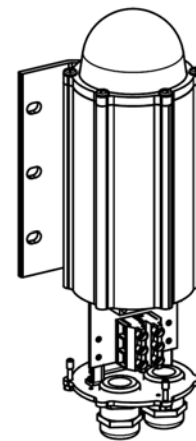
- Anodised, marine grade aluminium body and end parts
- AISI 316 acid proof steel screws
- Colourless (clear) glass cover
- Terminal box for 1,5 - 6 mm² wires
- Degree of protection IP 65
- Operating temperature range -55°C to +75°C
- Height 210 mm, diameter 104 mm, weight 1.1 kg
- Wind load with CEL-MS-EV60 mounting kit @ 200 km/h less than 40 N

Options

- Mounting kits
- Light unit without Photocell & Flasher: CEL - LI-10-230-F



CEL - LI-10-230-PCFL LED obstacle light



Photocell characteristics

- Turn on delay 1 s
- Turn off delay 200 s
- 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 / 20 fpm / 40 fpm / 60 fpm
- 250 ms flash duration



Order Code: **CEL - LI-10-230-PCFL**

Made in EU

Technical information in this document is subject to change without notice. Copyright © CEL 2006

**230 V_{AC} ICAO Low-intensity, Type A Obstacle Light
with photocell & flasher**

ELECTRICAL INSTALLATION INSTRUCTIONS

CEL - LI-10-230-PCFL have two cable glands for easy chaining without external distribution boxes

CEL - LI-10-230-PCFL is an obstacle light utilising LED technology. The cabling and installation principles are similar to those of conventional obstacle lights.

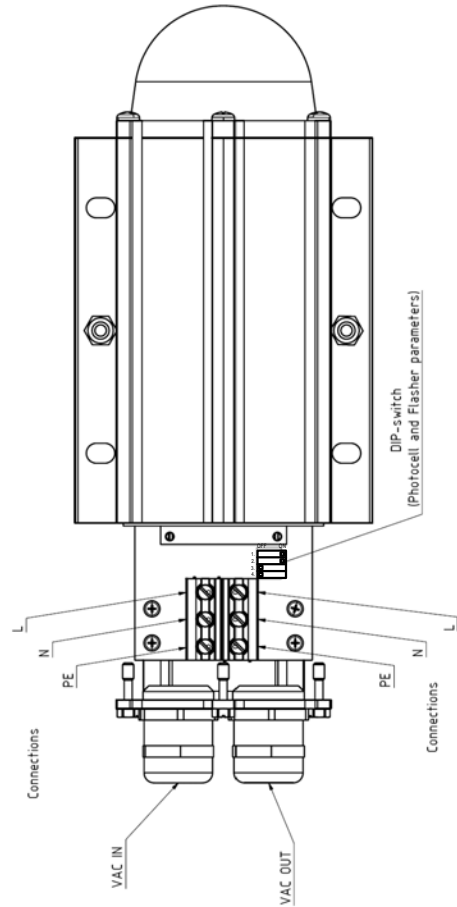
Connection can be protected with a 6A or 10A fuse or with a circuit breaker (C curve).

Installation specifications

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

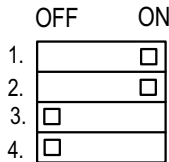
Options

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



PCFL DIP switches

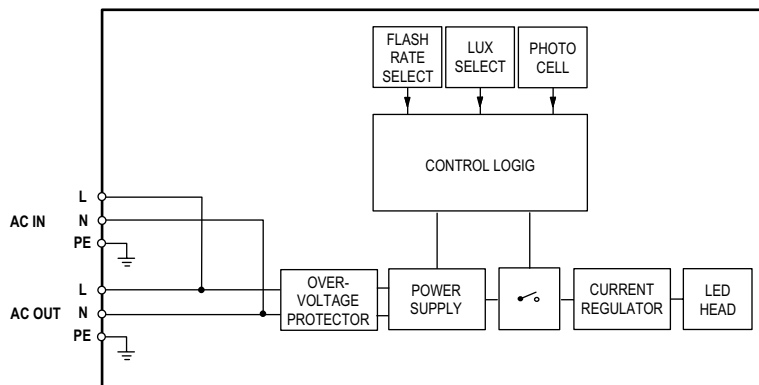
DIP1	DIP2	PHOTOCELL
OFF	OFF	OFF (light always ON)
ON	OFF	200 lux
OFF	ON	400 lux
ON	ON	800 lux



DIP3	DIP4	FLASH RATE
OFF	OFF	STEADY BURNING
ON	OFF	20 fpm
OFF	ON	40 fpm
ON	ON	60 fpm

Flash Duration 250 ms

**Default DIP settings:
800 lux, steady burning**

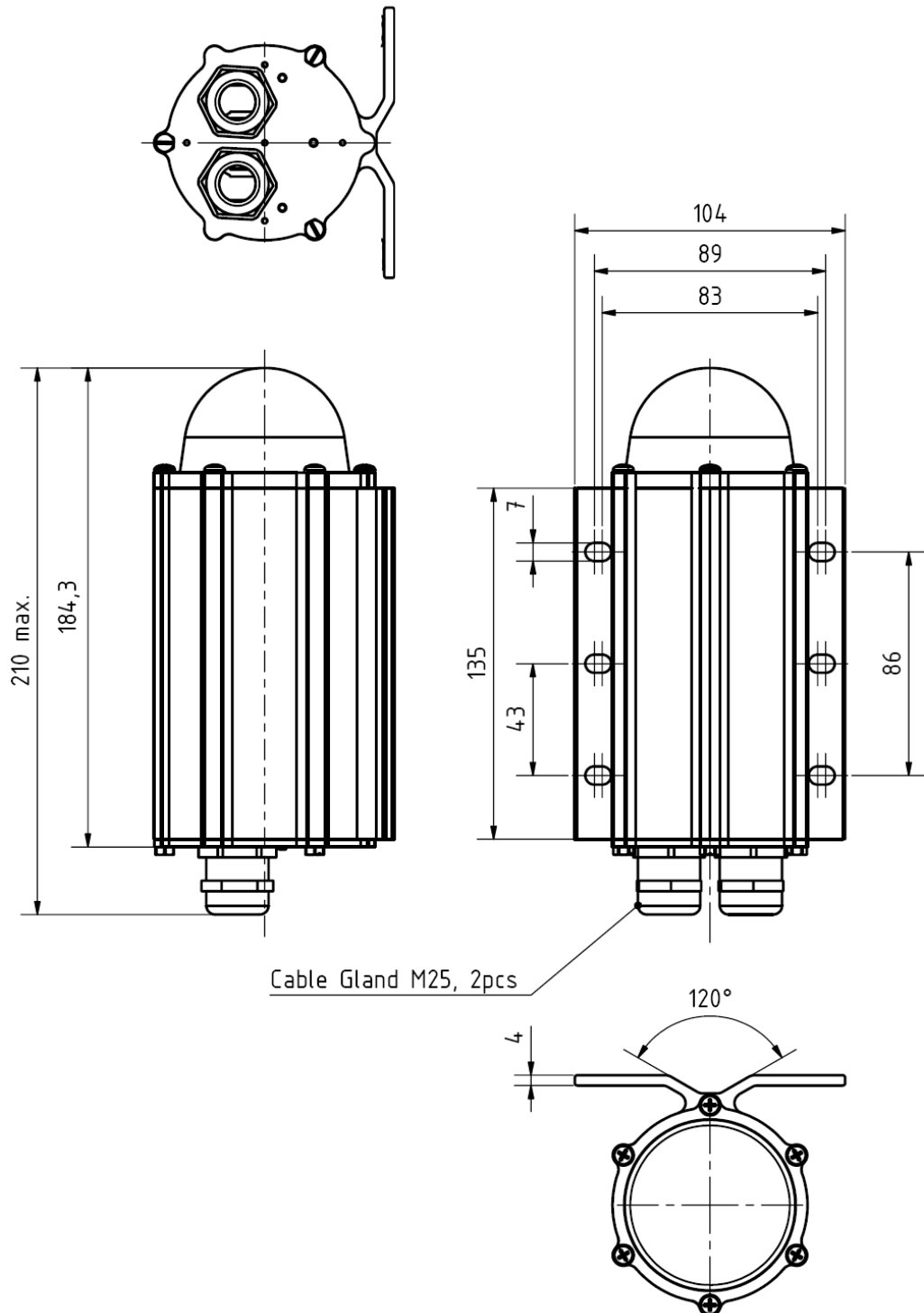


CEL - LI-10-230-PCFL block diagram

OPERATING VOLTAGE
230Vac

230 V_{AC} ICAO Low-intensity, Type A Obstacle Light
with photocell & flasher

Mechanical dimensions



Technical information in this document is subject to change without notice. Copyright © CEL 2006

**230 V_{AC} ICAO Low-intensity, Type A Obstacle Light
with photocell & flasher**

There are several types of mounting sets available as option:

CEL - MS-HV80

Mounting set for 33-80 mm vertical or horizontal pipe

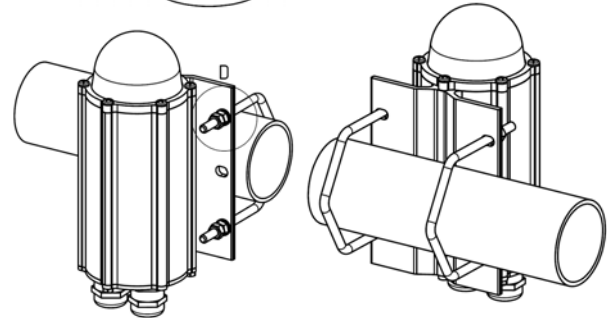
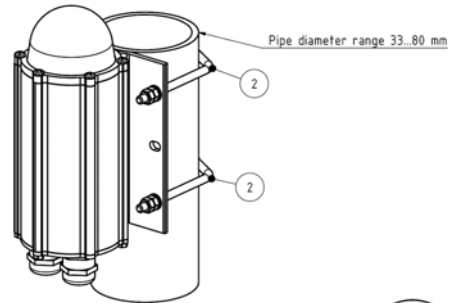
Mounting set include:

- 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: MS-HV80 datasheet

Order Code: **CEL - MS-HV80**

**CEL - MS-EV60**

Mounting set with extension plate
for 30-60 mm vertical pipe installation

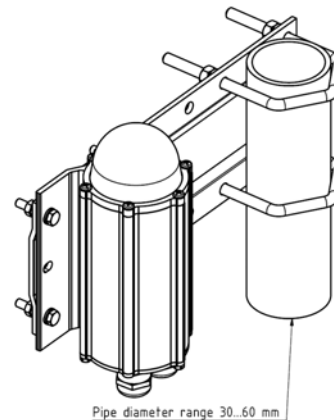
Mounting set include:

- 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

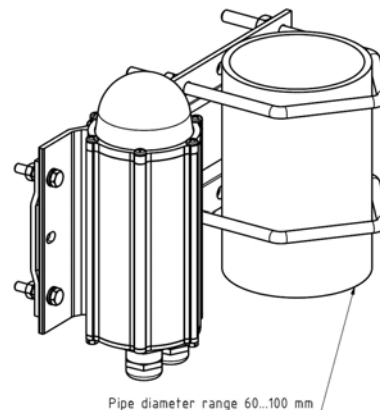
Mounting set include:

- 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**



Technical information in this document is subject to change without notice. Copyright © CEL 2006

**230 V_{AC} ICAO Low-intensity, Type A Obstacle Light
with photocell & flasher****CEL - MS-EV150:**

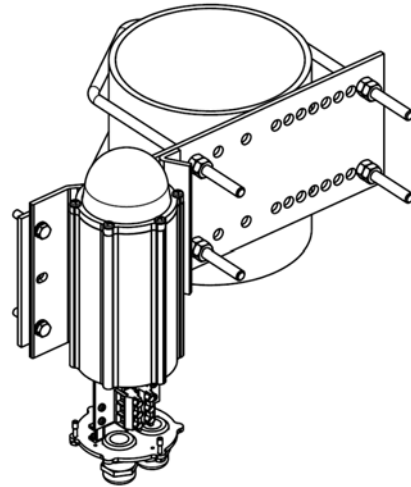
Mounting set with extension plate
for 100-150 mm vertical pipe installation

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**

**CEL-MS-DV60:**

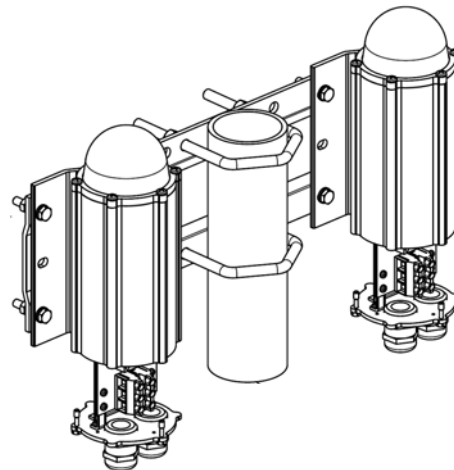
Double mounting set with extension plate
for 30-60 mm vertical pipe installation

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-DV60 datasheet

Order Code: **CEL - MS-DV60**

**CEL-MS-DV100:**

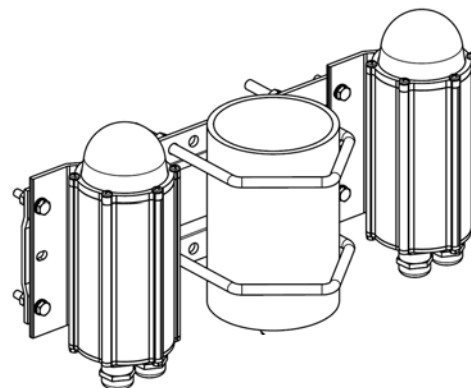
Double mounting set with extension plate
for 60-100 mm vertical pipe installation

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-DV100 datasheet

Order Code: **CEL-MS-DV100**



Technical information in this document is subject to change without notice. Copyright © CEL 2006

**230 V_{AC} ICAO Low-intensity, Type A Obstacle Light
with photocell & flasher****CEL - MS-RW**

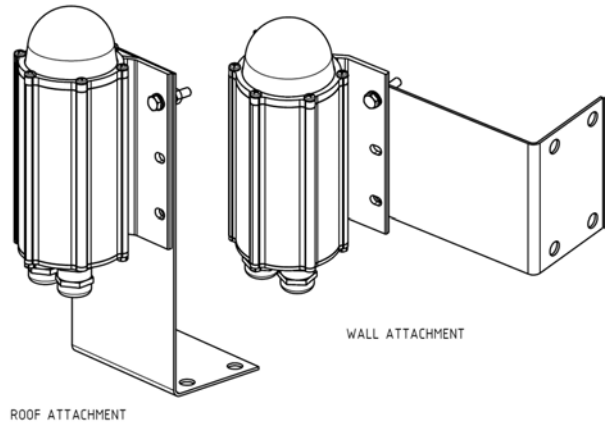
Mounting set for horizontal plate or wall installation

Mounting set includes:

- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs L-shape 2 mm 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

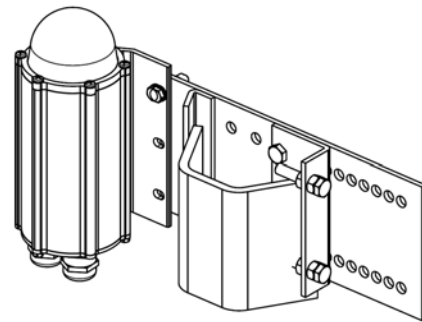
Mounting set includes

- 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****CEL - MS-N1B**

Mounting set for 1" NPT at bottom

More detailed mechanical dimensions: CEL - MS-N1B dataheet

Order Code: **CEL - MS-N1B**